SET No. 18

ADDITION TO
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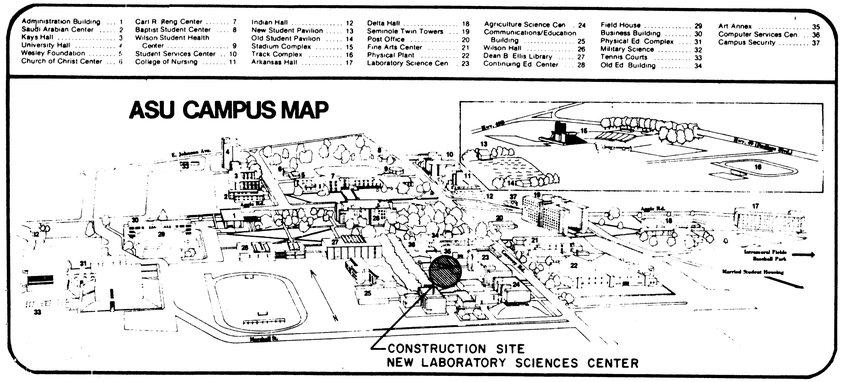

Brackett Krennerich and Associates Inc. Architects

STRUCTURAL ENGINEERS:
ENGINEERING CONSULTANTS, INC.
LITTLE ROCK, ARKANSAS

MECHANICAL/ELECTRICAL ENGINEER:
GOODMAN ENGINEERS INC.
LITTLE ROCK, ARKANSAS

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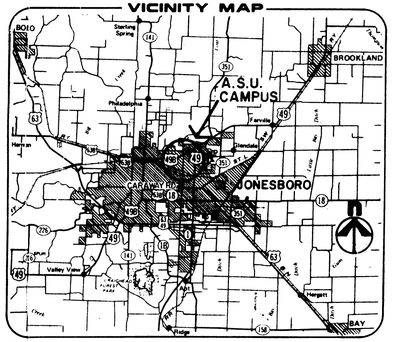
VICINITY MAP



SYMBOLS

SECTION — SECTION NUMBER / SHEET NUMBER

DETAIL — DETAIL NUMBER / SHEET NUMBER

DOOR — 1

CASEWORK — 1A

ALUMINUM STOREFRONT — AF-1

EXISTING ELEVATION — + 264.2 — EXISTING CONTOUR

NEW ELEVATION — + 265.0 — NEW CONTOUR

LOUVERS — L-1

CHALKBOARDS/TACKBOARDS — A

MATERIALS

CONCRETE
WOOD BLOCKING
PLYWOOD
PLASTER
STEEL (LARGE SCALE)
BATT INSULATION
INSULATION BOARD
CONCRETE BLOCK
BRICK

ABBREVIATIONS

EXPANSION JOINT	E.J.	WATER HEATER	W.H.
CONSTRUCTION JOINT	C.J.	FIRE EXTINGUISHER	F.E.
SCORED JOINT	S.J.	PLATE	PL
TOP OF FOOTING	T.O.F.	CARPET	CPT.
TOP OF WALL	T.O.W.	NOT IN CONTRACT	N.I.C.
TOP OF PIER	T.O.P.	FLOOR DRAIN	F.D.
ABOVE FINISH FLOOR	A.F.F.	VINYL	VIN.
BOTTOM OF FOOTING	B.O.F.	SIMILAR	SIM.
NOT TO SCALE	N.T.S.	APPROXIMATE	APP.
METAL THRESHOLD	M.T.	DRINK FOUNTAIN	D.F.
GENERAL CONTRACTOR	G.C.	SAME OPPOSITE HAND	S.O.H.
		ROOF DRAIN	R.D.

INDEX TO DRAWINGS

AF 32526

EXISTING LIBRARY

EXISTING COMPUTER SCIENCES BUILDING

EXISTING EDUCATION AND ART ANNEX BUILDING

CONTRACTOR'S MATERIAL STORAGE AREA

ENTRANCE GATE(S)

CONTRACTOR IS TO PROVIDE CONSTRUCTION FENCE AS INDICATED BY THIS LINE

EXISTING WALKS TO REMAIN

EXISTING TRANSFORMER TO REMAIN

EXISTING PINE TREES TO REMAIN

REMOVE EXIST. GREENHOUSE SLAB AND FOUNDATION (GREENHOUSE STRUCTURE TO BE REMOVED BY THE OWNER)

EXISTING TREE TO BE REMOVED BY THE CONTRACTOR

EXISTING MECHANICAL ACCESS GRATE

EXIST. CONC. WALKS TO BE REMOVED BY THE CONTRACTOR

EXISTING TREE TO BE REMOVED BY CONTRACTOR

EXISTING GAS RISER-SEE MECHANICAL

EXISTING COOLING TOWER BUILDING

GENERAL CONTRACTOR IS TO REMOVE EXIST. ANIMAL CARE BUILDING - INCLUDING REMOVAL OF SLABS AND FOUNDATIONS

EXISTING CONC. WALK TO BE REMOVED BY THE CONTRACTOR

3" WILLOW TREE TO BE REMOVED BY THE CONTRACTOR

REMOVE EXISTING WALK AS REQUIRED TO INSTALL NEW PIPING TO EXISTING MECHANICAL ROOM

EXIST. WALK TO REMAIN

CARAWAY ROAD

EXISTING LAB SCIENCES BUILDING

REMOVE 310'8" OF EXISTING UTILITY TUNNEL SEE NOTES. CAP ENDS OF TUNNEL. TUNNEL IS ±4' WIDE X6' HIGH

EXISTING TREE TO BE REMOVED BY THE CONTRACTOR

7" PECAN TREE TO BE REMOVED BY THE CONTRACTOR

REMOVE EXIST. INSECT LAMP

MANHOLE

CONC. BENCHES TO REMAIN

CONC. BENCH AND SLAB TO BE REMOVED BY THE CONTRACTOR

EXIST. CONC. WALKS AND STEPS TO BE REMOVED BY THE CONTRACTOR

EXISTING UTILITY TUNNEL UNDER WALK

EXISTING 14" PINE TO BE REMOVED BY THE CONTRACTOR

EXISTING PINE TREES TO REMAIN

POLE LIGHT TO BE REMOVED BY CONTRACTOR

CONTRACTOR IS TO PROVIDE CONSTRUCTION FENCE AS INDICATED BY THIS LINE

EXISTING DRAINAGE INLET

REMOVE EXIST. DRAIN HEADWALL REPLACE W/DROP INLET - SEE SITE PLAN AND DETAILS

REMOVE AND REPLACE EXISTING PIPE THRU UTILITY TUNNEL SEE SITE PLAN AND DETAILS

EXISTING AGRICULTURAL SCIENCES BUILDING

EXISTING EDUCATION-COMMUNICATIONS BUILDING

EXISTING GRADE

REMOVE EXISTING TUNNEL FROM AREA OF NEW CONSTRUCTION

3'-0" (WATERPROOFING)

8" CONC. WALL

NO.4@ BARS AT 2'-0" EACH WAY

WATERPROOFING

EXIST. CONC. UTILITY TUNNEL

GRAVEL FILL

NO.4@ DOWELS AT 2'-0" O.C.

4" P.V.C. DRAIN TILE CONNECT TO NEW BUILDING FOUNDATION DRAINAGE SYSTEM

2'-0"

6'-0" BELOW GRADE

NOTE: SEE ELECTRICAL FOR CONDUIT FOR EXISTING COMMUNICATIONS SYSTEM.

(1/A-1) section thru utility tunnel

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

notes:

1. THE CONTRACTOR IS TO VISIT AND INSPECT THE BUILDING SITE PRIOR TO BIDDING THE PROJECT. AT THE TIME OF BIDDING THE CONTRACTOR IS ASSUMED TO HAVE FULL KNOWLEDGE OF THE CONDITION OF THE SITE AND BE FAMILIAR WITH THE WORK REQUIRED TO PREPARE THE SITE FOR CONSTRUCTION.
2. SEE SPECIFICATIONS FOR DEMOLITION AND SITE PREPARATION REQUIREMENTS.
3. THE CONTRACTOR IS TO FURNISH AND INSTALL A CONSTRUCTION FENCE AS INDICATED ON THE DRAWING. THIS FENCE IS TO BE MAINTAINED BY THE CONTRACTOR UNTIL NEW BUILDING CAN BE LOCKED AND SECURED AND NO HAZARD EXISTS FOR THE UNIVERSITY PUBLIC.
4. THE CONTRACTOR IS TO TAKE ALL PRECAUTIONS TO PROTECT THE EXISTING PINE TREES ALONG THE WALK AT THE WEST SIDE OF THE CONSTRUCTION SITE. ERECT BARRICADES AS REQUIRED TO PROTECT THE TREES FROM EXCAVATION AND CONSTRUCTION EQUIPMENT.
5. THE CONTRACTOR MAY USE THE PORTION OF THE PARKING LOT AT THE NORTH END OF THE EXISTING LAB SCIENCE BUILDING FOR STORAGE OF MATERIALS AND EQUIPMENT AS SHOWN ON THE DRAWINGS. ADDITIONAL MATERIAL STORAGE AREAS WILL BE PROVIDED BY THE OWNER IF DESIRED BY THE CONTRACTOR AT ANOTHER SITE ON CAMPUS.
6. THE CONTRACTOR IS RESPONSIBLE FOR THE REPAIR OF ANY EXISTING WALKS, DRIVES, ETC. THAT ARE DAMAGED DURING THE CONSTRUCTION PROCESS. (EXCEPT FOR THE PARKING LOT AND MARSHALL ST. SOUTH OF THE SITE WHERE NEW SEWER LINES ARE TO BE INSTALLED.)
7. THE CONTRACTOR IS TO CONDUCT CONSTRUCTION OPERATIONS AS TO ALLOW THE USE OF THE EXISTING LAB SCIENCE BUILDING. ANY INTERRUPTION OF EXISTING BUILDING SERVICES OR USE OF PORTIONS OF THE EXISTING BUILDING SPACES MUST BE CO-ORDINATED WITH ARKANSAS STATE PHYSICAL PLANT SEVEN DAYS PRIOR TO ANTICIPATED INTERRUPTION.

(n) site preparation and demolition plan

SCALE: 1"=20'-0"

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A-1

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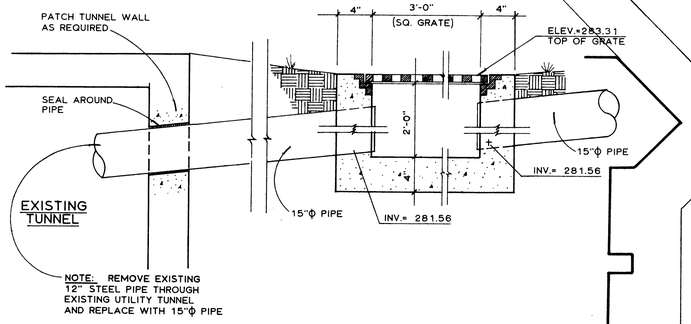
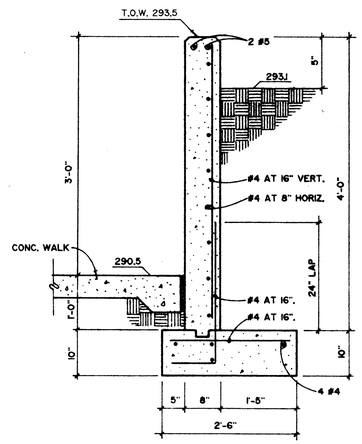


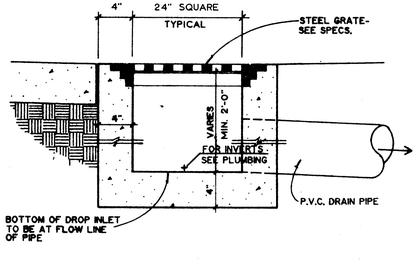
7 A-2 **detail at drop inlet**

(SOUTHWEST CORNER) SCALE: 1 1/2"=1'-0"



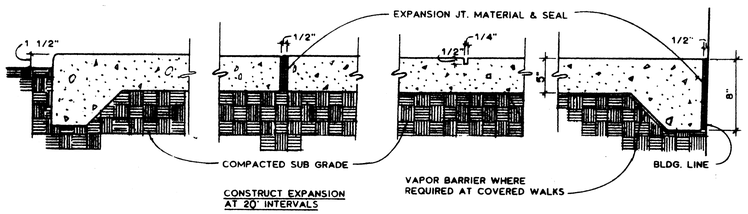
6 A-2 **conc. retaining walls**

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



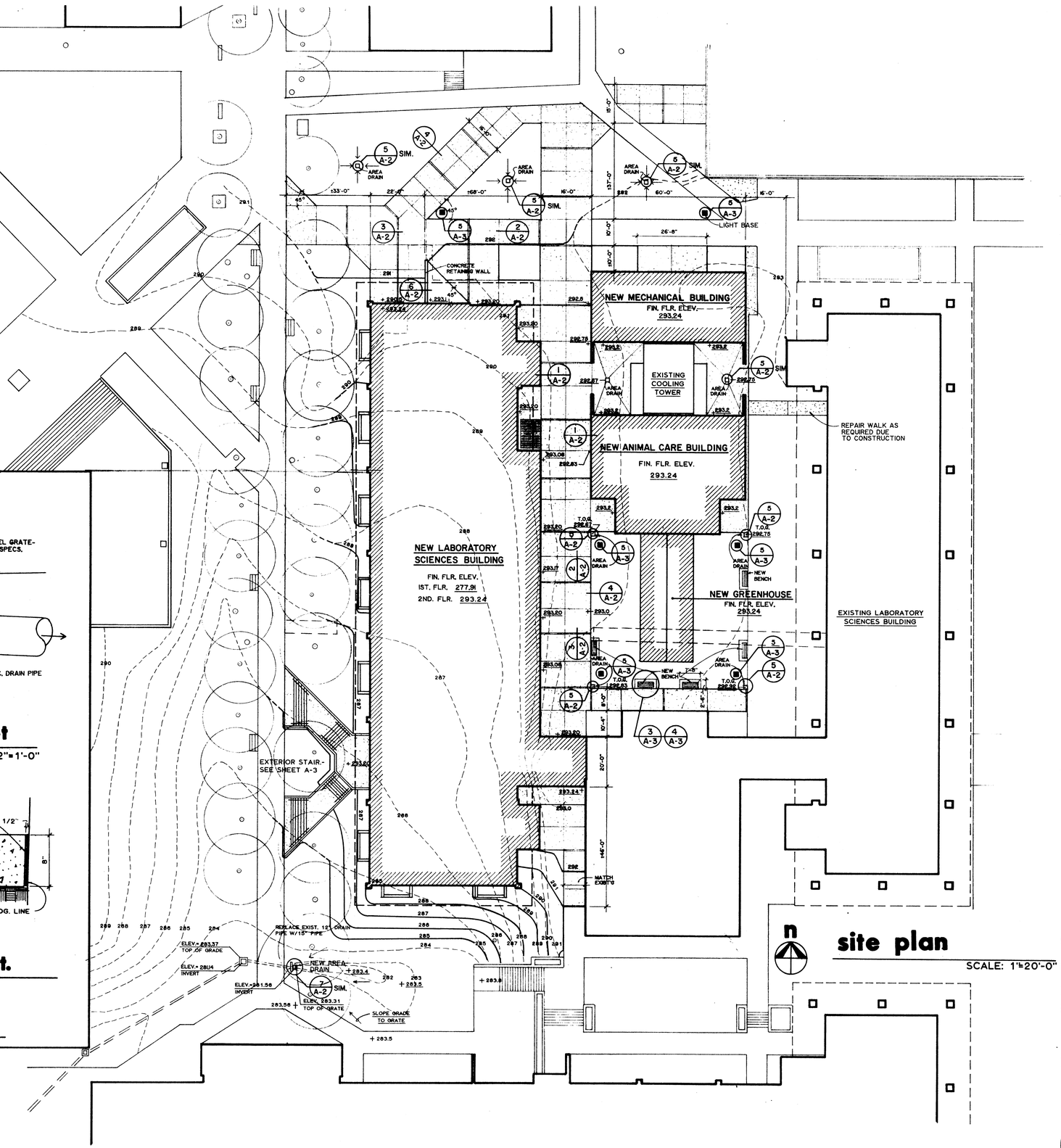
5 A-2 **detail at drop inlet**

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



4 A-2 **edge det.** 3 A-2 **exp. jnt.** 2 A-2 **scored jnt.** 1 A-2 **exp. jnt.**

sidewalk details 11/2"=1'-0"



site plan

SCALE: 1"=20'-0"

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A-2

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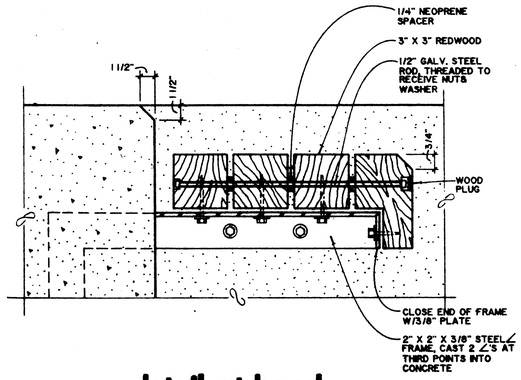
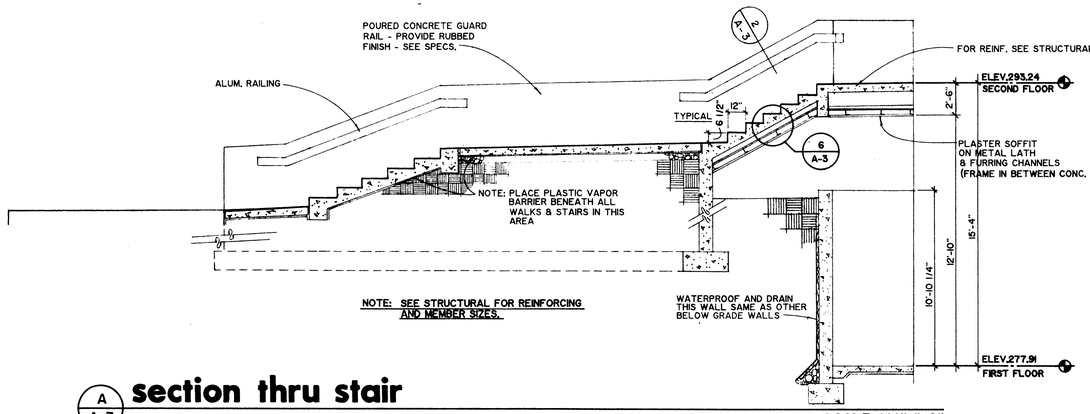


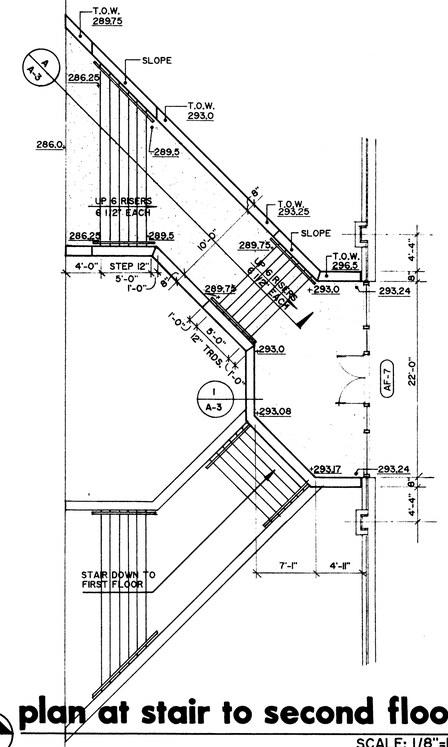
4 / A-3 detail at bench

SCALE: 3"=1'-0"



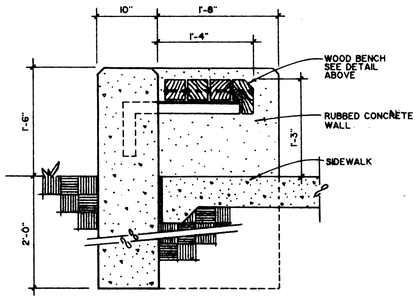
A / A-3 section thru stair

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



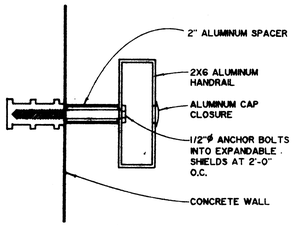
n plan at stair to second floor

SCALE: 1/8"=1'-0"



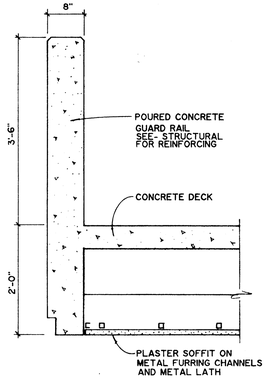
3 / A-3 detail at bench

SCALE: 1"=1'-0"



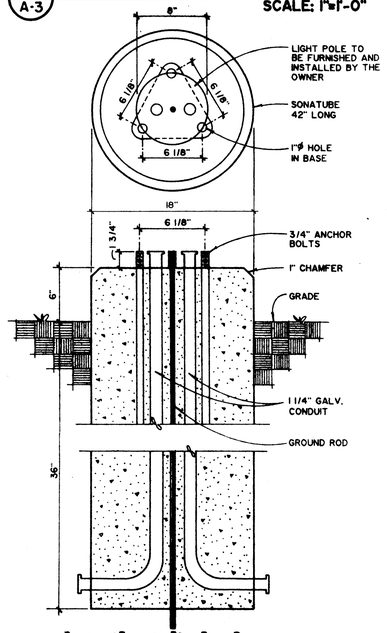
2 / A-3 detail

SCALE: 3"=1'-0"



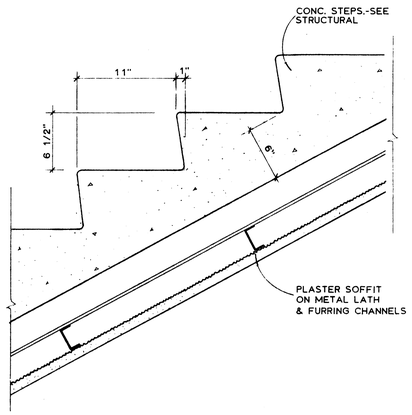
1 / A-3 detail

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



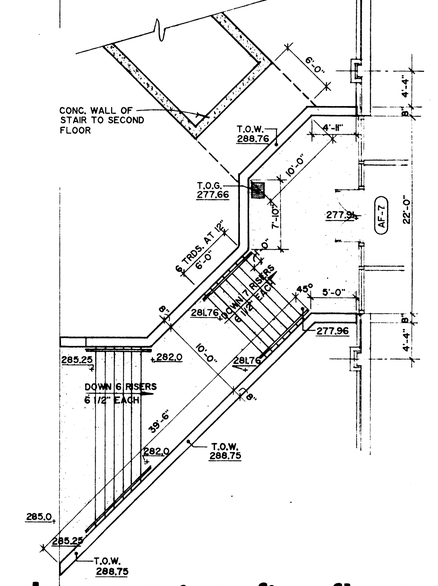
5 / A-3 detail at light base

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



6 / A-3 detail at stair

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



n plan at stair to first floor

SCALE: 1/8"=1'-0"

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A-3

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A-4

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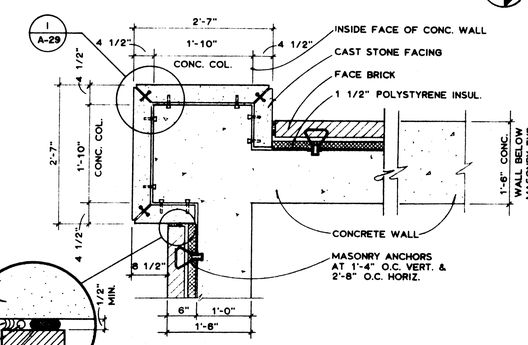
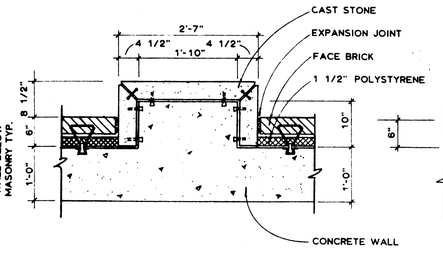
n first floor plan • laboratory science building

SCALE: 1/8"=1'-0"

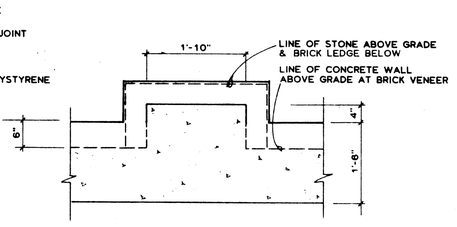
NOTE: FOR LARGE SCALE PLANS AT TOILET AND JANITOR AREAS SEE SHEET A-38



3/A-4 **detail** (ABOVE GRADE) SCALE: 3/4"=1'-0"



2/A-4 **detail col.** (ABOVE GRADE) SCALE: 3/4"=1'-0"



1/A-4 **detail col.** (BELOW GRADE) SCALE: 3/4"=1'-0"

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MATERIAL SCIENCE FLUID DYNAMICS HEAT TRANSFER 230

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CORRIDOR EECO2

OFFICE 248

OFFICE 247

OFFICE 245-C

WORK 245-B

OFFICE 245-A

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CORRIDOR GGCO2

OFFICE 249

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JANITOR 237

ELEC. 238

STUDENT LOUNGE 239

STORAGE 236-A

STAIR EESO2

STAIR FFSO2

LOBBY BBCO2

FOYER BBVO2

METAL THRESHOLD

FACE OF BRICK

FACE OF STONE

FACE OF WALL ABOVE

BRONZE PLAQUE

METAL GRATE

6'-0" DISPLAY CASE

STACK JOINT

STACK JOINT IN WALLS FOR FUTURE REMOVAL OF WALLS

TEST AREA HOLD DOWN BOLTS - SEE STRUCTURAL

STRUCTURAL LOADING SIGN SEE SPECS.

PAINT TEST AREA FLOOR THIS AREA

EXPANSION JOINT

REMOVE EXIST. STOREFRONT

NEW CONSTRUCTION

EXISTING BUILDING

REMOVE EXIST'G FLOOR REGISTERS SEE MECHANICAL

REMOVE EXIST. FLOOR MAT - INSTALL NEW FLOOR FINISH

EXISTING LECTURE HALL

EXISTING LECTURE HALL LOBBY

EXISTING MEN

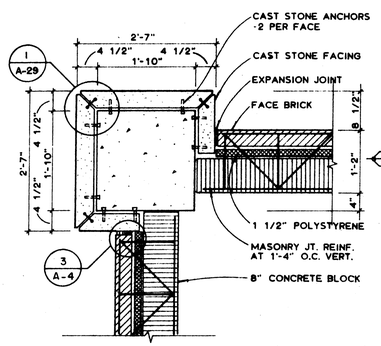
EXISTING WOMEN

EXISTING LECTURE HALL

NOTE: FOR LARGE SCALE PLAN AT JANITOR AREA SEE SHEET A-38

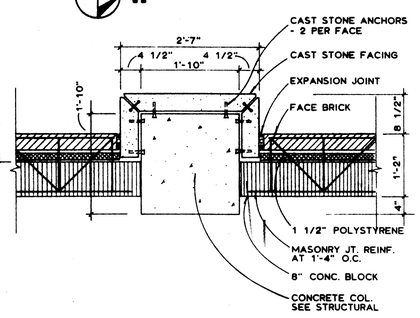
n second floor plan · laboratory science building

SCALE: 1/8"=1'-0"



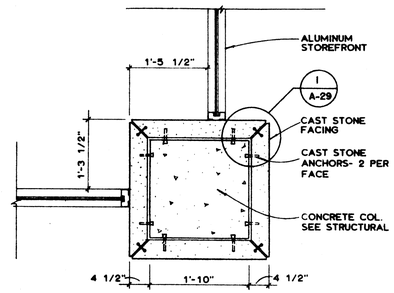
3/A-5 detail

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



2/A-5 detail

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



1/A-5 detail

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

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NEW CONSTRUCTION
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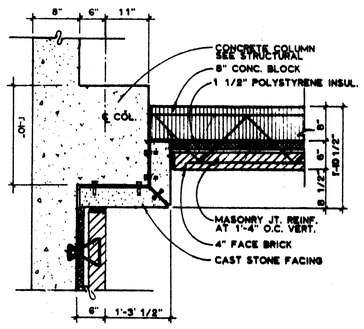
EXIST. ROOF BELOW
FACE OF BRICK
E.J.
TYP.
R.D.
F.D.
DN.
UP

NOTE: FOR LARGE SCALE PLANS AT TOILET AREA AND JANITOR SEE SHEET A-38

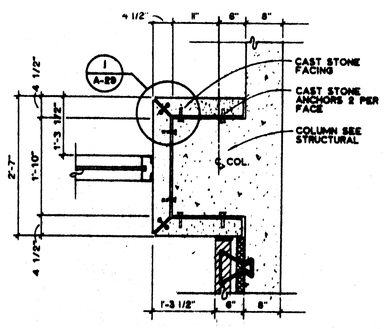
n third floor plan·laboratory science building

SCALE: 1/8"=1'-0"



4/A-6 detail

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



3/A-6 detail

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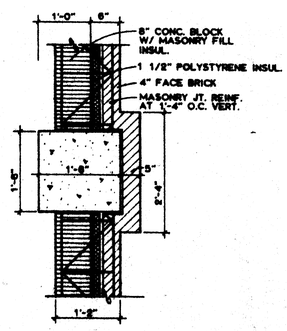
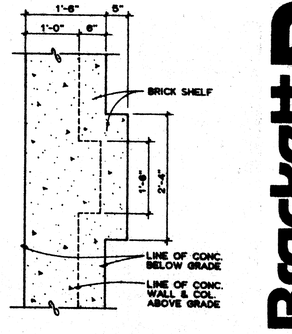


2/A-6 detail (ABOVE GRADE)

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



1/A-6 detail (BELOW GRADE)

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

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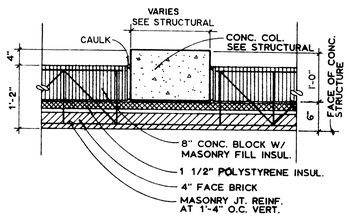
CLASSROOM 444
LABORATORY ASSISTANTS AREA 443
GENERAL BOTANY 442
PREPARATION & STORAGE 442-A
PREPARATION & STORAGE 441-A 10'-0"
GENERAL ZOOLOGY 441
REPTILES & AMPHIBS MUSEUM 440
MAMMAL MUSEUM STORAGE & WORK 439
PREP LAB 439-D
DARK STORAGE 439-C
STORAGE 439-B
STOR. 439-A
WET LAB 438
STUDENT LOUNGE 437
ELEC. 436
JANITOR 435
STOR. 434-B
PREPARATION & STORAGE 434-A
PHYSIOLOGY LABORATORY 434
ANATOMY LABORATORY 433
ELEC. 433-A
STOR. 433-B
MONITORED ENVIRONMENT LABORATORY 430
MEN 431
WOMEN 432
CORRIDOR FFC04
ELEVATOR BBE04
CHASE
STAIR EES04
STAIR FFS04
M.W.-34 3 REQ'D.
M.W.-35 10 REQ'D.
M.W.-34 4 REQ'D.
M.W.-36,12 REQ'D.
M.W.-37 4 REQ'D.
M.W.-38 3 REQ'D.
M.W.-39 2 REQ'D.
6'-0" DISPLAY CASE
F.D.
D.F.
E.J.
DN.
UP
AF-1
AF-2
AF-3
240'-0"
112'-0"
68'-0"
35'-0"
16'-0"
NEW CONSTRUCTION
EXISTING BUILDING
EXIST. ROOF BELOW
FACE OF BRICK

NOTE: FOR LARGE SCALE PLANS AT TOILET AREA AND JANITOR SEE SHEET A-38

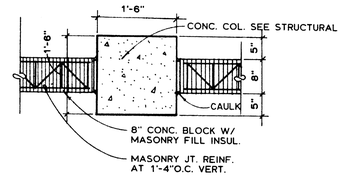
n fourth floor plan · laboratory science building

SCALE: 1/8"=1'-0"



2/A-7 detail

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



1/A-7 detail

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

COMM. NO. 10186

A-7

DATE: 6/23/86

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COMM. NO 10186

A-8

DATE: 6/23/86

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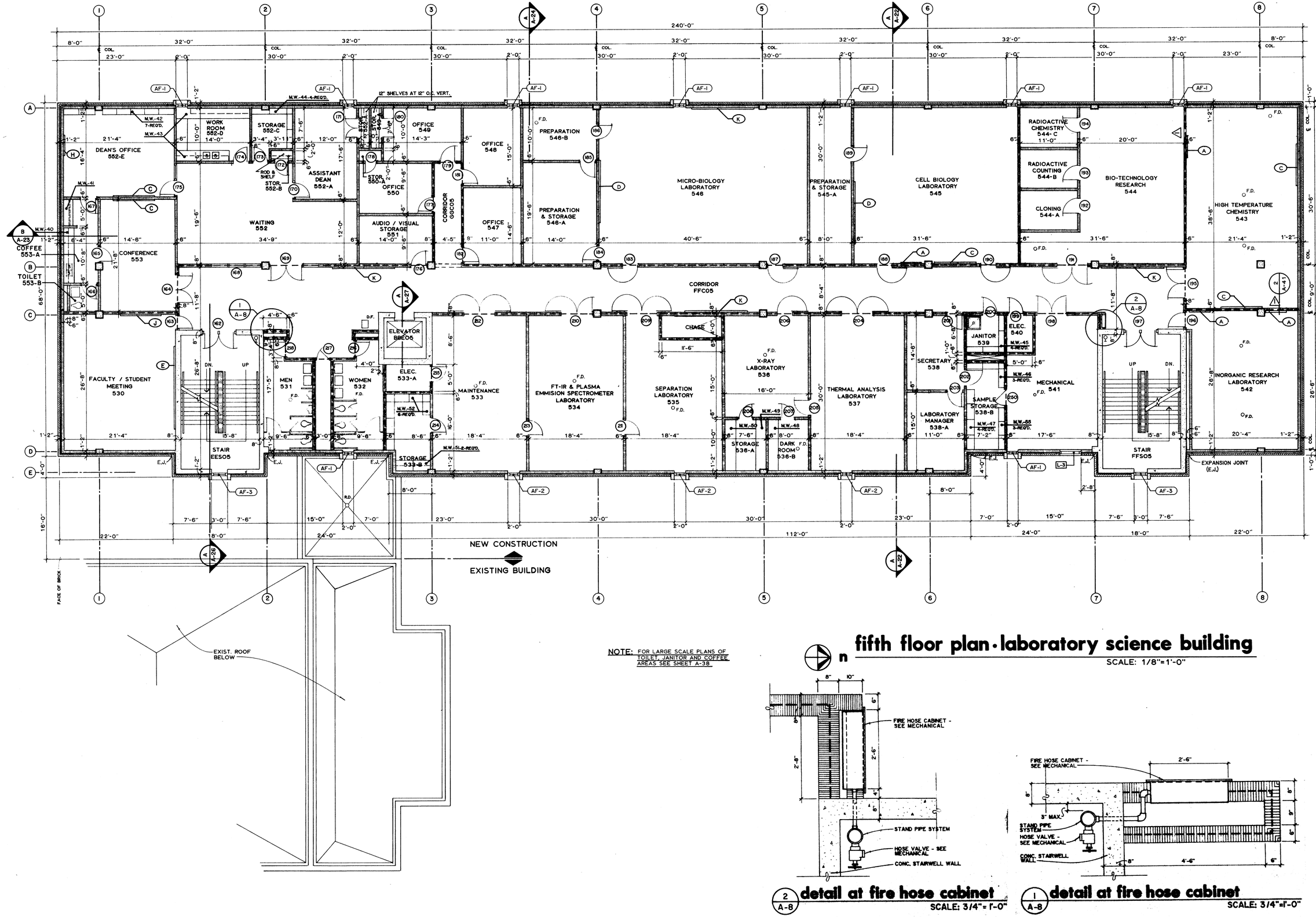


NOTE: FOR LARGE SCALE PLANS OF TOILET, JANITOR AND COFFEE AREAS SEE SHEET A-38

n fifth floor plan · laboratory science building

SCALE: 1/8"=1'-0"

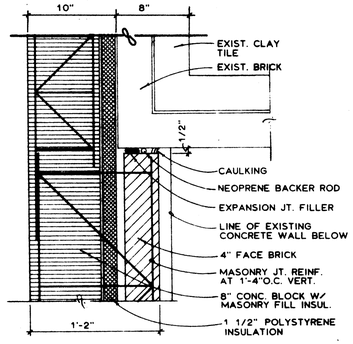
2/A-8 detail at fire hose cabinet

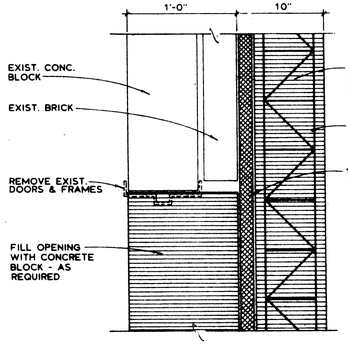
SCALE: 3/4"=1'-0"

1/A-8 detail at fire hose cabinet

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

AF 32526



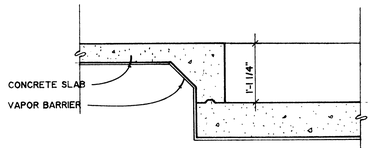


2 A-9 **detail**

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

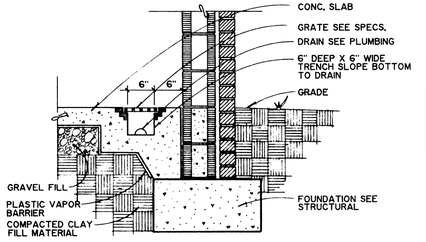
1 A-9 **detail**

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



3 A-9 **det. at cage washer pit**

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



4 A-9 **detail at drain trench**

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

NEW LABORATORY SCIENCE WING

EXISTING LABORATORY SCIENCE BUILDING

n **greenhouse . animal care . mechanical floor plan**

SCALE: 1/8"=1'-0"

COMM. NO. 10186

A-9

DATE: 6/23/86

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12526

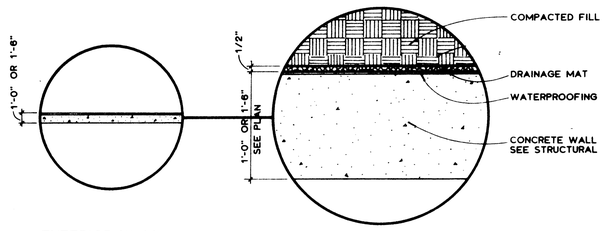
COMM. NO. 10186

A-10

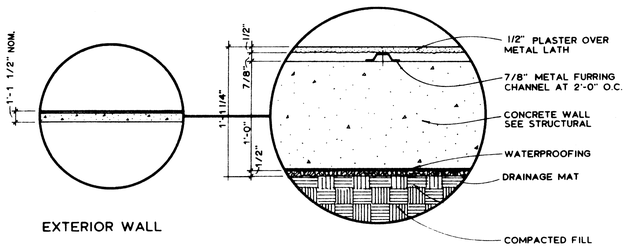
DATE: 6/23/86

PLAN SYMBOL / DESCRIPTION

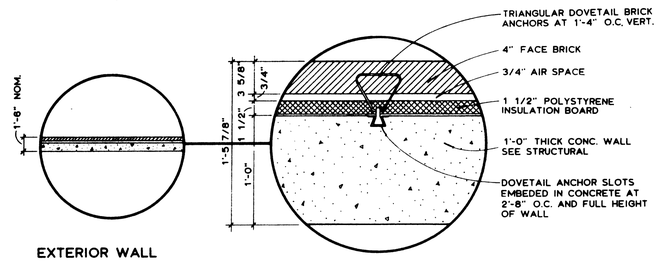
SCALE: 1/8"=1'-0" / SCALE: 1 1/2"=1'-0"



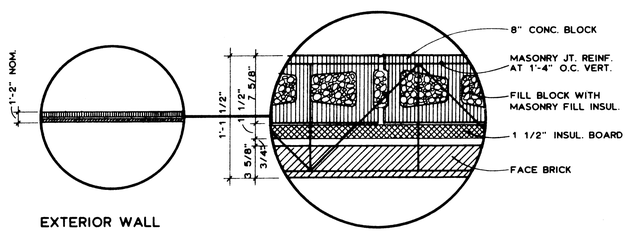
EXTERIOR WALL (BELOW GRADE)



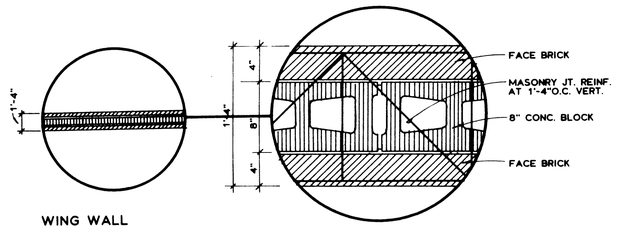
EXTERIOR WALL



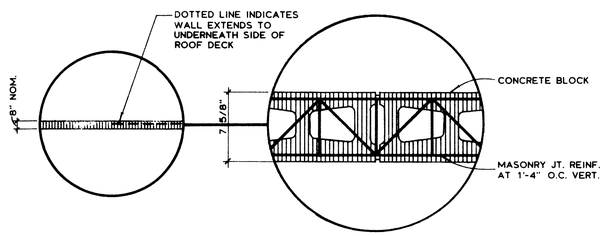
EXTERIOR WALL



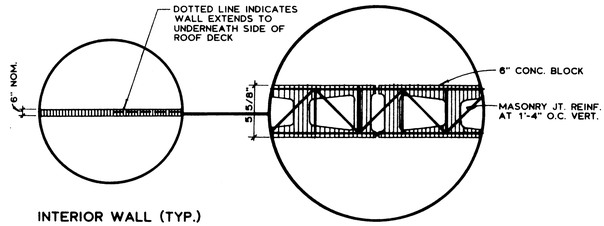
EXTERIOR WALL



WING WALL

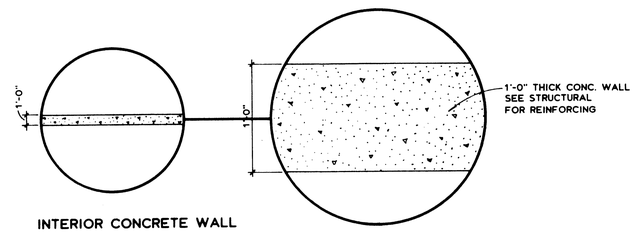


INTERIOR 8" WALL (CORRIDOR WALLS)



INTERIOR WALL (TYP.)

INTERIOR WALL



INTERIOR CONCRETE WALL

ROOM FINISH SCHEDULE • LAB SCIENCE BUILDING FIRST FLOOR

ROOM NO.	ROOM NAME	FLOOR	BASE	WALLS	CEILING HEIGHT	CEILING	REMARKS
AAY01	FOYER	CERAMIC (1) GRANULAR FL.	4" CERAMIC (1) GRANULAR FL.	PAINTED CONCRETE BLOCK	8'-0"	2 X 4 SUS. ACOUSTICAL TILE	(1) CERAMIC GRANULAR FLOOR - TURN CONTINUOUS UP WALL TO FORM 4" COVE BASE
EEC01	CORRIDOR	CERAMIC (1) GRANULAR FL.	4" CERAMIC (1) GRANULAR FL.	PAINTED CONCRETE BLOCK	8'-0"	2 x 4 SUS. ACOUSTICAL TILE	
FFC01	CORRIDOR	CERAMIC (1) GRANULAR FL.	4" CERAMIC (1) GRANULAR FL.	PAINTED (2) CONCRETE BLOCK	8'-0"	2 X 4 SUS. ACOUSTICAL TILE	(2) PAINTED CONCRETE AT COLUMNS, STAIRS, ELEVATOR, AND EXTERIOR WALLS
EES01	STAIR	CERAMIC (1) GRANULAR FL.	4" CERAMIC (1) GRANULAR FL.	PAINTED CONCRETE BLOCK & CONCRETE	—	PAINTED (3) CONCRETE	(3) PAINT ALL EXPOSED SURFACES, UNDERNEATH SIDE OF LANDINGS, ETC.
130	SECRETARY/ RECEPTION	CARPET	4" STR. RUBBER	PAINTED CONCRETE BLOCK & CONCRETE (2)	10'-0"	2 x 4 SUS. ACOUSTICAL TILE	
130A	STORAGE	CARPET	4" STR. RUBBER	PAINTED CONCRETE BLOCK	10'-0"	2 x 4 SUS. ACOUSTICAL TILE	
130B	OFFICE	CARPET	4" STR. RUBBER	PAINTED CONCRETE BLOCK & CONCRETE (2)	10'-0"	2 x 4 SUS. ACOUSTICAL TILE	
130C	OFFICE	CARPET	4" STR. RUBBER	PAINTED CONCRETE BLOCK & CONCRETE (2)	10'-0"	2 x 4 SUS. ACOUSTICAL TILE	
130D	OFFICE	CARPET	4" STR. RUBBER	PAINTED CONCRETE BLOCK & CONCRETE (2)	10'-0"	2 x 4 SUS. ACOUSTICAL TILE	
131	LECTURE CLASSROOM	EXPOSED (4) CONCRETE	4" RUBBER COVE	PAINTED CONCRETE BLOCK & CONCRETE (2)	10'-0"	2 x 4 SUS. ACOUSTICAL TILE	(4) "SEALED" CONCRETE SEE SPECIFICATIONS
132	GLASS BLOWING	EXPOSED (4) CONCRETE	4" RUBBER COVE	PAINTED CONCRETE BLOCK & CONCRETE (2)	10'-0"	2 x 4 SUS. ACOUSTICAL TILE	
133	STORAGE	EXPOSED (4) CONCRETE	NONE	PAINTED CONCRETE BLOCK & CONCRETE (2)	—	EXPOSED STRUCTURE	
134	STORAGE	EXPOSED (4) CONCRETE	NONE	PAINTED CONCRETE BLOCK & CONCRETE (2)	—	EXPOSED STRUCTURE	
135	MEN	CERAMIC TILE	4" CERAMIC COVE	CERAMIC TILE	9'-0"	2 x 4 SUS. ACOUSTICAL TILE	
136	WOMEN	CERAMIC TILE	4" CERAMIC COVE	CERAMIC TILE	9'-0"	2 x 4 SUS. ACOUSTICAL TILE	
137	ELECTRICAL	EXPOSED CONCRETE	NONE	EXPOSED CONCRETE BLOCK	—	EXPOSED STRUCTURE	
GGC01	CORRIDOR	EXPOSED (4) CONCRETE	4" RUBBER COVE	PAINTED CONCRETE BLOCK	10'-0"	2 x 4 SUS. ACOUSTICAL TILE	
138	SCOPE ROOM (SEM)	EXPOSED (4) CONCRETE	4" RUBBER COVE	PAINTED PLASTER	10'-0"	PAINTED PLASTER (5)	(5) CEMENT PLASTER OVER METAL LATH AND METAL SUSP. SYSTEM
139	SEM. PREP.	EXPOSED (4) CONCRETE	4" RUBBER COVE	PAINTED CONCRETE BLOCK	10'-0"	2 x 4 SUS. ACOUSTICAL TILE	
140	LIGHT LOCK ROOM	EXPOSED (4) CONCRETE	4" RUBBER COVE	PAINTED CONCRETE BLOCK	10'-0"	2 x 4 SUS. ACOUSTICAL TILE	
140A	FILM ROOM	EXPOSED (4) CONCRETE	4" RUBBER COVE	PAINTED CONCRETE BLOCK	10'-0"	2 x 4 SUS. ACOUSTICAL TILE	
140B	PRINT ROOM	EXPOSED (4) CONCRETE	4" RUBBER COVE	PAINTED CONCRETE BLOCK	10'-0"	2 x 4 SUS. ACOUSTICAL TILE	
141	SCOPE ROOM (TEM)	EXPOSED (4) CONCRETE	4" RUBBER COVE	PAINTED PLASTER	10'-0"	PAINTED PLASTER (5)	
142	TEM. PREP. ROOM	EXPOSED (4) CONCRETE	4" RUBBER COVE	PAINTED CONCRETE BLOCK & CONCRETE (2)	10'-0"	2 x 4 SUS. ACOUSTICAL TILE	
143	STORAGE	EXPOSED (4) CONCRETE	4" RUBBER COVE	PAINTED CONCRETE BLOCK & CONCRETE (2)	10'-0"	2 x 4 SUS. ACOUSTICAL TILE	
144	DATA ANALYSIS	EXPOSED (4) CONCRETE	4" RUBBER COVE	PAINTED CONCRETE BLOCK	10'-0"	2 x 4 SUS. ACOUSTICAL TILE	
145	MICROTECH-NIQUE ROOM	EXPOSED (4) CONCRETE	4" RUBBER COVE	PAINTED CONCRETE BLOCK & CONCRETE (2)	10'-0"	2 x 4 SUS. ACOUSTICAL TILE	
146	MICROSCOPE DIRECTOR	EXPOSED (4) CONCRETE	4" RUBBER COVE	PAINTED CONCRETE BLOCK	10'-0"	2 x 4 SUS. ACOUSTICAL TILE	
147	STORAGE	EXPOSED (4) CONCRETE	4" RUBBER COVE	PAINTED CONCRETE BLOCK	10'-0"	2 x 4 SUS. ACOUSTICAL TILE	
148	E.E. UPPER LEVEL LAB 1.	EXPOSED (4) CONCRETE	4" RUBBER COVE	PAINTED CONCRETE BLOCK	10'-0"	2 x 4 SUS. ACOUSTICAL TILE	
148-A	CHAMBER	EXPOSED (4) CONCRETE	4" RUBBER COVE	PAINTED PLASTER	10'-0"	PAINTED (5) PLASTER	
149	E.E. UPPER LEVEL LAB 2.	EXPOSED (4) CONCRETE	4" RUBBER COVE	PAINTED CONCRETE BLOCK & CONCRETE (2)	10'-0"	2 x 4 SUS. ACOUSTICAL TILE	
150	JANITOR	EXPOSED (4) CONCRETE	4" RUBBER COVE	PAINTED (6) CONCRETE BLOCK	—	PAINTED CONCRETE STRUCTURE	(6) CERAMIC TILE BEHIND JANITOR'S SINK SEE INTERIOR ELEVATIONS
151	MECHANICAL	EXPOSED (4) CONCRETE	NONE	EXPOSED BLOCK & CONCRETE	—	EXPOSED STRUCTURE	
FFS01	STAIR	CERAMIC (1) GRANULAR FL.	4" CERAMIC (1) GRANULAR FL.	PAINTED CONCRETE BLOCK & CONCRETE	—	PAINTED (3) CONCRETE	
152	GEN. E.E. STORAGE	EXPOSED (4) CONCRETE	4" RUBBER COVE	PAINTED CONCRETE BLOCK & CONCRETE (2)	10'-0"	2 x 4 SUS. ACOUSTICAL TILE	
153	CLASSROOM	EXPOSED CONCRETE (4)	4" RUBBER COVE	PAINTED CONCRETE	10'-0"	2 x 4 SUS. ACOUSTICAL TILE	
154	POWER/MACH. LAB	EXPOSED (4) CONCRETE	4" RUBBER COVE	PAINTED CONCRETE BLOCK & CONCRETE (2)	10'-0"	2 x 4 SUS. ACOUSTICAL TILE	
154-A	STORAGE	EXPOSED (4) CONCRETE	4" RUBBER COVE	PAINTED CONCRETE BLOCK & CONCRETE (2)	10'-0"	2 x 4 SUS. ACOUSTICAL TILE	
155	MACHINE SHOP	EXPOSED (4) CONCRETE	4" RUBBER COVE	PAINTED CONCRETE BLOCK & CONCRETE (2)	—	PAINTED CONCRETE STRUCTURE	
155A	STORAGE	EXPOSED (4) CONCRETE	4" RUBBER COVE	PAINTED CONCRETE	10'-0"	2 x 4 SUS. ACOUSTICAL TILE	
156	ROBOTICS	EXPOSED (4) CONCRETE	4" RUBBER COVE	PAINTED CONCRETE BLOCK & CONCRETE (2)	10'-0"	2 x 4 SUS. ACOUSTICAL TILE	
156-A	STORAGE	EXPOSED (4) CONCRETE	4" RUBBER COVE	PAINTED CONCRETE BLOCK	10'-0"	2 x 4 SUS. ACOUSTICAL TILE	
157	COMPUTER CENTER	EXPOSED (4) CONCRETE	4" RUBBER COVE	PAINTED CONCRETE BLOCK & CONCRETE (2)	10'-0"	2 x 4 SUS. ACOUSTICAL TILE	
DDC01	CORRIDOR	CERAMIC (1) GRANULAR FL.	4" CERAMIC (1) GRANULAR FL.	PAINTED CONCRETE BLOCK (2)	8'-0"	2 x 4 SUS. ACOUSTICAL TILE	

plan details

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AF 32526

COMM. NO. 10186

A-11

DATE: 6/23/86

ROOM FINISH SCHEDULE • LAB SCIENCE BUILDING SECOND FLOOR

ROOM NO.	ROOM NAME	FLOOR	BASE	WALLS	CEILING HEIGHT	CEILING	REMARKS
AAY02	FOYER	CERAMIC (1) GRANULAR FL.	4" CERAMIC (1) GRANULAR FL.	PAINTED CONCRETE BLOCK	8'-6"	2 x 4 SUS. ACOUSTICAL TILE	(1) CERAMIC GRANULAR FLOORING - TURN CONTINUOUS UP WALL TO FORM 4" COVE BASE
EEC02	CORRIDOR	CERAMIC (1) GRANULAR FL.	4" CERAMIC (1) GRANULAR FL.	PAINTED CONCRETE BLOCK	8'-6"	2 x 4 SUS. ACOUSTICAL TILE	
FFC02	CORRIDOR	CERAMIC (1) GRANULAR FL.	4" CERAMIC (1) GRANULAR FL.	PAINTED CONCRETE BLOCK & CONCRETE (2)	8'-6"	2 x 4 SUS. ACOUSTICAL TILE	(2) PAINTED CONCRETE AT COLUMNS, STAIRS, ELEVATOR WALLS.
DDC02	CORRIDOR	CERAMIC (1) GRANULAR FL.	4" CERAMIC (1) GRANULAR FL.	PAINTED CONCRETE BLOCK & CONCRETE (2)	8'-6"	2 x 4 SUS. ACOUSTICAL TILE	
BBC02	LOBBY	THIN SET TERRAZZO	NONE	—	10'-6"	2 x 4 SUS. ACOUSTICAL TILE	
EES02	STAIR	CERAMIC (1) GRANULAR FL.	4" CERAMIC (1) GRANULAR FL.	PAINTED CONCRETE BLOCK & CONCRETE	—	PAINTED CONCRETE (3)	(3) PAINT ALL EXPOSED SURFACES: UNDERNEATH SIDE OF LANDINGS, ETC.
230	MATERIAL SCIENCE	EXPOSED (4) CONCRETE	4" RUBBER COVE	PAINTED CONCRETE BLOCK	8'-6"	2 x 4 SUS. ACOUSTICAL TILE	(4) "SEALED" CONCRETE SEE SPECIFICATIONS
231	ENVIRONMENTAL RESEARCH	EXPOSED (4) CONCRETE	4" RUBBER COVE	PAINTED CONCRETE BLOCK & CONCRETE (2)	8'-6"	2 x 4 SUS. ACOUSTICAL TILE	
232	ENVIRONMENTAL SAMPLE	EXPOSED (4) CONCRETE	4" RUBBER COVE	PAINTED CONCRETE BLOCK & CONCRETE (2)	8'-6"	2 x 4 SUS. ACOUSTICAL TILE	
233	ELECTRICAL	EXPOSED (4) CONCRETE	NONE	EXPOSED CONCRETE & CONCRETE BLOCK	—	EXPOSED STRUCTURE	
234	SOILS LABORATORY	EXPOSED (4) CONCRETE	4" RUBBER COVE	PAINTED (2) CONCRETE BLOCK	—	PAINTED CONCRETE STRUCTURE	
234-A	HUMID STORAGE	EXPOSED (4) CONCRETE	4" RUBBER COVE	PAINTED CONCRETE BLOCK	—	PAINTED CONCRETE STRUCTURE	
235	SOILS SAMPLE RECEIVING	EXPOSED (4) CONCRETE	4" RUBBER COVE	PAINTED CONCRETE BLOCK	—	PAINTED CONCRETE STRUCTURE	
235-A	HUMID STORAGE	EXPOSED (4) CONCRETE	4" RUBBER COVE	PAINTED CONCRETE BLOCK	—	PAINTED CONCRETE STRUCTURE	
236	STRUCTURAL TEST LAB	EXPOSED (4) CONCRETE	4" RUBBER COVE	PAINTED CONCRETE BLOCK	—	PAINTED CONCRETE STRUCTURE	
237	JANITOR	EXPOSED (4) CONCRETE	4" RUBBER COVE	PAINTED (5) CONCRETE BLOCK	—	PAINTED CONCRETE STRUCTURE	(5) CERAMIC TILE BEHIND JANITOR'S SINK SEE INTERIOR ELEVATIONS
238	ELECTRICAL	EXPOSED (4) CONCRETE	NONE	EXPOSED CONCRETE BLOCK	—	EXPOSED CONCRETE STRUCTURE	
239	STUDENT LOUNGE	CERAMIC (1) GRANULAR FL.	4" GRANULAR(1) GRANULAR FL.	PAINTED CONCRETE BLOCK & CONCRETE (2)	8'-6"	2 x 4 SUS. ACOUSTICAL TILE	
FFS02	STAIR	CERAMIC (1) GRANULAR FL.	4" CERAMIC (1) GRANULAR FL.	PAINTED CONCRETE BLOCK & CONCRETE	—	PAINTED CONCRETE (3)	
BBY02	FOYER	CERAMIC (1) GRANULAR FL.	4" CERAMIC (1) GRANULAR FL.	PAINTED CONCRETE BLOCK & CONCRETE (2)	—	2 x 4 SUS. ACOUSTICAL TILE	
240	STRUCTURAL LAB TEST	EXPOSED (4) CONCRETE	4" RUBBER COVE	PAINTED CONCRETE BLOCK	—	PAINTED CONCRETE STRUCTURE	PAINT TEST AREA FLOOR SEE PLAN
240-A	VARYING TEMP.	EXPOSED (4) CONCRETE	4" RUBBER COVE	PAINTED CONCRETE BLOCK	—	PAINTED CONCRETE STRUCTURE	
240-B	CONSTANT TEMP.	EXPOSED (4) CONCRETE	4" RUBBER COVE	PAINTED CONCRETE BLOCK	—	PAINTED CONCRETE STRUCTURE	
240-C	STORAGE	EXPOSED (4) CONCRETE	4" RUBBER COVE	PAINTED CONCRETE BLOCK	8'-6"	2 x 4 SUS. ACOUSTICAL TILE	
241	MATERIAL RESEARCH	EXPOSED (4) CONCRETE	4" RUBBER COVE	PAINTED CONCRETE BLOCK	—	PAINTED CONCRETE STRUCTURE	
HHC02	CORRIDOR	CERAMIC (1) GRANULAR FL.	4" CERAMIC (1) GRANULAR FL.	PAINTED CONCRETE BLOCK	8'-6"	2 x 4 SUS. ACOUSTICAL TILE	
242	OFFICE	CARPET	4" STR. RUBBER	PAINTED CONCRETE BLOCK	8'-6"	2 x 4 SUS. ACOUSTICAL TILE	
243	OFFICE	CARPET	4" STR. RUBBER	PAINTED CONCRETE BLOCK	8'-6"	2 x 4 SUS. ACOUSTICAL TILE	
244	OFFICE	CARPET	4" STR. RUBBER	PAINTED CONCRETE BLOCK	8'-6"	2 x 4 SUS. ACOUSTICAL TILE	
245	SECRETARY/ WAITING	CARPET	4" STR. RUBBER	PAINTED CONCRETE BLOCK	8'-6"	2 x 4 SUS. ACOUSTICAL TILE	
245-A	OFFICE	CARPET	4" STR. RUBBER	PAINTED CONCRETE BLOCK	8'-6"	2 x 4 SUS. ACOUSTICAL TILE	
245-B	WORK	CARPET	4" STR. RUBBER	PAINTED CONCRETE BLOCK	8'-6"	2 x 4 SUS. ACOUSTICAL TILE	
245-C	OFFICE	CARPET	4" STR. RUBBER	PAINTED CONCRETE BLOCK	8'-6"	2 x 4 SUS. ACOUSTICAL TILE	
GGC02	CORRIDOR	CERAMIC (1) GRANULAR FL.	4" CERAMIC (1) GRANULAR FL.	PAINTED CONCRETE BLOCK	8'-6"	2 x 4 SUS. ACOUSTICAL TILE	
246	OFFICE	CARPET	4" STR. RUBBER	PAINTED CONCRETE BLOCK	8'-6"	2 x 4 SUS. ACOUSTICAL TILE	
247	OFFICE	CARPET	4" STR. RUBBER	PAINTED CONCRETE BLOCK	8'-6"	2 x 4 SUS. ACOUSTICAL TILE	
248	OFFICE	CARPET	4" STR. RUBBER	PAINTED CONCRETE BLOCK	8'-6"	2 x 4 SUS. ACOUSTICAL TILE	
249	OFFICE	CARPET	4" STR. RUBBER	PAINTED CONCRETE BLOCK	8'-6"	2 x 4 SUS. ACOUSTICAL TILE	
236-A	STORAGE	EXPOSED (4) CONCRETE	4" RUBBER COVE	PAINTED CONC. BLOCK	8'-6"	2X4 SUS. ACOUSTICAL TILE	

ROOM FINISH SCHEDULE • LAB SCIENCE BUILDING THIRD FLOOR

ROOM NO.	ROOM NAME	FLOOR	BASE	WALLS	CEILING HEIGHT	CEILING	REMARKS
FFC03	CORRIDOR	CERAMIC (1) GRANULAR FL.	4" CERAMIC (1) GRANULAR FL.	PAINTED CONCRETE BLOCK & CONCRETE (2)	8'-0"	2 x 4 SUS. ACOUSTICAL TILE	(1) CERAMIC GRANULAR FLOORING - TURN CONTINUOUS UP WALL TO FORM 4" COVE BASE
EES03	STAIR	CERAMIC (1) GRANULAR FL.	4" CERAMIC (1) GRANULAR FL.	PAINTED CONCRETE BLOCK & CONCRETE	—	PAINTED (3) CONCRETE	(2) PAINTED CONCRETE AT COLUMNS, STAIRS, ELEVATOR WALLS
330 / 330-E	RECEPTION / HALL	CARPET	4" STR. RUBBER	PAINTED CONCRETE BLOCK & CONCRETE (2)	8'-9"	2 x 4 SUS. ACOUSTICAL TILE	(3) PAINT ALL EXPOSED SURFACES, UNDERNEATH SIDE OF LANDINGS, ETC.
330-A	OFFICE	CARPET	4" STR. RUBBER	PAINTED CONCRETE BLOCK	8'-9"	2 x 4 SUS. ACOUSTICAL TILE	
330-B	OFFICE	CARPET	4" STR. RUBBER	PAINTED CONCRETE BLOCK	8'-9"	2 x 4 SUS. ACOUSTICAL TILE	
330-C	OFFICE	CARPET	4" STR. RUBBER	PAINTED CONCRETE BLOCK	8'-9"	2 x 4 SUS. ACOUSTICAL TILE	
330-D	OFFICE	CARPET	4" STR. RUBBER	PAINTED CONCRETE BLOCK & CONCRETE (2)	8'-9"	2 x 4 SUS. ACOUSTICAL TILE	
331	MEN	CERAMIC TILE	4" CERAMIC COVE	CERAMIC TILE	8'-9"	2 x 4 SUS. ACOUSTICAL TILE	
332	WOMEN	CERAMIC TILE	4" CERAMIC COVE	CERAMIC TILE	8'-9"	2 x 4 SUS. ACOUSTICAL TILE	
333	GEN. PHYSICAL SCIENCE LAB	EXPOSED (4) CONCRETE (5)	4" RUBBER COVE	PAINTED (2) CONCRETE BLOCK	8'-9"	2 x 4 SUS. ACOUSTICAL TILE	(4) "SEALED" CONCRETE - SEE SPECIFICATIONS
333-A	ELECTRICAL	EXPOSED (4) CONCRETE	NONE	EXPOSED BLOCK & CONCRETE	—	EXPOSED CONCRETE STRUCTURE	(5) CERAMIC GRANULAR FLOORING TO BE INSTALLED ON PLATFORM
333-B	STORAGE	EXPOSED (4) CONCRETE	4" RUBBER COVE	PAINTED CONCRETE BLOCK	8'-9"	2 x 4 SUS. ACOUSTICAL TILE	
334	GEN. PHYSICAL SCIENCE LAB	EXPOSED (4) CONCRETE (5)	4" RUBBER COVE	PAINTED CONCRETE BLOCK	8'-9"	2 x 4 SUS. ACOUSTICAL TILE	
334-A	PREPARATION	EXPOSED (4) CONCRETE	4" RUBBER COVE	PAINTED CONCRETE BLOCK	8'-9"	2 x 4 SUS. ACOUSTICAL TILE	
334-B	CHEMICAL STORAGE	EXPOSED (4) CONCRETE	4" RUBBER COVE	PAINTED CONCRETE BLOCK	8'-9"	2 x 4 SUS. ACOUSTICAL TILE	
334-C	STORAGE	EXPOSED (4) CONCRETE	4" RUBBER COVE	PAINTED CONCRETE BLOCK	8'-9"	2 x 4 SUS. ACOUSTICAL TILE	
335	JANITOR	EXPOSED (4) CONCRETE	4" RUBBER COVE	PAINTED (6) CONCRETE BLOCK	—	PAINTED CONCRETE STRUCTURE	(6) CERAMIC TILE BEHIND JANITOR'S SINK SEE INTERIOR ELEVATIONS
336	ELECTRICAL	EXPOSED (4) CONCRETE	NONE	EXPOSED CONCRETE BLOCK	—	EXPOSED CONCRETE STRUCTURE	
337	MECHANICAL	EXPOSED (4) CONCRETE	NONE	EXPOSED CONCRETE BLOCK	—	EXPOSED CONCRETE STRUCTURE	
FFS03	STAIR	CERAMIC (1) GRANULAR FL.	4" CERAMIC (1) GRANULAR FL.	PAINTED CONCRETE BLOCK & CONCRETE	—	PAINTED (3) CONCRETE	
338	BIO-CHEMISTRY LAB	EXPOSED (4) CONCRETE	4" RUBBER COVE	PAINTED CONCRETE BLOCK	9'-4"	2 x 4 SUS. ACOUSTICAL TILE	
339	PHYSICAL GEOLOGY	EXPOSED (4) CONCRETE	4" RUBBER COVE	PAINTED CONCRETE BLOCK	8'-9"	2 x 4 SUS. ACOUSTICAL TILE	
339-A	PREPARATION/ LAPIDARY	EXPOSED (4) CONCRETE	4" RUBBER COVE	PAINTED CONCRETE BLOCK	8'-9"	2 x 4 SUS. ACOUSTICAL TILE	
339-B	REPOSITORY	EXPOSED (4) CONCRETE	4" RUBBER COVE	PAINTED CONCRETE BLOCK	8'-9"	2 x 4 SUS. ACOUSTICAL TILE	
339-C	MAP FILE/ CARTOGRAPHY	EXPOSED (4) CONCRETE	4" RUBBER COVE	PAINTED CONCRETE BLOCK	8'-9"	2 x 4 SUS. ACOUSTICAL TILE	
340	LEARNING LAB	EXPOSED (4) CONCRETE	4" RUBBER COVE	PAINTED CONCRETE BLOCK	8'-9"	2 x 4 SUS. ACOUSTICAL TILE	
341	GEN. BIOLOGY LAB	EXPOSED (4) CONCRETE	4" RUBBER COVE	PAINTED CONCRETE BLOCK	8'-9"	2 x 4 SUS. ACOUSTICAL TILE	
342	PREPARATION	EXPOSED (4) CONCRETE	4" RUBBER COVE	PAINTED CONCRETE BLOCK	8'-9"	2 x 4 SUS. ACOUSTICAL TILE	
343	GEN. BIOLOGY LAB	EXPOSED (4) CONCRETE	4" RUBBER COVE	PAINTED CONCRETE BLOCK	8'-9"	2 x 4 SUS. ACOUSTICAL TILE	
344	CLASSROOM	EXPOSED (4) CONCRETE	4" RUBBER COVE	PAINTED CONCRETE BLOCK	8'-9"	2 x 4 SUS. ACOUSTICAL TILE	

ROOM FINISH SCHEDULE • LAB SCIENCE BUILDING FOURTH FLOOR

ROOM NO.	ROOM NAME	FLOOR	BASE	WALLS	CEILING HEIGHT	CEILING	REMARKS
FFC04	CORRIDOR	CERAMIC (1) GRANULAR FL.	4" CERAMIC (1) GRANULAR FL.	PAINTED CONCRETE BLOCK & CONCRETE (2)	8'-0"	2 x 4 SUS. ACOUSTICAL TILE	(1) CERAMIC GRANULAR FLOORING - TURN CONTINUOUS UP WALL TO FORM 4" COVE BASE
EES04	STAIR	CERAMIC (1) GRANULAR	4" CERAMIC (1) GRANULAR FL.	PAINTED CONCRETE & CONCRETE BLOCK	—	PAINTED (3) CONCRETE	(2) PAINTED CONCRETE AT COLUMNS, STAIRS, ELEVATOR WALLS
430	MONITORED ENVIRON. LAB	EXPOSED (4) CONCRETE	4" RUBBER COVE	PAINTED CONCRETE BLOCK & CONCRETE (2)	8'-9"	2 x 4 SUS. ACOUSTICAL TILE	(3) PAINT ALL EXPOSED SURFACES; UNDERNEATH SIDE OF LANDINGS, ETC.
431	MEN	CERAMIC TILE	4" CERAMIC COVE	CERAMIC TILE	8'-9"	2 x 4 SUS. ACOUSTICAL TILE	(4) "SEALED" CONCRETE - SEE SPECIFICATIONS
432	WOMEN	CERAMIC TILE	4" CERAMIC COVE	CERAMIC TILE	8'-9"	2 x 4 SUS. ACOUSTICAL TILE	
433	ANATOMY LAB	EXPOSED (4) CONCRETE	4" RUBBER COVE	PAINTED (2) CONCRETE BLOCK	8'-9"	2 x 4 SUS. ACOUSTICAL TILE	
433-A	ELECTRICAL	EXPOSED (4) CONCRETE	NONE	EXPOSED BLOCK & CONCRETE	—	EXPOSED STRUCTURE	
433-B	STORAGE	EXPOSED (4) CONCRETE	4" RUBBER COVE	PAINTED CONCRETE BLOCK	8'-9"	2 x 4 SUS. ACOUSTICAL TILE	
434	PHYSIOLOGY LAB	EXPOSED (4) CONCRETE	4" RUBBER COVE	PAINTED CONCRETE BLOCK	8'-9"	2 x 4 SUS. ACOUSTICAL TILE	
434-A	PREPARATION/ STORAGE	EXPOSED (4) CONCRETE	4" RUBBER COVE	PAINTED CONCRETE BLOCK	8'-9"	2 x 4 SUS. ACOUSTICAL TILE	
434-B	STORAGE	EXPOSED (4) CONCRETE	4" RUBBER COVE	PAINTED CONCRETE BLOCK	8'-9"	2 x 4 SUS. ACOUSTICAL TILE	
435	JANITOR	EXPOSED (4) CONCRETE	4" RUBBER COVE	PAINTED (5) CONCRETE BLOCK	—	PAINTED CONCRETE STRUCTURE	(5) CERAMIC TILE BEHIND THE JANITORS SINK - SEE INTERIOR ELEVATIONS
436	ELECTRICAL	EXPOSED (4) CONCRETE	NONE	EXPOSED CONCRETE BLOCK	—	EXPOSED STRUCTURE	
437	STUDENT LOUNGE	CERAMIC (1) GRANULAR FL.	4" CERAMIC (1) GRANULAR FL.	PAINTED (2) CONCRETE & CONCRETE BLOCK	8'-9"	2 x 4 SUS. ACOUSTICAL TILE	
FFS04	STAIR	CERAMIC (1) GRANULAR FL.	4" CERAMIC (1) GRANULAR FL.	PAINTED CONCRETE & CONCRETE BLOCK	—	PAINTED (3) CONCRETE	
438	WET LAB	EXPOSED (4) CONCRETE	4" RUBBER COVE	PAINTED CONCRETE BLOCK	8'-9"	2 x 4 SUS. ACOUSTICAL TILE	
439	MAMMAL MUSEUM	EXPOSED (4) CONCRETE	4" RUBBER COVE	PAINTED CONCRETE BLOCK	8'-9"	2 x 4 SUS. ACOUSTICAL TILE	
439-A	STORAGE	EXPOSED (4) CONCRETE	4" RUBBER COVE	PAINTED CONCRETE BLOCK	8'-9"	2 x 4 SUS. ACOUSTICAL TILE	
439-B	STORAGE	EXPOSED (4) CONCRETE	4" RUBBER COVE	PAINTED CONCRETE BLOCK	8'-9"	2 x 4 SUS. ACOUSTICAL TILE	
439-C	DARK STORAGE	EXPOSED (4) CONCRETE	4" RUBBER COVE	PAINTED CONCRETE BLOCK	8'-9"	2 x 4 SUS. ACOUSTICAL TILE	
439-D	PREP. LAB	EXPOSED (4) CONCRETE	4" RUBBER COVE	PAINTED CONCRETE BLOCK	8'-9"	2 x 4 SUS. ACOUSTICAL TILE	
440	ICTHS & HERPS	EXPOSED (4) CONCRETE	4" RUBBER COVE	PAINTED CONCRETE BLOCK	8'-9"	2 x 4 SUS. ACOUSTICAL TILE	
441	GENERAL ZOOLOGY	EXPOSED (4) CONCRETE	4" RUBBER COVE	PAINTED CONCRETE BLOCK	8'-9"	2 x 4 SUS. ACOUSTICAL TILE	
441-A	PREPARATION/ STORAGE	EXPOSED (4) CONCRETE	4" RUBBER COVE	PAINTED CONCRETE BLOCK	8'-9"	2 x 4 SUS. ACOUSTICAL TILE	
442	GENERAL BOTANY	EXPOSED (4) CONCRETE	4" RUBBER COVE	PAINTED CONCRETE BLOCK	8'-9"	2 x 4 SUS. ACOUSTICAL TILE	
442-A	PREPARATION/ STORAGE	EXPOSED (4) CONCRETE	4" RUBBER COVE	PAINTED CONCRETE BLOCK	8'-9"	2 x 4 SUS. ACOUSTICAL TILE	
443	LABORATORY ASSISTANTS	EXPOSED (4) CONCRETE	4" RUBBER COVE	PAINTED CONCRETE BLOCK	8'-9"	2 x 4 SUS. ACOUSTICAL TILE	
444	CLASSROOM	EXPOSED (4) CONCRETE	4" RUBBER COVE	PAINTED CONCRETE BLOCK	8'-9"	2 x 4 SUS. ACOUSTICAL TILE	

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ROOM FINISH SCHEDULE • LAB SCIENCE BUILDING FIFTH FLOOR

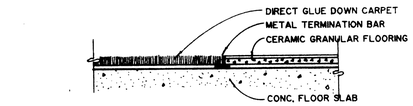
ROOM NO.	ROOM NAME	FLOOR	BASE	WALLS	CEILING HEIGHT	CEILING	REMARKS
FFC05	CORRIDOR	CERAMIC (1) GRANULAR FL.	4" CERAMIC (1) GRANULAR FL.	PAINTED CONCRETE BLOCK & CONCRETE (2)	8'-0"	2 x 4 SUS. ACOUSTICAL TILE	(1) CERAMIC GRANULAR FLOORING - TURN CONTINUOUS UP WALL TO FORM 4" COVE BASE
EES05	STAIR	CERAMIC (1) GRANULAR FL.	4" CERAMIC GRANULAR FL.	PAINTED CONCRETE BLOCK & CONCRETE	—	PAINTED (3) CONCRETE	(2) PAINTED CONCRETE AT COLUMNS, STAIRS, ELEVATOR WALLS
530	FACULTY/ STUDENT MEET.	EXPOSED (4) CONCRETE	4" RUBBER COVE	PAINTED CONCRETE BLOCK & CONCRETE (2)	8'-9"	2 x 4 SUS. ACOUSTICAL TILE	(3) PAINT ALL EXPOSED SURFACES; UNDERNEATH SIDE OF LANDINGS, ETC.
531	MEN	CERAMIC TILE	4" CERAMIC COVE	CERAMIC TILE	8'-9"	2 x 4 SUS. ACOUSTICAL TILE	(4) "SEALED" CONCRETE - SEE SPECIFICATIONS
532	WOMEN	CERAMIC TILE	4" CERAMIC COVE	CERAMIC TILE	8'-9"	2 x 4 SUS. ACOUSTICAL TILE	
533	MAINTENANCE	EXPOSED (4) CONCRETE	4" RUBBER COVE	PAINTED CONCRETE BLOCK & CONCRETE (2)	8'-9"	2 x 4 SUS. ACOUSTICAL TILE	
533-A	ELECTRICAL	EXPOSED (4) CONCRETE	NONE	EXPOSED BLOCK & CONCRETE	—	EXPOSED STRUCTURE	
533-B	STORAGE	EXPOSED (4) CONCRETE	4" RUBBER COVE	PAINTED CONCRETE BLOCK	8'-9"	2 x 4 SUS. ACOUSTICAL TILE	
534	FT-IR & PLASMA	EXPOSED (4) CONCRETE	4" RUBBER COVE	PAINTED CONCRETE BLOCK	8'-9"	2 x 4 SUS. ACOUSTICAL TILE	
535	SEPARATION LAB	EXPOSED (4) CONCRETE	4" RUBBER COVE	PAINTED CONCRETE BLOCK	8'-9"	2 x 4 SUS. ACOUSTICAL TILE	
536	X-RAY LAB	EXPOSED (4) CONCRETE	4" RUBBER COVE	PAINTED CONCRETE BLOCK	8'-9"	2 x 4 SUS. ACOUSTICAL TILE	
536-A	STORAGE	EXPOSED (4) CONCRETE	4" RUBBER COVE	PAINTED CONCRETE BLOCK	8'-9"	2 x 4 SUS. ACOUSTICAL TILE	
536-B	DARK ROOM	EXPOSED (4) CONCRETE	4" RUBBER COVE	PAINTED CONCRETE BLOCK	8'-9"	2 x 4 SUS. ACOUSTICAL TILE	
537	THERMAL ANALYSIS LAB	EXPOSED (4) CONCRETE	4" RUBBER COVE	PAINTED CONCRETE BLOCK	8'-9"	2 x 4 SUS. ACOUSTICAL TILE	
538	SECRETARY	CARPET	— 4" STR. RUBBER	PAINTED CONCRETE BLOCK	8'-9"	2 x 4 SUS. ACOUSTICAL TILE	
538-A	LABORATORY MANAGER	CARPET	4" STR. RUBBER	PAINTED CONCRETE BLOCK	8'-9"	2 x 4 SUS. ACOUSTICAL TILE	
538-B	SAMPLE STORAGE	EXPOSED (4) CONCRETE	4" RUBBER COVE	PAINTED CONCRETE BLOCK	8'-9"	2 x 4 SUS. ACOUSTICAL TILE	
539	JANITOR	EXPOSED (4) CONCRETE	4" RUBBER COVE	PAINTED (6) CONCRETE BLOCK	—	PAINTED CONCRETE STRUCTURE	(5) CERAMIC TILE BEHIND JANITORS SINK - SEE INTERIOR ELEVATIONS
540	ELECTRICAL	EXPOSED (4) CONCRETE	NONE	EXPOSED CONCRETE BLOCK	—	EXPOSED STRUCTURE	
541	MECHANICAL	EXPOSED (4) CONCRETE	NONE	EXPOSED CONCRETE & CONCRETE BLOCK	—	EXPOSED STRUCTURE	
FFS05	STAIR	CERAMIC (1) GRANULAR FL.	4" CERAMIC (1) GRANULAR FL.	PAINTED CONCRETE BLOCK & CONCRETE	—	PAINTED (3) CONCRETE	
542	INORGANIC RESEARCH LAB	EXPOSED (4) CONCRETE	4" RUBBER COVE	PAINTED CONCRETE BLOCK	9'-3"	2 x 4 SUS. ACOUSTICAL TILE	
543	HIGH TEMP CHEMISTRY	EXPOSED (4) CONCRETE	4" RUBBER COVE	PAINTED CONCRETE BLOCK	9'-3"	2 x 4 SUS. ACOUSTICAL TILE	
544	BIO-TECH RESEARCH	EXPOSED (4) CONCRETE	4" RUBBER COVE	PAINTED CONCRETE BLOCK	8'-9"	2 x 4 SUS. ACOUSTICAL TILE	
544-A	CLONING	EXPOSED (4) CONCRETE	4" RUBBER COVE	PAINTED CONCRETE BLOCK	8'-9"	2 x 4 SUS. ACOUSTICAL TILE	
544-B	RADIOACTIVE COUNTING	EXPOSED (4) CONCRETE	4" RUBBER COVE	PAINTED CONCRETE BLOCK	8'-9"	2 x 4 SUS. ACOUSTICAL TILE	
544-C	RADIOACTIVE CHEMISTRY	EXPOSED (4) CONCRETE	4" RUBBER COVE	PAINTED CONCRETE BLOCK	8'-9"	2 x 4 SUS. ACOUSTICAL TILE	
545	CELL BIOLOGY LAB.	EXPOSED (4) CONCRETE	4" RUBBER COVE	PAINTED CONCRETE BLOCK	8'-9"	2 x 4 SUS. ACOUSTICAL TILE	
545-A	PREPARATION & STORAGE	EXPOSED (4) CONCRETE	4" RUBBER COVE	PAINTED CONCRETE BLOCK	8'-9"	2 x 4 SUS. ACOUSTICAL TILE	
546	MICRO-BIOLOGY LAB	EXPOSED (4) CONCRETE	4" RUBBER COVE	PAINTED CONCRETE BLOCK	8'-9"	2 x 4 SUS. ACOUSTICAL TILE	
546-A	PREPARATION & STORAGE	EXPOSED (4) CONCRETE	4" RUBBER COVE	PAINTED CONCRETE BLOCK	8'-9"	2 x 4 SUS. ACOUSTICAL TILE	
546-B	PREPARATION	EXPOSED (4) CONCRETE	4" RUBBER COVE	PAINTED CONCRETE BLOCK	8'-9"	2 x 4 SUS. ACOUSTICAL TILE	
GGC05	CORRIDOR	CERAMIC (1) GRANULAR FL.	4" CERAMIC (1) GRANULAR FL.	PAINTED CONCRETE BLOCK	8'-0"	2 x 4 SUS. ACOUSTICAL TILE	
547	OFFICE	CARPET	4" STR. RUBBER	PAINTED CONCRETE BLOCK	8'-9"	2 x 4 SUS. ACOUSTICAL TILE	
548	OFFICE	CARPET	4" STR. RUBBER	PAINTED CONCRETE BLOCK	8'-9"	2 x 4 SUS. ACOUSTICAL TILE	
549	OFFICE	CARPET	4" STR. RUBBER	PAINTED CONCRETE BLOCK	8'9"	2 x 4 SUS. ACOUSTICAL TILE	
549-A	STORAGE	CARPET	4" STR. RUBBER	PAINTED CONCRETE BLOCK	8'-9"	2 x 4 SUS. ACOUSTICAL TILE	
550	OFFICE	CARPET	4" STR. RUBBER	PAINTED CONCRETE BLOCK	8'-9"	2 x 4 SUS. ACOUSTICAL TILE	
550-A	STORAGE	CARPET	4" STR. RUBBER	PAINTED CONCRETE BLOCK	8'-9"	2 x 4 SUS. ACOUSTICAL TILE	
551	AUDIO/ VISUAL STOR.	CARPET	4" STR. RUBBER	PAINTED CONCRETE BLOCK	8'-9"	2 x 4 SUS. ACOUSTICAL TILE	
552	WAITING	CARPET	4" STR. RUBBER	PAINTED CONCRETE BLOCK	8'-9"	2 x 4 SUS. ACOUSTICAL TILE	
552-A	ASSISTANT DEAN	CARPET	4" STR. RUBBER	STAINED WOOD (6) PANELING	8-9"	2 x 4 SUS. ACOUSTICAL TILE	(6) WOOD PANELING GLUED DIRECTLY TO CONCRETE BLOCK WALLS - SEE SPECIFICATIONS
552-A	STORAGE	CARPET	4" STR. RUBBER	PAINTED CONCRETE BLOCK	8'-9"	2 x 4 SUS. ACOUSTICAL TILE	
552-B	STORAGE	CARPET	4" STR. RUBBER	PAINTED CONCRETE BLOCK	8'-9"	2 x 4 SUS. ACOUSTICAL TILE	
552-C	STORAGE	CARPET	4" STR. RUBBER	PAINTED CONCRETE BLOCK	8'-9"	2 x 4 SUS. ACOUSTICAL TILE	
552-D	WORK ROOM	CARPET	4" STR. RUBBER	PAINTED CONCRETE BLOCK	8'-9"	2 x 4 SUS. ACOUSTICAL TILE	
552-E	DEAN'S OFFICE	CARPET	4" STR. RUBBER	STAINED WOOD PANELING (6)	8'-9"	2 x 4 SUS. ACOUSTICAL TILE	
553	CONFERENCE	CARPET	4" STR. RUBBER	STAINED WOOD PANELING (6)	8'-9"	2 x 4 SUS. ACOUSTICAL TILE	
553-A	COFFEE	CARPET	4" STR. RUBBER	PAINTED CONCRETE BLOCK	8'-9"	2 x 4 SUS. ACOUSTICAL TILE	
553-B	TOILET	CERAMIC TILE	4" CERAMIC COVE	PAINTED CONCRETE BLOCK	8'-9"	2 x 4 SUS. ACOUSTICAL TILE	

ROOM FINISH SCHEDULE • LAB SCIENCE BUILDING ROOF

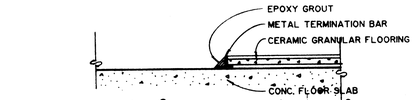
ROOM NO.	ROOM NAME	FLOOR	BASE	WALLS	CEILING HEIGHT	CEILING	REMARKS
EES06	STAIR	CERAMIC (1) GRANULAR FL.	4" CERAMIC (1) GRANULAR FL.	PAINTED CONCRETE & CONCRETE BLOCK	—	PAINTED CONCRETE (2)	SEE SHEET A-36
BBE06	ELEVATOR PENTHOUSE	EXPOSED STRUCTURE	NONE	EXPOSED CONCRETE	—	EXPOSED CONCRETE	(1) CERAMIC GRANULAR FLOORING - TURN CONTINUOUS UP WALL TO FORM 4" COVE BASE
630	VENTILATION EQUIP. ROOM	EXPOSED STRUCTURE	NONE	EXPOSED CONCRETE BLOCK	—	EXPOSED STRUCTURE	(2) PAINT ALL EXPOSED SURFACES; UNDERNEATH SIDE OF LANDINGS, ETC.
FFS06	STAIR	CERAMIC (1) GRANULAR FL.	4" CERAMIC (1) GRANULAR FL.	PAINTED CONCRETE & CONCRETE BLOCK	—	PAINTED (2) CONCRETE	

ROOM FINISH SCHEDULE • GREENHOUSE · ANIMAL CARE · MECHANICAL

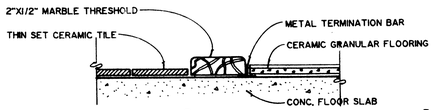
ROOM NO.	ROOM NAME	FLOOR	BASE	WALLS	CEILING HEIGHT	CEILING	REMARKS
260	HEAD HOUSE	EXPOSED (1) CONCRETE	4" RUBBER COVE	PAINTED CONCRETE BLOCK	—	PAINTED METAL DECK & JOISTS	(1) "SEALED" CONCRETE - SEE SPECIFICATIONS
260-A	GREENHOUSE	EXPOSED (1) CONCRETE	NONE	PAINTED (2) CONCRETE BLOCK	—	EXPOSED GREENHOUSE STRUCTURE	(2) PAINT 2'-8" HIGH BLOCK WALL GREENHOUSE BASE SEE SECTIONS
HHC02	CORRIDOR	EXPOSED (1) CONCRETE	4" RUBBER COVE	PAINTED CONCRETE BLOCK	10'-0"	2 x 4 SUS. VINYL COVERED GYP. PANELS	
261	ANIMAL ROOM	EXPOSED (1) CONCRETE	4" RUBBER COVE	PAINTED CONCRETE BLOCK	10'-0"	2 x 4 SUS. VINYL COVERED GYP. PANELS	
262	ANIMAL ROOM	EXPOSED (1) CONCRETE	4" RUBBER COVE	PAINTED CONCRETE BLOCK	10'-0"	2 x 4 SUS. VINYL COVERED GYP. PANELS	
263	ANIMAL ROOM	EXPOSED (1) CONCRETE	4" RUBBER COVE	PAINTED CONCRETE BLOCK	10'-0"	2 x 4 SUS. VINYL COVERED GYP. PANELS	
264	ANIMAL ROOM	EXPOSED (1) CONCRETE	4" RUBBER COVE	PAINTED CONCRETE BLOCK	10'-0"	2 x 4 SUS. VINYL COVERED GYP. PANELS	
265	ANIMAL ROOM	EXPOSED (1) CONCRETE	4" RUBBER COVE	PAINTED CONCRETE BLOCK	10'-0"	2 x 4 SUS. VINYL COVERED GYP. PANELS	
266	ANIMAL ROOM	EXPOSED (1) CONCRETE	4" RUBBER COVE	PAINTED CONCRETE BLOCK	10'-0"	2 x 4 SUS. VINYL COVERED GYP. PANELS	
267	STORAGE	EXPOSED (1) CONCRETE	4" RUBBER COVE	PAINTED CONCRETE BLOCK	10'-0"	2 x 4 SUS. VINYL COVERED GYP. PANELS	
268	MECHANICAL	EXPOSED (1) CONCRETE	NONE	EXPOSED CONCRETE BLOCK	—	EXPOSED STRUCTURE	
269	CAGEWASH	EXPOSED (1) CONCRETE	4" RUBBER COVE	PAINTED CONCRETE BLOCK	10'-0"	2 x 4 SUS. VINYL COVERED GYP. PANELS	
270	SURGERY	EXPOSED (1) CONCRETE	4" RUBBER COVE	PAINTED CONCRETE BLOCK	10'-0"	2 x 4 SUS. VINYL COVERED GYP. PANELS	
271	FOOD STORAGE	EXPOSED (1) CONCRETE	4" RUBBER COVE	PAINTED CONCRETE BLOCK	10'-0"	2 x 4 SUS. VINYL COVERED GYP. PANELS	
272	OFFICE	EXPOSED (1) CONCRETE	4" RUBBER COVE	PAINTED CONCRETE BLOCK	10'-0"	2 x 4 SUS. VINYL COVERED GYP. PANELS	
272-A	RESTROOM	CERAMIC TILE	4" CERAMIC COVE	PAINTED (3) CONCRETE BLOCK	10'-0"	2 x 4 SUS. VINYL COVERED GYP. PANELS	(3) CERAMIC TILE AT SHOWER WALLS - SEE INTERIOR ELEVATIONS
273	CHEMICAL STORAGE	EXPOSED (1) CONCRETE	NONE	EXPOSED CONCRETE BLOCK	—	PAINTED METAL DECK & JOISTS	
274	MECHANICAL	EXPOSED (1) CONCRETE	NONE	EXPOSED CONCRETE BLOCK	—	PAINTED METAL DECK & JOISTS	



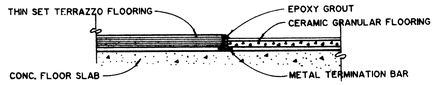
1 / A-12 **carpet - ceramic granular** NO SCALE



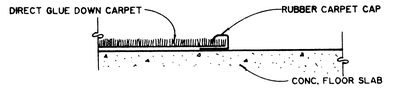
2 / A-12 **exposed conc.- ceramic granular** NO SCALE



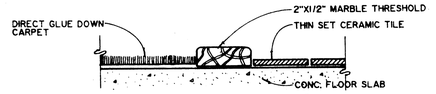
3 / A-12 **ceramic tile - ceramic granular** NO SCALE



4 / A-12 **terrazzo - ceramic granular** NO SCALE

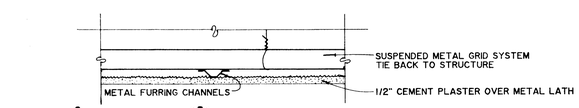


5 / A-12 **carpet - exposed concrete** NO SCALE

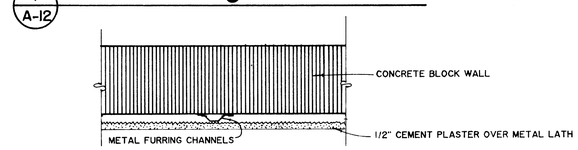


6 / A-12 **carpet - ceramic tile** NO SCALE

transition details



7 / A-12 **det. at ceiling**



8 / A-12 **det. at wall**

details at plaster

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

COMM. NO. 10186

A-12

DATE: 6/23/86

ADDITION TO
LABORATORY SCIENCES CENTER
ARKANSAS STATE UNIVERSITY
JONESBORO, ARKANSAS

P.O. Box 1655 • Jonesboro, Arkansas 72403-1655 • 501/932-0571

BRACKETT-KENNERICH & ASSOCIATES, P.A. REGISTERED ARCHITECTS C13 ARKANSAS

Brackett Kennerich and Associates Inc. Architects

AF 32526

DOOR SCHEDULE • LAB SCIENCE BUILDING

Floor	Opening Number	Door Type	Door Num.	Door Thresh	Label	Detail Head	Detail Jamb	Detail Sill	Hdwe Set No.	Remarks
First Floor	1	E	PAIR	——	"B"	11/A-14	11/A-14		1	
First Floor	2	B	PAIR	——	—	5/A-14	6/A-14	2/A-12	2	
First Floor	3	B	PAIR	——	—	5/A-14	6/A-14	2/A-12	2	
First Floor	4	C	SINGLE	MARBLE	—	5/A-14	6/A-14	3/A-12	3	
First Floor	5	D	SINGLE	——	"B"	5/A-14	6/A-14		4	
First Floor	6	C	SINGLE	MARBLE	—	5/A-14	6/A-14	3/A-12	3	
First Floor	7	C	SINGLE	——	—	5/A-14	6/A-14	2/A-12	5	
First Floor	8	C	SINGLE	——	—	5/A-14	6/A-14		5	
First Floor	9	E	PAIR	——	"B"	12/A-14	12/A-14		1	
First Floor	10	F	SINGLE	——	—	10/A-14	——	1/A-12	7	
First Floor	11	C	SINGLE	——	—	1/A-14	2/A-14		6	
First Floor	12	C	SINGLE	——	—	1/A-14	2/A-14		6	
First Floor	13	C	SINGLE	——	—	1/A-14	2/A-14		6	
First Floor	14	C	SINGLE	——	—	1/A-14	2/A-14		6	
First Floor	15	G	SINGLE	——	—	5/A-14	6/A-14	2/A-12	8	
First Floor	16	H	SINGLE	——	—	5/A-14	6/A-14	2/A-12	8	
First Floor	17	A	PAIR	——	—	5/A-14	6/A-14	2/A-12	9	
First Floor	18	C	SINGLE	——	—	1/A-14	2/A-14		6	
First Floor	19	H	SINGLE	——	—	5/A-14	6/A-14	2/A-12	8	
First Floor	20	J	PAIR	——	—	1/A-14	2/A-14		10	
First Floor	21	J	PAIR	——	—	1/A-14	2/A-14		10	
First Floor	22	C	SINGLE	——	—	1/A-14	2/A-14		6	
First Floor	23	A	PAIR	——	—	5/A-14	6/A-14	2/A-12	9	
First Floor	24	C	SINGLE	——	—	1/A-14	2/A-14		6	
First Floor	25	H	SINGLE	——	—	5/A-14	6/A-14	2/A-12	8	
First Floor	26	G	SINGLE	——	—	12/A-14	12/A-14	2/A-12	8	
First Floor	27	C	SINGLE	——	—	12/A-14	12/A-14		8	
First Floor	28	C	SINGLE	——	—	5/A-14	6/A-14	2/A-12	8	
First Floor	29	E	PAIR	——	"B"	12/A-14	12/A-14		1	
First Floor	30	K	PAIR	——	"B"	5/A-14	6/A-14	2/A-12	10	
First Floor	31									DOOR OMITTED
First Floor	32	L	SINGLE	——	"B"	5/A-14	6/A-14	2/A-12	5	
First Floor	33	A	PAIR	——	—	5/A-14	6/A-14	2/A-12	9	
First Floor	34	H	SINGLE	——	—	5/A-14	6/A-14	2/A-12	8	
First Floor	35	L	SINGLE	——	—	——	3/A-14		6	
First Floor	36	J	PAIR	——	—	1/A-14	2/A-14		10	
First Floor	37	H	SINGLE	——	—	5/A-14	6/A-14		7	
First Floor	38	C	SINGLE	——	—	1/A-14	2/A-14		5	
First Floor	39	C	SINGLE	——	—	1/A-14	2/A-14		5	
First Floor	40	C	SINGLE	——	—	1/A-14	2/A-14		5	
First Floor	41	N	N.A.	——	—	7/A-14	7/A-14	9/A-14	—	GLAZED OPENING-NO DOOR
First Floor	42	C	SINGLE	——	—	1/A-14	2/A-14		5	
First Floor	43	C	SINGLE	——	—	1/A-14	2/A-14		5	
First Floor	44	C	SINGLE	——	—	1/A-14	2/A-14		5	
First Floor	45	C	SINGLE	——	—	1/A-14	2/A-14		5	
First Floor	46	L	SINGLE	——	—	——	3/A-14		5	
First Floor	47	C	SINGLE	——	—	1/A-14	2/A-14		17	DARK ROOM-DOOR
First Floor	47a	C	SINGLE	——	—	1/A-14	2/A-14		17	DARK ROOM-DOOR
First Floor	48	M	SINGLE	——	—	1/A-14	2/A-14		17	DARK ROOM DOOR
First Floor	49	L	SINGLE	——	—	——	3/A-14		5	
First Floor	50	C	SINGLE	——	—	1/A-14	2/A-14		5	
First Floor	51	C	SINGLE	——	—	5/A-14	——	2/A-12	7	
First Floor	52	L	SINGLE	——	"B"	5/A-14	6/A-14	2/A-12	4	
Second Floor	53	C	SINGLE	——	—	5/A-14	6/A-14	2/A-12	8	
Second Floor	54	L	SINGLE	——	"B"	5/A-14	6/A-14	2/A-12	4	
Second Floor	55	C	SINGLE	——	—	5/A-14	6/A-14	2/A-12	5	
Second Floor	56	E	PAIR	——	"B"	12/A-14	12/A-14		1	
Second Floor	57	A	PAIR	——	—	5/A-14	6/A-14	2/A-12	9	
Second Floor	58	A	PAIR	——	—	5/A-14	6/A-14	2/A-12	9	
Second Floor	59	C	SINGLE	——	—	5/A-14	6/A-14	1/A-12	6	
Second Floor	60	C	SINGLE	——	—	5/A-14	6/A-14	1/A-12	6	
Second Floor	61	C	SINGLE	——	—	5/A-14	6/A-14	1/A-12	6	
Second Floor	62	C	SINGLE	——	—	5/A-14	6/A-14	1/A-12	6	
Second Floor	63	P	SINGLE	——	—	10/A-14	——	1/A-12	7	
Second Floor	64	C	SINGLE	——	—	1/A-14	2/A-14		6	
Second Floor	65	C	SINGLE	——	—	1/A-14	2/A-14		6	

DOOR SCHEDULE • LAB SCIENCE BUILDING

Floor	Opening Number	Door Type	Door Num.	Door Thresh	Label	Detail Head	Detail Jamb	Detail Sill	Hdwe Set No.	Remarks
Second Floor	66	C	SINGLE	——	—	1/A-14	2/A-14		6	
Second Floor	67	C	SINGLE	——	—	5/A-14	6/A-14	1/A-12	6	
Second Floor	68	C	SINGLE	——	—	5/A-14	6/A-14	1/A-12	6	
Second Floor	69	C	SINGLE	——	—	5/A-14	6/A-14	1/A-12	6	
Second Floor	70	A	PAIR	——	—	5/A-14	6/A-14	2/A-12	9	
Second Floor	71	C	SINGLE	——	—	1/A-14	2/A-14		5	
Second Floor	72	A	PAIR	——	—	5/A-14	6/A-14	2/A-12	9	
Second Floor	73	O	SINGLE	METAL	—	1/A-14	2/A-14		6	
Second Floor	74	O	SINGLE	METAL	—	1/A-14	2/A-14		6	
Second Floor	75	C	SINGLE	——	—	1/A-14	2/A-14		5	
Second Floor	76	Q	PAIR	——	—	13/A-14	14/A-14	15/A-14	11	
Second Floor	77	E	PAIR	——	"B"	12/A-14	12/A-14		1	
Second Floor	78	R	SINGLE	——	—	10/A-14	6/A-14		5	
Second Floor	79	L	SINGLE	——	"B"	5/A-14	6/A-14	2/A-12	4	
Second Floor	80	C	SINGLE	——	—	5/A-14	6/A-14	2/A-12	5	
Second Floor	81	H	SINGLE	——	—	5/A-14	6/A-14	2/A-12	8	
Second Floor	82	J	PAIR	——	—	1/A-14	2/A-14		10	
Second Floor	83	S	——	——	—	20/A-14	19/A-14		——	ROLLING SERVICE DOOR
Second Floor	84	A	PAIR	——	—	5/A-14	6/A-14	2/A-12	9	
Second Floor	85	H	SINGLE	——	—	5/A-14	6/A-14	2/A-12	8	
Second Floor	86	S	——	——	—	20/A-14	19/A-14		——	ROLLING SERVICE DOOR
Second Floor	87	J	PAIR	——	—	1/A-14	2/A-14		9	
Second Floor	88	O	SINGLE	METAL	—	1/A-14	2/A-14	4/A-14	6	
Second Floor	89	A	PAIR	——	—	5/A-14	6/A-14	2/A-12	9	
Second Floor	90	O	SINGLE	METAL	—	1/A-14	2/A-14	4/A-14	6	
Third Floor	91	E	PAIR	——	"B"	12/A-14	12/A-14		1	
Third Floor	92	F	SINGLE	——	—	10/A-14		1/A-12	7	
Third Floor	93	C	SINGLE	——	—	1/A-14	2/A-14		6	
Third Floor	94	C	SINGLE	——	—	1/A-14	2/A-14		6	
Third Floor	95	C	SINGLE	——	—	1/A-14	2/A-14		6	
Third Floor	96	C	SINGLE	——	—	1/A-14	2/A-14		6	
Third Floor	97	G	SINGLE	——	—	5/A-14	6/A-14	2/A-12	8	
Third Floor	98	H	SINGLE	——	—	5/A-14	6/A-14	2/A-12	8	
Third Floor	99	A	PAIR	——	—	5/A-14	6/A-14	2/A-12	9	
Third Floor	100	C	SINGLE	——	—	1/A-14	2/A-14		15	
Third Floor	101	C	SINGLE	——	—	1/A-14	2/A-14		15	
Third Floor	102	A	PAIR	——	—	5/A-14	6/A-14	2/A-12	9	
Third Floor	103	H	SINGLE	——	—	5/A-14	6/A-14	2/A-12	8	
Third Floor	104	H	SINGLE	——	—	5/A-14	6/A-14		8	
Third Floor	105	H	SINGLE	——	—	5/A-14	6/A-14	2/A-12	8	
Third Floor	106	C	SINGLE	——	—	1/A-14	2/A-14		5	
Third Floor	107	C	SINGLE	——	—	1/A-14	2/A-14		5	
Third Floor	108	J	PAIR	——	—	1/A-14	2/A-14		9	
Third Floor	109	H	SINGLE	——	—	5/A-14	6/A-14	2/A-12	8	
Third Floor	110	A	PAIR	——	—	5/A-14	6/A-14	2/A-12	9	
Third Floor	111	E	PAIR	——	"B"	12/A-14	12/A-14		1	
Third Floor	112	K	PAIR	——	"B"	5/A-14	6/A-14	2/A-12	10	
Third Floor	113	L	SINGLE	——	"B"	5/A-14	6/A-14	2/A-12	4	
Third Floor	114	C	SINGLE	——	—	5/A-14	6/A-14	2/A-12	5	
Third Floor	115	H	SINGLE	——	—	5/A-14	6/A-14	2/A-12	8	
Third Floor	116	C	SINGLE	——	—	1/A-14	2/A-14		5	
Third Floor	117	C	SINGLE	——	—	1/A-14	2/A-14		5	
Third Floor	118	C	SINGLE	——	—	1/A-14	2/A-14		15	
Third Floor	119	A	PAIR	——	—	5/A-14	6/A-14	2/A-12	9	
Third Floor	120	A	PAIR	——	—	5/A-14	6/A-14	2/A-12	9	
Third Floor	121	C	SINGLE	——	—	1/A-14	2/A-14		15	
Third Floor	122	C	SINGLE	——	—	1/A-14	2/A-14		5	
Third Floor	123	C	SINGLE	——	—	1/A-14	2/A-14		5	
Third Floor	124	L	SINGLE	——	"B"	1/A-14	2/A-14		4	
Third Floor	125	H	SINGLE	——	—	5/A-14	6/A-14	2/A-12	8	
Third Floor	126	C	SINGLE	MARBLE	—	5/A-14	6/A-14	3/A-12	3	
Third Floor	127	D	SINGLE	——	"B"	5/A-14	6/A-14		4	
Third Floor	128	C	SINGLE	MARBLE	—	5/A-14	6/A-14	3/A-12	3	

DOOR SCHEDULE • LAB SCIENCE BUILDING

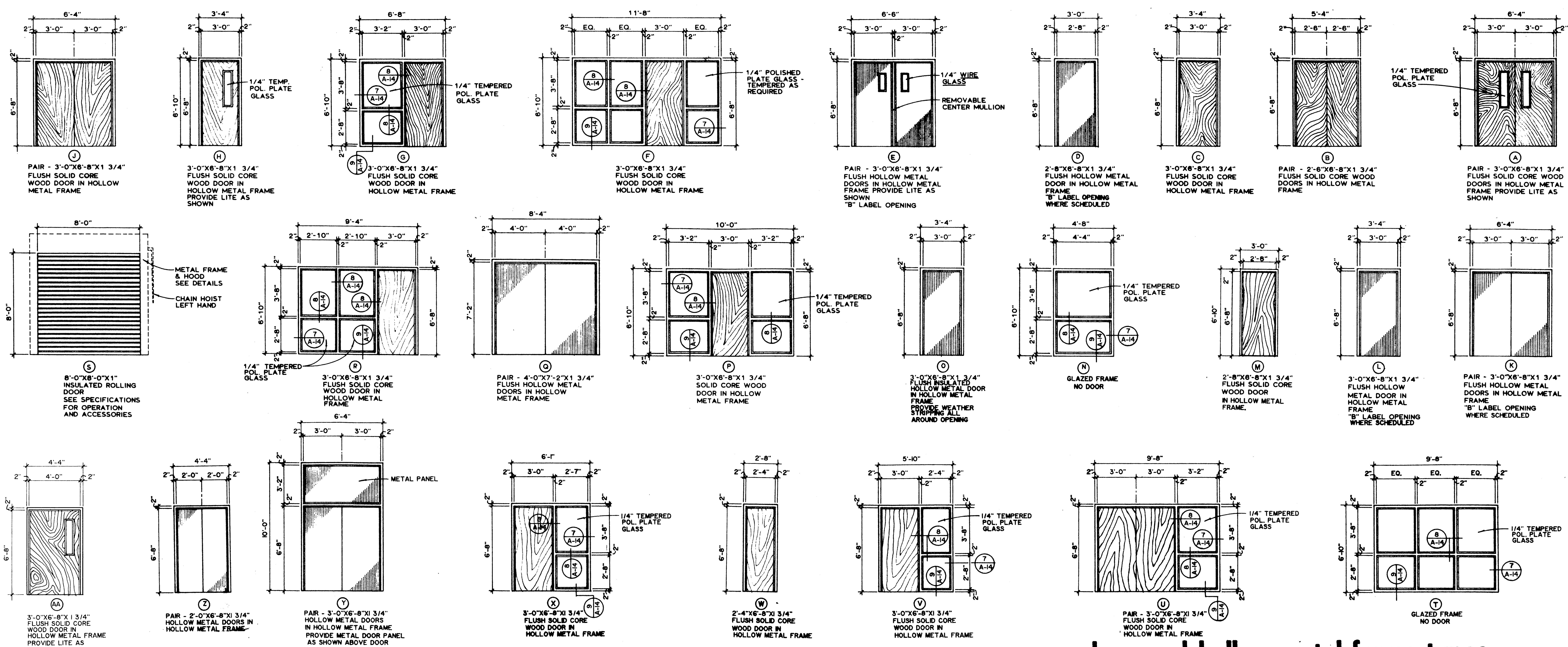
Floor	Opening Number	Door Type	Door Num.	Door Thresh	Label	Detail Head	Detail Jamb	Detail Sill	Hdwe Set No.	Remarks
Fourth Floor	129	E	PAIR	——	"B"	12/A-14	12/A-14		1	
Fourth Floor	130	A	PAIR	——	—	5/A-14	6/A-14	2/A-12	9	
Fourth Floor	131	G	SINGLE	——	—	5/A-14	6/A-14	2/A-12	8	
Fourth Floor	132	H	SINGLE	——	—	5/A-14	6/A-14	2/A-12	8	
Fourth Floor	133	H	SINGLE	——	—	5/A-14	6/A-14	2/A-12	8	
Fourth Floor	134	A	PAIR	——	—	5/A-14	6/A-14	2/A-12	9	
Fourth Floor	135	C	SINGLE	——	—	1/A-14	2/A-14		5	
Fourth Floor	136	A	PAIR	——	—	5/A-14	6/A-14	2/A-12	9	
Fourth Floor	137	C	SINGLE	——	—	1/A-14	2/A-14		5	
Fourth Floor	138	H	SINGLE	——	—	5/A-14	6/A-14	2/A-12	8	
Fourth Floor	139	L	SINGLE	——	"B"	5/A-14	6/A-14	2/A-12	8	
Fourth Floor	140	A	PAIR	——	—	5/A-14	6/A-14	2/A-12	9	
Fourth Floor	141	C	SINGLE	——	—	1/A-14	2/A-14		5	
Fourth Floor	142	C	SINGLE	——	—	1/A-14	2/A-14		5	
Fourth Floor	143	C	SINGLE	——	—	1/A-14	2/A-14		5	
Fourth Floor	144	J	PAIR	——	—	1/A-14	2/A-14		9	
Fourth Floor	145	A	PAIR	——	—	5/A-14	6/A-14	2/A-12	9	
Fourth Floor	146	E	PAIR	——	"B"	12/A-14	12/A-14		1	
Fourth Floor	147	R	SINGLE	——	—	5/A-14	6/A-14		5	
Fourth Floor	148	L	SINGLE	——	"B"	5/A-14	6/A-14	2/A-12	4	
Fourth Floor	149	C	SINGLE	——	—	5/A-14	6/A-14	2/A-12	5	
Fourth Floor	150	A	PAIR	——	—	5/A-14	6/A-14	2/A-12	9	
Fourth Floor	151	C	SINGLE	——	—	1/A-14	2/A-14		5	
Fourth Floor	152	C	SINGLE	——	—	1/A-14	2/A-14		15	
Fourth Floor	153	H	SINGLE	——	—	5/A-14	6/A-14	2/A-12	8	
Fourth Floor	154	H	SINGLE	——	—	5/A-14	6/A-14	2/A-12	8	
Fourth Floor	155	C	SINGLE	——	—	1/A-14	2/A-14		15	
Fourth Floor	156	C	SINGLE	——	—	1/A-14	2/A-14		5	
Fourth Floor	157	L	SINGLE	——	"B"	1/A-14	2/A-14		4	
Fourth Floor	158	A	PAIR	——	—	5/A-14	6/A-14	2/A-12	9	
Fourth Floor	159	C	SINGLE	——	—	5/A-14	6/A-14	3/A-12	3	
Fourth Floor	160	D	SINGLE	——	"B"	5/A-14	6/A-14		4	
Fourth Floor	161	C	SINGLE	——	—	5/A-14	6/A-14	3/A-12	3	
Fifth Floor	162	E	PAIR	——	"B"	12/A-14	12/A-14		1	
Fifth Floor	163	H	SINGLE	——	—	5/A-14	6/A-14	2/A-12	8	
Fifth Floor	164	A	PAIR	——	—	5/A-14	6/A-14	1/A-12	9	
Fifth Floor	165	C	SINGLE	——	—	1/A-14	2/A-14		5	
Fifth Floor	166	C	SINGLE	——	—	1/A-14	2/A-14	6/A-12	12	
Fifth Floor	167	C	SINGLE	——	—	1/A-14	2/A-14		5	
Fifth Floor	168	T	N.A.	——	—	10/A-14	7/A-14	9/A-14	—	GLAZED OPENING-NO DOOR
Fifth Floor	169	U	PAIR	——	—	10/A-14	7/A-14	1/A-12	13	
Fifth Floor	170	G	SINGLE	——	—	1/A-14	2/A-14		6	
Fifth Floor	171	B	PAIR	——	—	1/A-14	2/A-14		14	
Fifth Floor	172	C	SINGLE	——	—	1/A-14	2/A-14		5	
Fifth Floor	173	C	SINGLE	——	—	1/A-14	2/A-14		6	
Fifth Floor	174	C	SINGLE	——	—	1/A-14	2/A-14		6	
Fifth Floor	175	V	SINGLE	——	—	1/A-14	2/A-14		6	
Fifth Floor	176	C	SINGLE	——	—	5/A-14	6/A-14	1/A-12	6	
Fifth Floor	177	C	SINGLE	——	—	5/A-14	6/A-14	1/A-12	6	
Fifth Floor	178	W	SINGLE	——	—	1/A-14	2/A-14		5	
Fifth Floor	179	C	SINGLE	——	—	5/A-14	6/A-14	1/A-12	6	
Fifth Floor	180	B	PAIR	——	—	1/A-14	2/A-14		14	
Fifth Floor	181	C	SINGLE	——	—	5/A-14	6/A-14	1/A-12	6	
Fifth Floor	182	C	SINGLE	——	—	5/A-14	6/A-14	1/A-12	6	
Fifth Floor	183	H	SINGLE	——	—	5/A-14	6/A-14	2/A-12	8	
Fifth Floor	184	C	SINGLE	——	—	1/A-14	2/A-14		5	
Fifth Floor	185	C	SINGLE	——	—	1/A-14	2/A-14		5	
Fifth Floor	186	C	SINGLE	——	—	1/A-14	2/A-14		5	
Fifth Floor	187	H	SINGLE	——	—	5/A-14	6/A-14	2/A-12	8	
Fifth Floor	188	H	SINGLE	——	—	5/A-14	6/A-14	2/A-12	8	
Fifth Floor	189	C	SINGLE	——	—	1/A-14	2/A-14		5	
Fifth Floor	190	H	SINGLE	——	—	5/A-14	6/A-14	2/A-12	8	
Fifth Floor	191	A	PAIR	——	—	5/A-14	6/A-14	2/A-12	9	
Fifth Floor	192	C	SINGLE	——	—	1/A-14	2/A-14		5	
Fifth Floor	193	C	SINGLE	——	—	1/A-14	2/A-14		5	
Fifth Floor	194	C	SINGLE	——	—	1/A-14	2/A-14		5	
Fifth Floor	195	A	PAIR	——	—	5/A-14	6/A-14	2/A-12	9	
Fifth Floor	196	H	SINGLE	——	—	5/A-14	6/A-14	2/A-12	8	

DOOR SCHEDULE • LAB SCIENCE BUILDING

Floor	Opening Number	Door Type	Door Num.	Door Thresh	Label	Detail Head	Detail Jamb	Detail Sill	Hdwe Set No.	Remarks
	197	E	PAIR	——	"B"	12/A-14	12/A-14		1	
	198	K	PAIR	——	"B"	5/A-14	6/A-14	2/A-12	10	
	199	L	SINGLE	——	"B"	5/A-14	6/A-14	2/A-12	4	
	200	C	SINGLE	——	—	5/A-14	6/A-14	2/A-12	5	
	201	X	SINGLE	——	—	5/A-14	6/A-14	1/A-12	7	
	202	C	SINGLE	——	—	1/A-14	2/A-14	6/A-12	5	
	203	G	SINGLE	——	—	1/A-14	2/A-14		6	
	204	A	PAIR	——	—	5/A-14	6/A-14	2/A-12	9	
	205	C	SINGLE	——	—	1/A-14	2/A-14		5	
	206	AA	SINGLE	——	—	5/A-14	6/A-14	2/A-12	8	
	207	C	SINGLE	——	—	1/A-14	2/A-14		17	DARK ROOM DOOR
	208	C	SINGLE	——	—	1/A-14	2/A-14		6	
	209	A	PAIR	——	—	5/A-14	6/A-14	2/A-12	9	
	210	A	PAIR	——	—	5/A-14	6/A-14	2/A-12	9	
	211	C	SINGLE	——	—	1/A-14	2/A-14		16	
	212	A	PAIR	——	—	5/A-14	6/A-14	2/A-12	9	
	213	C	SINGLE	——	—	1/A-14	2/A-14		16	
	214	C	SINGLE	——	—	1/A-14	2/A-14		5	
	215	L	SINGLE	——	"B"	1/A-14	2/A-14		4	
	216	C	SINGLE	——	—	5/A-14	6/A-14	3/A-12	3	
	217	D	SINGLE	——	"B"	5/A-14	6/A-14		4	
	218	C	SINGLE	——	—	5/A-14	6/A-14	3/A-12	3	
	250	L	SINGLE	——	"B"	1/A-14	2/A-14		5	DOOR LOCATED IN MECHANICAL 541
Roof	219	L	SINGLE	METAL	—	16/A-14	17/A-14	1/A-37	18	
Roof	220	L	SINGLE	METAL	—	16/A-14	17/A-14	3/A-27	18	
Roof	221	K	PAIR	METAL	—	13/A-14	14/A-14		11	
Roof	222	K	PAIR	METAL	—	13/A-14	14/A-14		11	
Roof	223	L	SINGLE	METAL	—	16/A-14	17/A-14	1/A-37	18	

DOOR SCHEDULE • GREENHOUSE - ANIMAL CARE - MECHANICAL

Opening Number	Door Type	Door Num.	Door Thresh	Label	Detail Head	Detail Jamb	Detail Sill	Hdwe Set No.	Remarks
224	K	PAIR	METAL	—	13/A-14	14/A-14	18/A-14	19	
225	L	SINGLE	——	—	13/A-14	14/A-14		16	
226	L	SINGLE	METAL	—	13/A-14	14/A-14	18/A-14	20	
227	L	SINGLE	METAL	—	13/A-14	14/A-14		20	
228	L	SINGLE	——	—	1/A-14	2/A-14		6	
229	L	SINGLE	——	—	1/A-14	2/A-14		21	
230	L	SINGLE	——	—	1/A-14	2/A-14		21	
231	Y	PAIR	METAL	—	13/A-14	14/A-14	18/A-14	11	
232	L	SINGLE	——	—	1/A-14	2/A-14		21	
233	L	SINGLE	——	—	1/A-14	2/A-14		21	
234	L	SINGLE	——	—	1/A-14	2/A-14		21	
235	L	SINGLE	——	—	1/A-14	2/A-14		21	
236	L	SINGLE	——	—	1/A-14	2/A-14		6	
237	L	SINGLE	——	—	1/A-14	2/A-14		12	
238	L	SINGLE	——	—	1/A-14	2/A-14		21	
239	Z	PAIR	——	—	1/A-14	2/A-14		2	
240	L	SINGLE	——	—	1/A-14	2/A-14		21	
241	L	SINGLE	——	—	1/A-14	2/A-14		6	
242	L	SINGLE	——	—	1/A-14	2/A-14		12	
243	K	PAIR	METAL	—	13/A-14	14/A-14	18/A-14	19	
244	K	PAIR	METAL	—	13/A-14	14/A-14	18/A-14	19	
245	L	SINGLE	METAL	—	——	——	18/A-14	20	
246	K	PAIR	METAL	"B"	13/A-14	14/A-14	18/A-14	19	
247	S	——	——	—	20/A-14	19/A-14		——	ROLLING SERVICE DOOR
248	S	——	——	—	20/A-14	19/A-14		——	ROLLING SERVICE DOOR
249	L	SINGLE	METAL		13/A-14	14/A-14		18	



(J) PAIR - 3'-0"X6'-8"X1 3/4" FLUSH SOLID CORE WOOD DOOR IN HOLLOW METAL FRAME

(H) 3'-0"X6'-8"X1 3/4" FLUSH SOLID CORE WOOD DOOR IN HOLLOW METAL FRAME PROVIDE LITE AS SHOWN

(G) 3'-0"X6'-8"X1 3/4" FLUSH SOLID CORE WOOD DOOR IN HOLLOW METAL FRAME

(F) 3'-0"X6'-8"X1 3/4" FLUSH SOLID CORE WOOD DOOR IN HOLLOW METAL FRAME

(E) PAIR - 3'-0"X6'-8"X1 3/4" FLUSH HOLLOW METAL DOORS IN HOLLOW METAL FRAME PROVIDE LITE AS SHOWN "B" LABEL OPENING

(D) 2'-8"X6'-8"X1 3/4" FLUSH HOLLOW METAL DOOR IN HOLLOW METAL FRAME "B" LABEL OPENING WHERE SCHEDULED

(C) 3'-0"X6'-8"X1 3/4" FLUSH SOLID CORE WOOD DOOR IN HOLLOW METAL FRAME

(B) PAIR - 2'-6"X6'-8"X1 3/4" FLUSH SOLID CORE WOOD DOORS IN HOLLOW METAL FRAME

(A) PAIR - 3'-0"X6'-8"X1 3/4" FLUSH SOLID CORE WOOD DOORS IN HOLLOW METAL FRAME PROVIDE LITE AS SHOWN

(S) 8'-0"X8'-0"X1" INSULATED ROLLING DOOR SEE SPECIFICATIONS FOR OPERATION AND ACCESSORIES

(R) 3'-0"X6'-8"X1 3/4" FLUSH SOLID CORE WOOD DOOR IN HOLLOW METAL FRAME

(Q) PAIR - 4'-0"X7'-2"X1 3/4" FLUSH HOLLOW METAL DOORS IN HOLLOW METAL FRAME

(P) 3'-0"X6'-8"X1 3/4" SOLID CORE WOOD DOOR IN HOLLOW METAL FRAME

(O) 3'-0"X6'-8"X1 3/4" FLUSH INSULATED HOLLOW METAL DOOR IN HOLLOW METAL FRAME PROVIDE WEATHER STRIPPING ALL AROUND OPENING

(N) GLAZED FRAME NO DOOR

(M) 2'-8"X6'-8"X1 3/4" FLUSH SOLID CORE WOOD DOOR IN HOLLOW METAL FRAME.

(L) 3'-0"X6'-8"X1 3/4" FLUSH HOLLOW METAL DOOR IN HOLLOW METAL FRAME "B" LABEL OPENING WHERE SCHEDULED

(K) PAIR - 3'-0"X6'-8"X1 3/4" FLUSH HOLLOW METAL DOORS IN HOLLOW METAL FRAME "B" LABEL OPENING WHERE SCHEDULED

(AA) 3'-0"X6'-8"X1 3/4" FLUSH SOLID CORE WOOD DOOR IN HOLLOW METAL FRAME PROVIDE LITE AS SHOWN.

(Z) PAIR - 2'-0"X6'-8"X1 3/4" HOLLOW METAL DOORS IN HOLLOW METAL FRAME

(Y) PAIR - 3'-0"X6'-8"X1 3/4" HOLLOW METAL DOORS IN HOLLOW METAL FRAME PROVIDE METAL DOOR PANEL AS SHOWN ABOVE DOOR

(X) 3'-0"X6'-8"X1 3/4" FLUSH SOLID CORE WOOD DOOR IN HOLLOW METAL FRAME

(W) 2'-4"X6'-8"X1 3/4" FLUSH SOLID CORE WOOD DOOR IN HOLLOW METAL FRAME

(V) 3'-0"X6'-8"X1 3/4" FLUSH SOLID CORE WOOD DOOR IN HOLLOW METAL FRAME

(U) PAIR - 3'-0"X6'-8"X1 3/4" FLUSH SOLID CORE WOOD DOOR IN HOLLOW METAL FRAME

(T) GLAZED FRAME NO DOOR

door and hollow metal frame types

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

COMM. NO. 10186

A-13

DATE: 6/23/86

ADDITION TO LABORATORY SCIENCES CENTER

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JONESBORO, ARKANSAS

BRACKETT-KRENNERICH & ASSOCIATES, P.A. REGISTERED ARCHITECTS C 13 ARKANSAS

Brackett Krennerich and Associates Inc. Architects

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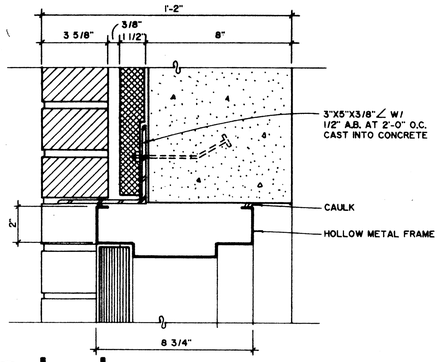
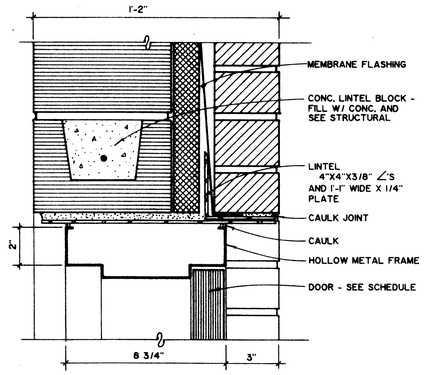
AF 32526



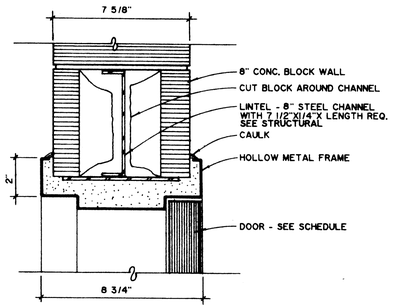
16 A-14 **head**

SCALE: 3"=1'-0"



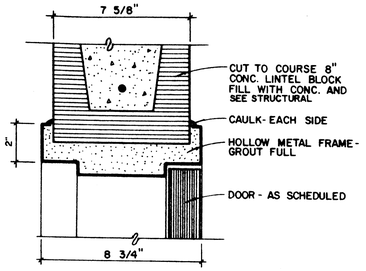
13 A-14 **head**

SCALE: 3"=1'-0"



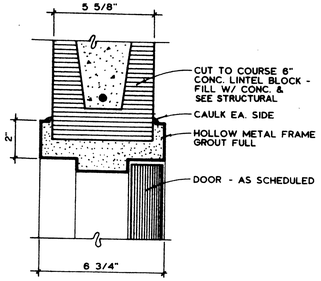
10 A-14 **head**

SCALE: 3"=1'-0"



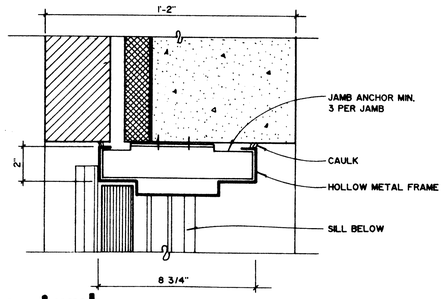
5 A-14 **head**

SCALE: 3"=1'-0"



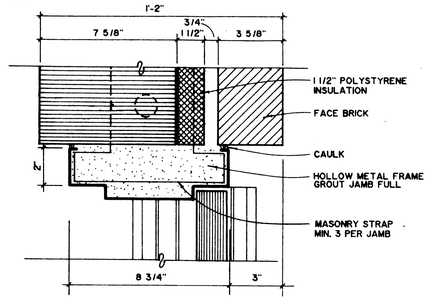
1 A-14 **head**

SCALE: 3"=1'-0"



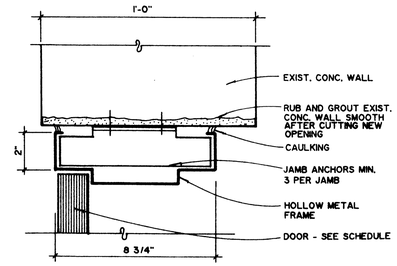
17 A-14 **jamb**

SCALE: 3"=1'-0"



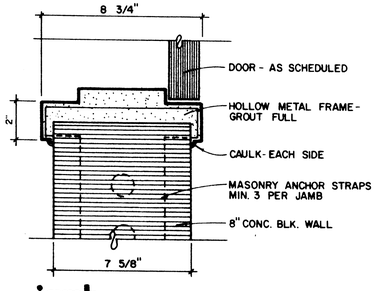
14 A-14 **jamb**

SCALE: 3"=1'-0"



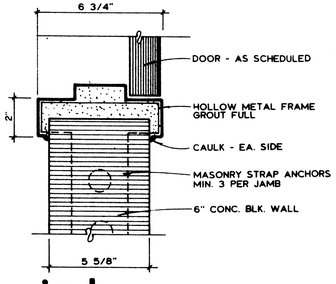
11 A-14 **jamb** (HEAD SIMILAR)

SCALE: 3"=1'-0"



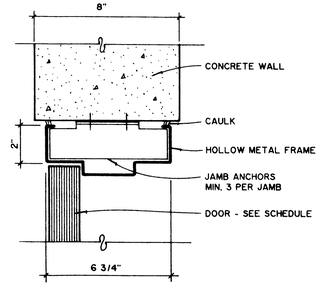
6 A-14 **jamb**

SCALE: 3"=1'-0"



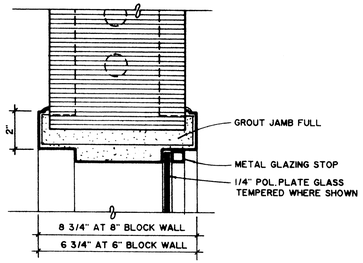
2 A-14 **jamb**

SCALE: 3"=1'-0"



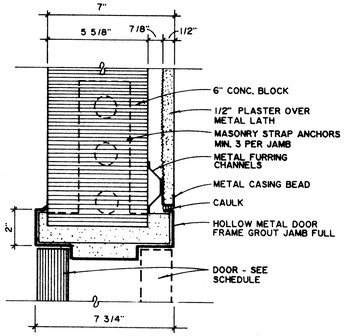
12 A-14 **jamb** (HEAD SIMILAR)

SCALE: 3"=1'-0"



7 A-14 **jamb**

SCALE: 3"=1'-0"



3 A-14 **jamb**

SCALE: 3"=1'-0"

18 A-14 **sill**

SCALE:3"=1'-0"

15 A-14 **sill**

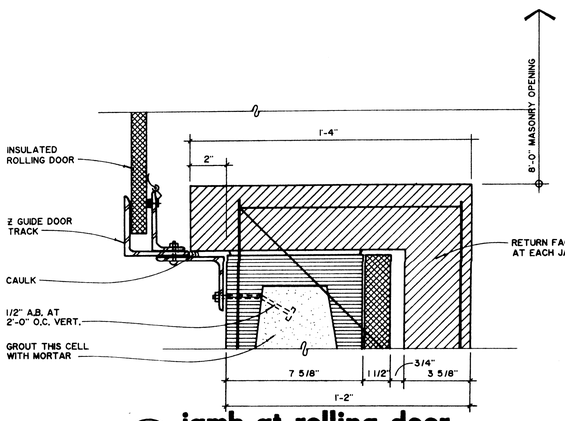
SCALE: 3"=1'-0"

8 A-14 **jamb**

SCALE: 3"=1'-0"

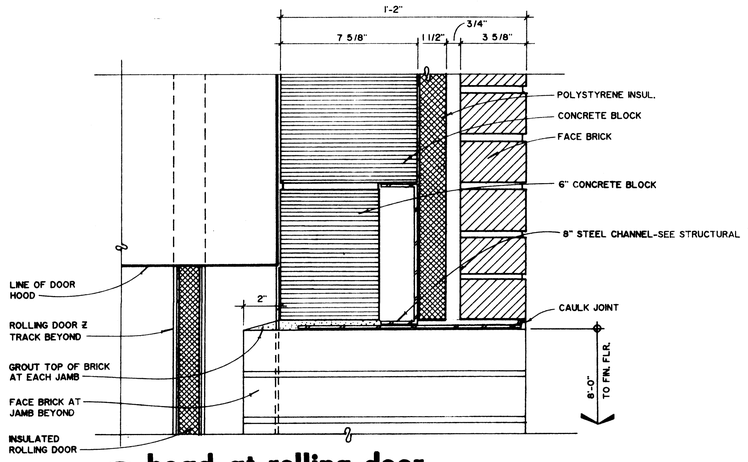
4 A-14 **sill**

SCALE:3"=1'-0"



19 A-14 **jamb at rolling door**

SCALE: 3"=1'-0"



20 A-14 **head at rolling door**

SCALE: 3"=1'-0"

COMM. NO. 10186

A-14

DATE: 6/23/86

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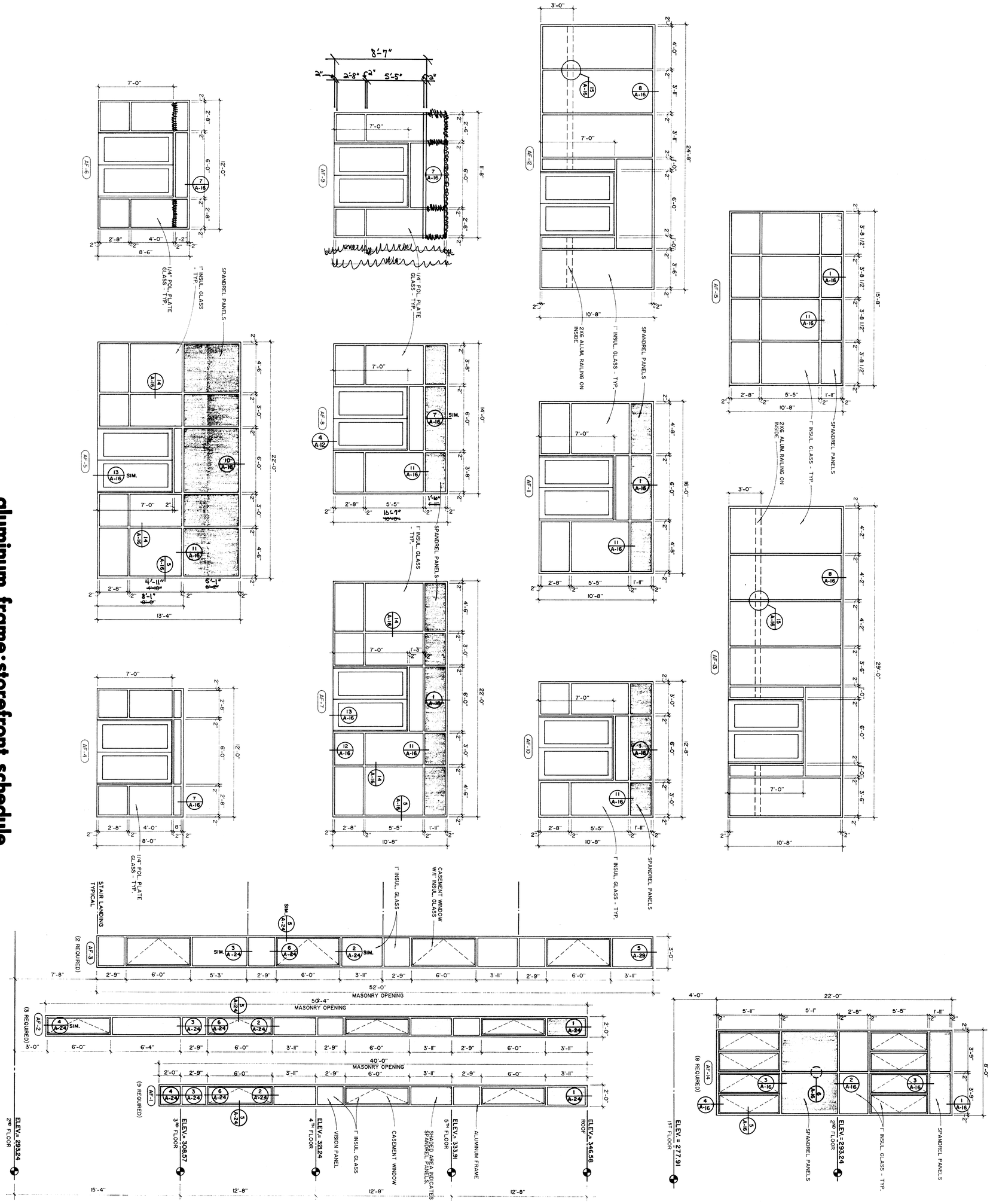
Brackett Krennerich and Associates Inc. Architects

door details

aluminum frame • storefront schedule



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

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COMM. NO. 1086

A-15

DATE: 6/23/86

Brackett Krennerich and Associates Inc. Architects

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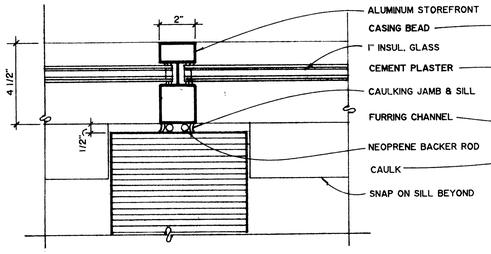
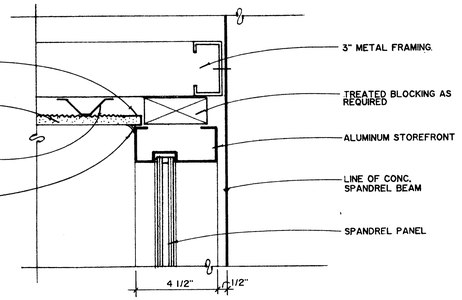
AF 32526



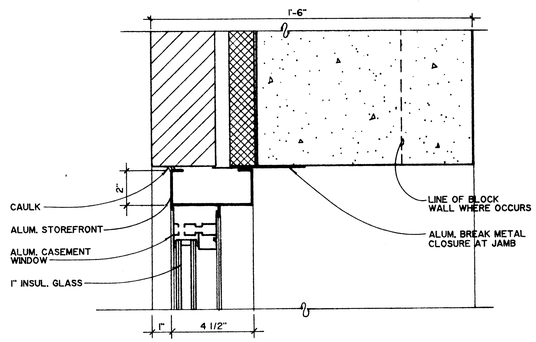
14 A-16 **mull at abutting wall**

SCALE: 3"=1'-0"



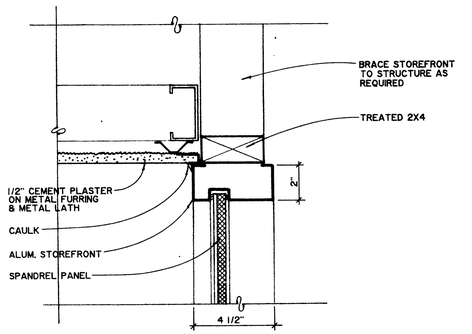
10 A-16 **detail at head** (UNDER EXT. STAIR)

SCALE: 3"=1'-0"



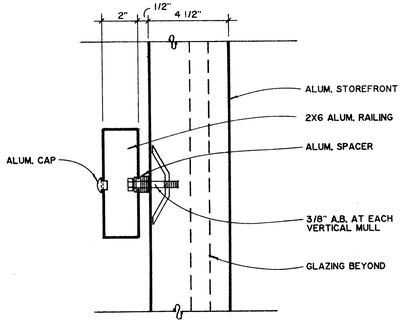
5 A-16 **jamb**

SCALE: 3"=1'-0"



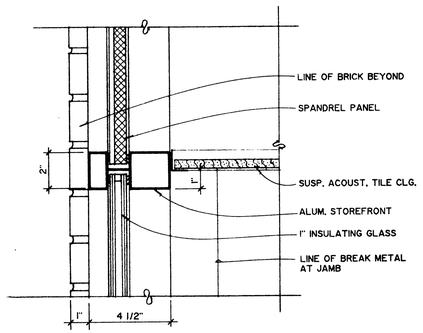
1 A-16 **detail·head at soffit**

SCALE: 3"=1'-0"



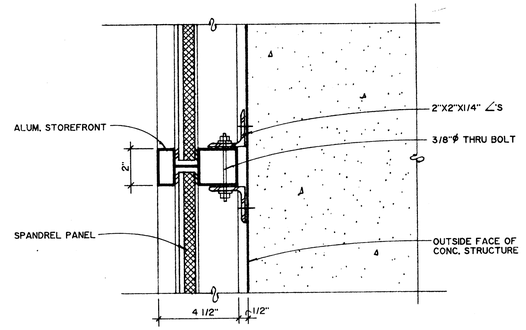
15 A-16 **detail at guard rail**

SCALE: 3"=1'-0"



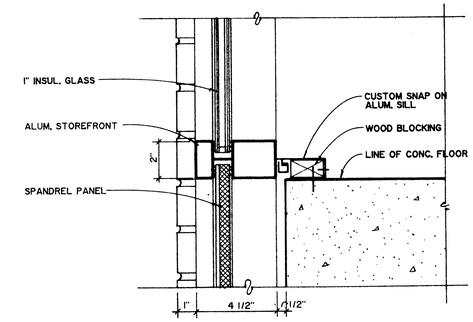
11 A-16 **detail at ceiling**

SCALE: 3"=1'-0"



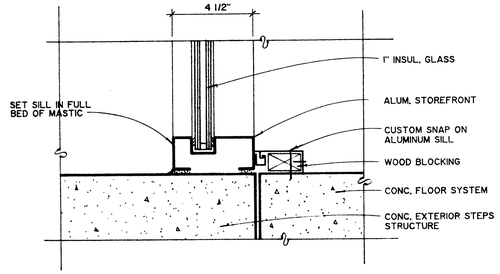
6 A-16 **detail at wind load anchor**

SCALE: 3"=1'-0"



2 A-16 **detail at floor**

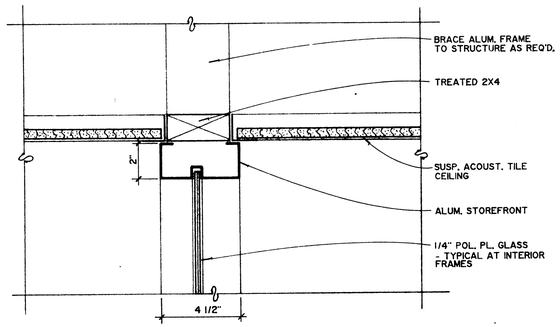
SCALE: 3"=1'-0"



NOTE: CUSTOM SNAP ON SILL ONLY AT AF-7 & AF-14

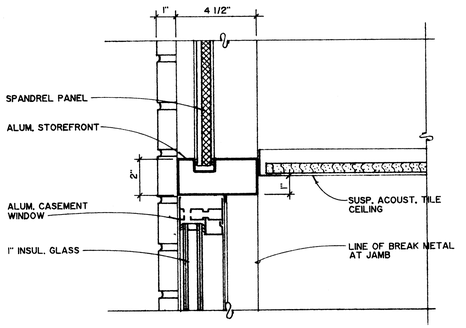
12 A-16 **detail at floor**

SCALE: 3"=1'-0"



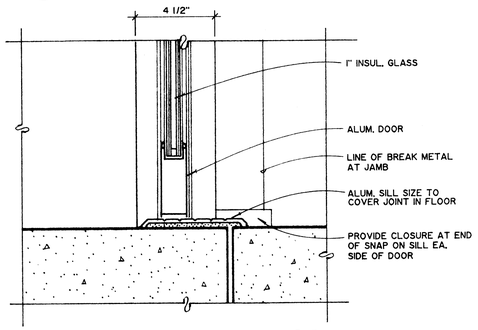
7 A-16 **head at interior frame**

SCALE: 3"=1'-0"



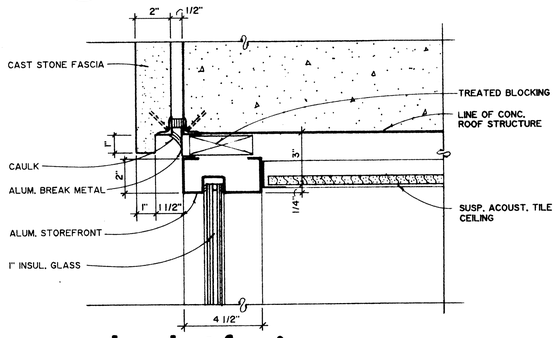
3 A-16 **detail at ceiling**

SCALE: 3"=1'-0"



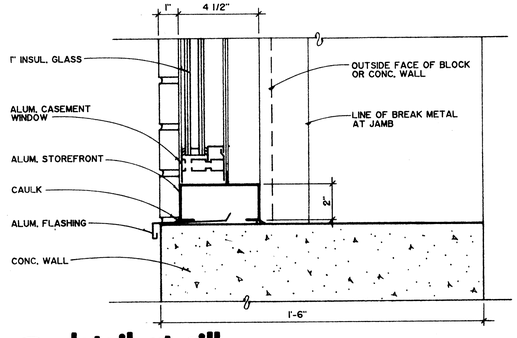
13 A-16 **detail at threshold**

SCALE: 3"=1'-0"



8 A-16 **head at fascia** (SECOND FLOOR CONNECTION)

SCALE: 3"=1'-0"



4 A-16 **detail at sill**

SCALE: 3"=1'-0"

aluminum frame · storefront details

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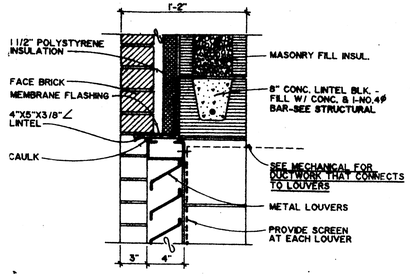
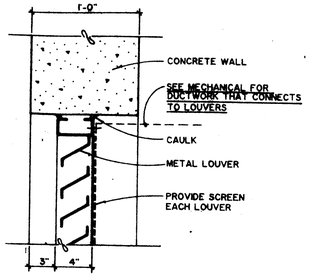


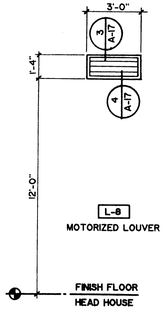
3 / A-17 **head at louver**

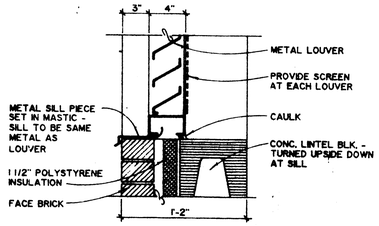
SCALE: 1 1/2"=1'-0"



1 / A-17 **head at louver**

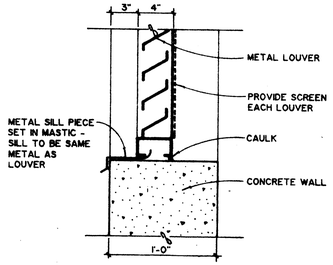
SCALE: 1 1/2"=1'-0"





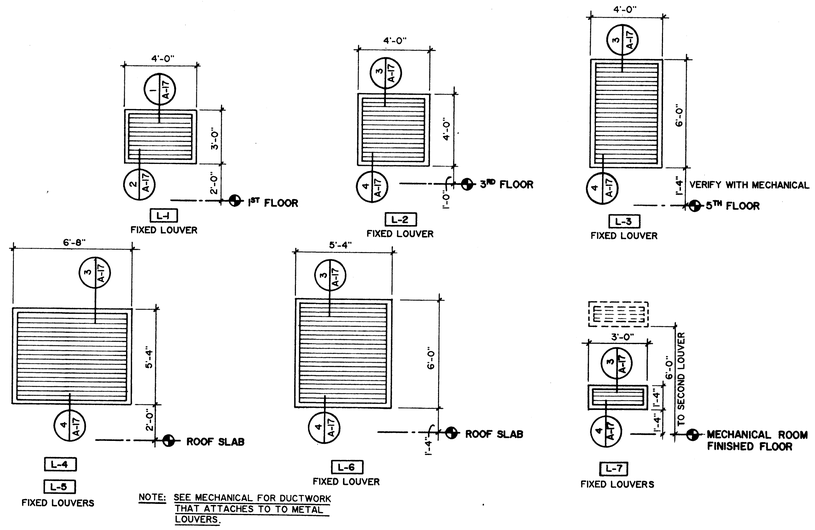
4 / A-17 **sill at louver**

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



2 / A-17 **jamb at louver**

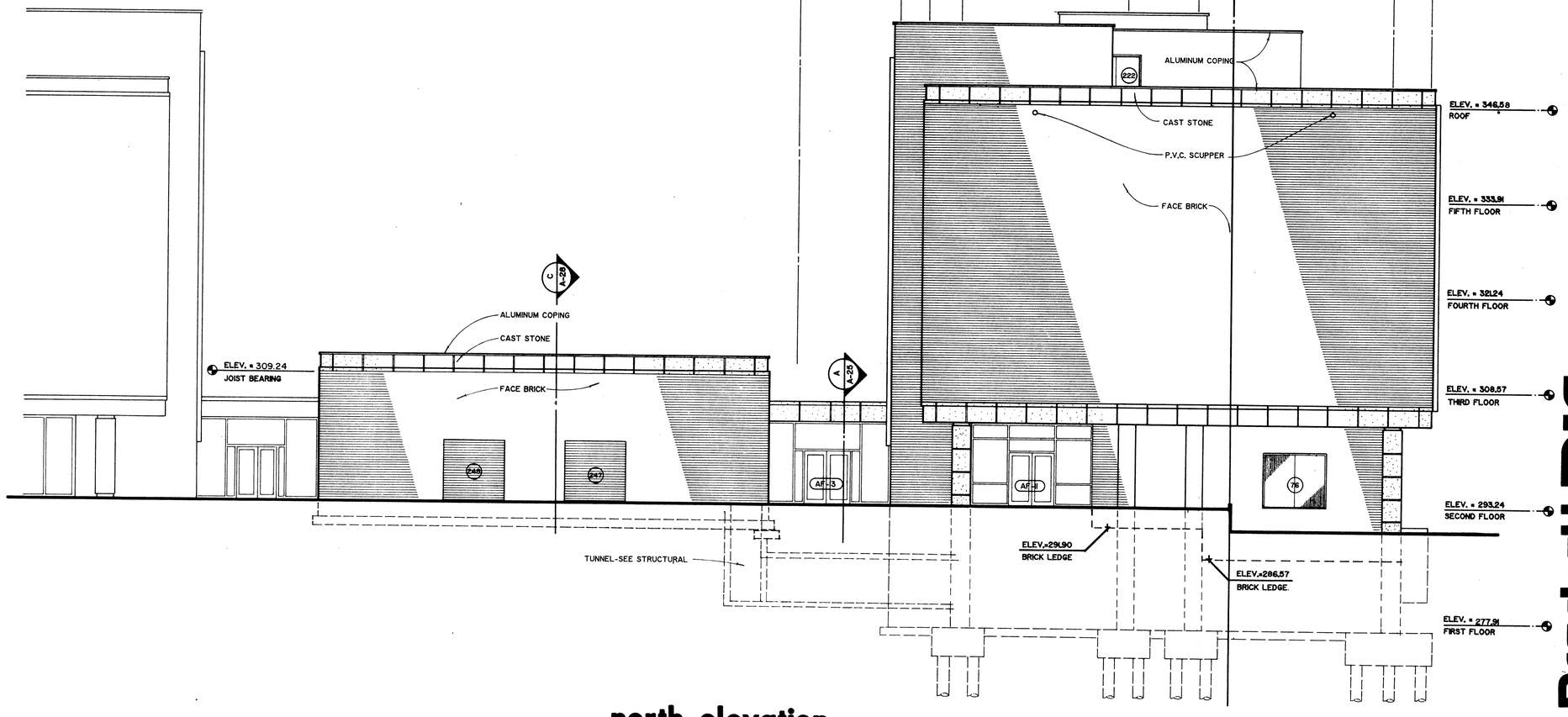
SCALE: 1 1/2"=1'-0"



NOTE: SEE MECHANICAL FOR DUCTWORK THAT ATTACHES TO TO METAL LOUVERS.

louver schedule

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



north elevation

SCALE: 1/8"=1'-0"

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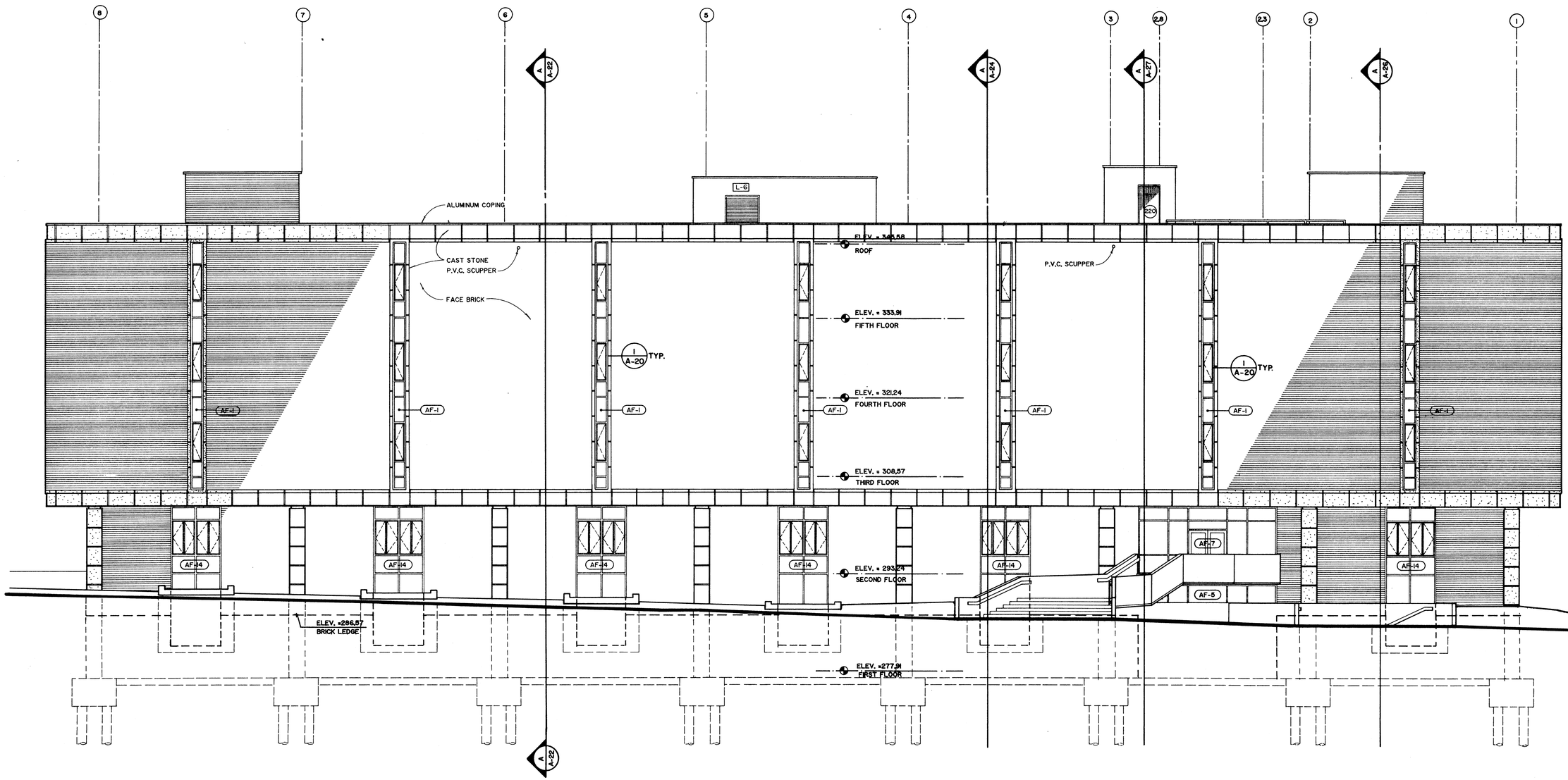

west elevation

SCALE: 1/8"=1'-0"

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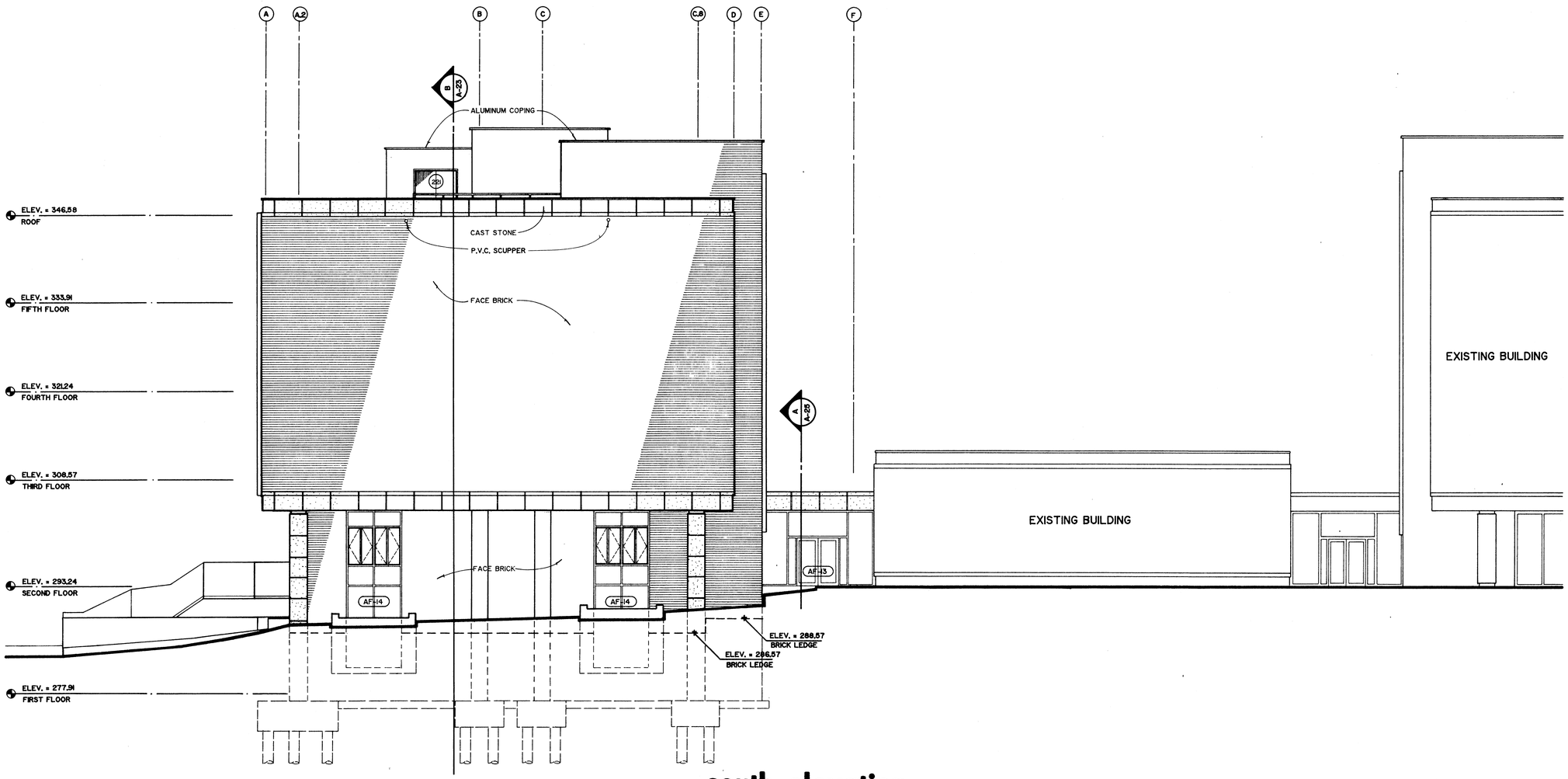

south elevation

SCALE: 1/8"=1'-0"

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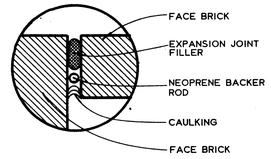
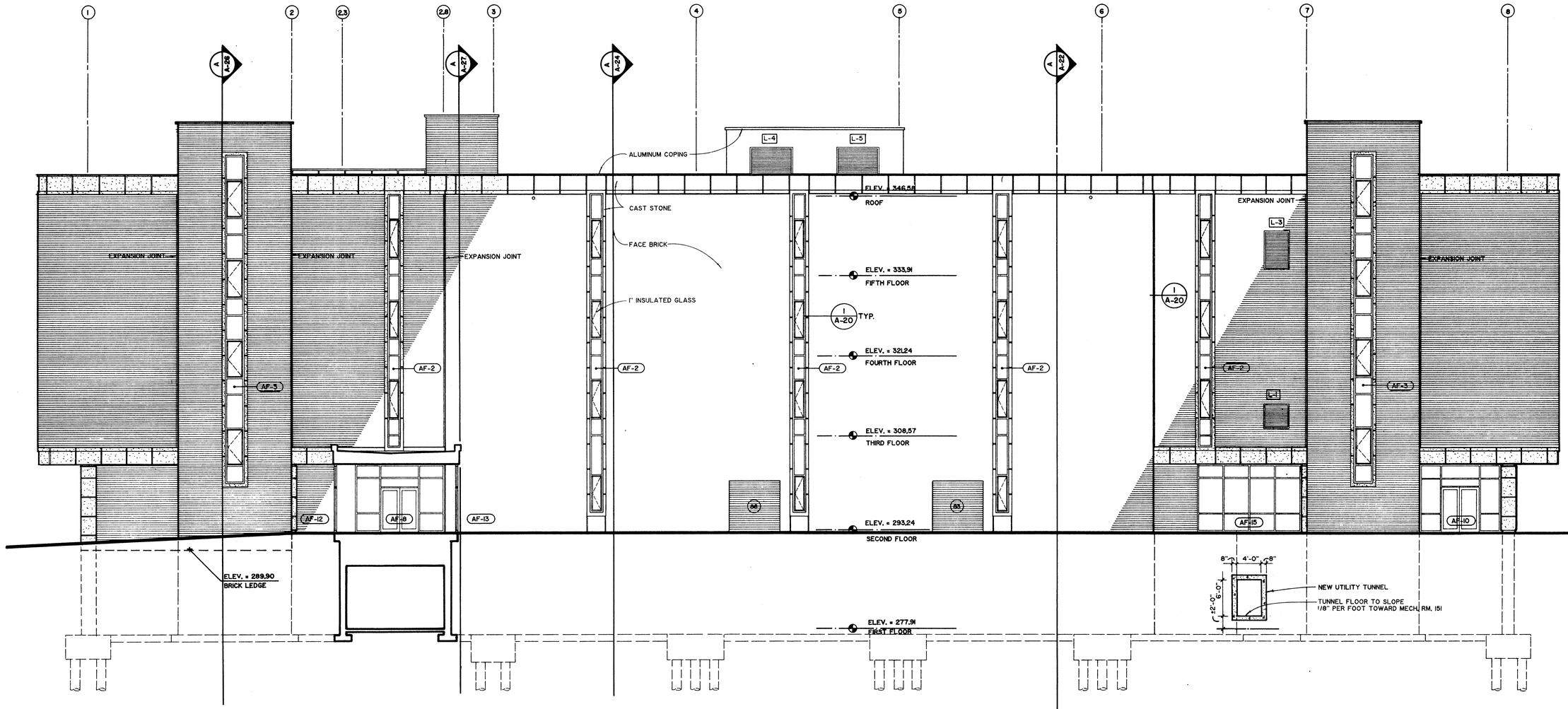


1 / A-20 **exp. joint det.**

SCALE: 3"=1'-0"



east elevation

SCALE: 1/8"=1'-0"

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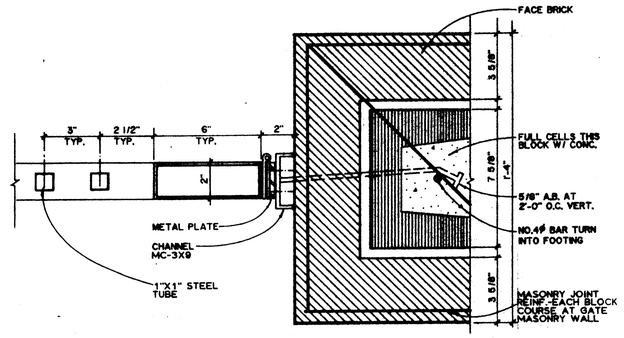
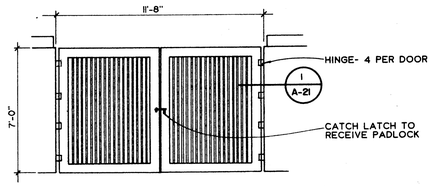


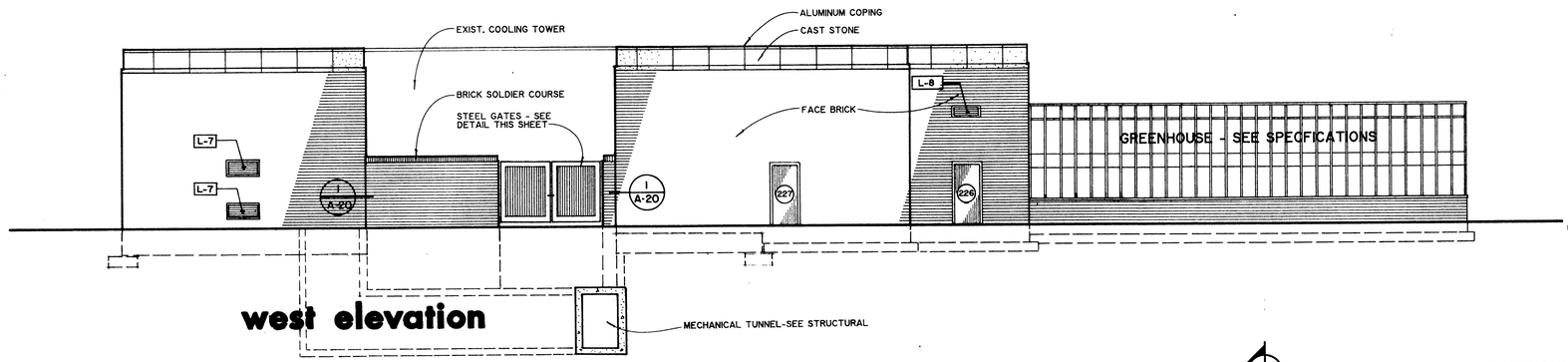
1 / A-21 **jamb at gates**

SCALE: 3"=1'-0"

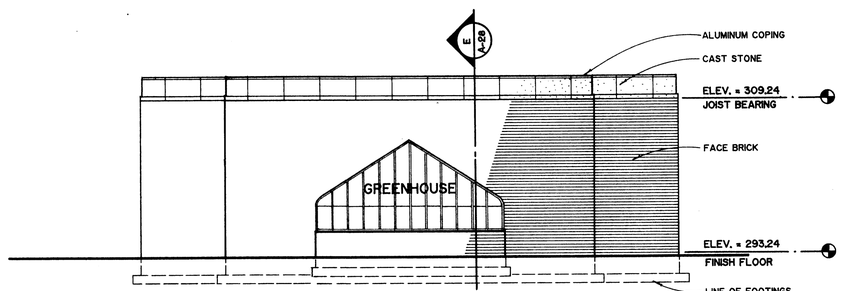


elevation at gates

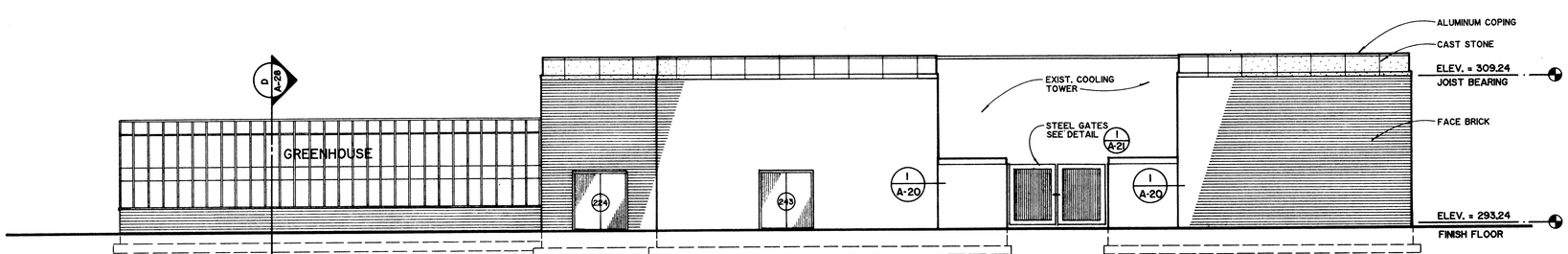
SCALE: 1/4"=1'-0"



west elevation



south elevation



east elevation

greenhouse . animal care . mechanical

SCALE: 1/8"=1'-0"

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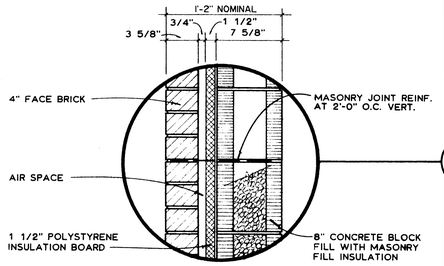
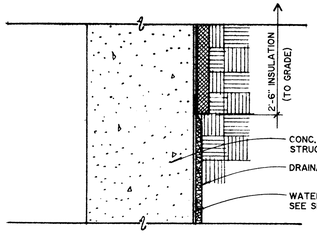


exterior wall

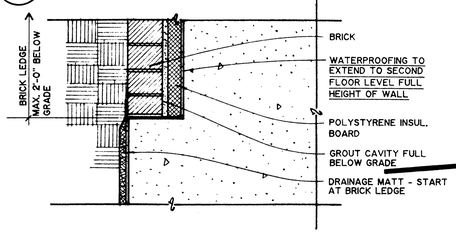
R-VALUE 14



det. at perimeter insul.

1 / A-22

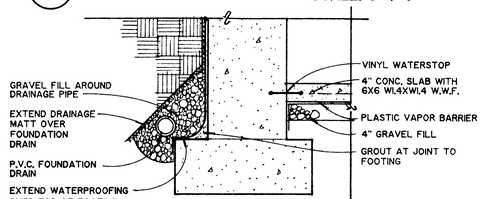
SCALE: 3"=1'-0"



det. at brick ledge

2 / A-22

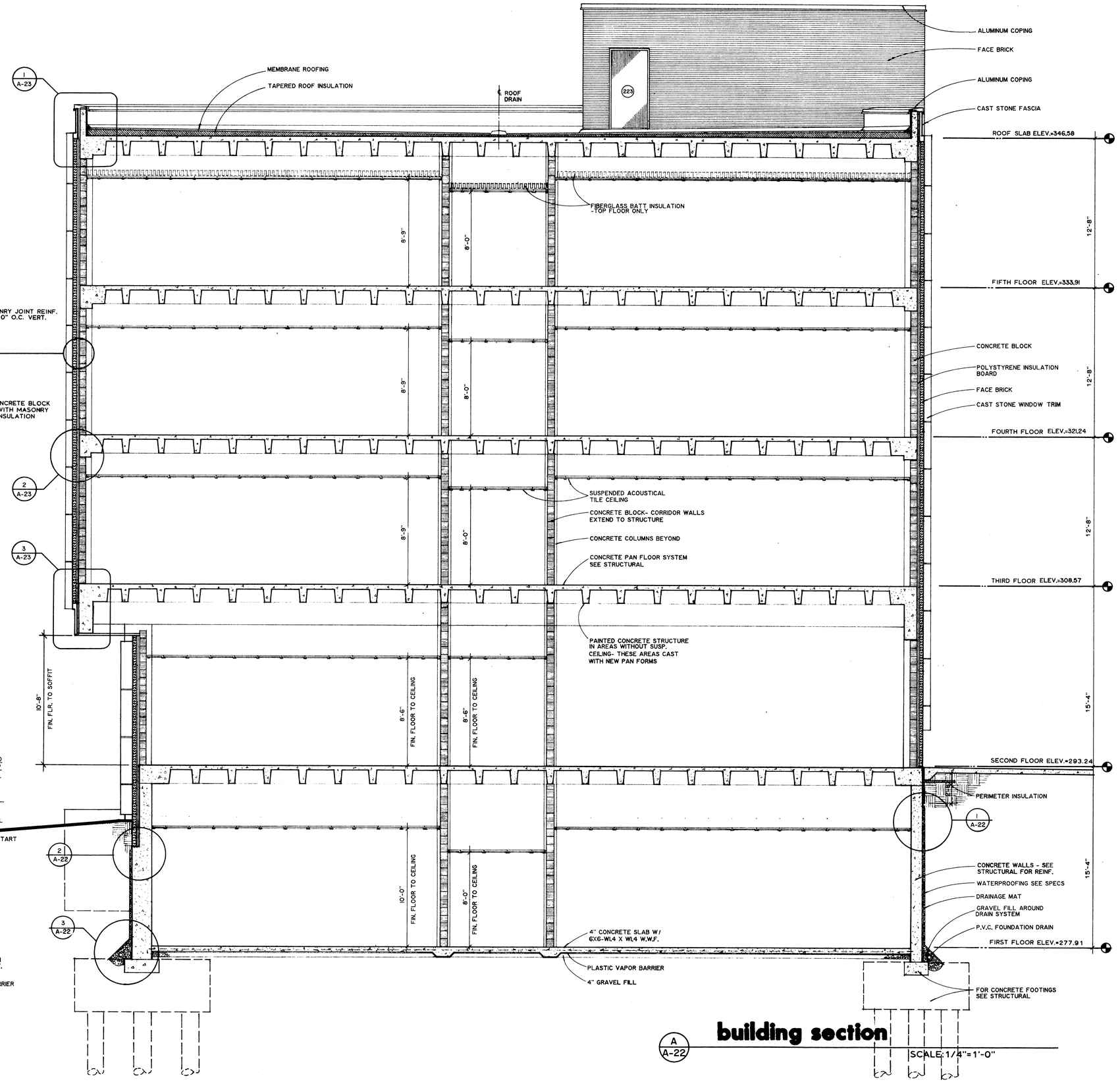
SCALE: 3"=1'-0"



det. at foundation drain

3 / A-22

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



building section

A / A-22

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

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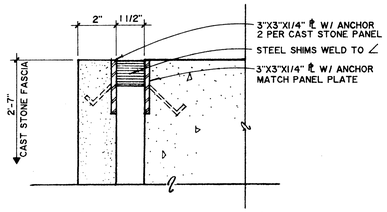
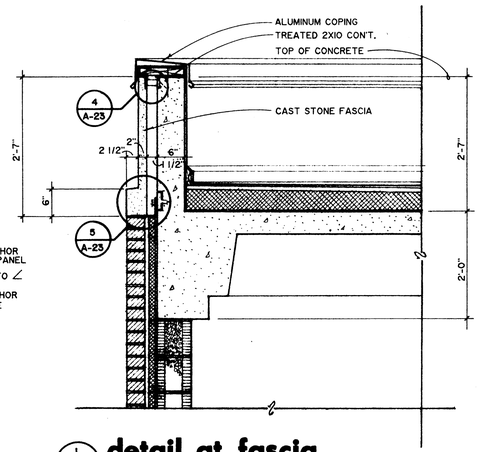


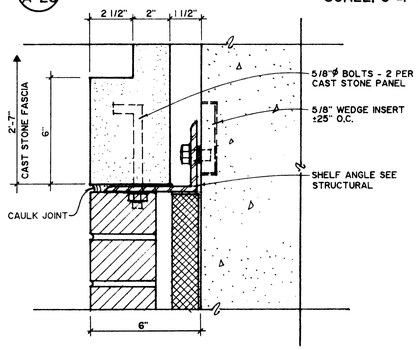
4/A-23 detail · cast stone fascia

SCALE: 3"=1'-0"



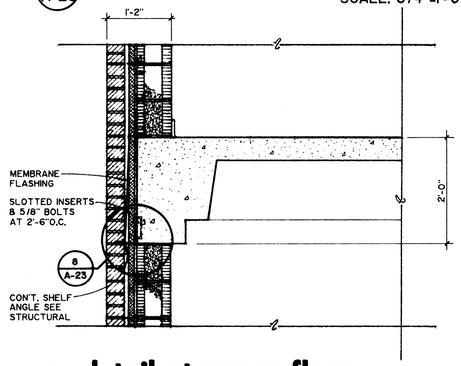
1/A-23 detail at fascia

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



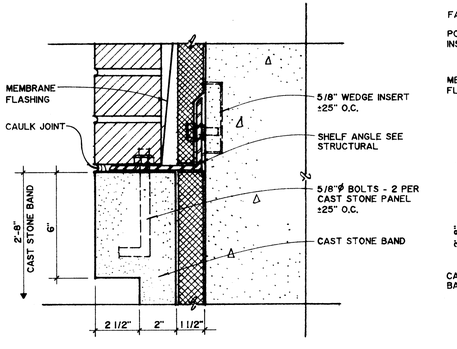
5/A-23 detail · cast stone fascia

SCALE: 3"=1'-0"



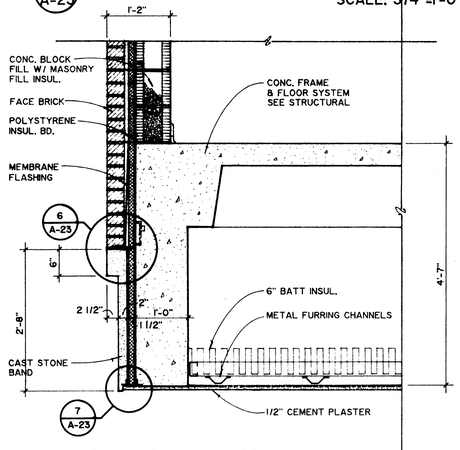
2/A-23 detail at upper floors

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



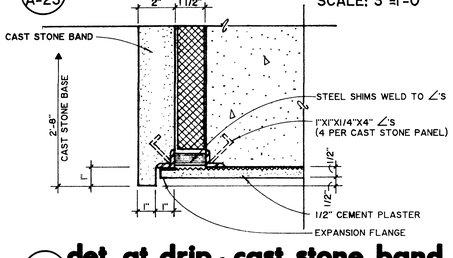
6/A-23 det. at top · cast stone band

SCALE: 3"=1'-0"



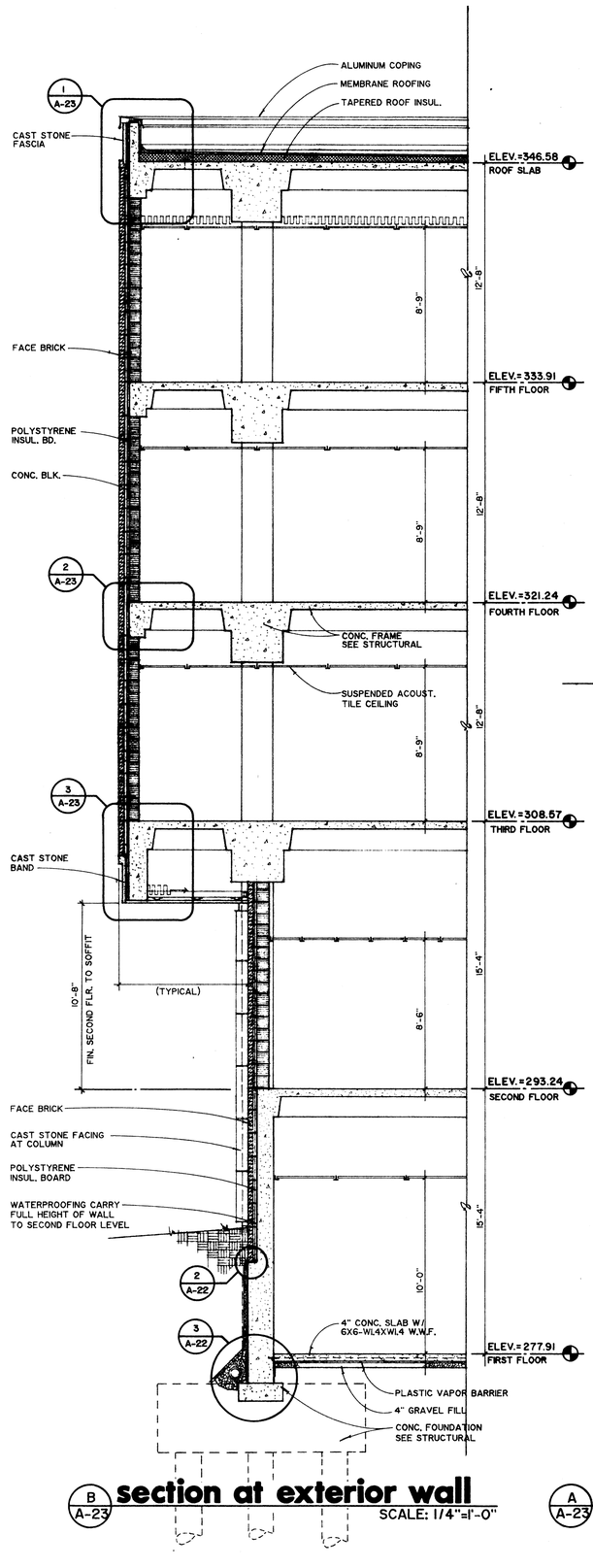
3/A-23 (THIRD FLOOR) detail at soffit

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



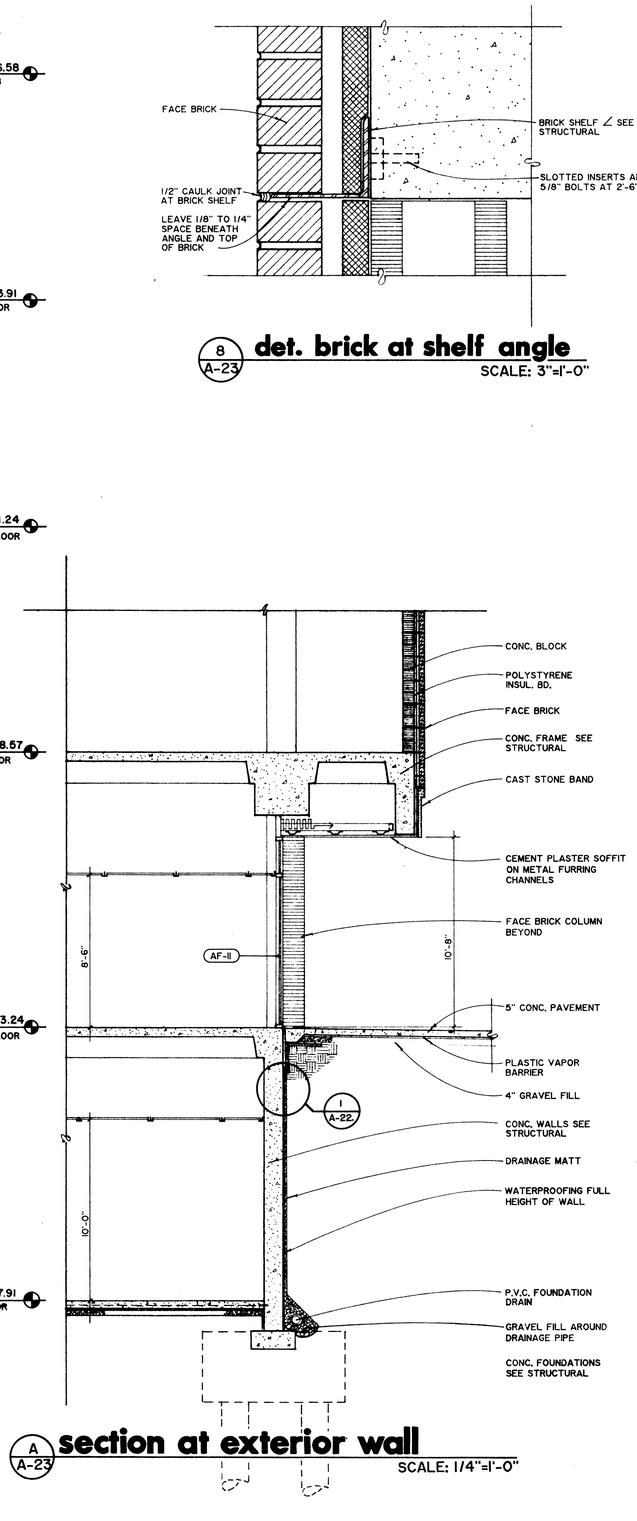
7/A-23 det. at drip · cast stone band

SCALE: 3"=1'-0"



B/A-23 section at exterior wall

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



A/A-23 section at exterior wall

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

8/A-23 det. brick at shelf angle

SCALE: 3"=1'-0"

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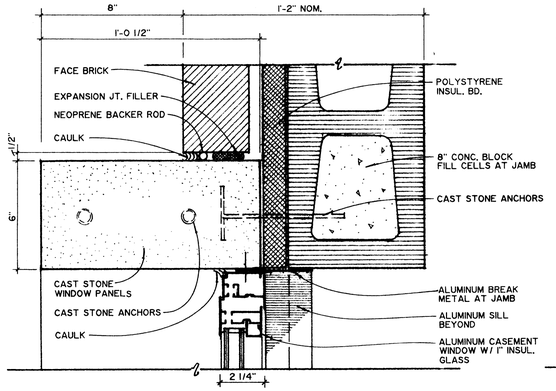
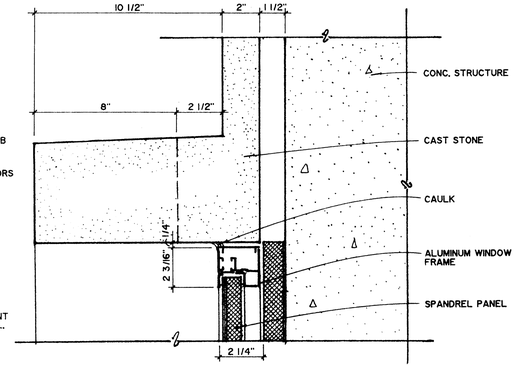


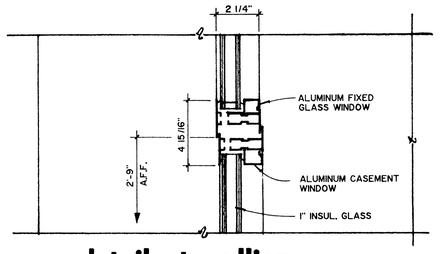
5 A-24 **detail at jamb**

SCALE: 3"=1'-0"



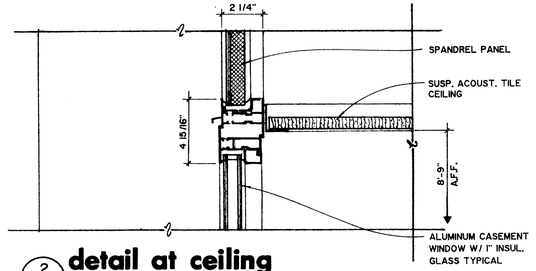
1 A-24 **detail at cast stone head**

SCALE: 3"=1'-0"



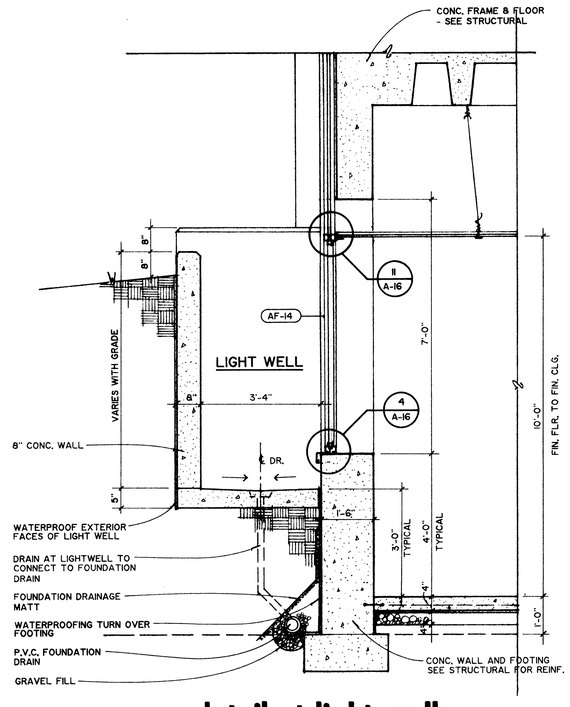
6 A-24 **detail at mullion**

SCALE: 3"=1'-0"



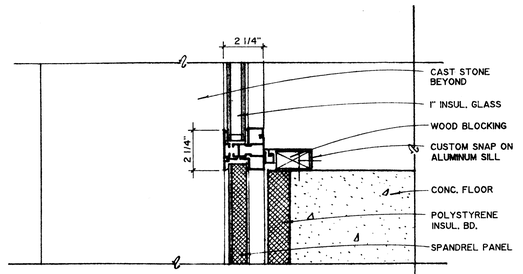
2 A-24 **detail at ceiling**

SCALE: 3"=1'-0"



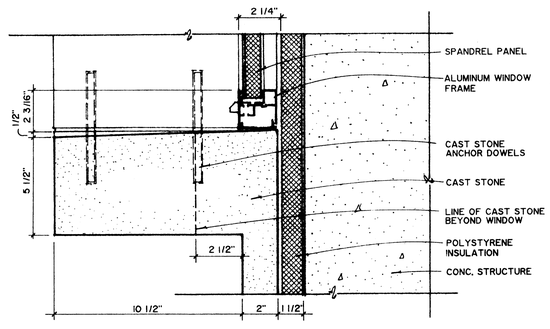
7 A-24 **detail at light wells**

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



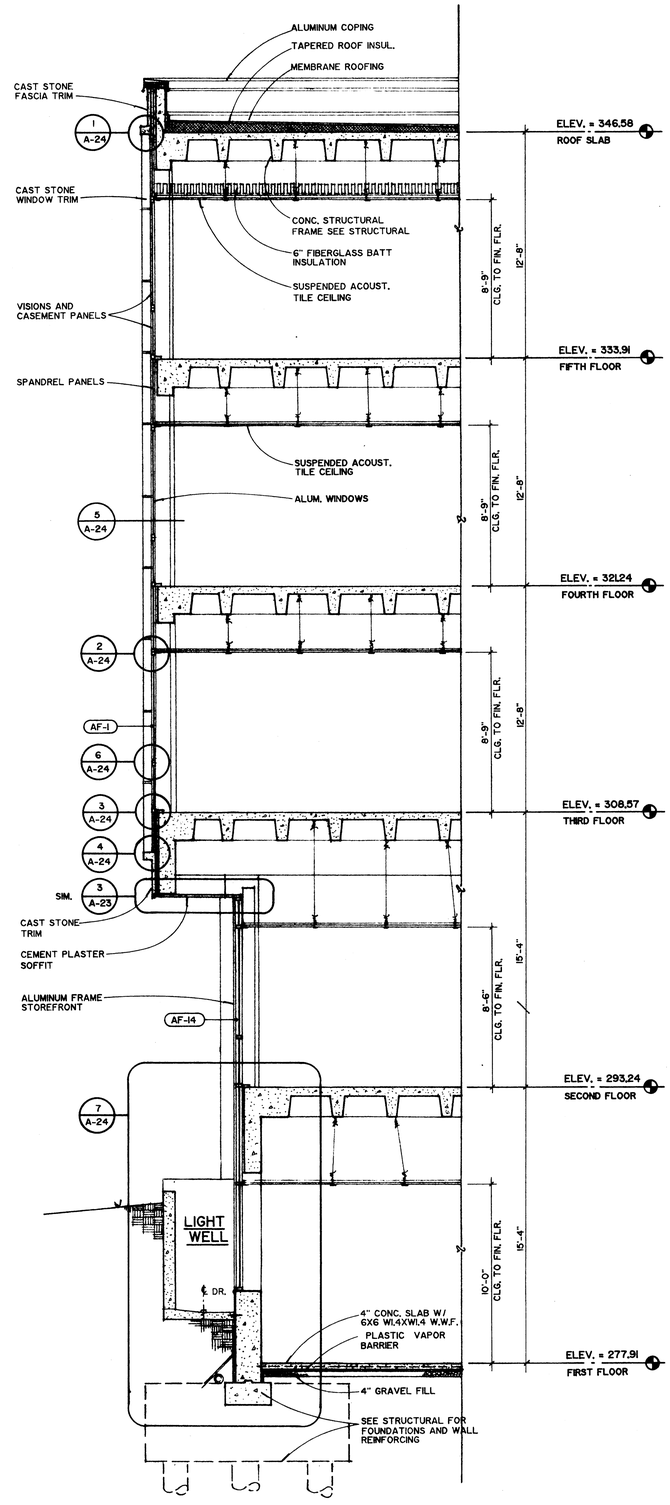
3 A-24 **detail at floor**

SCALE: 3"=1'-0"



4 A-24 **detail at cast stone base**

SCALE: 3"=1'-0"



A A-24 **section at exterior wall at windows**

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

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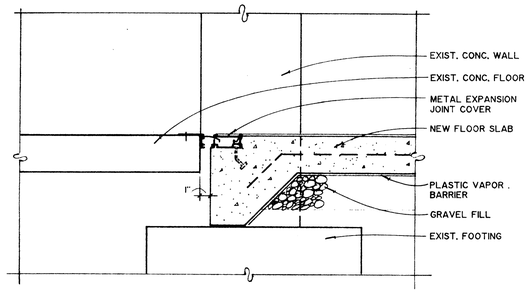
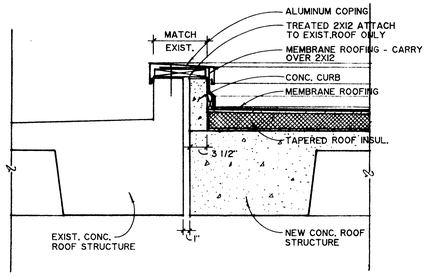


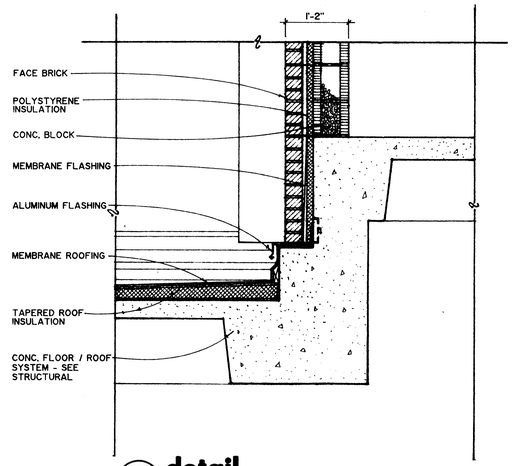
4 A-25 **detail at floor exp. joint**

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



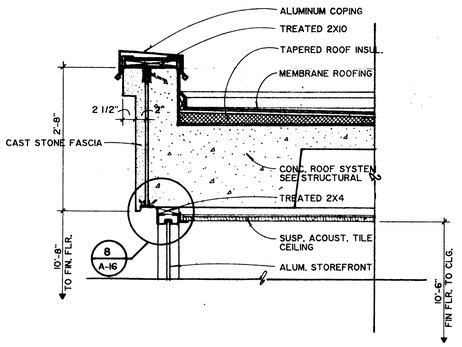
3 A-25 **detail at exist. roof**

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



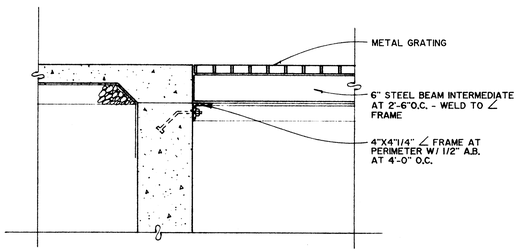
2 A-25 **detail**

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



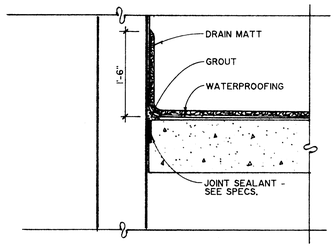
1 A-25 **detail at fascia**

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



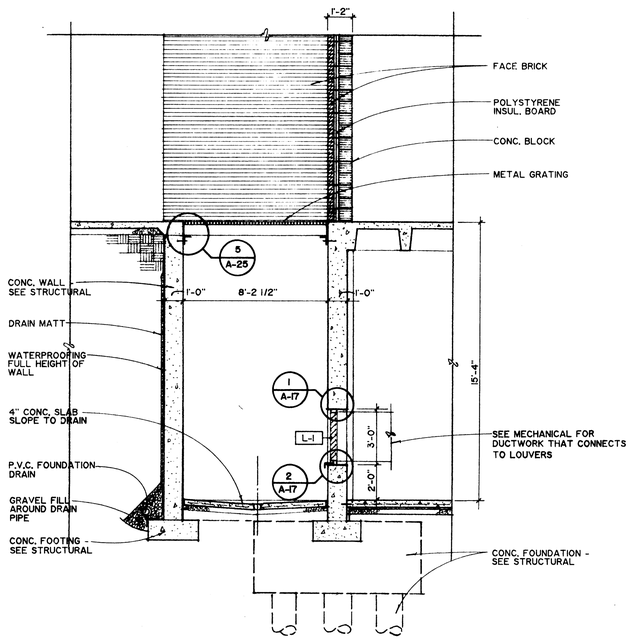
5 A-25 **detail at metal grating**

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



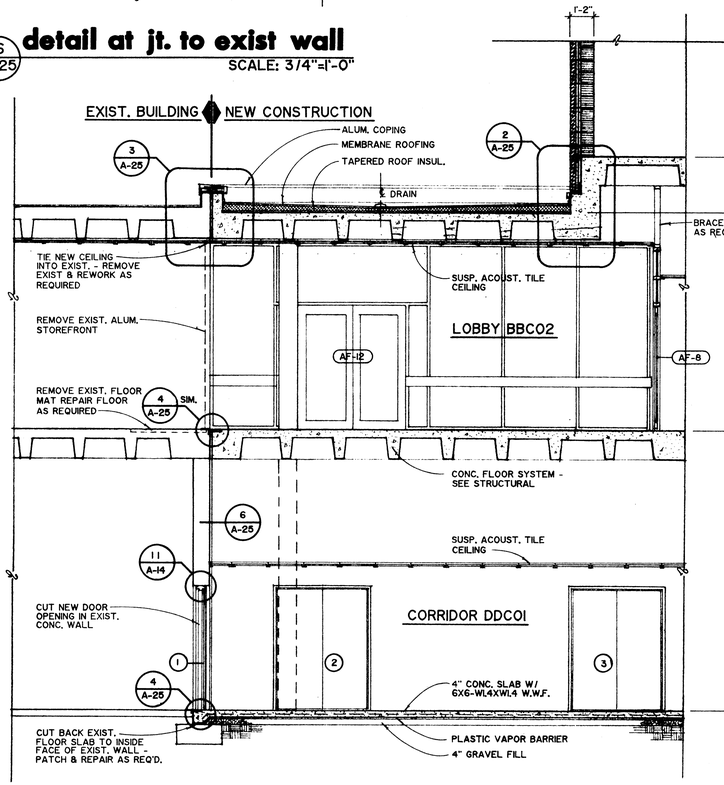
6 A-25 **detail at jt. to exist wall**

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



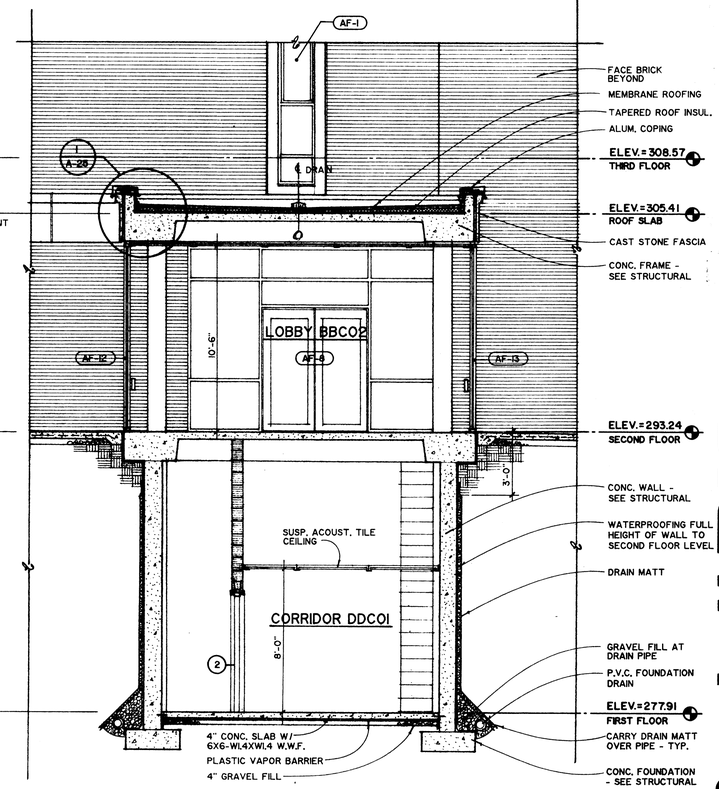
C A-25 **section at access well**

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



B A-25 **section at connection to existing building**

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



A A-25 **section at connection to existing bldg.**

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

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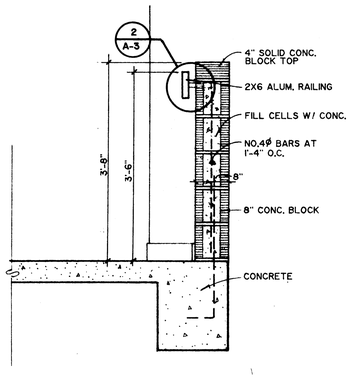
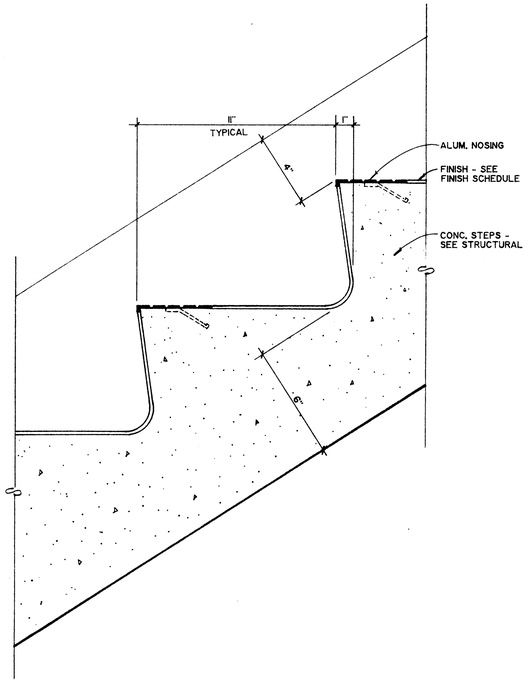


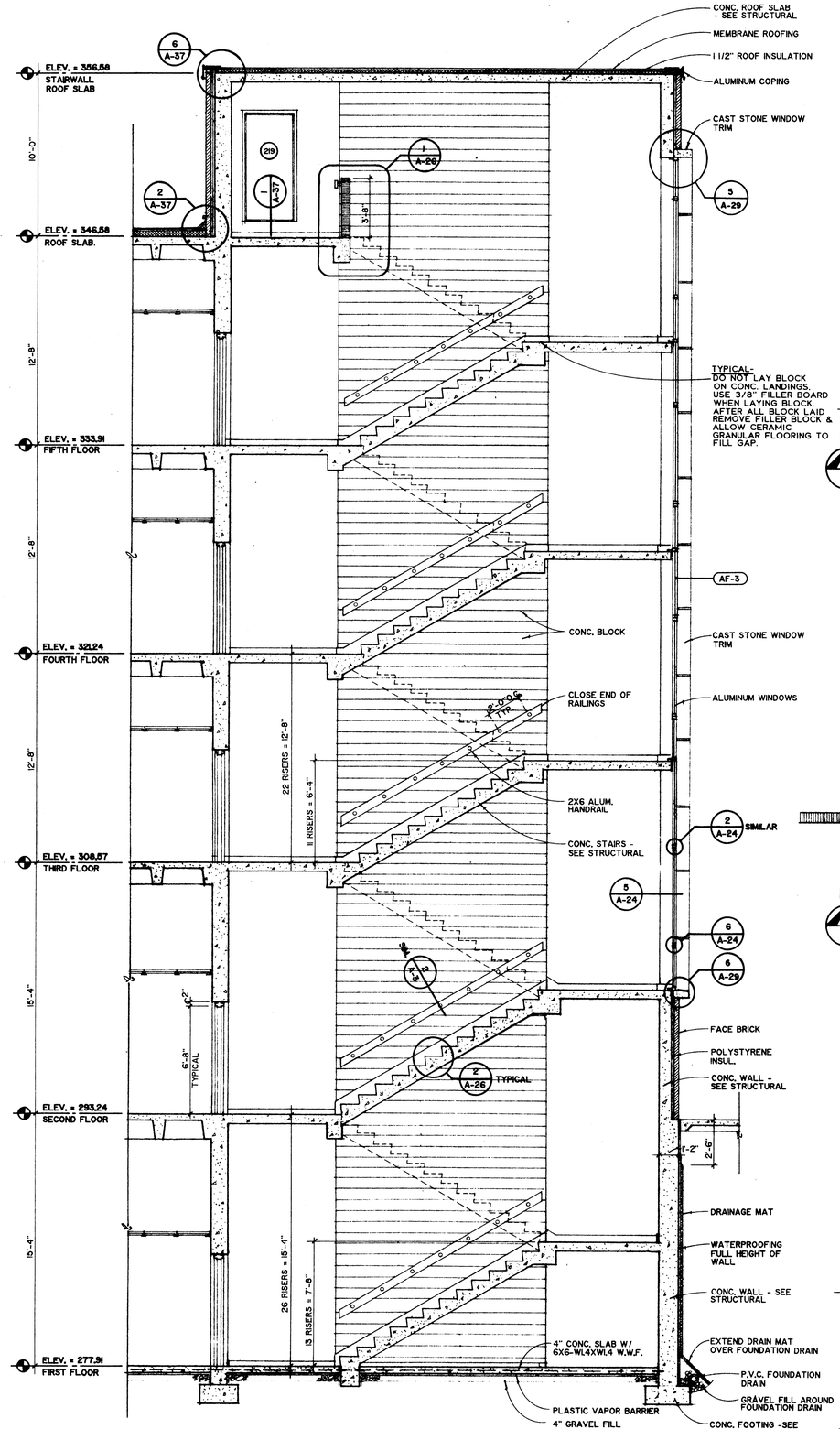
1/A-26 detail at guardrail (ROOF LEVEL ONLY)

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



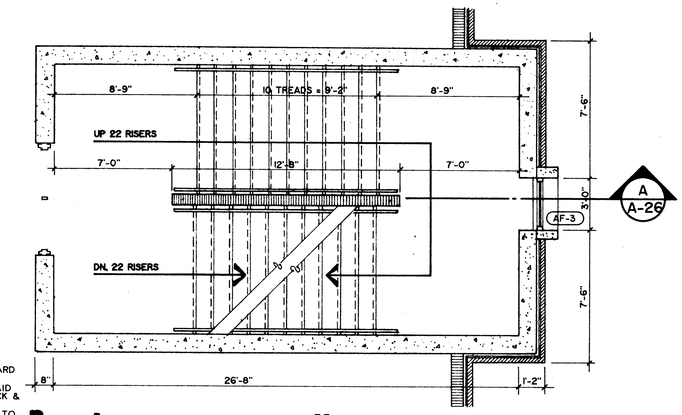
2/A-26 detail at typical tread and riser

SCALE: 3"=1'-0"



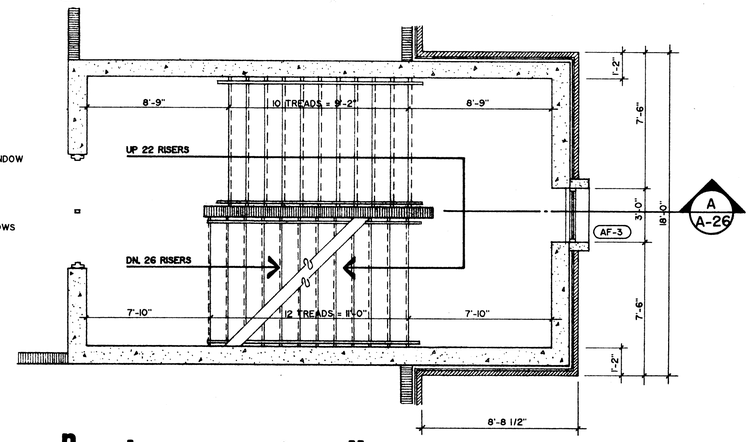
A/A-26 section at stairwells

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



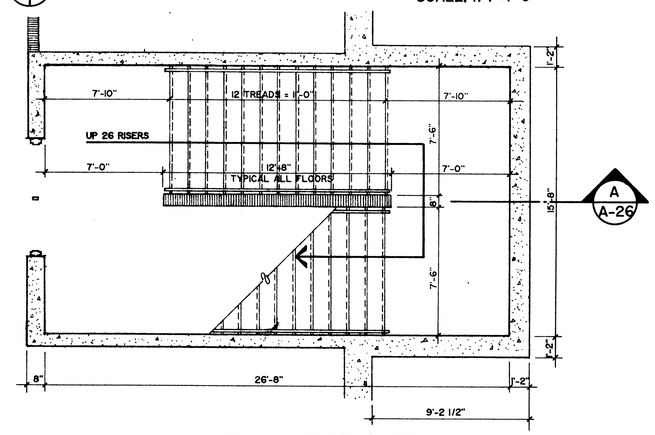
n plan at stairwell · upper floors

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



n plan at stairwell · third floor

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



NOTE: SEE FLOOR PLANS FOR DOOR LOCATIONS AT EA. FLOOR.

n plan at stairwell · first floor

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

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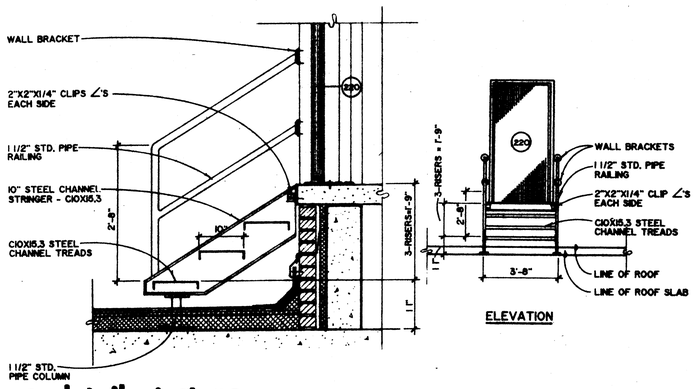
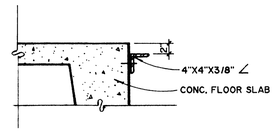


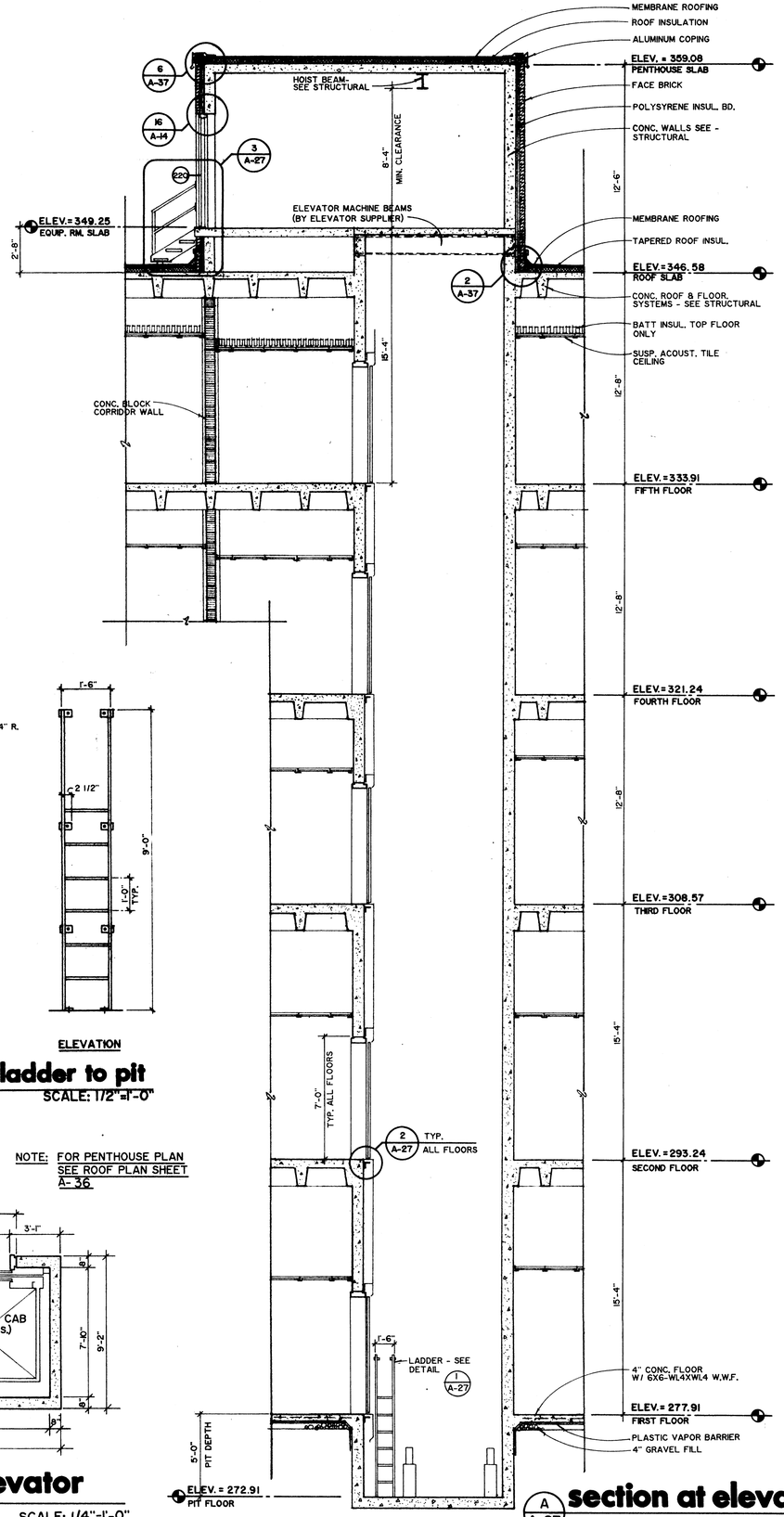
3 A-27 **detail at steps**

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



2 A-27 **detail at elevator sill**

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

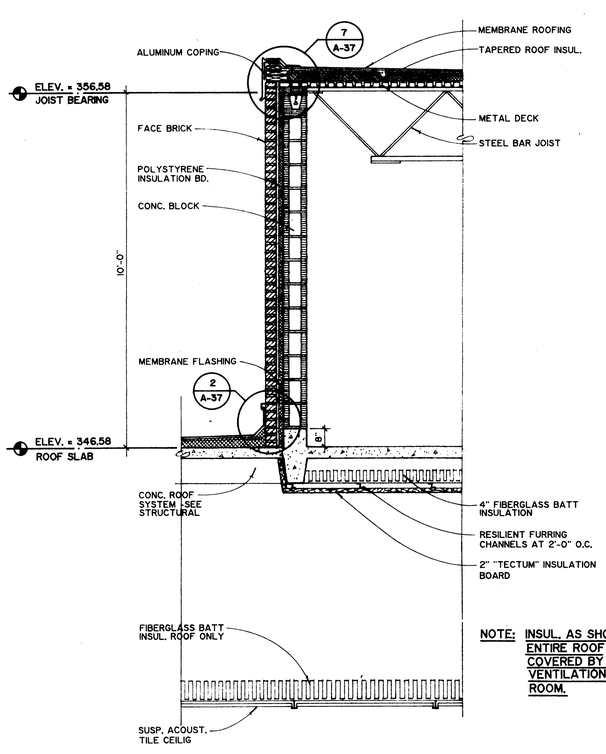


A A-27 **section at elevator**

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

1 A-27 **detail · ladder to pit**

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



B A-27 **section at ventilation equip. rm.**

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

NOTE: INSUL. AS SHOWN ENTIRE ROOF COVERED BY VENTILATION EQUIP. ROOM.

n **plan at elevator**

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

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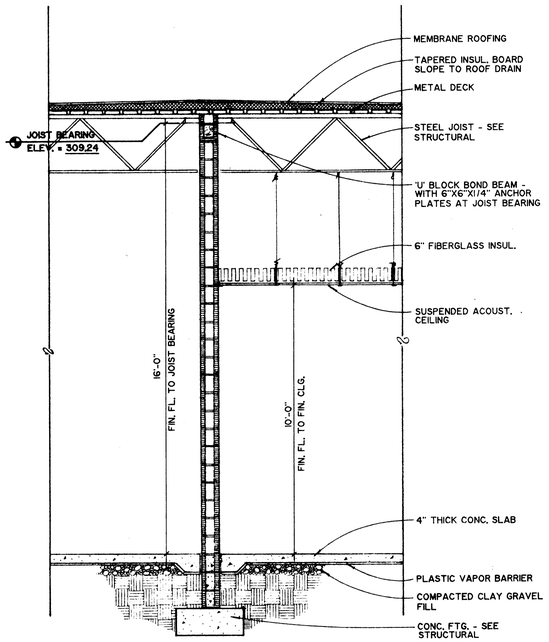
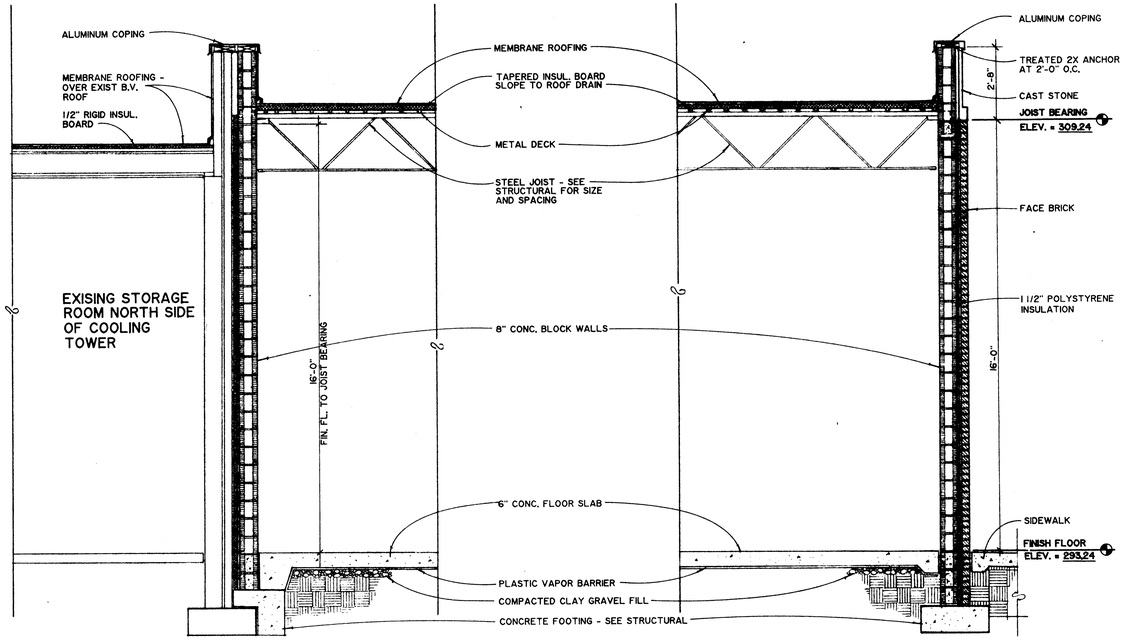


A/A-28 **wall section**

SCALE: 3/8"=1'-0"

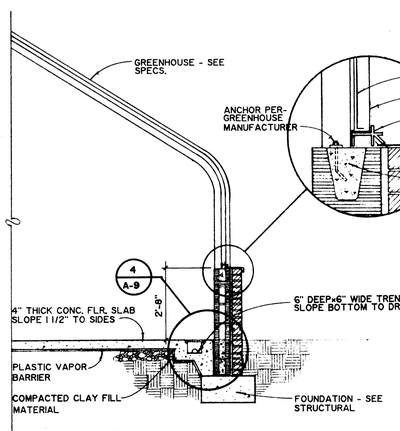


B/A-28 **wall section**

SCALE: 3/8"=1'-0"

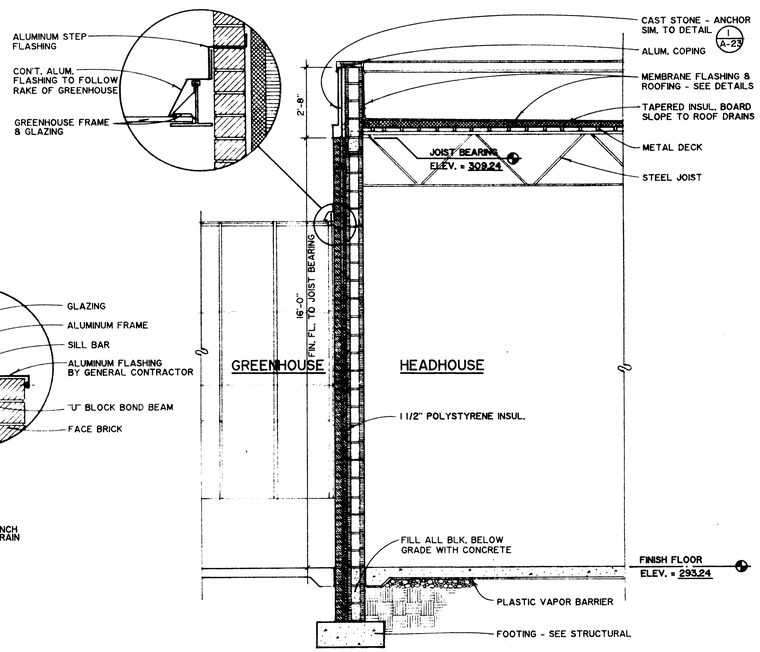
C/A-28 **wall section**

SCALE: 3/8"=1'-0"



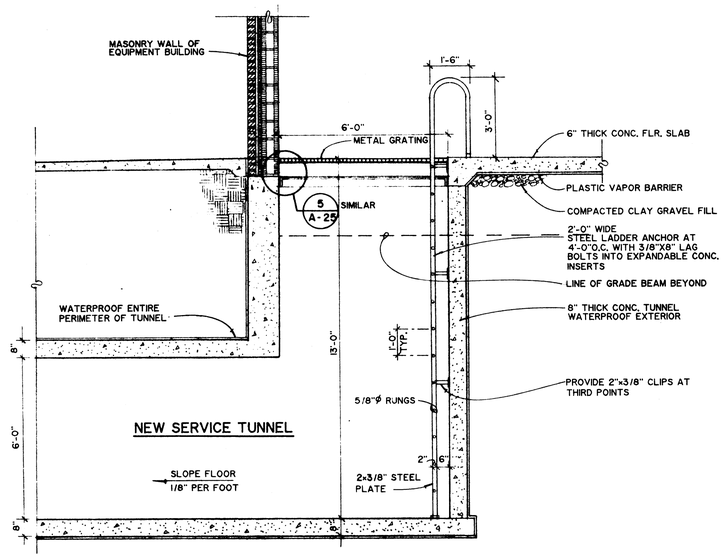
D/A-28 **wall section**

SCALE: 3/8"=1'-0"



E/A-28 **wall section**

SCALE: 3/8"=1'-0"



F/A-28 **wall section**

SCALE: 3/8"=1'-0"

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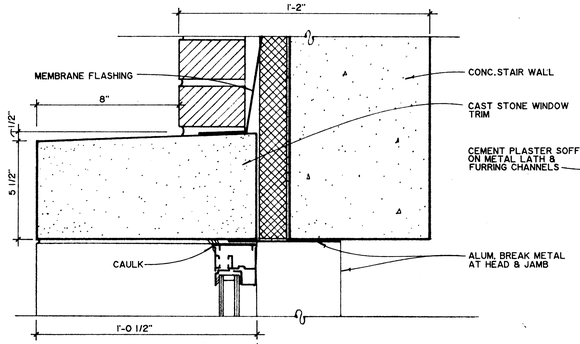
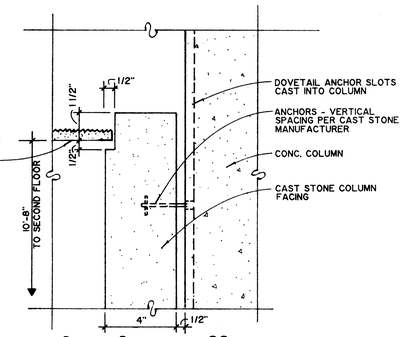
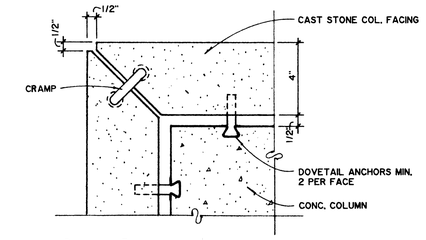


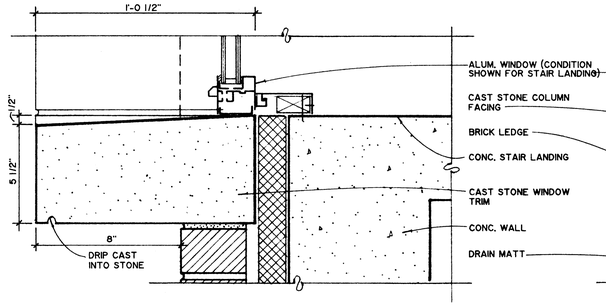
5 A-29 **detail at head** SCALE: 3"=1'-0"



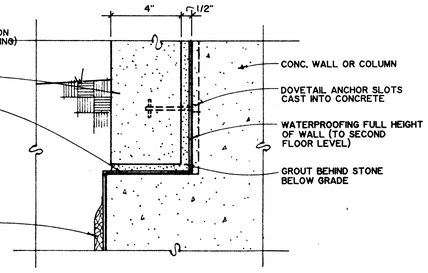
2 A-29 **detail at soffit** SCALE: 3"=1'-0"



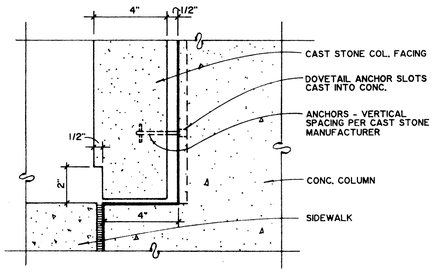
1 A-29 **detail at corners** SCALE: 3"=1'-0"



6 A-29 **detail at sill** SCALE: 3"=1'-0"



3 A-29 (BRICK LEDGE) **detail at column base** SCALE: 3"=1'-0"

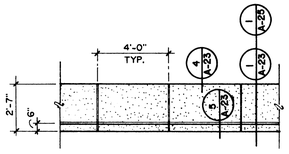


4 A-29 **detail at column base** SCALE: 3"=1'-0"

NOTES

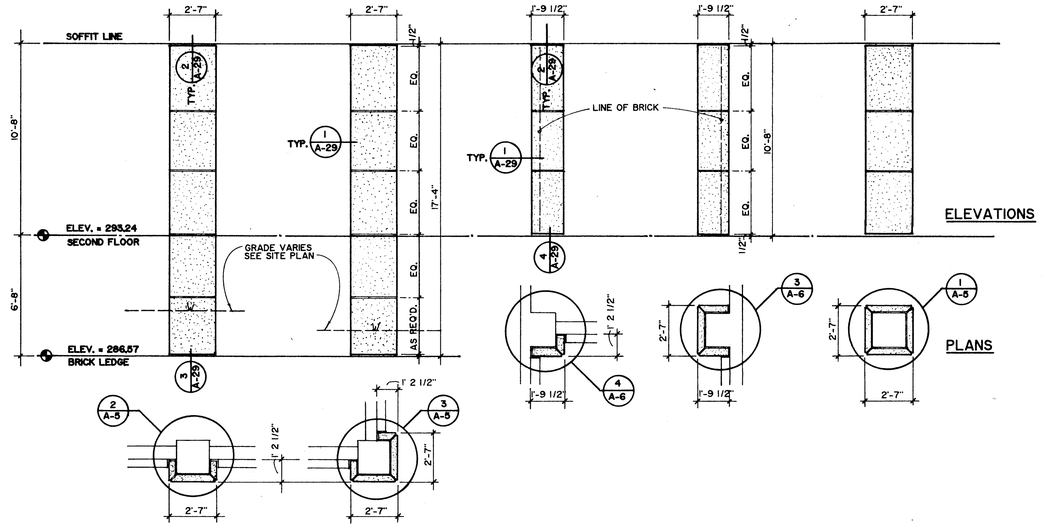
1) GENERAL REQUIRMENTS FOR ANCHORAGE AND JOINING CAST STONE COMPONENTS ARE SHOWN ON THE DRAWING; COMPLETE ANCHORAGE SYSTEMS ARE THE RESPONSIBILITY OF THE CAST STONE MANUFACTURER.

2) SHOP DRAWINGS INDICATING ALL CAST STONE PIECES INCLUDING ANCHORAGE ARE TO BE SUBMITTED FOR APPROVAL PRIOR TO MANUFACTURING CAST STONE.

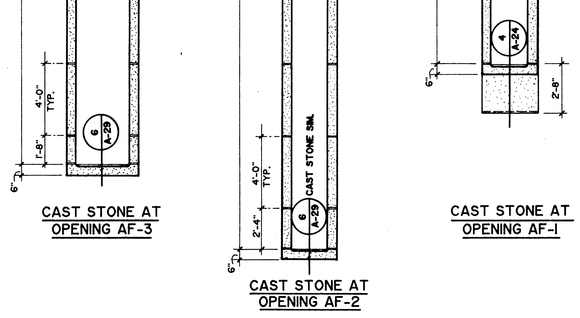


NOTE:
4'-0" JOINT SPACING TYPICAL; CORNER PANELS TO BE USED TO ADJUST LENGTHS THAT ARE NOT 4'-0" MODULE.

fascia bands



columns



window trim

cast stone schedule

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

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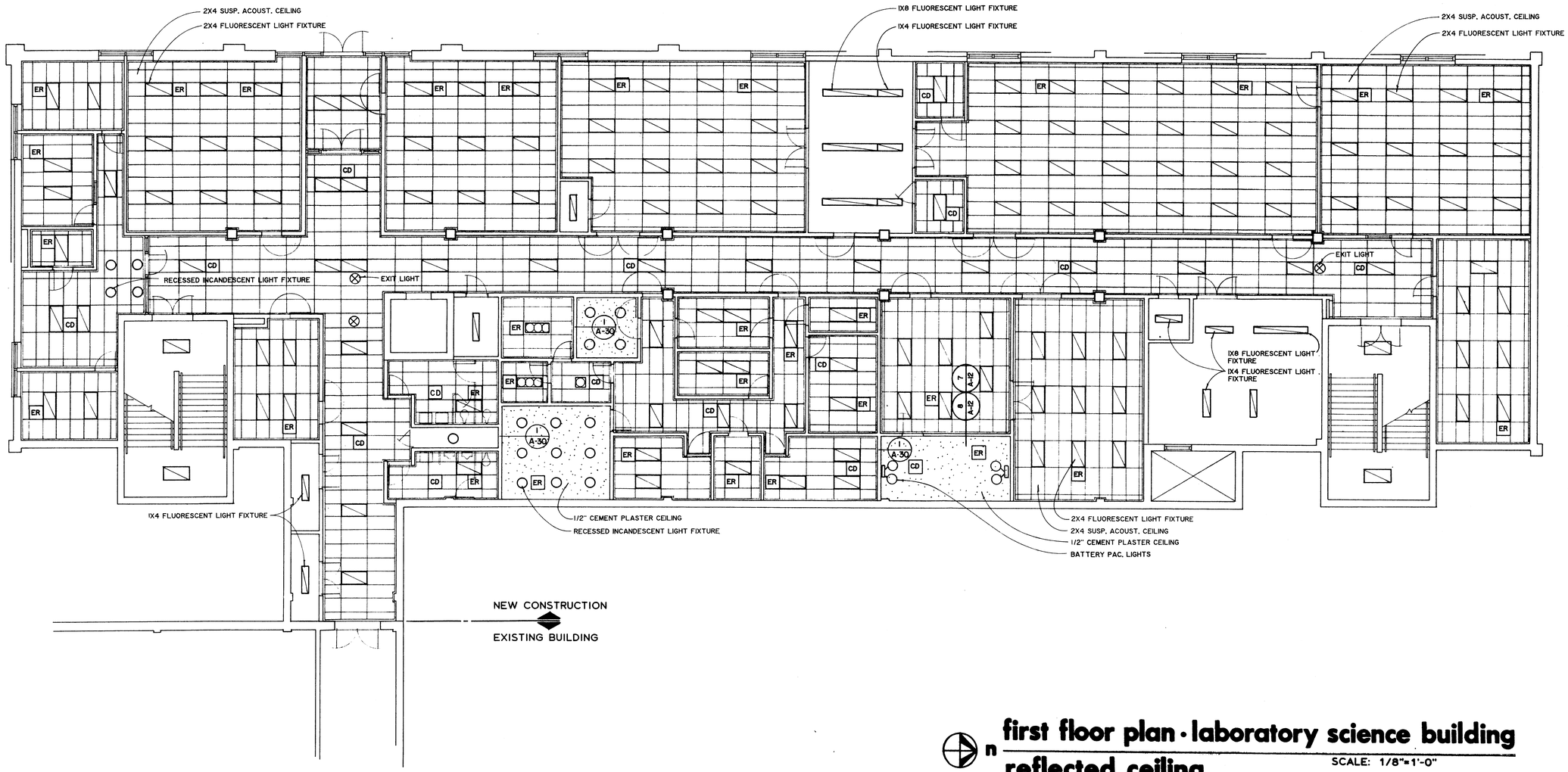
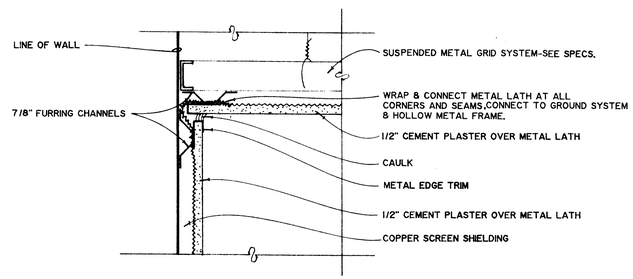


n first floor plan · laboratory science building reflected ceiling

SCALE: 1/8"=1'-0"



1/A-30 det. at joint · ceiling to wall

SCALE: 3"=1'-0"

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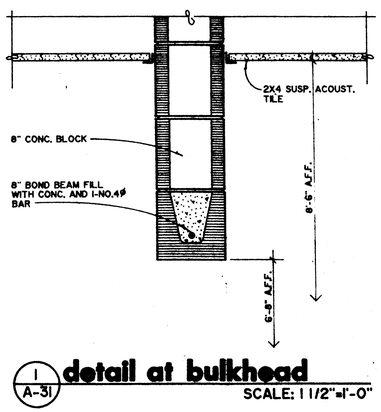
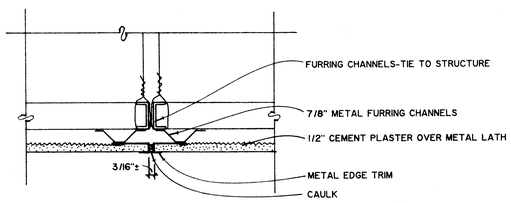
PLASTER SOFFIT
2X4 SUSP. ACOUST. CEILING
2X4 FLUORESCENT LIGHT FIXTURE
EXPANSION JOINTS (TYP.)
RECESSED INCANDESCENT LIGHT FIXTURE
IX8 FLUORESCENT LIGHT FIXTURE
EXIT LIGHT
CHASE
IX4 FLUORESCENT LIGHT FIXTURE
IX8 FLUORESCENT LIGHT FIXTURE
2X4 SUSP. ACOUST. CEILING
2X4 FLUORESCENT LIGHT FIXTURE.
CEILING GRID TO LINE WITH EXIST. CEILING GRID - REMOVE AND REPLACE EXISTING AS REQUIRED.
NEW CONSTRUCTION
EXISTING BUILDING



1 / A-31 **detail at bulkhead**
SCALE: 1 1/2"=1'-0"

n **second floor plan · laboratory science building**
reflected ceiling
SCALE: 1/8"=1'-0"



2 / A-31 **detail at expansion joint**
SCALE: 3"=1'-0"

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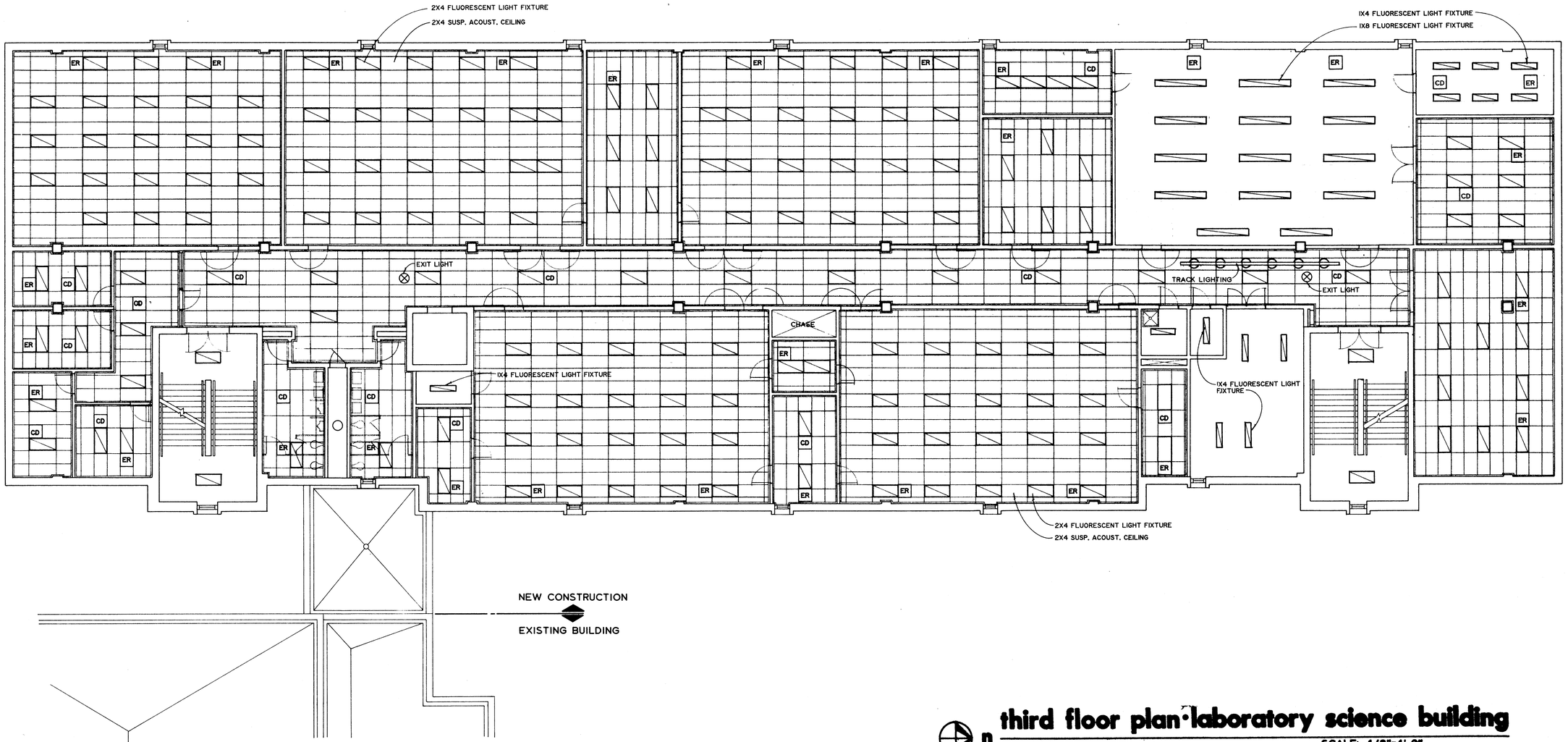
A-32

DATE: 6/23/86



n **third floor plan · laboratory science building**
reflected ceiling

SCALE: 1/8"=1'-0"

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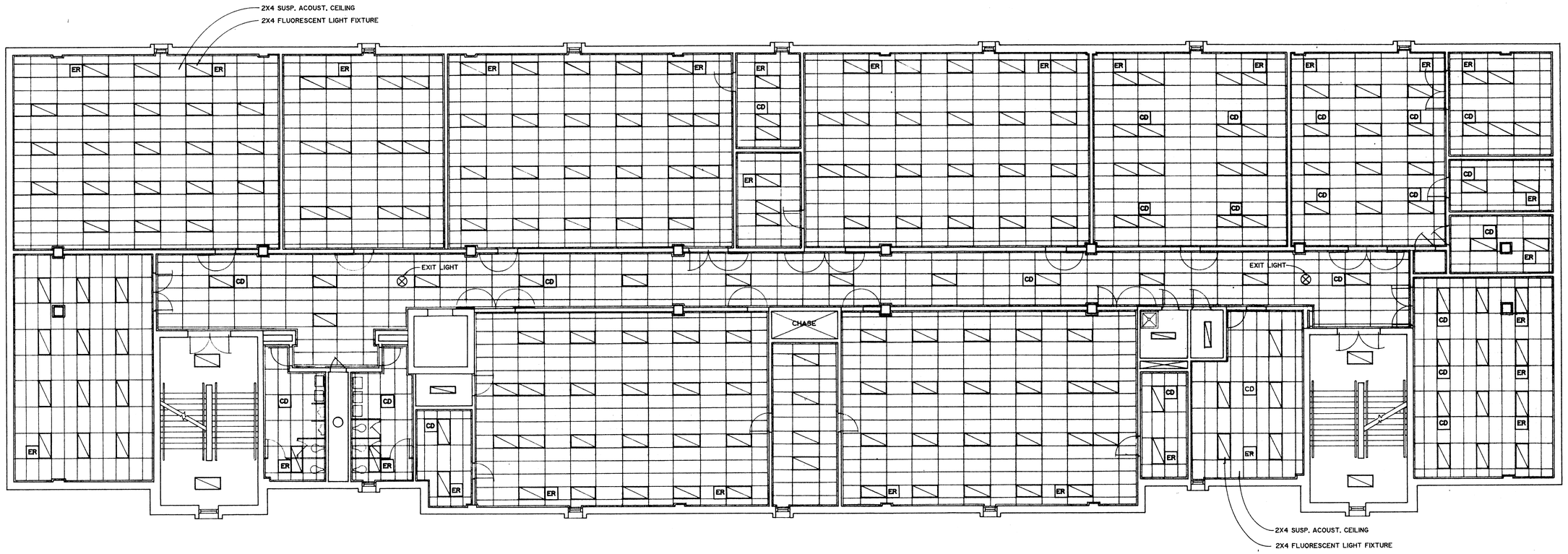

n **fourth floor plan · laboratory science building**
reflected ceiling

SCALE: 1/8"=1'-0"

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REGISTERED ARCHITECT C13
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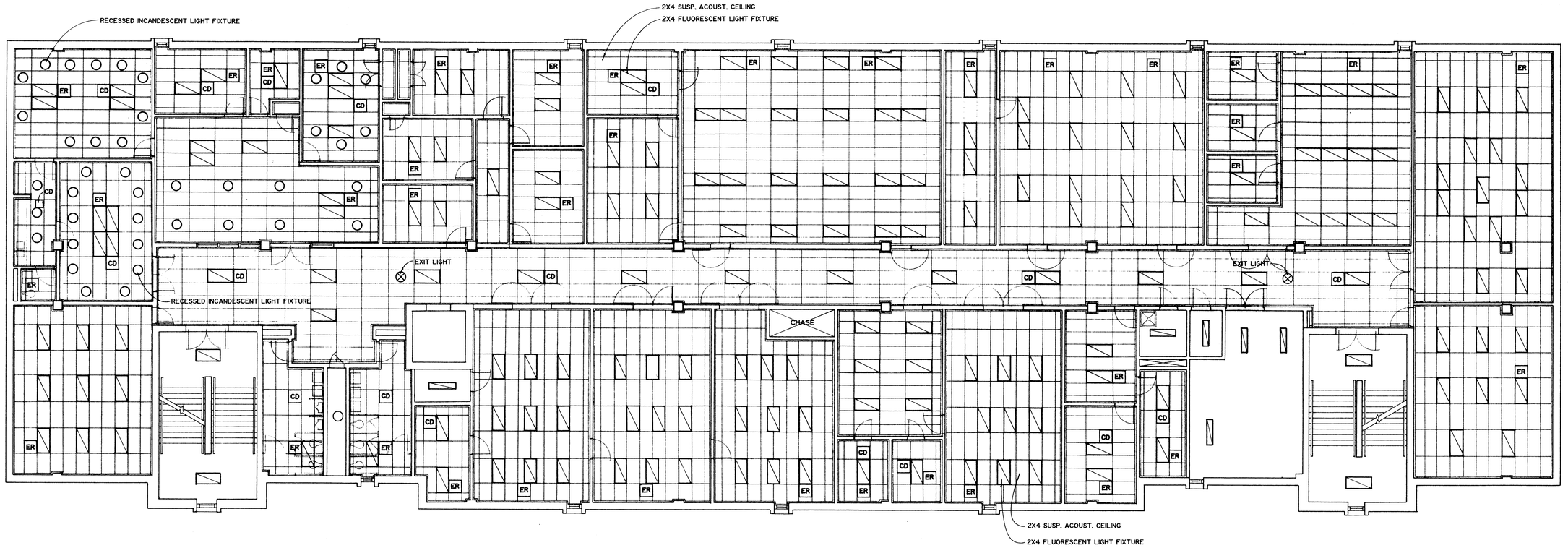

n **fifth floor plan · laboratory science building**
reflected ceiling
SCALE: 1/8"=1'-0"

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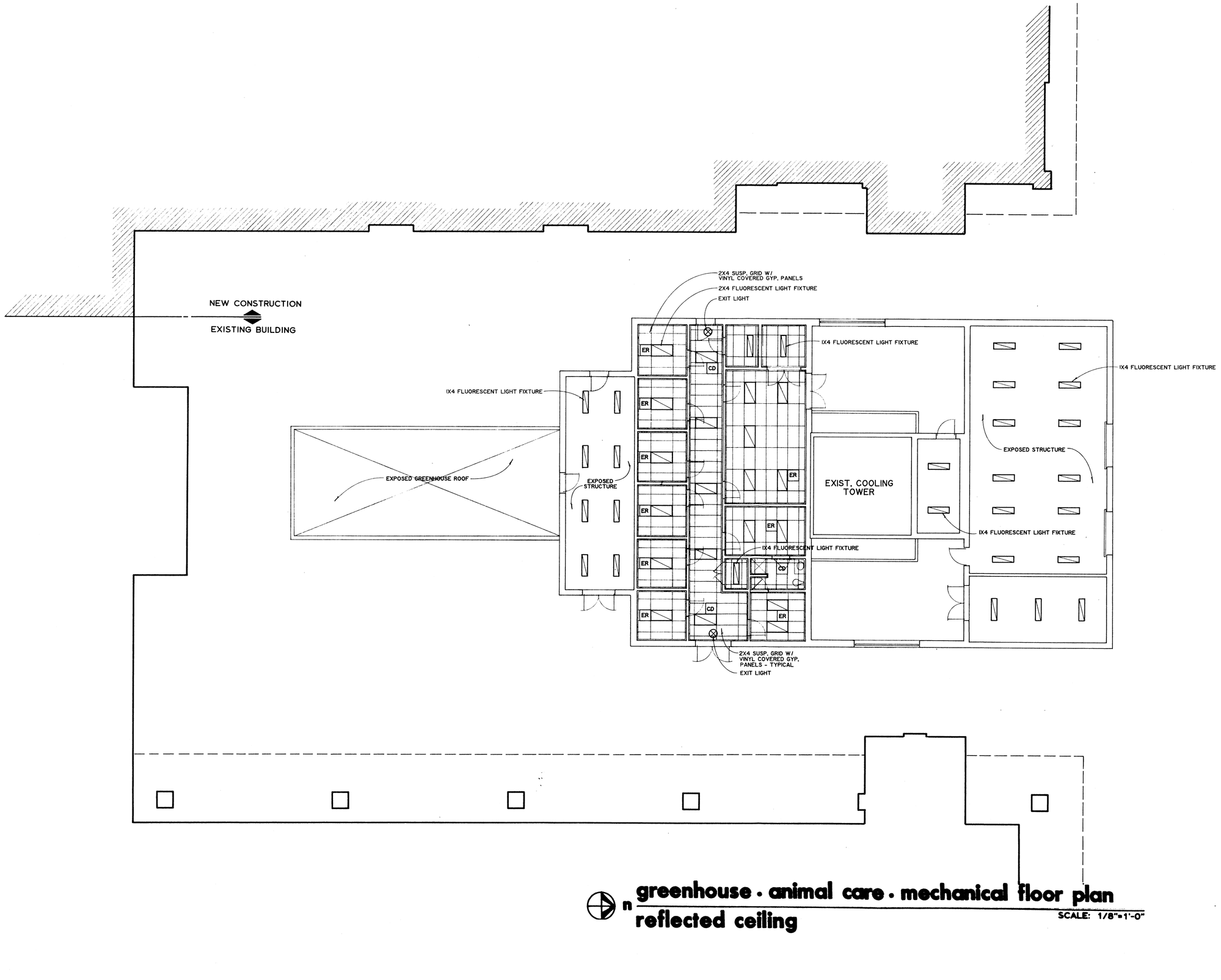

n **greenhouse . animal care . mechanical floor plan**
reflected ceiling

SCALE: 1/8"=1'-0"

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A-35

DATE: 6/23/86

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COMM. NO. 10186

A-36

DATE: 6/23/86

ADDITION TO
LABORATORY SCIENCES CENTER
ARKANSAS STATE UNIVERSITY
JONESBORO, ARKANSAS

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BRACKETT-KRENNERICH & ASSOCIATES, P.A.
REGISTERED ARCHITECTS C13
ARKANSAS

Brackett Krennerich and Associates Inc.

240'-0"

1'-2" 22'-0" 18'-0" 21'-10" 10'-8" 6" 36'-8" 5'-2" 28'-0" 1'-2" 62'-10" 18'-0" 22'-0" 1'-2"

68'-0"

20'-0"

36'-0"

12"X12" ROOF BLOCKS SEE SPECS.

POSTS OF RAILING ANCHOR TO CONC. DECK

11/2" STD. PIPE RAILING-SEE DETAIL

METAL STEPS SEE DETAIL

4" P.V.C.-EXTEND UNDER CAST STONE (RELIEF SCUPPER)

ALUMINUM COPING TYPICAL

ALL ROOFING TO BE SINGLE PLY MEMBRANE ROOFING OF MODIFIED BITUMEN OVER TAPERED INSULATION AND 1/2" RIGID INSULATION BOARD

ELEVATOR BBE06

VENTILATION EQUIPMENT ROOM 630

CHASE

METAL THRESHOLD

11/2" STD. PIPE RAILING

TV. ANTENNA SERVICE

VENT PIPING-SEE PLUMBING

EXHAUST FAN -SEE MECHANICAL

NOTE: ARROWS INDICATE DIRECTION OF SLOPE FOR TAPERED INSULATION

STAIR EES06

STAIR FFS06

THIS AREA TO RECEIVE 2 LAYERS OF MEMBRANE ROOFING

MODIFIED BITUMEN MEMBRANE ROOFING

NEW CONSTRUCTION

EXISTING BUILDING

EXISTING ROOF

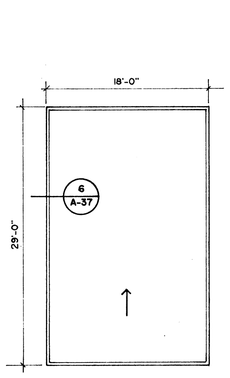
NOTES:

1.) MINIMUM THICKNESS OF ROOF INSULATION TO BE 1 1/2" AT THE ROOF DRAINS

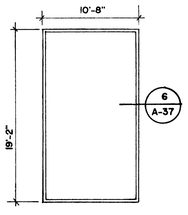
2.) MINIMUM ROOF SLOPE (TAPER) TO BE 1/8" PER FOOT SLOPE TO DRAINS.

roof plan · laboratory science building

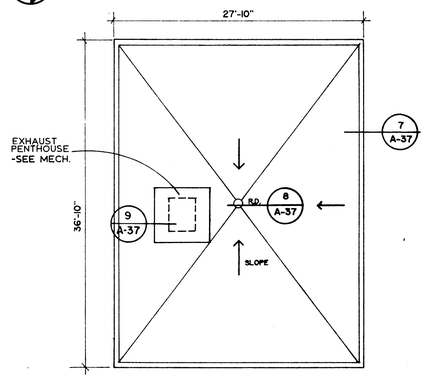
SCALE: 1/8" = 1'-0"



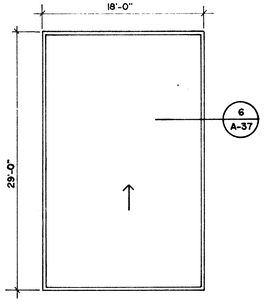
roof at stair EES06
SCALE: 1/8"=1'-0"



roof at elev. pent.
SCALE: 1/8"=1'-0"



roof at vent. equip. room
SCALE: 1/8"=1'-0"



roof at stair FFS06
SCALE: 1/8"=1'-0"

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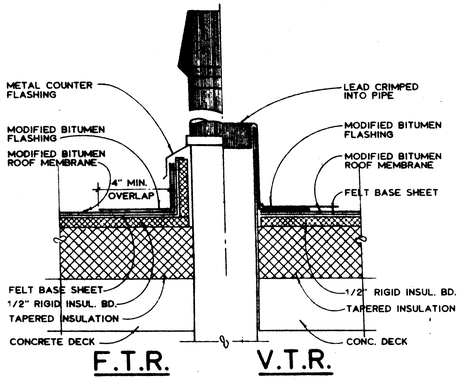
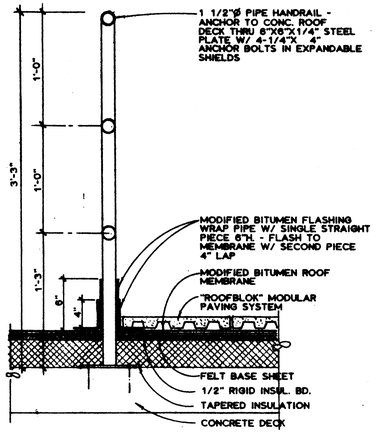


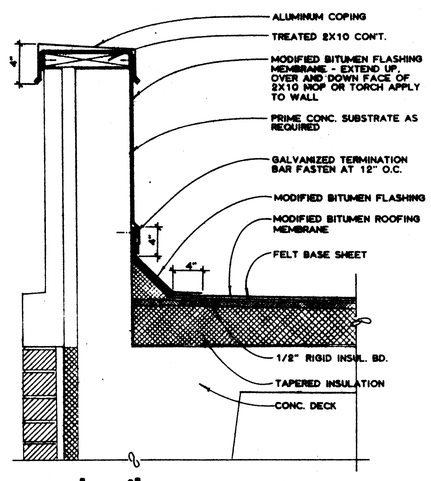
5 A-37 **detail at roof penetration**

SCALE: 3"=1'-0"



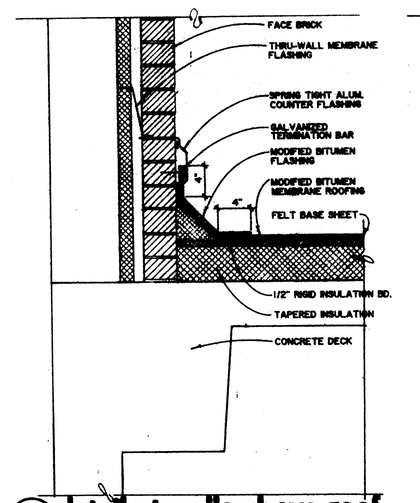
4 A-37 **detail at handrail**

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



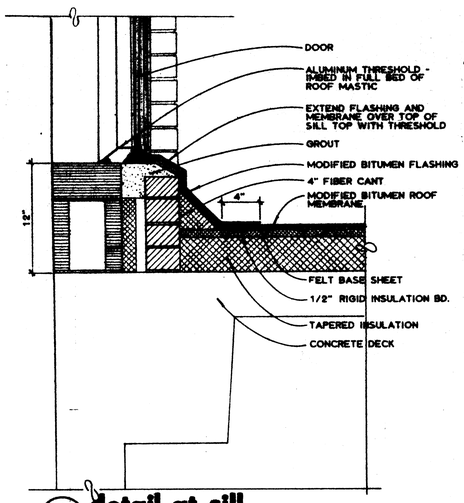
3 A-37 **detail at parapet**

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



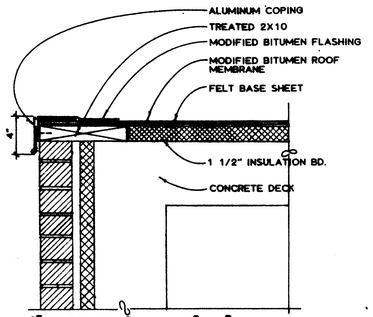
2 A-37 **detail at walls above roof**

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



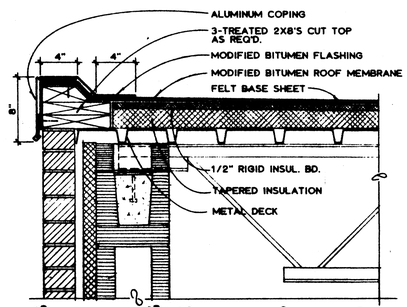
1 A-37 **detail at sill**

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



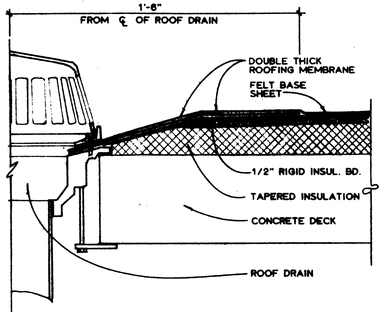
6 A-37 **detail at stair and elevator penthouse**

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



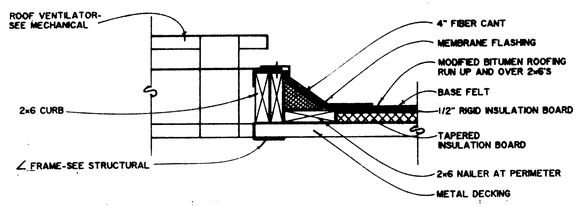
7 A-37 **detail at ventilation equipment room**

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

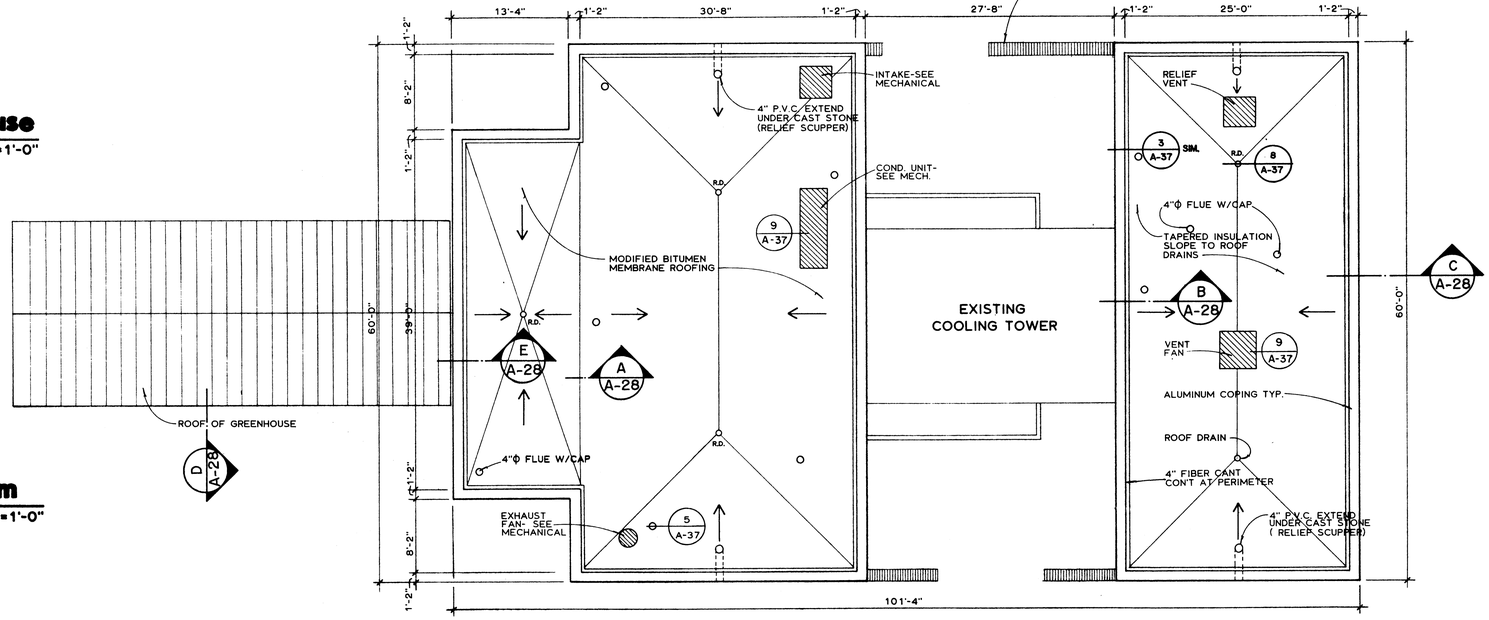


8 A-37 **detail at roof drain**

SCALE: 3"=1'-0"



9 A-37 **detail at roof ventilator (ROOF TOP EQUIP. SIM.)** SCALE: 1 1/2"=1'-0"



n **roof plan greenhouse . animal care . mechanical building**

SCALE: 1/8"=1'-0"

NOTES:

1.) MINIMUM THICKNESS OF ROOF INSULATION TO BE 1 1/2" AT THE ROOF DRAINS

2.) MINIMUM ROOF SLOPE (TAPER)TO BE 1/8" PER FOOT, SLOPE TO DRAINS.

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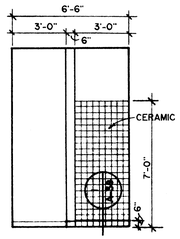
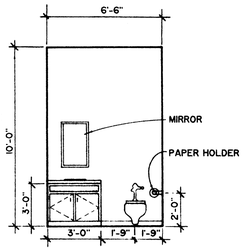
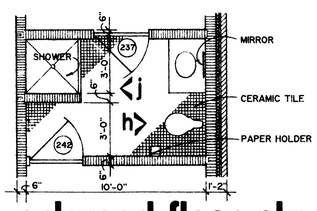


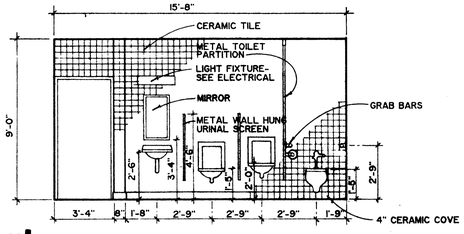
elevation 'j'
SCALE: 1/4"=1'-0"



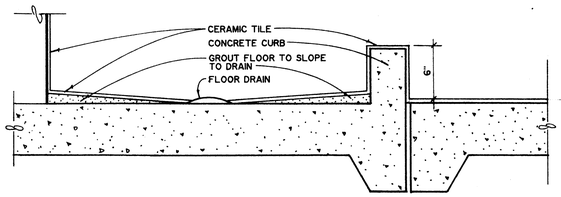
elevation 'h'
SCALE: 1/4"=1'-0"



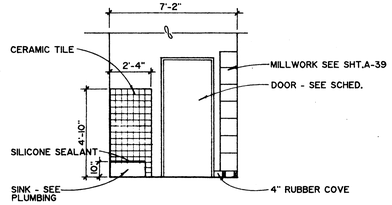
enlarged floor plan at restroom 272-A
SCALE: 1/4"=1'-0"



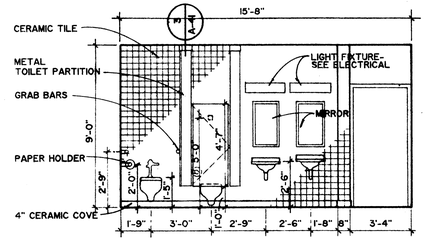
elevation 'a'
SCALE: 1/4"=1'-0"



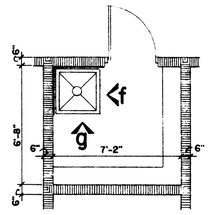
1/A-38 detail at shower
SCALE: 1 1/2"=1'-0"

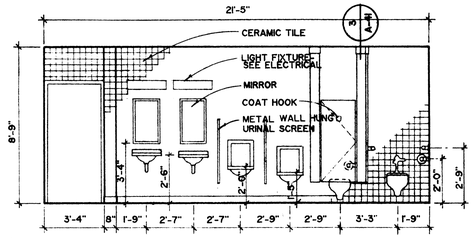


elevation 'g'
elevation 'f' sim. opposite hand
SCALE: 1/4"=1'-0"



elevation 'b'
SCALE: 1/4"=1'-0"

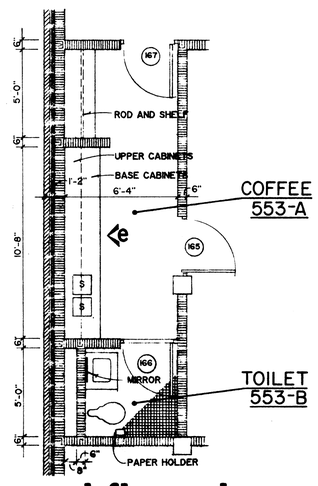




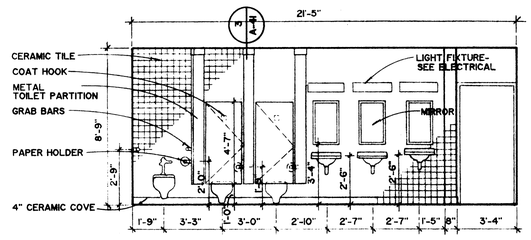
elevation 'c'
SCALE: 1/4"=1'-0"

enlarged floor plan at janitor 237, 335, 435 & 539
SCALE: 1/4"=1'-0"

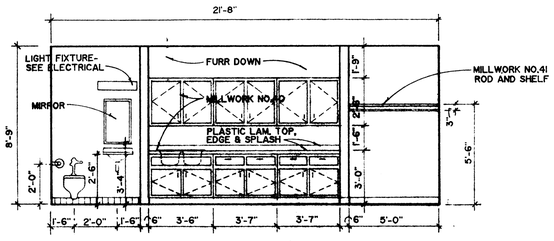
NOTE:
AT JANITOR 150 ROOM IS 6'-0"X6'-8" - SEE SHEET A-4



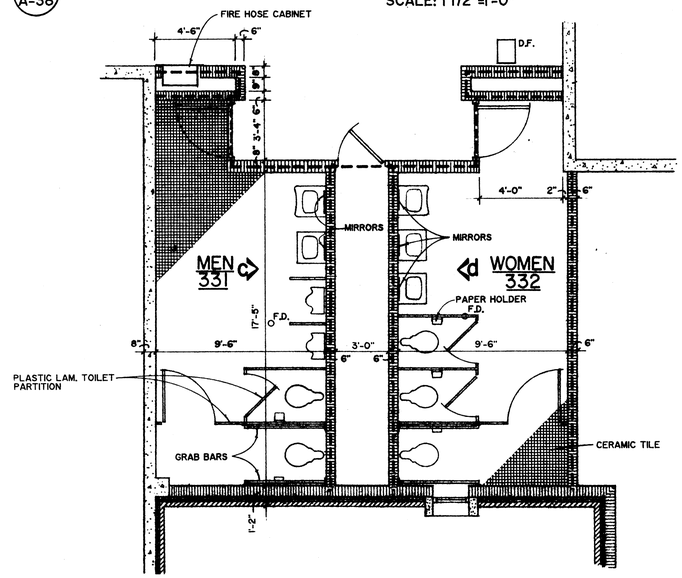
enlarged floor plan at coffee 553-A & toilet 553-B
SCALE: 1/4"=1'-0"



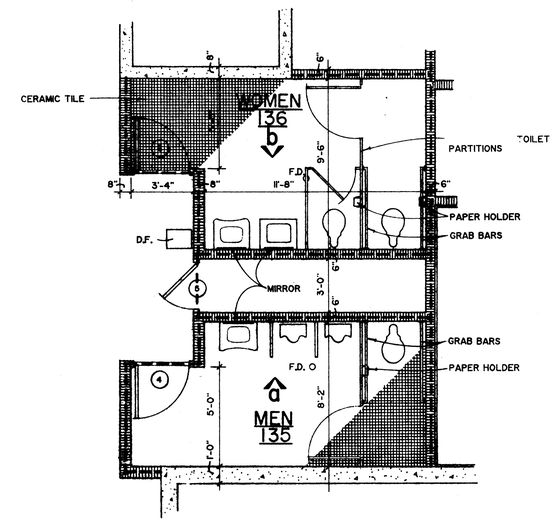
elevation 'd'
SCALE: 1/4"=1'-0"



elevation 'e'
SCALE: 1/4"=1'-0"



enlarged floor plan at toilet · 331 & 332
(431, 432, 531 & 532 SIM.)
SCALE: 1/4"=1'-0"



enlarged floor plan at toilet · 135 & 136
SCALE: 1/4"=1'-0"

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A-38

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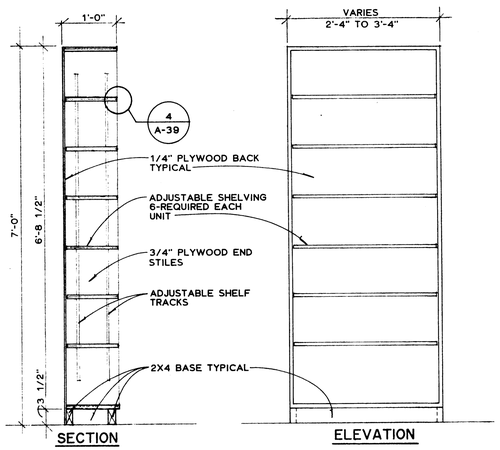
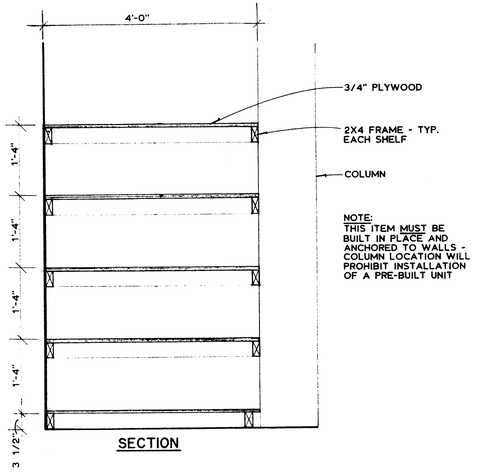


millwork items nos. 1,15,17,24, 25,28,29,36, 37,38,39,44, 45,46,55,56

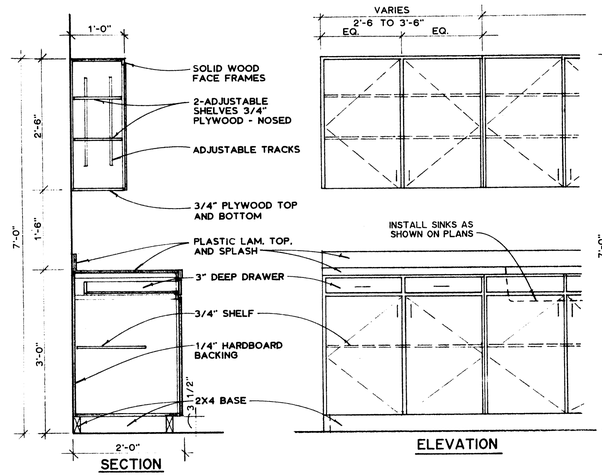
TYPICAL NOTE: WHERE THESE MILLWORK ITEMS ARE SHOWN, PROVIDE UNITS AS DETAILED, IN EQUAL SIZES TO BE OVERALL SIZE AS DRAWN ON PLAN.

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



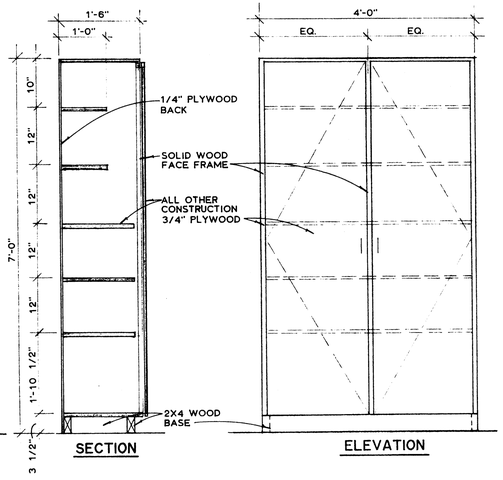
millwork item no. 2

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



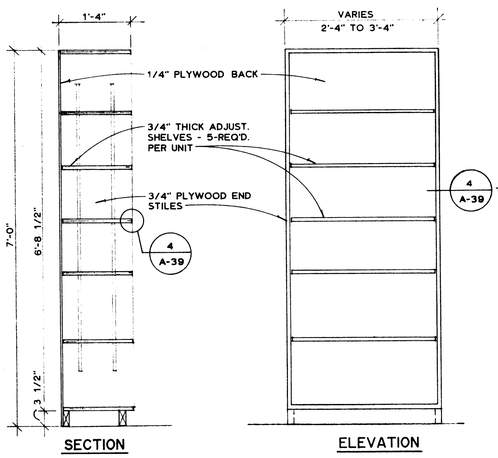
millwork items nos. 3,4,5,11,14,18, 51

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



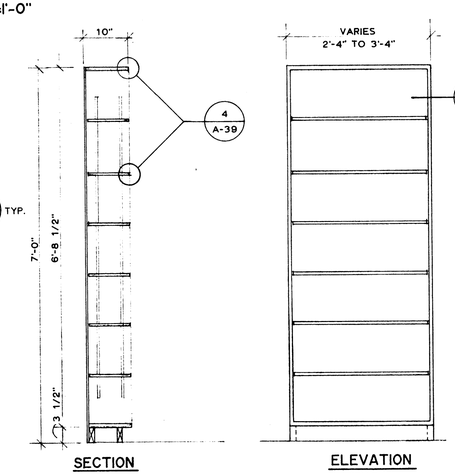
millwork item no. 6

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



millwork items nos. 7,8,27,30, 32,33,47,52, 54

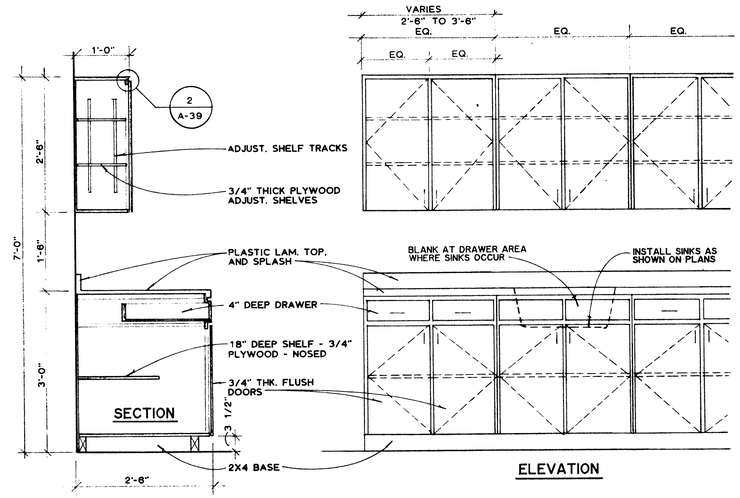
SCALE: 3/4"=1'-0"



millwork items nos. 9,10,12,13, 42

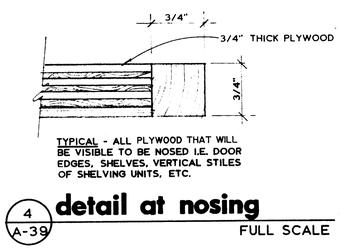
SCALE: 3/4"=1'-0"

NOTE: ALL UNITS IN A SERIES SHALL BE THE SAME SIZE



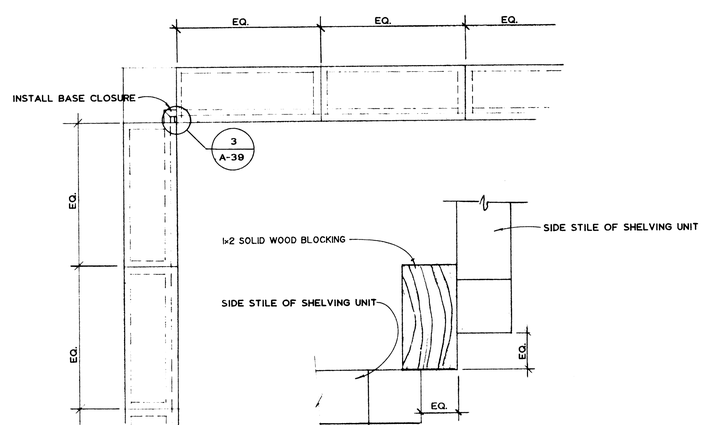
millwork items nos. 16,19,20,21,23

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



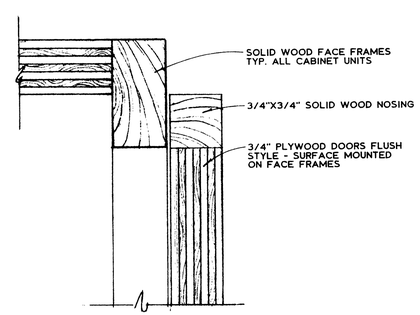
4 A-39 **detail at nosing**

FULL SCALE



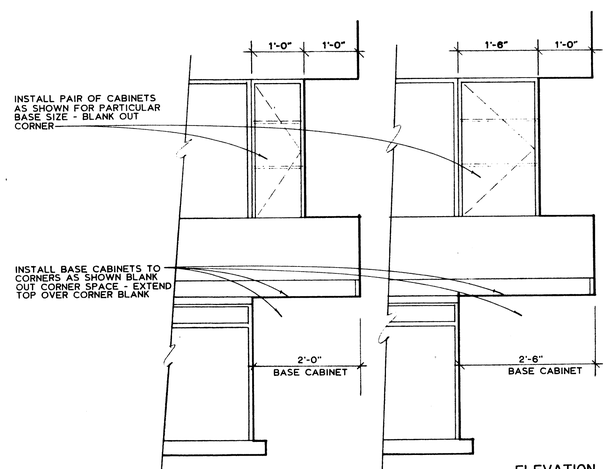
3 A-39 **detail at corner of shelving units**

FULL SCALE



2 A-39 **detail at cabinets**

FULL SCALE



1 A-39 **detail at corner of cabinets**

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

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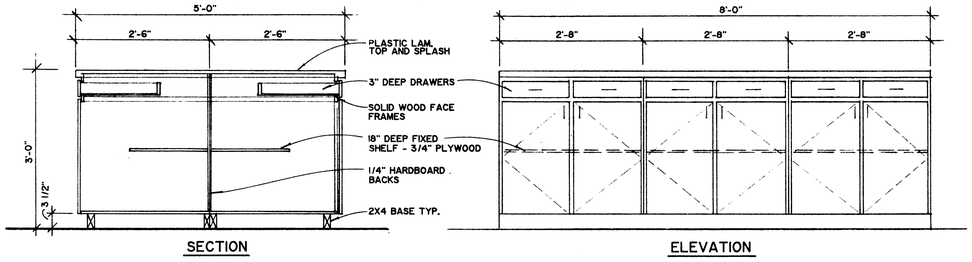
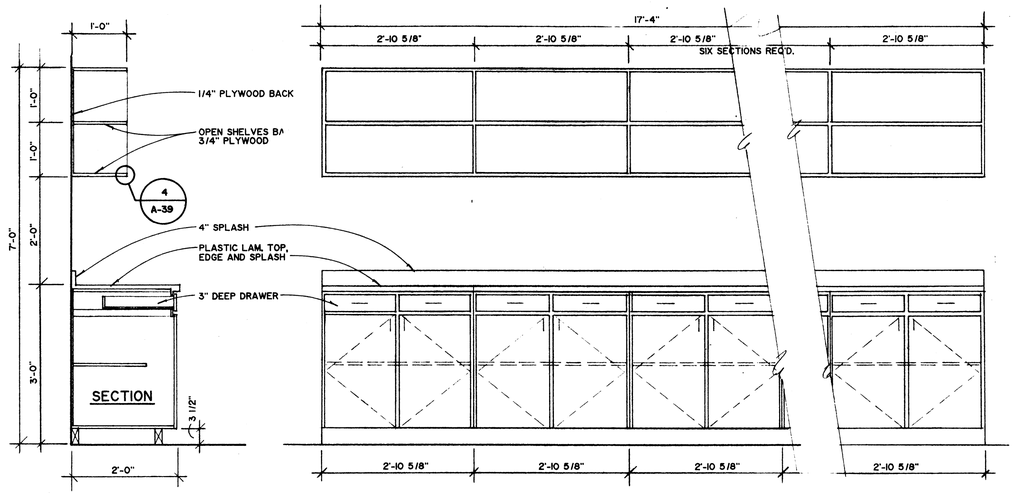


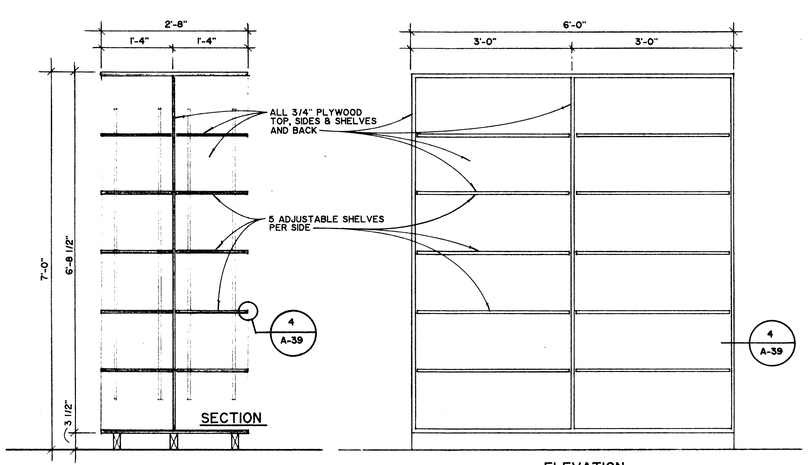
millwork item no. 22

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



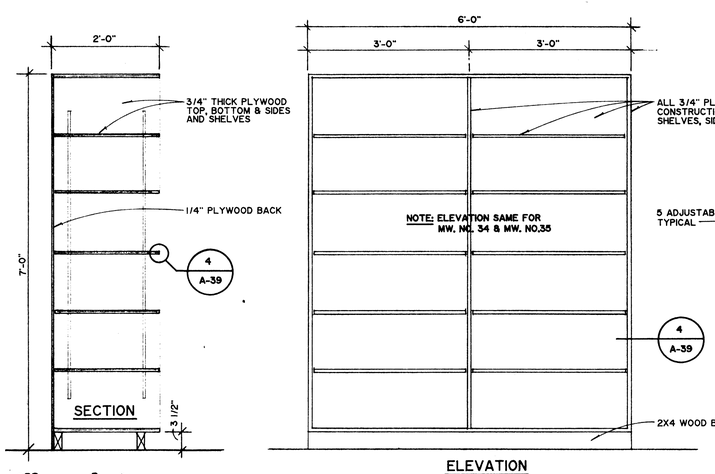
millwork item no. 26

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



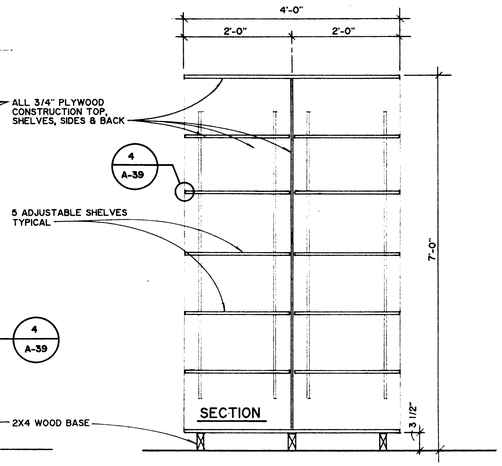
millwork item no. 31

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



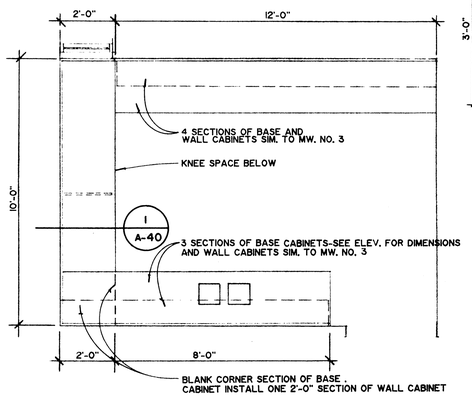
millwork item no. 34

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



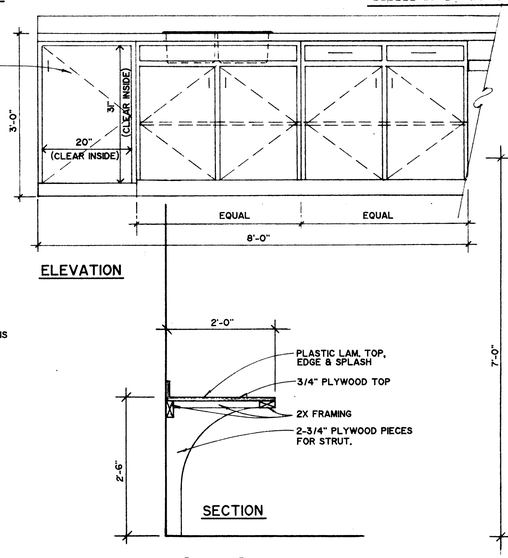
millwork item no. 35

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



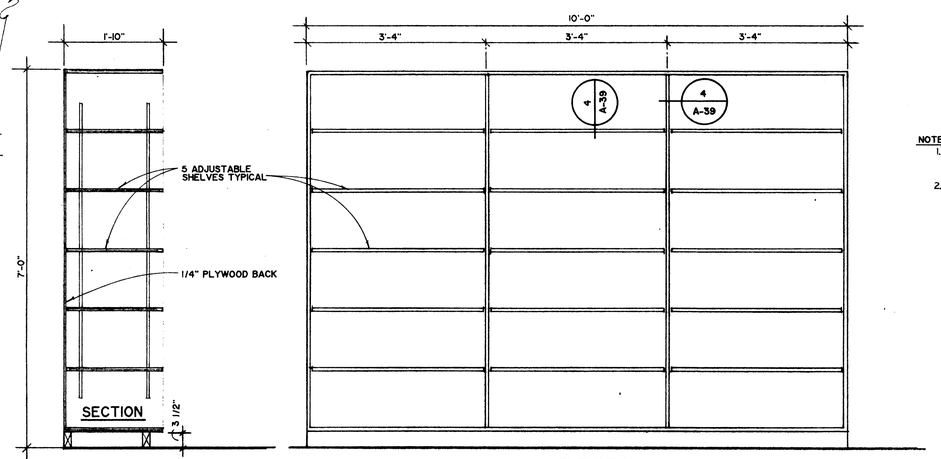
millwork item no. 43

SCALE: 3/8"=1'-0"



1/A-40 detail

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



millwork items nos. 48 49 50

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

NOTE:
1.) PROVIDE SECTIONS OF UNITS AS DETAILED ON THESE SHEETS IN EQUAL LENGTHS IN ANY ONE MILLWORK ITEM.
2.) PROVIDE GROUPS OF EQUAL UNITS TO LENGTHS AS SHOWN ON THE PLANS.

COMM. NO. 10186

A-40

DATE: 6/23/86

ADDITION TO
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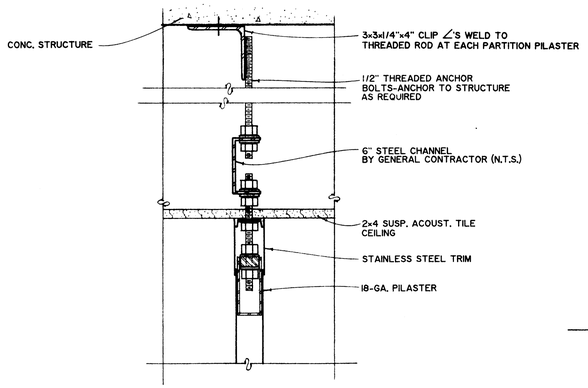
JONESBORO, ARKANSAS

BRACKETT-KRENNERICH & ASSOCIATES, P.A. REGISTERED ARCHITECTS C13 ARKANSAS

Brackett Krennerich and Associates Inc Architects

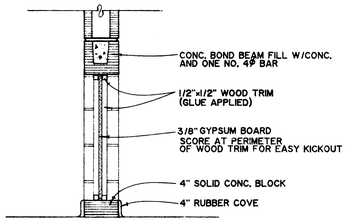
P.O. Box 1655 • Jonesboro, Arkansas 72403-1655 • 5019322-0571

AF 32526

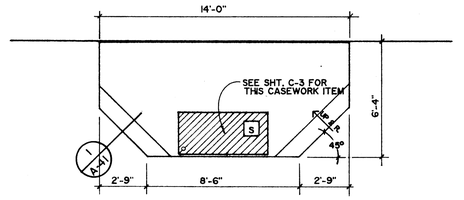


3 / A-41 det. at toilet partitions head

SCALE: 3"=1'-0"

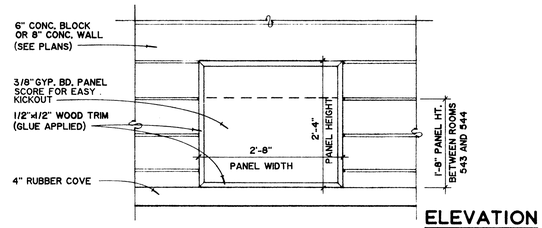


SECTION



plan at platform (labs-333 & 334)

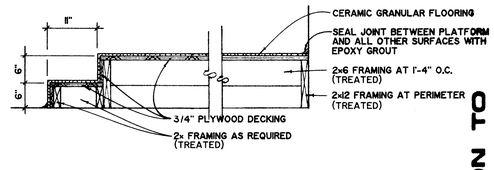
SCALE: 1/4"=1'-0"



ELEVATION

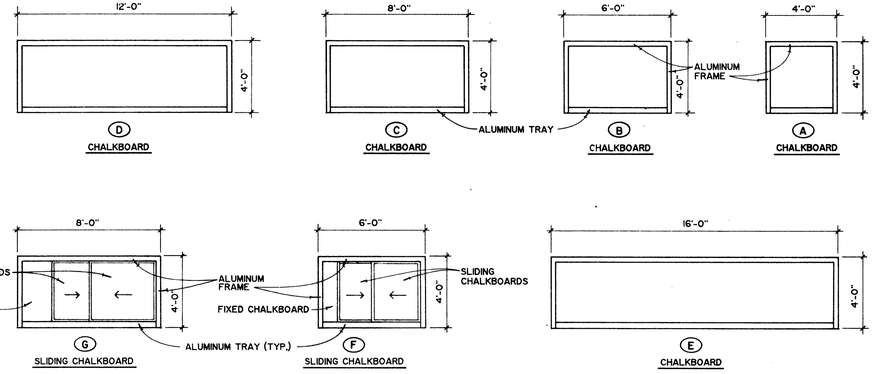
2 / A-41 detail at kickout panel

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



1 / A-41 section

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



chalkboard, tackboard, display case schedule

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

COMM. NO. 10186

A-41

DATE: 6/23/86

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AF 32526

COMM. NO 10166

S-1

DATE: 6/23/88

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STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 2913
FREDERICK C. HEGI

Brackett Kennerich and Associates, Inc.
Architects

SEE SHT. S-14 FOR EXTERIOR STAIR THIS AREA

FIN. FLR. LEVEL 1 277.91'

SEE DTL. L/S.9 FOR TYP. REINF. AT ALL CORNERS OF ELEVATOR WALLS

SEE DTL. L/S.9 FOR TYP. REINF. AT ALL CORNERS OF STAIR WALLS

10" THICK CONC. SLAB REINF. W/ #3 @ 12" EA. WAY TOP & BOT. PROVIDE 6" ISOLATION JOINT MATL. ALL AROUND

6"ø PERFORATED DRAIN PIPE (TYP.)

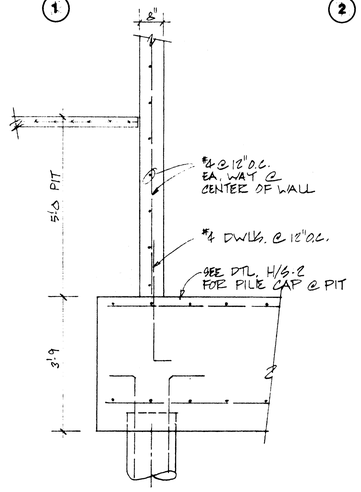
FOUNDATION DRAINS ALL RUN TO SUMP HERE.

NOTE:
TYPICAL TOP OF PILE CAP (T.O.P.) ELEVATION SHALL BE 276.91 EXCEPT WHERE NOTED OTHERWISE ON PLAN

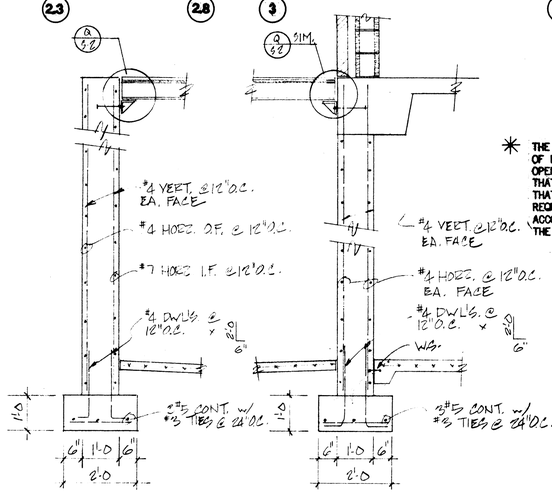
foundation plan • laboratory science building

1/8" = 1'-0

n

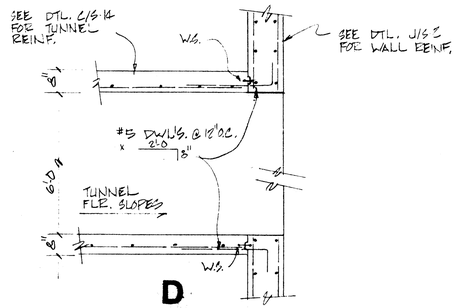


A



B

C



D

✱ THE CONTRACTOR SHALL SUBMIT TO THE ARCHITECT FOR APPROVAL A DRAWING OF EACH FRAMED LEVEL SHOWING LOCATIONS AND SIZES OF ALL FRAMED OPENINGS REQUIRED THAT ARE NOT SHOWN ON THE STRUCTURAL DRAWINGS AND THAT ARE LARGER THAN 12" SQUARE OR 12" DIAMETER AND ALL OPENINGS THAT REQUIRE SLEEVING OF BEAMS OR JOISTS. ANY ALTERATION OF FRAMING REQUIRED INCLUDING EXTRA CONCRETE OR REINFORCING NECESSARY TO ACCOMODATE THESE OPENINGS SHALL BE PROVIDED AT NO ADDITIONAL COST TO THE OWNER.

GENERAL NOTES

1. ALL PILING SHOWN SHALL BE 16" DIAMETER PRESSURE GROUTED (AUGER CAST) PILING AND SHALL HAVE PILE TIPS LOCATED IN THE DENSE TO VERY DENSE GRANULAR SOILS BETWEEN ELEVATIONS +245 AND +251. THE MINIMUM WORKING DESIGN LOAD CAPACITY REQUIREMENT IS 75 TONS PER PILE. THIS LOAD CAPACITY SHALL BE VERIFIED BY A PILE LOAD TEST AS DESCRIBED IN THE SPECIFICATIONS. BOTH THE PILE LOAD TEST AND THE PRODUCTION PILE INSTALLATION SHALL BE PERFORMED UNDER THE SUPERVISION OF A QUALIFIED SOILS ENGINEER LICENSED IN THE STATE OF ARKANSAS.

2. FOOTINGS FOR THE MECHANICAL, ANIMAL CARE AND GREENHOUSE BUILDINGS SHALL BE FOUNDED IN THE STIFF TO VERY STIFF BROWN, VERY SILTY CLAY APPROXIMATELY 2'-0" BELOW EXISTING GRADE. BOTTOM OF FOOTING ELEVATIONS SHOWN ON PLAN ARE FOR ESTIMATING PURPOSES ONLY AND ARE NOT NECESSARILY TO BE USED FOR CONSTRUCTION. A MINIMUM ALLOWABLE SOIL BEARING PRESSURE OF 2000 PSF IS REQUIRED. THE SOILS ENGINEER SHALL OBSERVE THE FOOTING EXCAVATIONS AND VERIFY THAT THIS SOIL BEARING VALUE IS APPROPRIATE.

3. CONCRETE SHALL HAVE THE FOLLOWING MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS:

ALL SLABS, JOISTS & BEAMS ABOVE GRADE, ALL COLUMNS, BASEMENT WALLS, STAIR & ELEVATOR WALLS, PILES & PILE CAPS	4000 PSI
PRECAST CONCRETE	5000 PSI
ALL OTHER CONCRETE UNLESS NOTED OTHERWISE ON PLAN	3000 PSI

4. PROVIDE 3% TO 5% AIR ENTRAINMENT IN ALL CONCRETE THAT WILL BE EXPOSED TO WEATHER.

5. ALL REINFORCING STEEL SHALL BE ASTM A615 GRADE 60 EXCEPT COLUMN TIES MAY BE GRADE 40.

6. NO HORIZONTAL JOINTS WILL BE PERMITTED IN CONCRETE WORK EXCEPT WHERE NOTED OR DETAILED. ANY STOP IN CONCRETE POUR SHALL BE MADE WITH A VERTICAL BULKHEAD AT THE CENTER OF A SPAN. CONTRACTOR SHALL SUBMIT A PLAN SHOWING HIS PROPOSED CONSTRUCTION JOINT LOCATIONS FOR ALL ELEVATED LEVELS TO THE ARCHITECT/ENGINEER FOR APPROVAL BEFORE CONCRETE WORK IS BEGUN.

7. CHAMFER ALL EXPOSED EDGES 1/2" UNLESS NOTED OR DETAILED OTHERWISE.

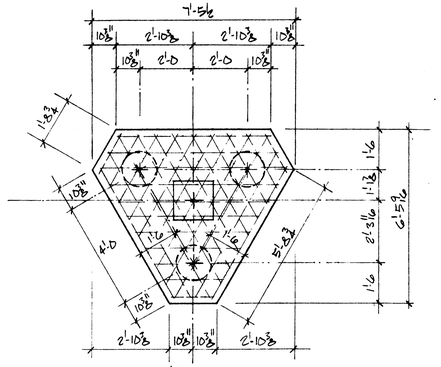
✱8. ANY OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS THAT ARE LARGER THAN 12" SQUARE OR ANY OPENING REQUIRING SLEEVING OF A BEAM OR JOIST OR ANY OPENING WITHIN 5'-0" OF A COLUMN SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER FOR APPROVAL.

9. CONTRACTOR SHALL BE RESPONSIBLE FOR THE TEMPORARY BRACING OF THE STRUCTURE DURING CONSTRUCTION. THE STRUCTURE, IN SOME CASES, MAY NOT BE STABLE UNTIL ALL ELEMENTS ARE IN PLACE.

10. SEE ARCHITECTURAL DRAWINGS FOR DIMENSIONS AND DETAILS OF DEPRESSED AREAS, EMBEDDED ITEMS, SLOPES, ETC. IN CONCRETE WORK.

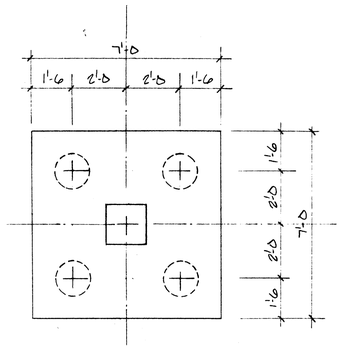
11. ALL STRUCTURAL STEEL SHALL BE ASTM A36, UNLESS NOTED OTHERWISE.

AF 32526



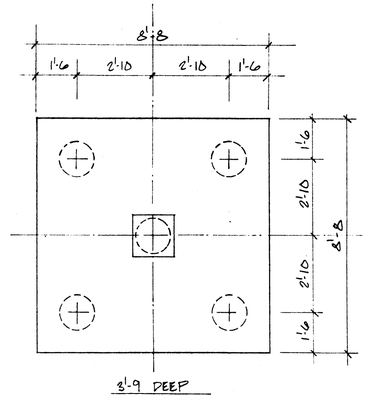
REINF. w/ 11 #6 (3 WAYS AS SHOWN)

A pile cap w/ 3 piles



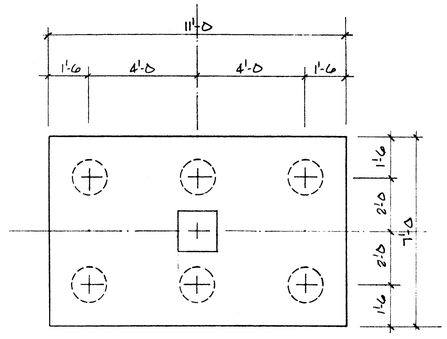
REINF. w/ 11 #7 x 6'-6 EA. WAY

B pile cap w/ 4 piles



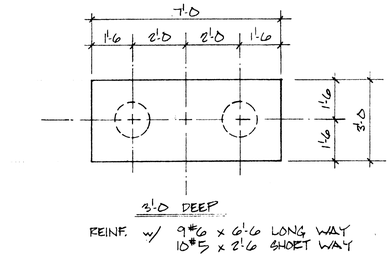
REINF. w/ 11 #8 x 8'-2 EA. WAY

C pile cap w/ 5 piles



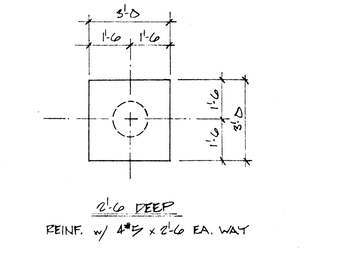
REINF. w/ 11 #9 x 10'-6 LONG WAY
16 #7 x 6'-6 SHORT WAY

D pile cap w/ 6 piles



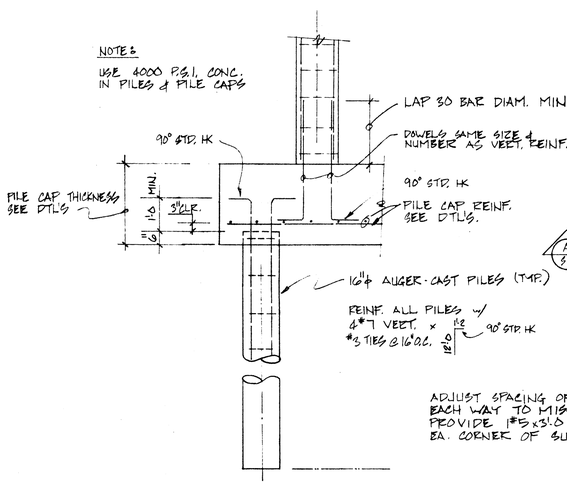
REINF. w/ 9 #6 x 6'-6 LONG WAY
10 #5 x 2'-6 SHORT WAY

E pile cap w/ 2 piles

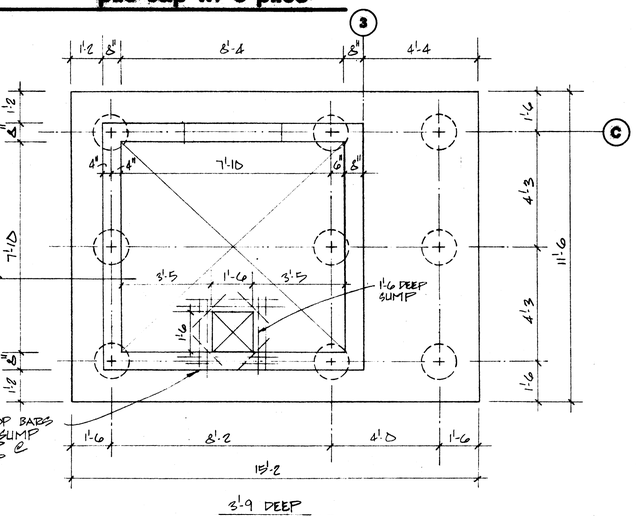


REINF. w/ 4 #5 x 2'-6 EA. WAY

F pile cap w/ 1 pile



G typical pile cap section

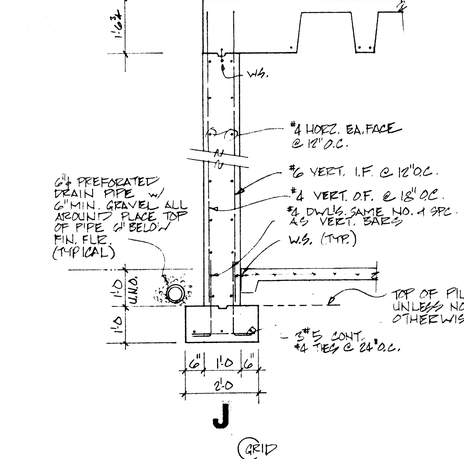


ADJUST SPACING OF TOP BARS EACH WAY TO MISS SUMP PROVIDE 11 #5 x 3'-0 TOP @ EA. CORNER OF SUMP

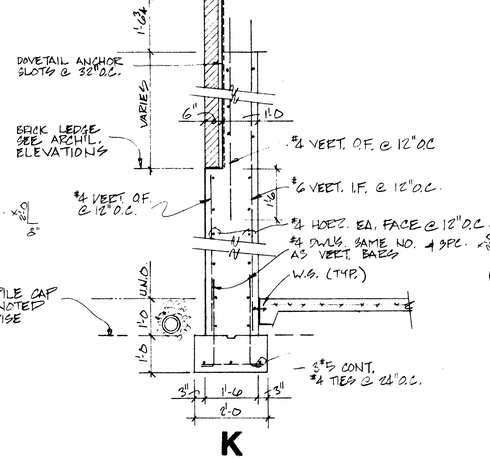
3'-9 DEEP

REINF. w/ 13 #9 x 14'-8 LONG WAY } TOP & BOTTOM
15 #8 x 11'-0 SHORT WAY }

H pile cap at elevator pit



J



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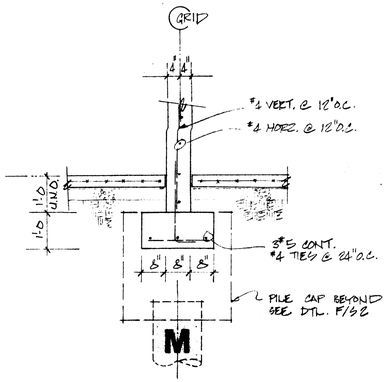
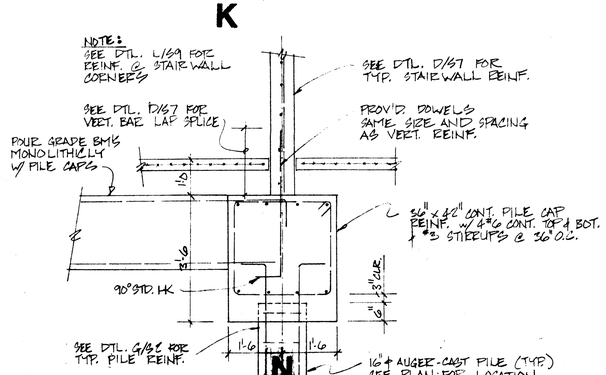


M



N

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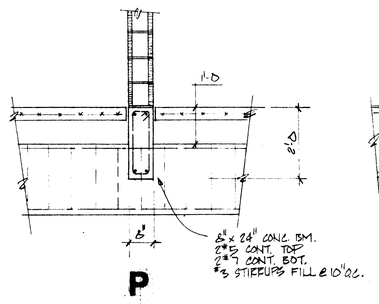

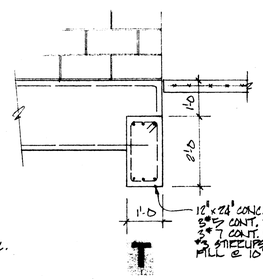

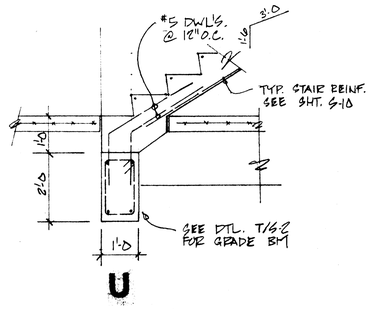

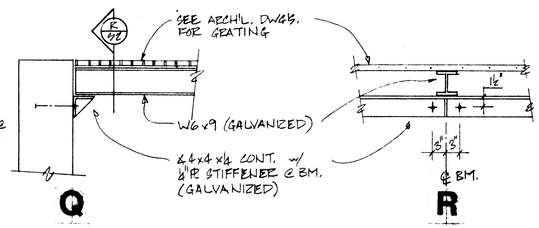

COMM. NO 10186

S - 2

DATE: 8/23/96

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STATE OF ARKANSAS
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No. 2913
FREDERICK C. HEGI

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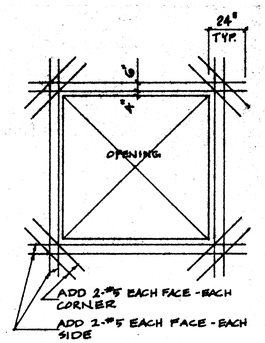
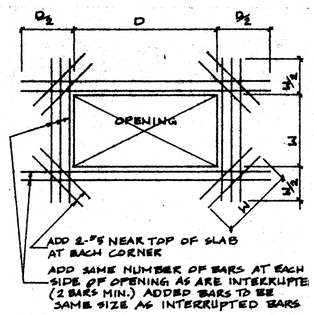


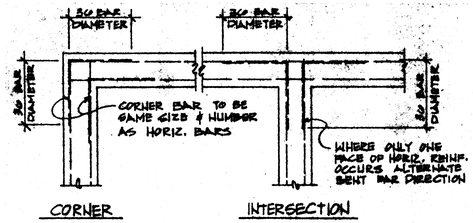
REINF. AROUND OPENINGS IN CONCRETE WALLS

A



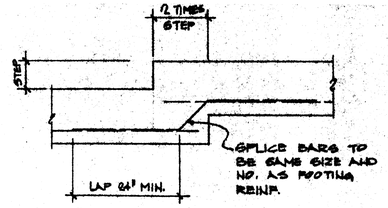
REINF. AROUND OPENINGS IN STRUCTURAL SLABS

B



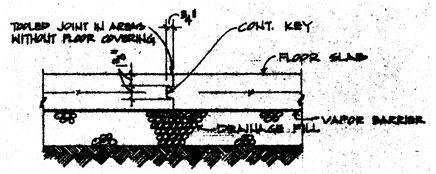
CORNER BAR DETAIL

C



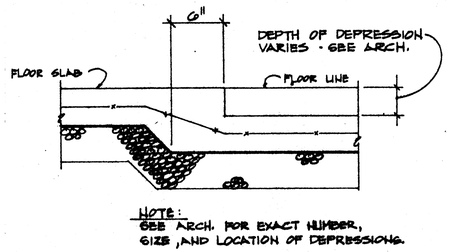
CONTINUOUS FOOTING STEP DETAIL

D



CONTROL JOINT DETAIL

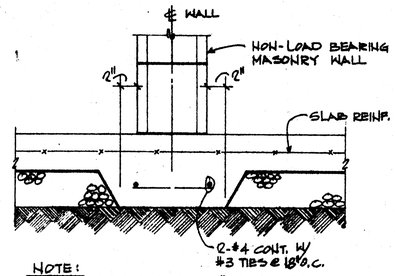
E



NOTE:
SEE ARCH. FOR EXACT NUMBER, SIZE, AND LOCATION OF DEPRESSIONS.

SLAB DEPRESSION DETAIL

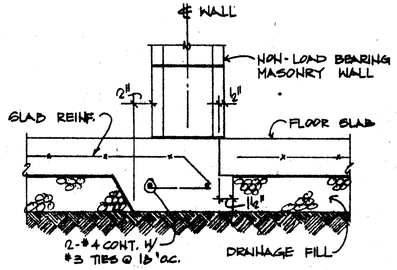
F



NOTE:
TYPICAL AT ALL WALLS 6" OR GREATER IN THICKNESS.
SEE ARCH. FOR EXACT LOCATIONS.

THICKENED SLAB DETAIL

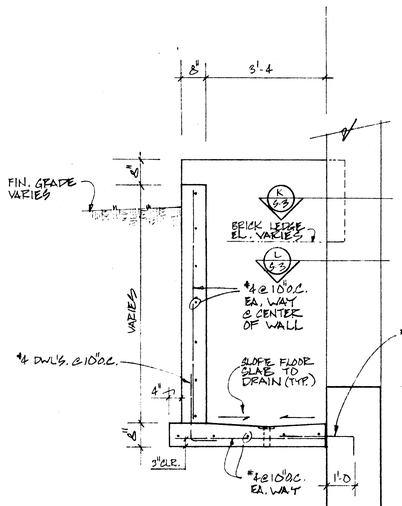
G

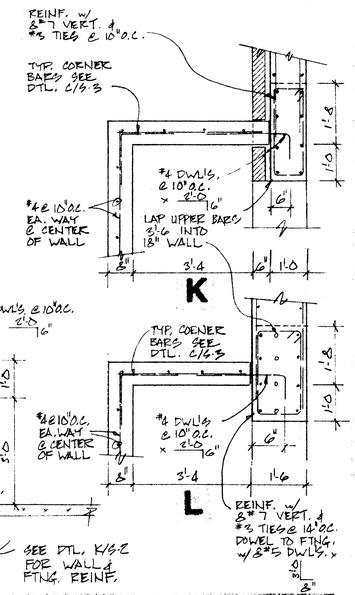


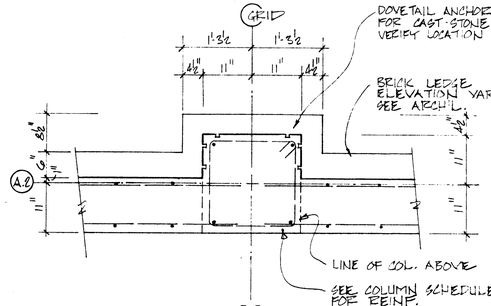
NOTE:
TYPICAL WHERE CONTROL JOINT OCCURS PARALLEL TO WALL.
SEE ARCH. FOR EXACT LOCATION.

THICKENED SLAB w/ C.J. DETAIL

H







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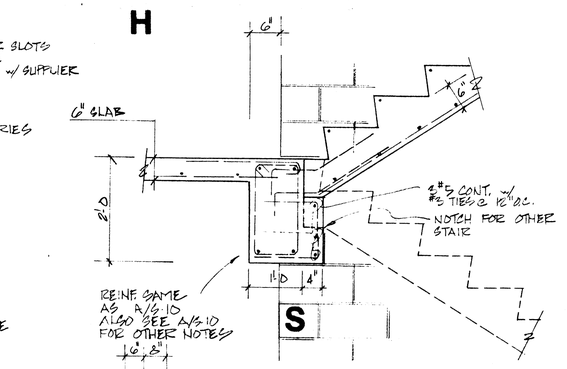
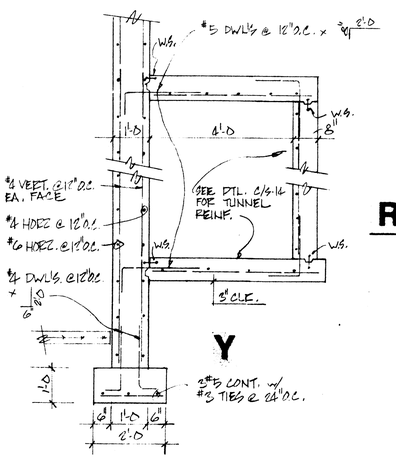
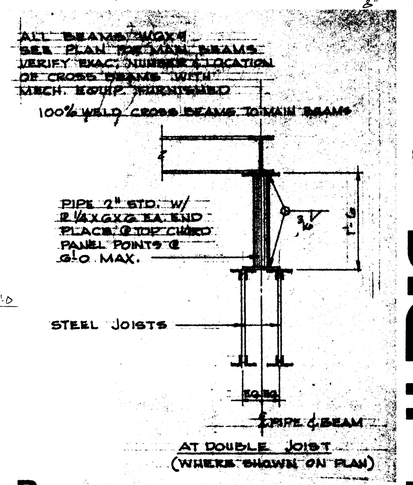
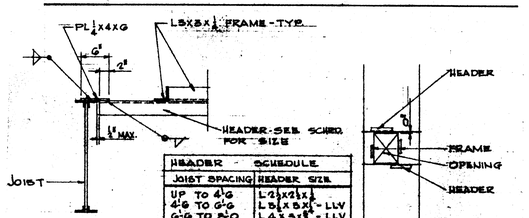






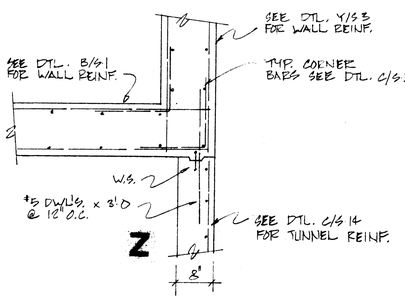
R support for roof top mech. unit

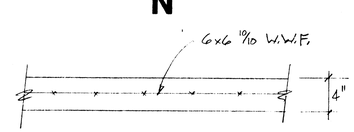


HEADER SCHEDULE	
JOIST SPACING	HEADER SIZE
UP TO 4'-6"	L 2½x2½x¼
4'-6" TO 6'-0"	L 5"x5"x⅝" - LLV
6'-0" TO 8'-0"	L 4"x3½x⅝" - LLV

NOTE: VERIFY EXACT NUMBER, SIZE, & LOCATION OF OPENINGS WITH ARCHITECTURAL AND MECHANICAL.

P typ. opng. in mtl. roof deck





Q typ. slab on grade reinf.

TYP. EXCEPT WHERE NOTED OR DETAILED OTHERWISE

M	COL'S. B/7.9 C/7.9	AS SHOWN
M-1	COL'S. B/1.1 C/1.1	OPP. HAND

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TOP & BOT. REINF. FOR JOISTS IN THIS BAY SHALL BE CONTINOUS AS IN TYPICAL BAYS AND SHALL RUN THRU BEAMS B43, B44, B45

SEE SHT. S14 FOR DETAILED PLANS OF EXT. STAIR

NOTCH WALL 5'-0 x 1'-0 MIN. EACH END TO RECEIVE B46

12½" THICK SLAB REINF. w/ #9 @ 12" O.C. EA. WAY TOP & BOT.

6 EQ. SPC. @ 3'-0 = 18'-0

5 EQ. SPC. @ 3'-0 = 15'-0

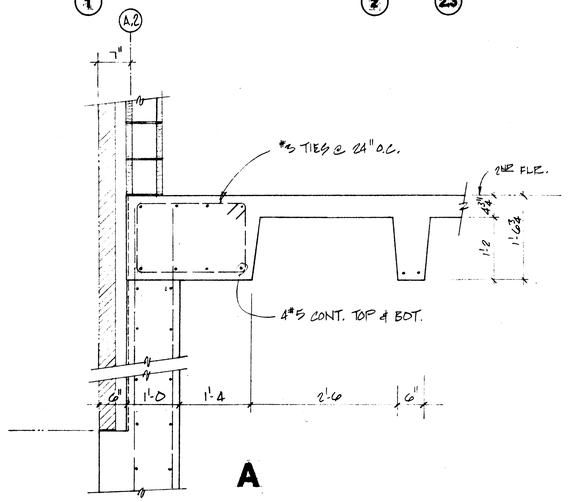
SEE DTL. 8/S9 FOR STRUCTURAL TEST LAB HOLD DOWN BOLTS

MECHL. TUNNEL

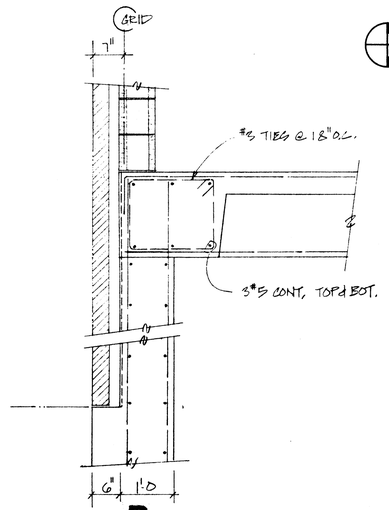
REINF. FROM J2

second floor framing plan • laboratory science building

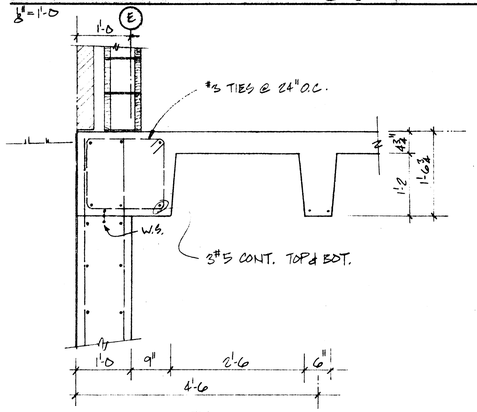
3/8"=1'-0



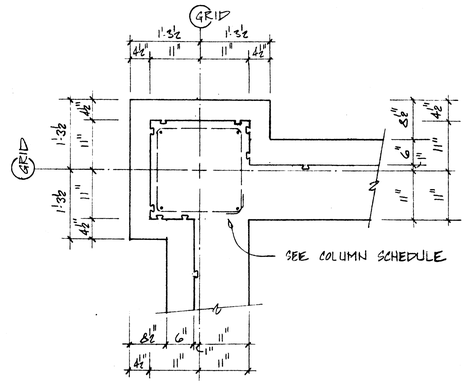
A



B



C



D

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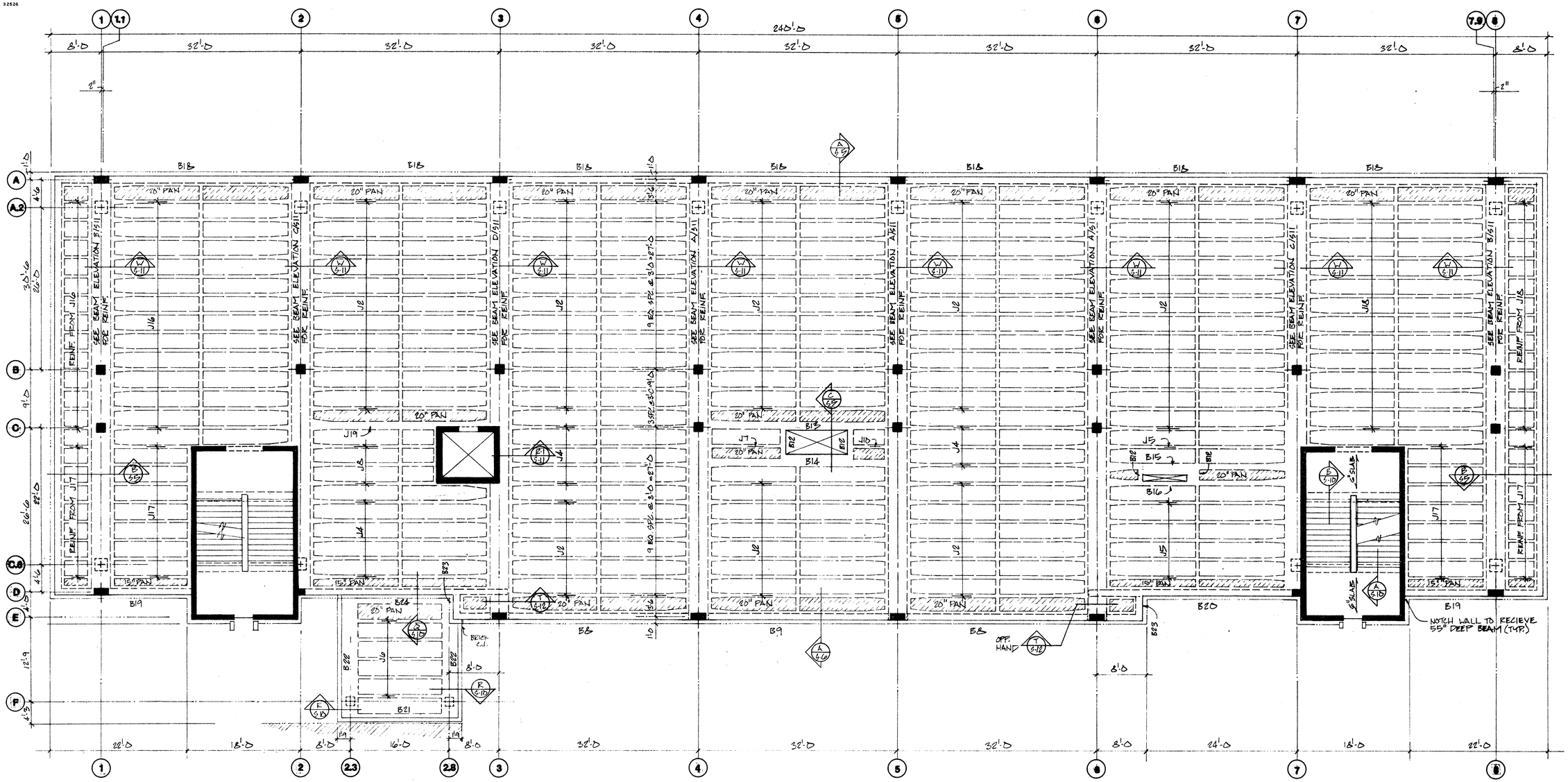
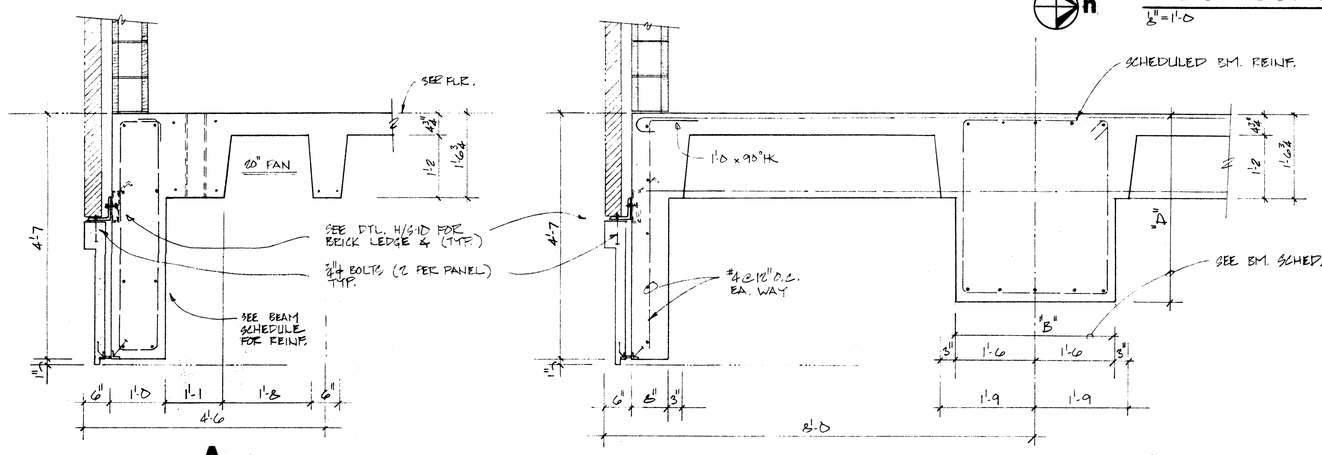
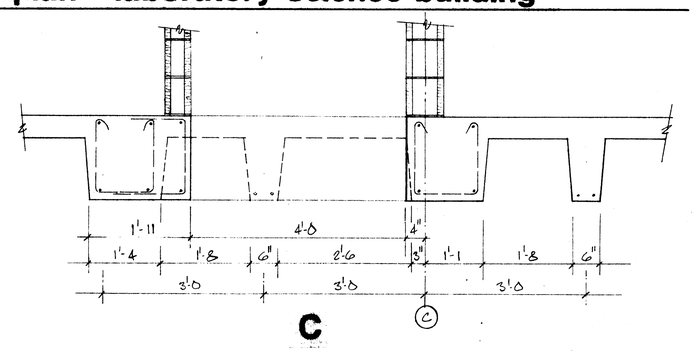


third floor framing plan • laboratory science building

3/8"=1'-0





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fourth & fifth floor framing plan • laboratory science building

1/8" = 1'-0

STAIR REINF. SAME AS OTHER STAIR EXCEPT OPP. HAND

NOTCH WALL TO RECIEVE BM. SEE DTL. C/S-10

NOTCH WALL TO RECIEVE 24" BEAM (TYP.)

REINF. FROM J1

REINF. FROM J5 @ 5TH LEVEL
J9 @ 4TH LEVEL

5" SLAB

SEE DTL. H/S-10 FOR TYP. BRICK LEDGE &

SEE BEAM SCHEDULE FOR REINF.

8"x 24" BEAM REINF. w/ 2#5 CONT. TOP & BOT. LAP 24" WHERE REQ'D #3 STIRRUPS @ 24" O.C.

BEAM REINF. SEE BM. SCHED.

A

B

C

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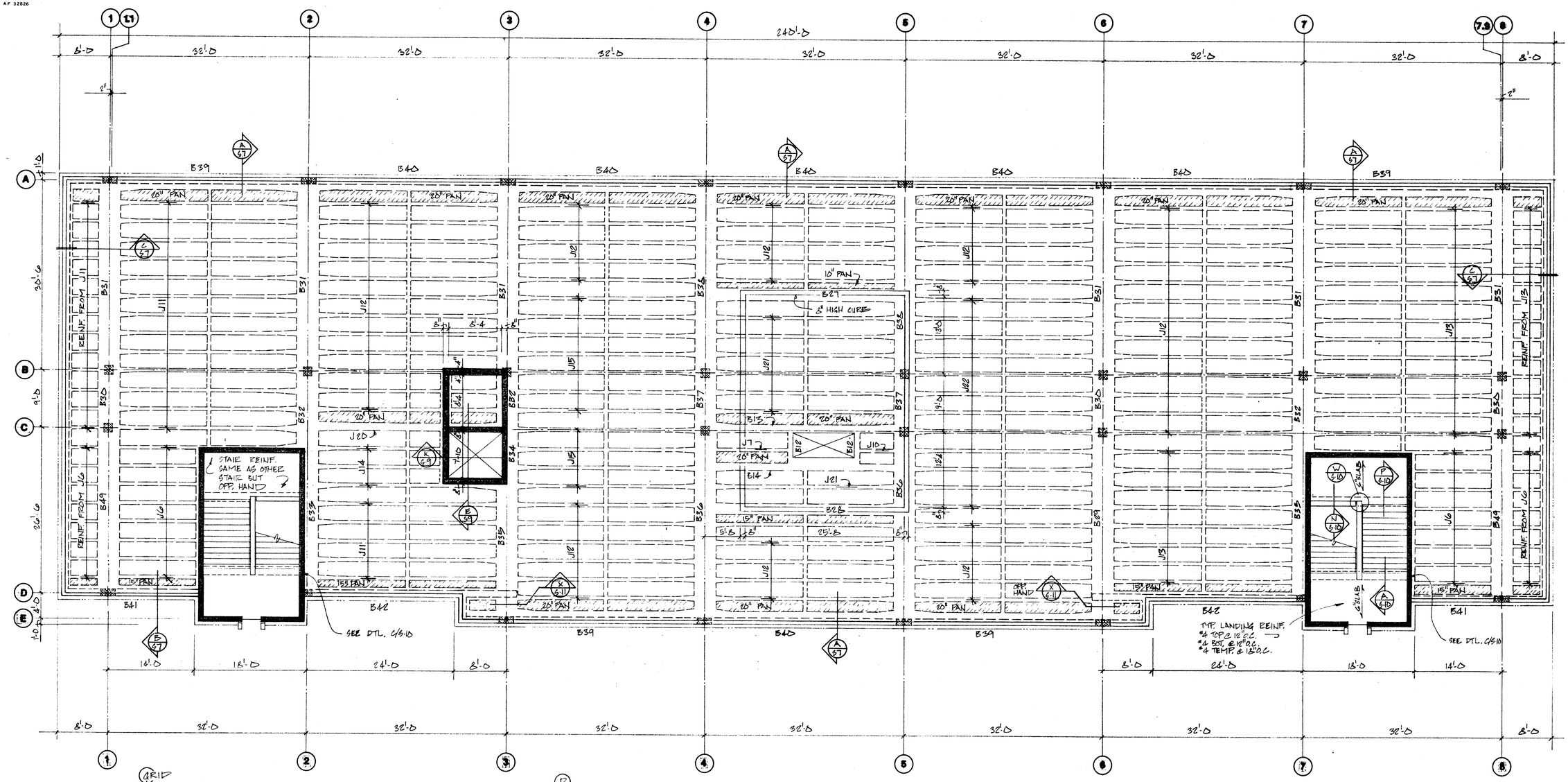
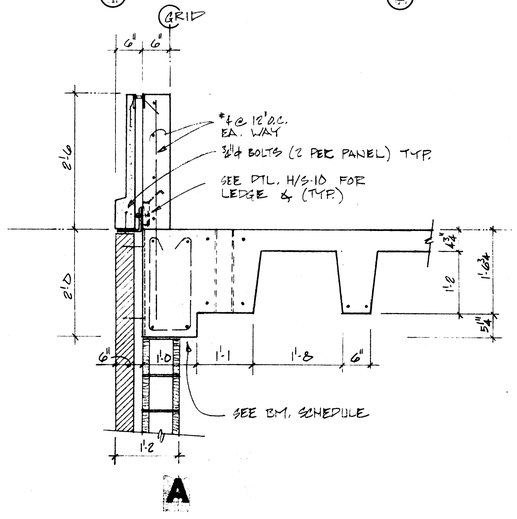
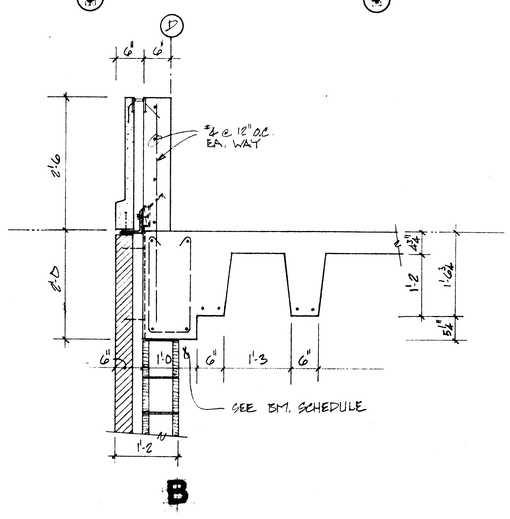
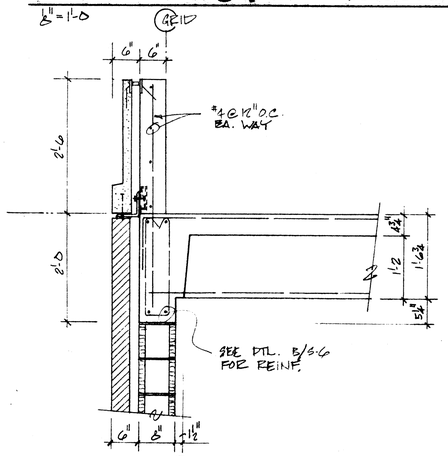
roof framing plan • laboratory science building

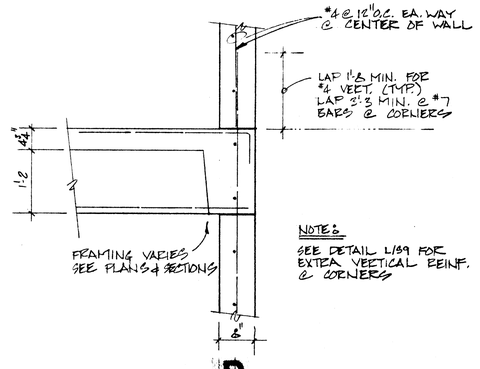
1" = 1'-0"











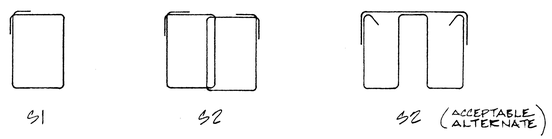
TYPICAL DETAIL THRU CONCRETE WALLS @ STAIRS & ELEVATORS

BEAM REINFORCING SCHEDULE

MARK	SIZE (INCHES) "B"	SIZE (INCHES) "D"	BOTTOM BARS	TOP BARS LEFT	TOP BARS RIGHT	TOP BARS CONT.	STIRRUPS TYPE	STIRRUPS SIZE	STIRRUPS SPACING EACH END	REMARKS
B1	42	18¾	7#10	——	4#11	4#11	S2	#4	19@3"/FILL @ 24"	
B2	42	18¾	4#9	FAS	FAS	4#11	S2	#4	FILL @ 24"	BEAM NOTE #7
B3	42	18¾	7#10	4#11	——	4#11	S2	#4	19@3"/FILL @ 24"	
B4	42	18¾	4#9	4#11	FAS	4#11	S2	#4	FILL @ 24"	BEAM NOTE #6
B5	42	18¾	5#10	——	4#11	4#11	S2	#4	15@3"/FILL @ 24"	
B6	42	18¾	8#9	4#11	——	4#11	S2	#4	17@3"/FILL @ 24"	
B7	42	18¾	9#10	——	6#11	4#11	S2	#4	15@3"/12@3"/FILL @ 24"	
B8	12	24	2#7	——	——	2#10	S1	#3	14@10"/FILL @ 24"	BEAM NOTES #1 & #3
B9	12	24	2#7	——	——	2#10	S1	#3	13@10"/FILL @ 24"	
B10	12	24	2#11	——	——	2#8	S1	#3	14@10"/FILL @ 24"	
B11	12	24	2#5	——	——	2#6	S1	#3	4@10"/FILL @ 24"	BEAM NOTES #1 & #2
B12	8	18¾	2#4	——	——	2#4	S1	#3	FILL @ 12"	
B13	16	18¾	3#11	——	——	3#8	S1	#3	14@3"/FILL @ 24"	
B14	16	18¾	3#10	——	——	3#7	S1	#3	14@3"/FILL @ 24"	
B15	11	18¾	2#11	——	——	2#7	S1	#3	16@3"/FILL @ 24"	
B16	9 11	18¾	2#10	——	——	2#7	S1	#3	15@3"/FILL @ 24"	
B17	42	18¾	7#10	——	——	4#11	S2	#4	12@3"/FILL @ 24"	
B18	12	55	2#8	——	——	2#9	S1	#3	FILL @ 24"	BEAM NOTE #5
B19	12	55	2#8	——	——	2#8	S1	#3	FILL @ 24"	
B20	12	55	2#9	——	——	2#8	S1	#3	FILL @ 24"	
B21	11	18¾	2#6	——	——	2#5	S1	#3	2@3"/FILL @ 24"	
B22	32	18¾	5#8	——	——	3#6	S1	#3	2@3"/FILL @ 24"	
B23	12	24	2#5	——	——	2#5	S1	#3	FILL @ 12"	
B24	12	56½	2#10	——	——	2#8	S1	#3	FILL @ 22"	
B25	35	18¾	4#10	——	FAS	3#11	S1	#4	4@3"/FILL @ 24"	
B26	29	18¾	3#10	——	FAS	2#11	S1	#4	FILL @ 24"	
B27	26	18¾	4#11	——	——	4#8	S1	#3	14@3"/FILL @ 24"	
B28	21	18¾	4#10	——	——	4#8	S1	#3	14@3"/FILL @ 24"	
B29	42	18¾	5#10	——	3#10	4#10	S1	#4	17@3"/FILL @ 24"	
B30	42	18¾	5#8	FAS	FAS	4#10	S1	#4	FILL @ 24"	
B31	42	18¾	5#10	3#10	——	4#10	S1	#4	17@3"/FILL @ 24"	
B32	42	18¾	5#8	3#10	FAS	4#10	S1	#4	FILL @ 24"	BEAM NOTE #4
B33	35	18¾	3#10	——	FAS	4#10	S1	#4	4@3"/FILL @ 24"	
B34	29	18¾	3#9	——	FAS	2#10	S1	#4	FILL @ 24"	
B35	42	18¾	6#9	——	——	4#10	S1	#4	10@3"/FILL @ 24"	
B36	42	18¾	9#10	——	5#11	5#11	S2	#4	15@3"/12@3"/FILL @ 24"	
B37	42	18¾	4#10	FAS	FAS	5#11	S2	#4	FILL @ 24"	
B38	42	18¾	9#10	5#11	——	5#11	S2	#4	15@3"/12@3"/FILL @ 24"	
B39	12	24	2#6	——	——	2#8	S1	#3	10@10"/FILL @ 24"	BEAM NOTES #1 & #2
B40	12	24	2#6	——	——	2#8	S1	#3	9@10"/FILL @ 24"	
B41	12	24	2#5	——	——	2#5	S1	#3	4@10"/FILL @ 24"	BEAM NOTES #1 & #2
B42	12	24	2#9	——	——	2#7	S1	#3	12@10"/FILL @ 24"	
B43	16	30	3#8	——	——	4#9	S1	#3	6@12"/FILL @ 24"	BEAM NOTES #3 & #9
B44	16	30	3#7	——	——	3#9	S1	#3	5@3"/FILL @ 24"	BEAM NOTES #3 & #9
B45	12	30	2#7	——	——	2#7	S1	#3	6@12"/FILL @ 24"	BEAM NOTES #3 & #9
B46	12	60	2#10	——	——	2#10	S1	#3	9@3"/4@12"/FILL @ 24"	BEAM NOTE #10
B47	21	18¾	4#11	——	——	4#9	S1	#4	FILL @ 8"	
B48	42	18¾	8#10	——	5#11	4#11	S2	#4	4@3"/16@3"/FILL @ 24"	
B49	42	18¾	5#9	——	4#10	4#10	S1	#4	15@3"/FILL @ 24"	

BEAM NOTES:

1. EXTEND TOP & BOT. REINF. TO END OF ADJACENT CANTILEVER.
2. CANTILEVER STIRRUP SPACING: 2@10"/FILL @ 24"
3. CANTILEVER STIRRUP SPACING: 4@10"/FILL @ 24"
4. 7#10 TOP BARS SHALL EXTEND ACROSS B32
5. ADD 2#5 CONT. @ ⅓ POINTS OF BEAM DEPTH. LAP 2'-6" @ SPLICES.
6. 8#11 TOP BARS SHALL EXTEND ACROSS B4.
7. 8#11 TOP BARS SHALL EXTEND ACROSS B2.
8. CANTILEVER STIRRUP SPACING: FILL @ 18"
9. GRADUALLY REDUCE BEAM DEPTH AT CANTILEVER FROM 30" TO FIT SLOPE OF SLAB (SEE ARCH'L. DWGS.) MIN. DEPTH = 27" @ END OF CANTILEVER.
10. EXTEND TOP REINFORCING 6'-0" MIN. INTO SUPPORTING WALL EACH END.



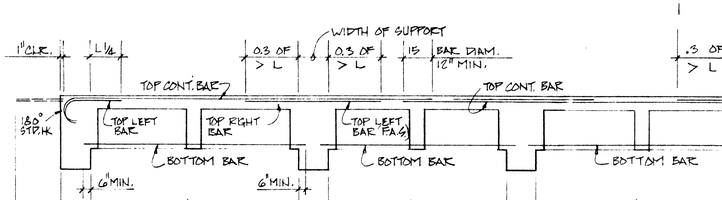
BEAM STIRRUP TYPES

JOIST REINFORCING SCHEDULE

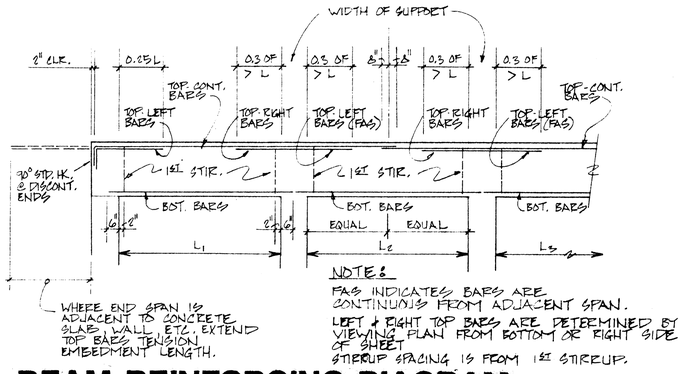
MARK	SIZE (INCHES) "B"	SIZE (INCHES) "D"	BOTTOM BARS	TOP BARS LEFT	TOP BARS RIGHT	TOP BARS CONT.	REMARKS
J1	6	18¾	2#7	#4@24	#5@12	#4@24	JOIST NOTE #2
J2	6	18¾	2#6	FAS	#5@12	#4@24	JOIST NOTE #2
J3	6	18¾	2#7	FAS	#4@24	#4@24	JOIST NOTE #2
J4	6	18¾	2#7	#4@24	#5@12	#4@24	
J5	6	18¾	2#8	FAS	#4@24	#4@24	JOIST NOTE #1
J6	6	18¾	2#4	——	——	#4@12	
J7	6	18¾	2#4	FAS	#4@24	#4@24	
J8	6	18¾	2#6	#4@24	#4@24	#4@24	
J9	6	18¾	2#8	FAS	#4@24	#4@24	JOIST NOTES #1 & #2
J10	6	18¾	2#4	——	FAS	#4@12	
J11	6	18¾	2#5	#4@24	#5@24	#4@24	JOIST NOTE #2
J12	6	18¾	2#5	FAS	#5@24	#4@24	
J13	6	18¾	2#5	FAS	#4@24	#4@24	
J14	6	18¾	2#5	#4@24	#4@24	#4@24	
J15	6	18¾	2#5	#4@24	#5@12	#4@24	
J16	6	18¾	2#7	#5@24	#5@12	#4@24	JOIST NOTE #2
J17	6	18¾	2#4	——	——	#5@14	
J18	6	18¾	2#7	FAS	#5@24	#4@24	JOIST NOTE #2
J19	16	18¾	3#6	#4@24	#4@24	#4@24	
J20	16	18¾	3#5	#4@24	#4@24	#4@24	
J21	6	18¾	2#8	FAS	#5@12	#4@24	JOIST NOTE #1
J22	6	18¾	2#5	#5@12	#4@24	#4@24	

JOIST NOTES:

1. PROVIDE JOIST STIRRUPS AS SHOWN IN DTL. A/S-8 EACH END OF JOIST (NO STIRRUPS REQ'D IN CANTILEVER)
2. EXTEND TOP & BOT. REINF. TO END OF ADJACENT CANTILEVER WHERE CANTILEVER OCCURS. SEE PLAN.

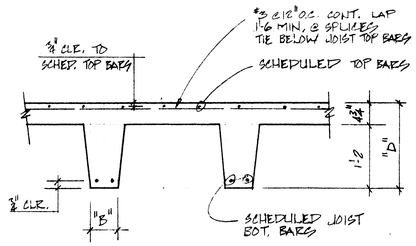


JOIST REINFORCING DIAGRAM

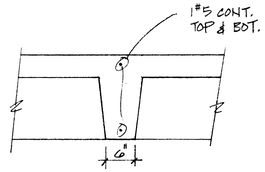


NOTE:
FAS INDICATES BARS ARE CONTINUOUS FROM ADJACENT SPAN.
LEFT & RIGHT TOP BARS ARE DETERMINED BY VIEWING PLAN FROM BOTTOM OR RIGHT SIDE OF SHEET.
STIRRUP SPACING IS FROM 1ST STIRRUP.

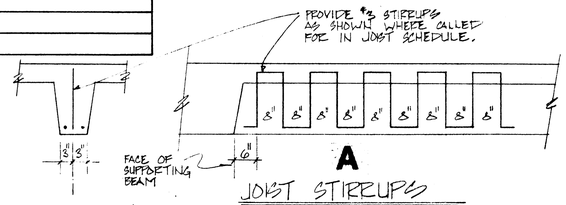
BEAM REINFORCING DIAGRAM



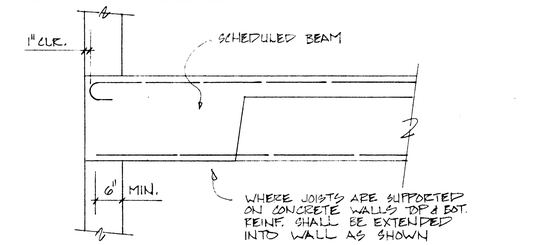
typical reinforcing in slab over pan joists



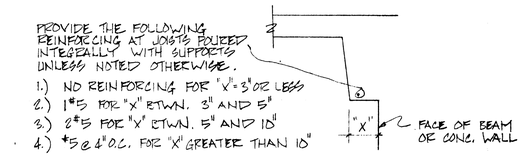
typical distribution rib



JOIST STIRRUPS



typical reinforcing where joist bear on wall



typical reinforcing detail for edge joists

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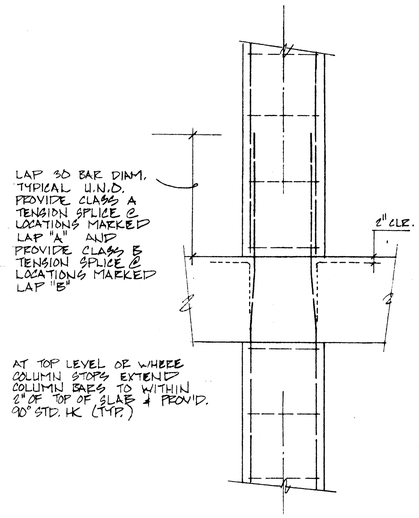
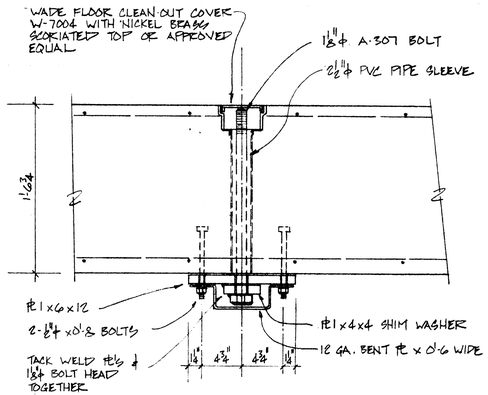
COLUMN SCHEDULE

ROOF LEVEL / MARK		A/1, A/2, A/3, A/4, A/5, A/6, A/7, A/8	A.2/1, A.2/2, A.2/3, A.2/4, A.2/5, A.2/6, A.2/7, A.2/8	B/1.1, B/1.3, B/1.6, B/1.9	B/2, B/7	B/4, B/5	C/1.1, C/1.6, C/1.9	C/4, C/5	E/4, E/5, E/6	D/1, D/8	C.8/1, C.8/8	F/2.3, F/2.8
5th LEVEL	SIZE	12"x24"		18"ϕ	18"ϕ	18"ϕ	18"ϕ	18"ϕ	12"x28"	12"x24"		
	VERT. BARS	4-#8		4-#10	4-#10	4-#10	4-#10	4-#10	8-#8	4-#8		
	TIES	#3@12"		#3@18"	#3@18"	#3@18"	#3@18"	#3@18"	#3@12"	#3@12"		
	SPLICE	LAP "B"							LAP "B"	LAP "B"		
4th LEVEL	SIZE	12"x24"		18"ϕ	18"ϕ	18"ϕ	18"ϕ	18"ϕ	12"x28"	12"x24"		
	VERT. BARS	4-#9		4-#10	4-#10	4-#10	4-#10	4-#10	8-#8	4-#8		
	TIES	#3@12"		#3@18"	#3@18"	#3@18"	#3@18"	#3@18"	#3@12"	#3@12"		
	SPLICE	LAP "A"							LAP "B"	LAP "B"		
3rd LEVEL	SIZE	12"x24"		18"ϕ	18"ϕ	18"ϕ	18"ϕ	18"ϕ	12"x28"	12"x24"		
	VERT. BARS	8-#10		4-#10	4-#10	4-#10	4-#10	4-#10	8-#8	4-#8		
	TIES	#3@12"		#3@18"	#3@18"	#3@18"	#3@18"	#3@18"	#3@12" LAP "A"	#3@12"		
	SPLICE											
2nd LEVEL	SIZE		22"ϕ	18"ϕ	18"ϕ	18"ϕ	18"ϕ	18"ϕ	12"x28"		22"ϕ	12"ϕ
	VERT. BARS		8-#9	4-#10	4-#10	8-#10	4-#10	8-#10	8-#8		8-#9	4-#6
	TIES		#3@18"	#3@18"	#3@18"	#3@18"	#3@18"	#3@18"	#3@12" LAP "A"		#3@18"	#3@12"
	SPLICE											
1st LEVEL	SIZE		22"ϕ	18"ϕ	18"ϕ	12"ϕ	18"ϕ	18"ϕ	12"x28"		22"ϕ	12"ϕ
	VERT. BARS		8-#10	8-#10	8-#11	12-#10	8-#10	8-#11	16-#9		8-#9	4-#6
	TIES		#3@18"	#3@18"	#4@18"	#3@18"	#3@18"	#4@18"	#3@18"		#3@18"	#3@12"
	SPLICE											

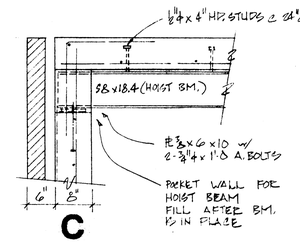
see sheet S-11 for column bar lay-out



A typical column splice detail



B detail of hold down bolts in structural test lab



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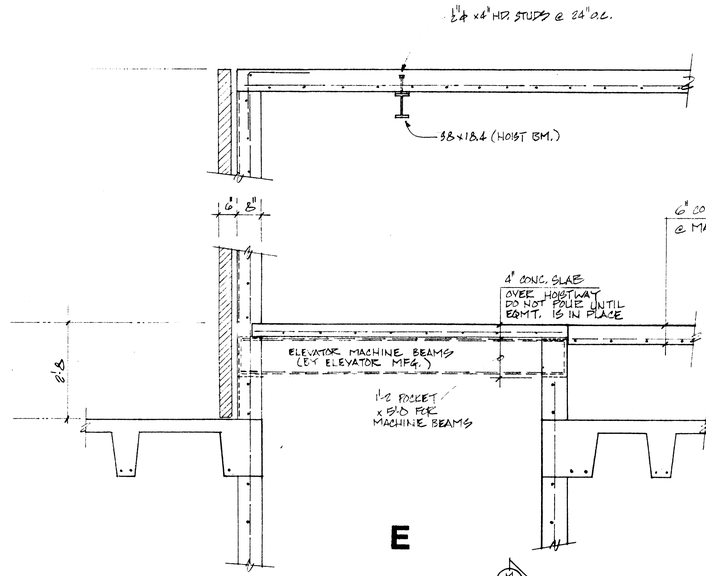

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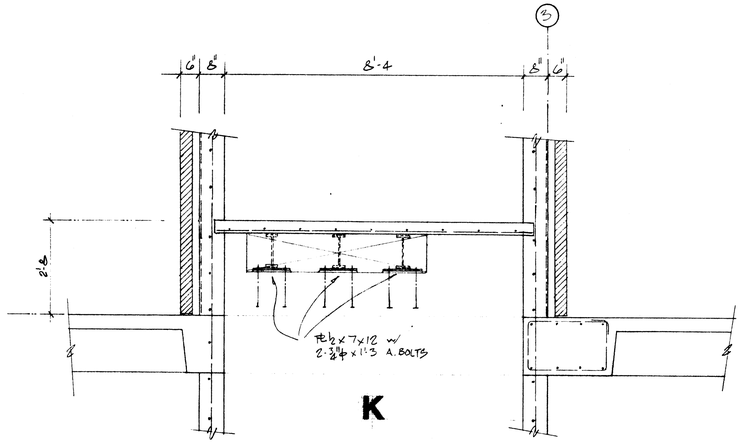

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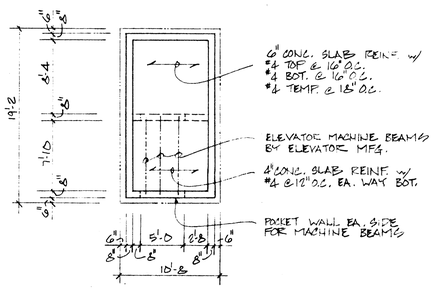
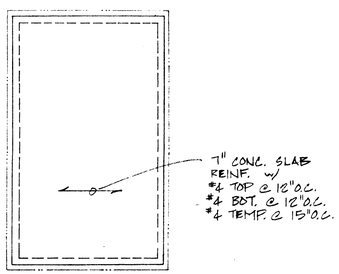
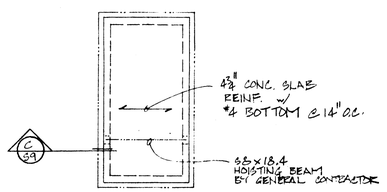


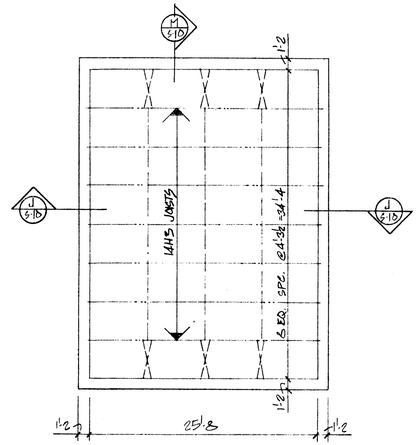
D floor framing at elevator machine room
⅜" = 1'-0



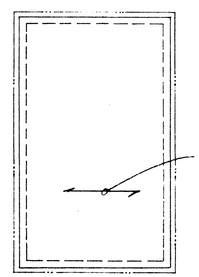
F roof framing at stair EES06
⅛" = 1'-0

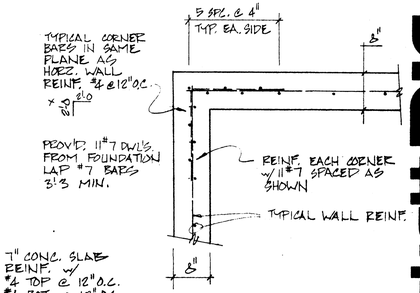


G roof framing at elevator penthouse
⅛" = 1'-0



H roof framing at vent. equip. room
⅛" = 1'-0





TYPICAL CORNER REINF. @ STAIR & ELEVATOR WALLS

L

J roof framing at stair FFS06
⅛" = 1'-0

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DATE: 8/23/88

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A

B

C

D

E

TYP. CAST-STONE ANCHORS @ STAIR

F

TYP. CAST-STONE ANCHORS @ TYP. FLR.

G

TYP. BRICK LEDGE @

H

J

M

R

N

P

Q

T

U

W

S

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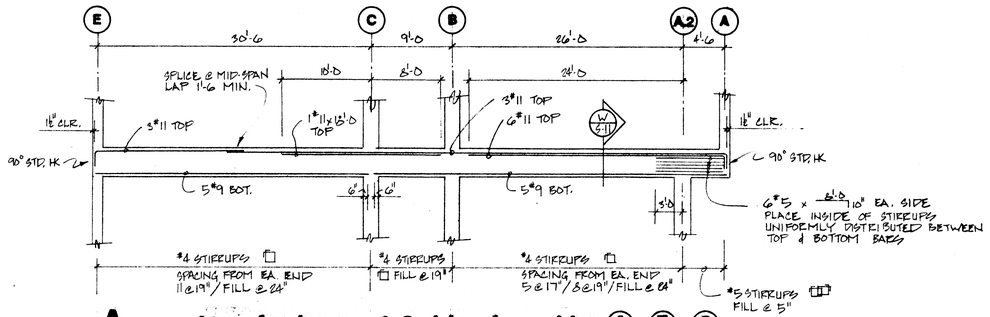
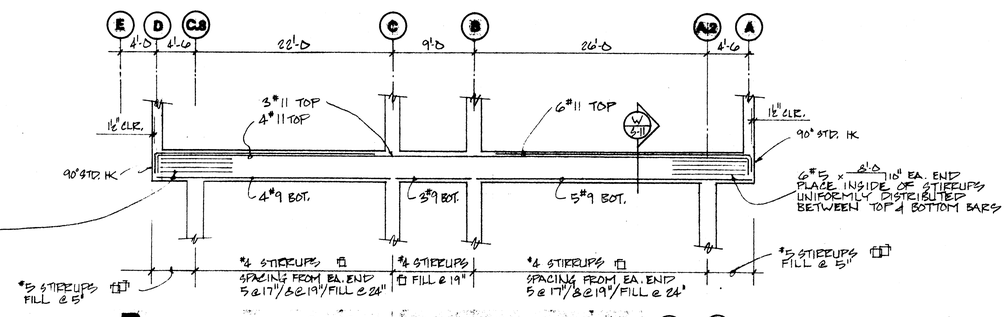
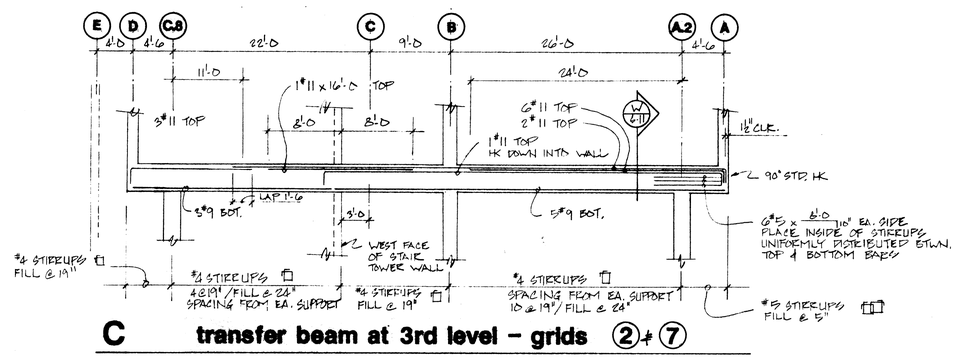


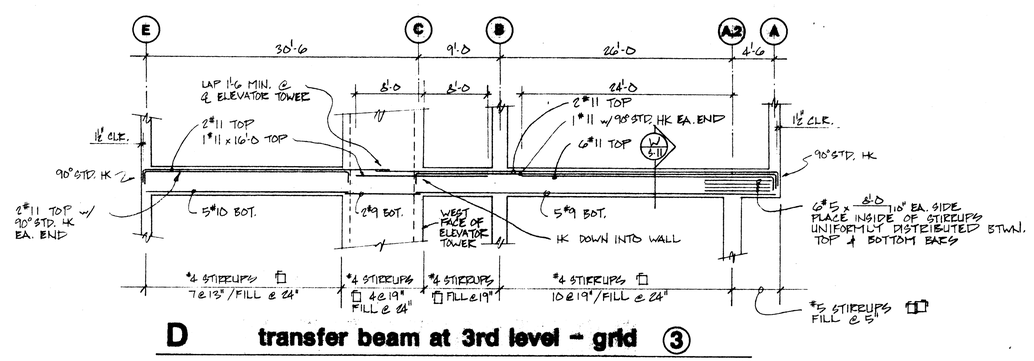
A transfer beam at 3rd level – grids (4)+(5)+(6)



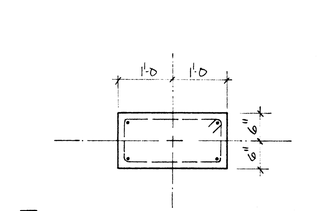
B transfer beam at 3rd level – grids (1)+(8)



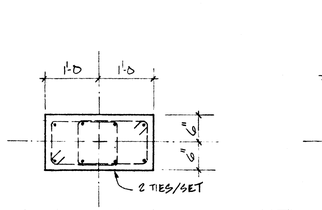
C transfer beam at 3rd level – grids (2)+(7)



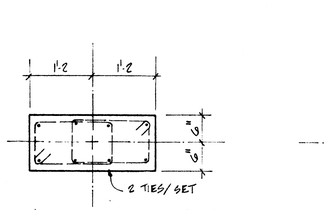
D transfer beam at 3rd level – grid (3)



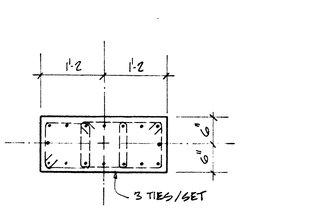
E 12 x 24 col. – 4 bars



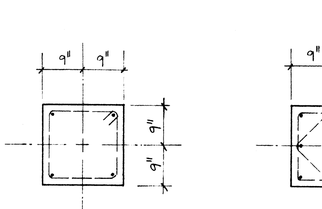
F 12 x 24 col. – 8 bars



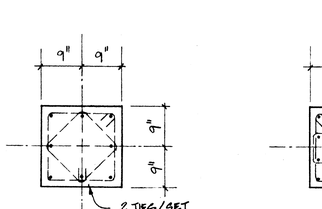
G 12 x 28 col. – 8 bars



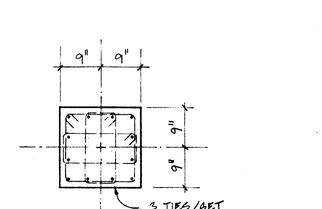
H 12 x 28 col. – 16 bars



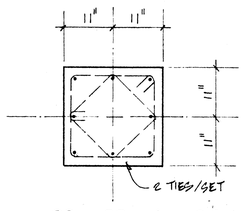
J 18 x 18 col. – 4 bars



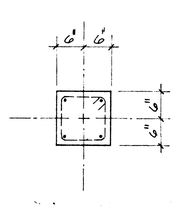
K 18 x 18 col. – 8 bars



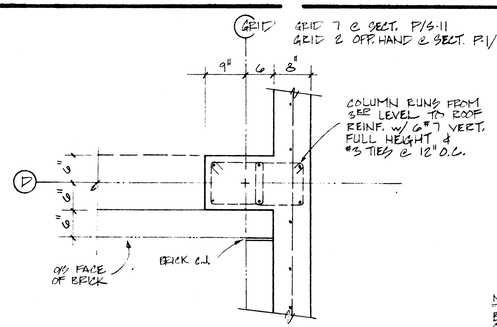
L 18 x 18 col. – 12 bars



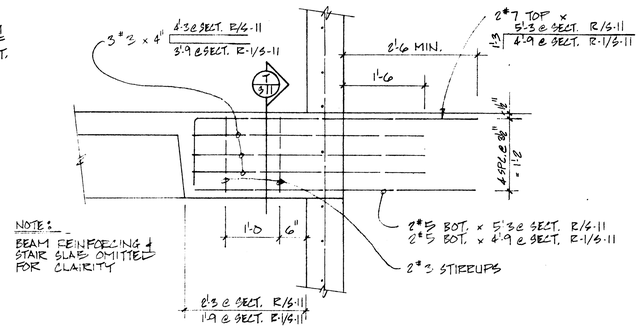
M 22 x 22 col. – 8 bars



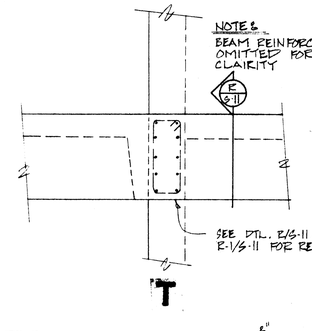
N 12 x 12 col. – 4 bars



P & P-1



R & R-1



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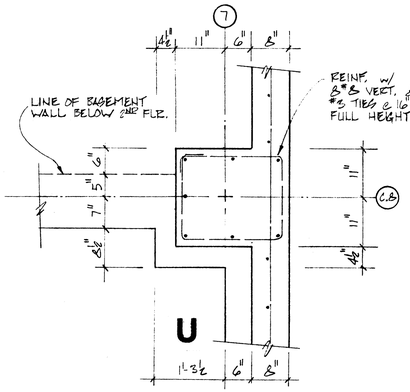

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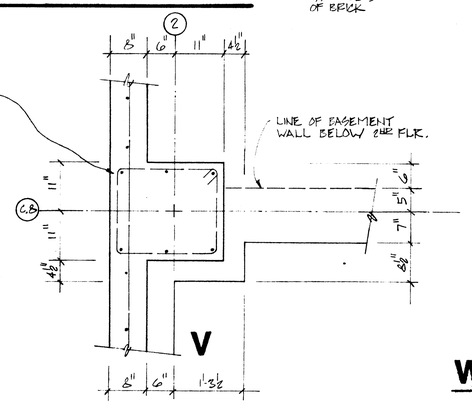

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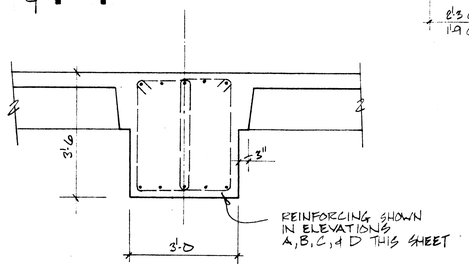
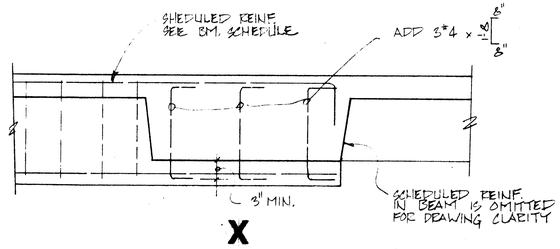


W typical section thru transfer beam



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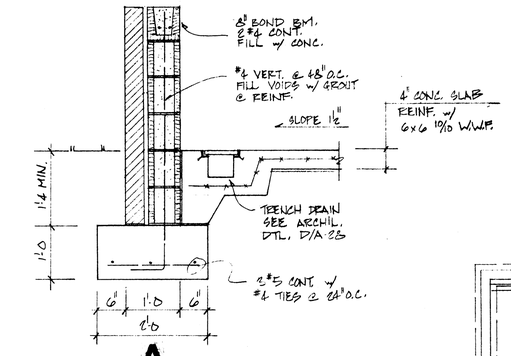
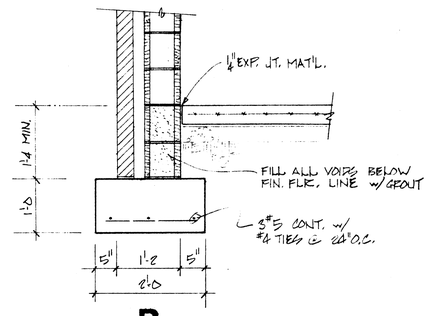
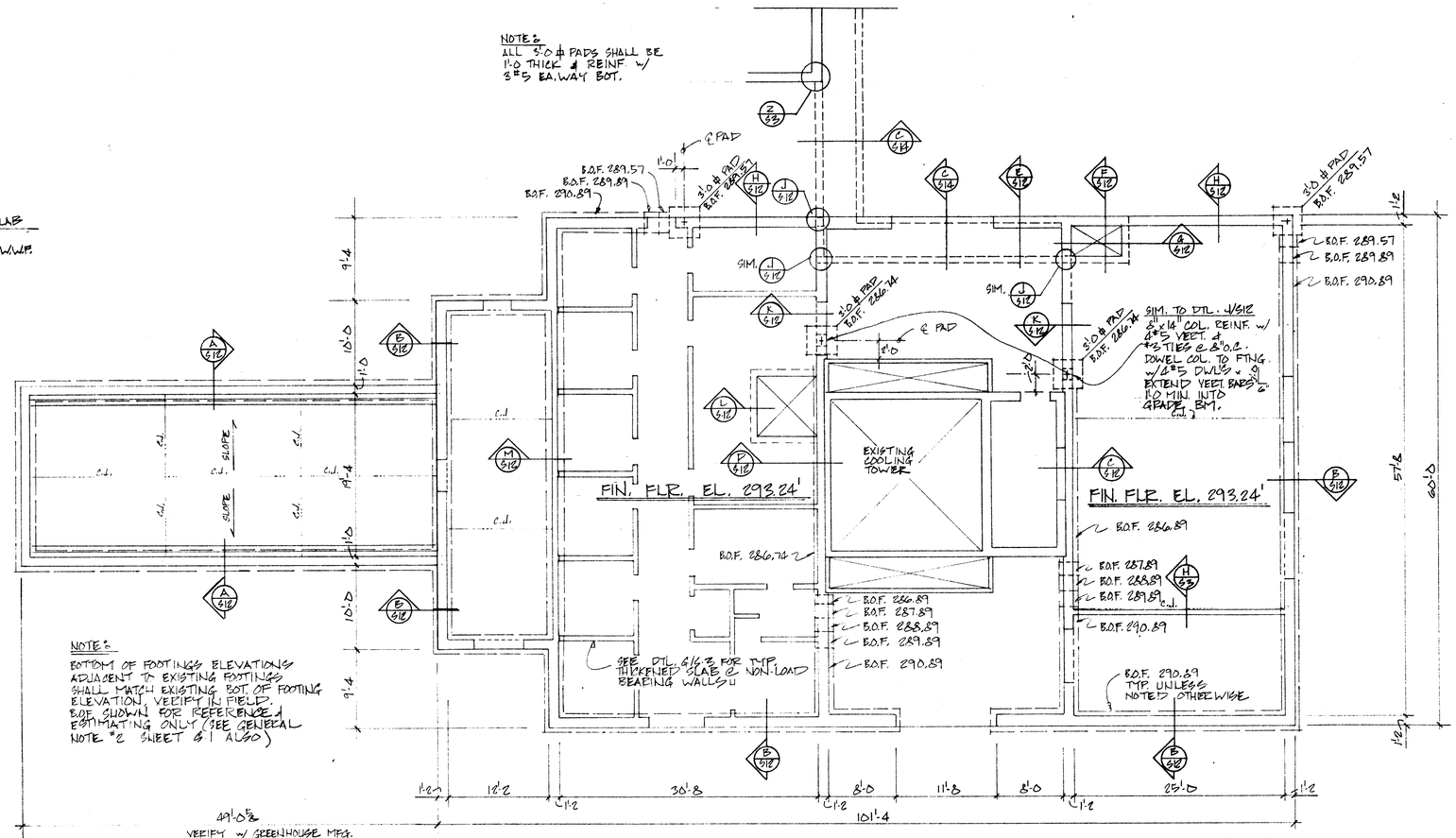


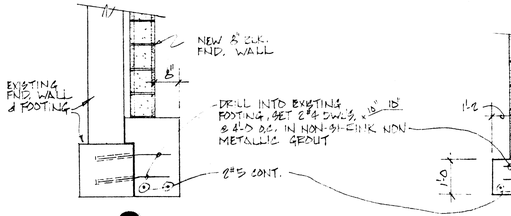


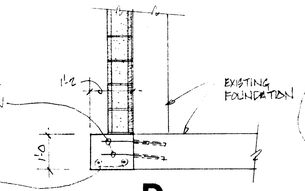


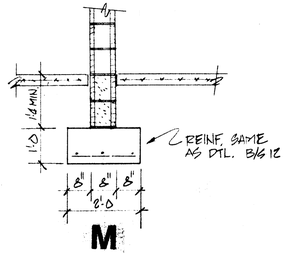
n

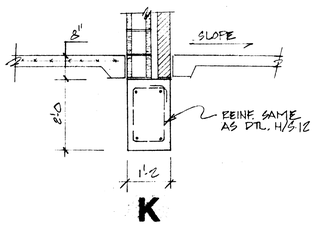
foundation plan • greenhouse • animal care • mechanical building

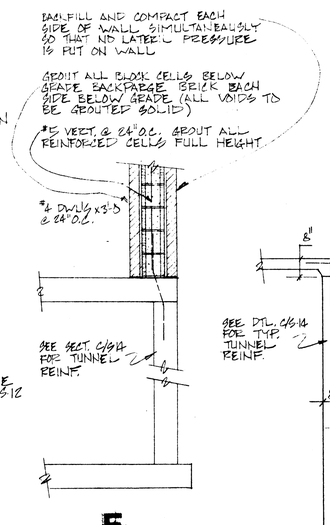
1" = 1'-0

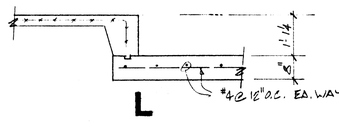


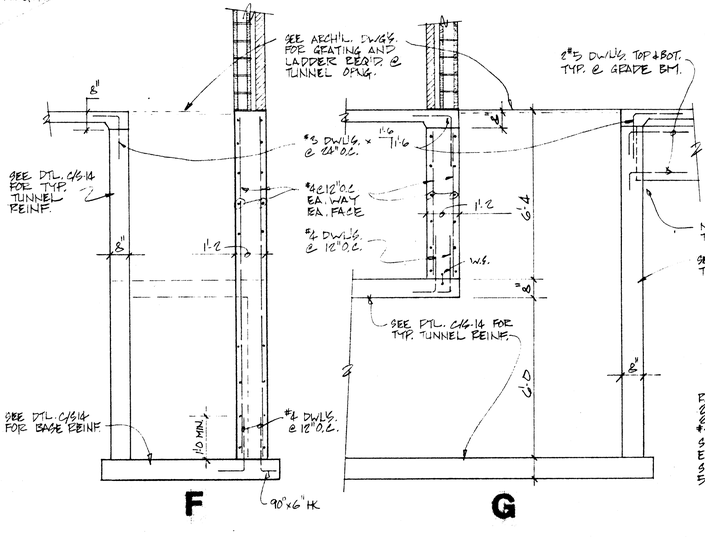


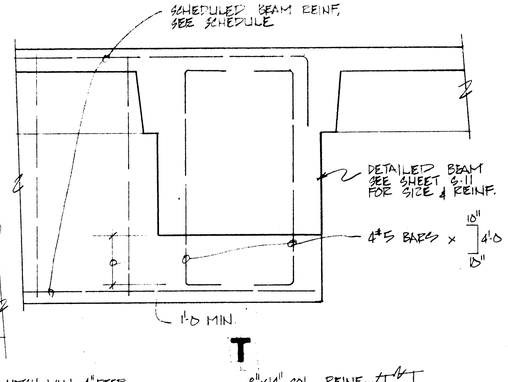


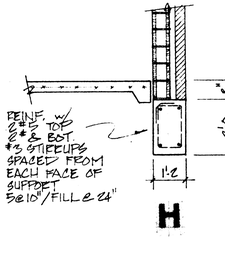


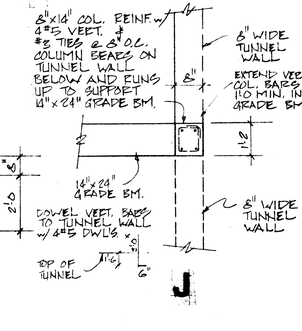












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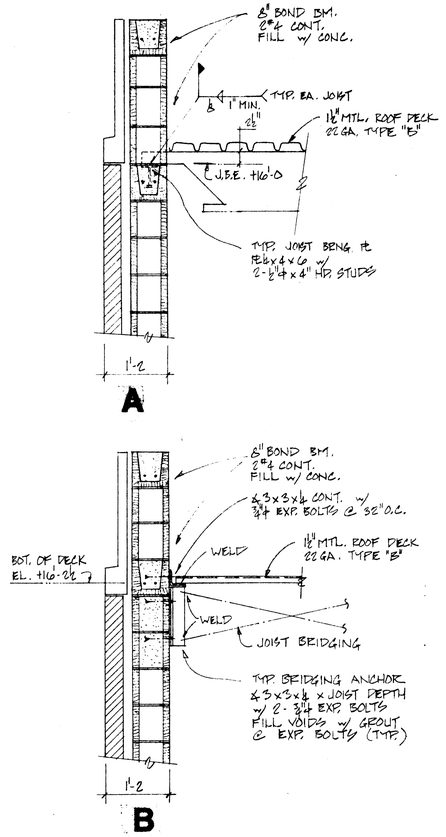
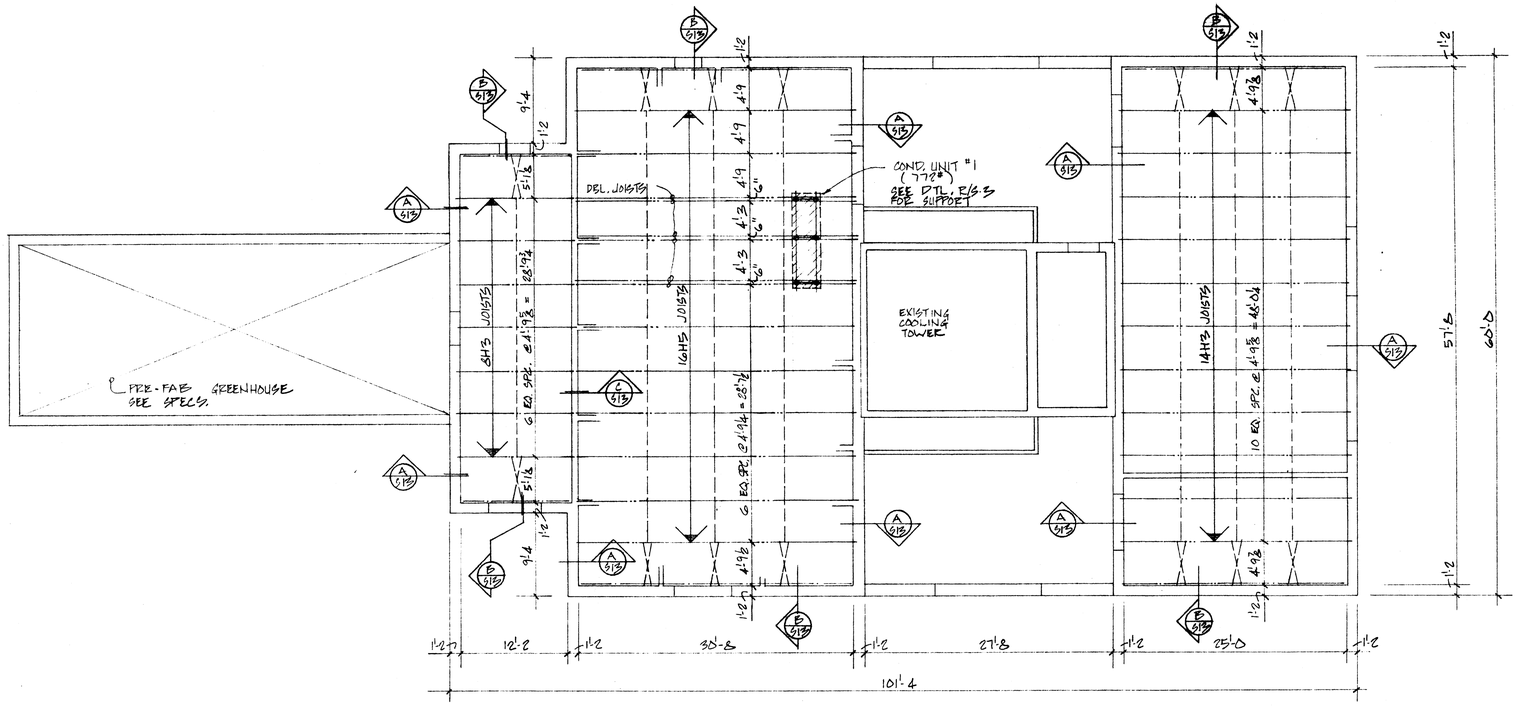
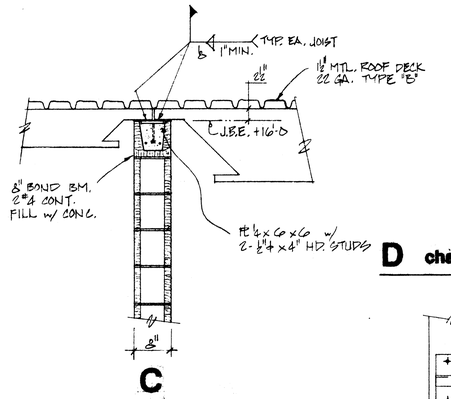


A

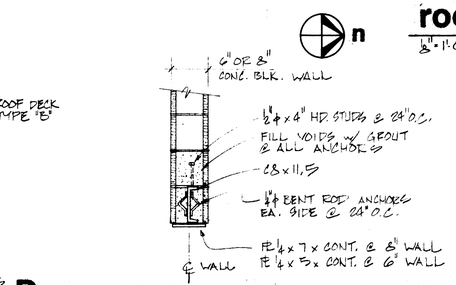
B



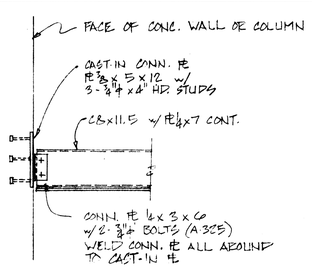
roof framing plan • greenhouse • animal care • mechanical building



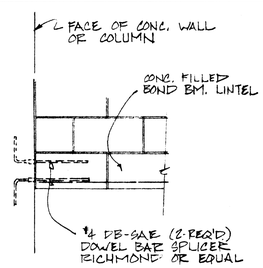
C



D **channel lintel for opng's 8'-0 and greater**



E **typ. channel lintel brng. @ conc. wall or col.**



F **block lintel brng. @ conc. wall or col.**

LINTEL SCHEDULE

WALL	UP TO 3'-6 OPN'G.	3'-6 TO 5'-0 OPN'G	5'-0 TO 7'-6 OPN'G
4"	2 L⁴ 1¾ x 1¾ x ¼	2 L⁴ 2½ x 1½ x 5/16	
6"	2 L⁶ 2½ x 2½ x ¼	2 L⁶ 3 x 2½ x ¼	
8"	2 L⁸ 3½ x 3½ x ¼	2 L⁸ 5 x 3½ x 5/16	
12"	2 L¹² 3½ x 3½ x ¼	2 L¹² 5 x 3½ x 5/16	2 L¹² 6 x 3½ x 5/16 LLH
4" VENEER	1 L 3½ x 3½ x ¼	1 L 5 x 3½ x 5/16	1 L 6 x 3½ x 5/16 LLH

NOTE:

LINTEL SCHEDULE APPLIES UNLESS NOTED OR DETAILED OTHERWISE.

WHERE L'S ARE BACK TO BACK, WELD TOGETHER WITH LONG LEG UP.

8" MIN. BEARING EACH END UNLESS NOTED OR DETAILED OTHERWISE.

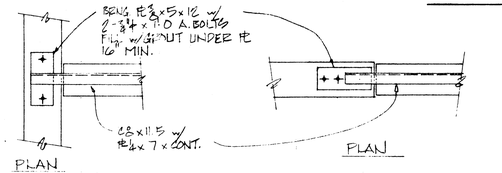
BLOCK LINTEL NOTES:

PROVIDE BLOCK LINTELS WITH DIMENSIONS & REINFORCING SHOWN WHERE EVER ARCHITECTS DWGS. INDICATE BLOCK LINTELS.

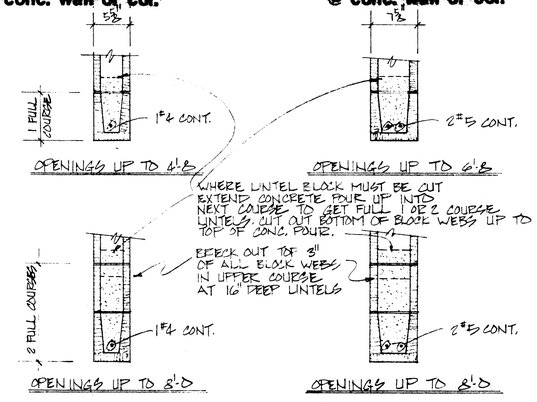
DO NOT USE BLOCK LINTELS FOR OPENINGS GREATER THAN 8'-0.

FILL LINTELS AS INDICATED WITH 3000 P.S.I. CONCRETE.

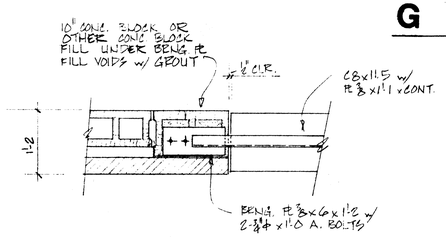
PROVIDE 8" MIN. BEARING @ ENDS OF ALL LINTELS.



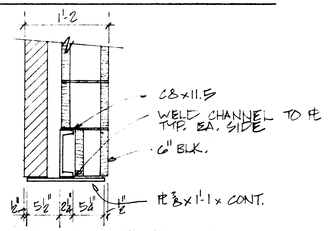
G **typ. channel lintel brng. on block wall**



H **typical block lintel details**



K **typ. lintel brng. @ 1'-2 wall**



J **typ. lintel for 1'-2 wide wall**

COMM. NO. 10186

S-13

DATE: 6/23/86

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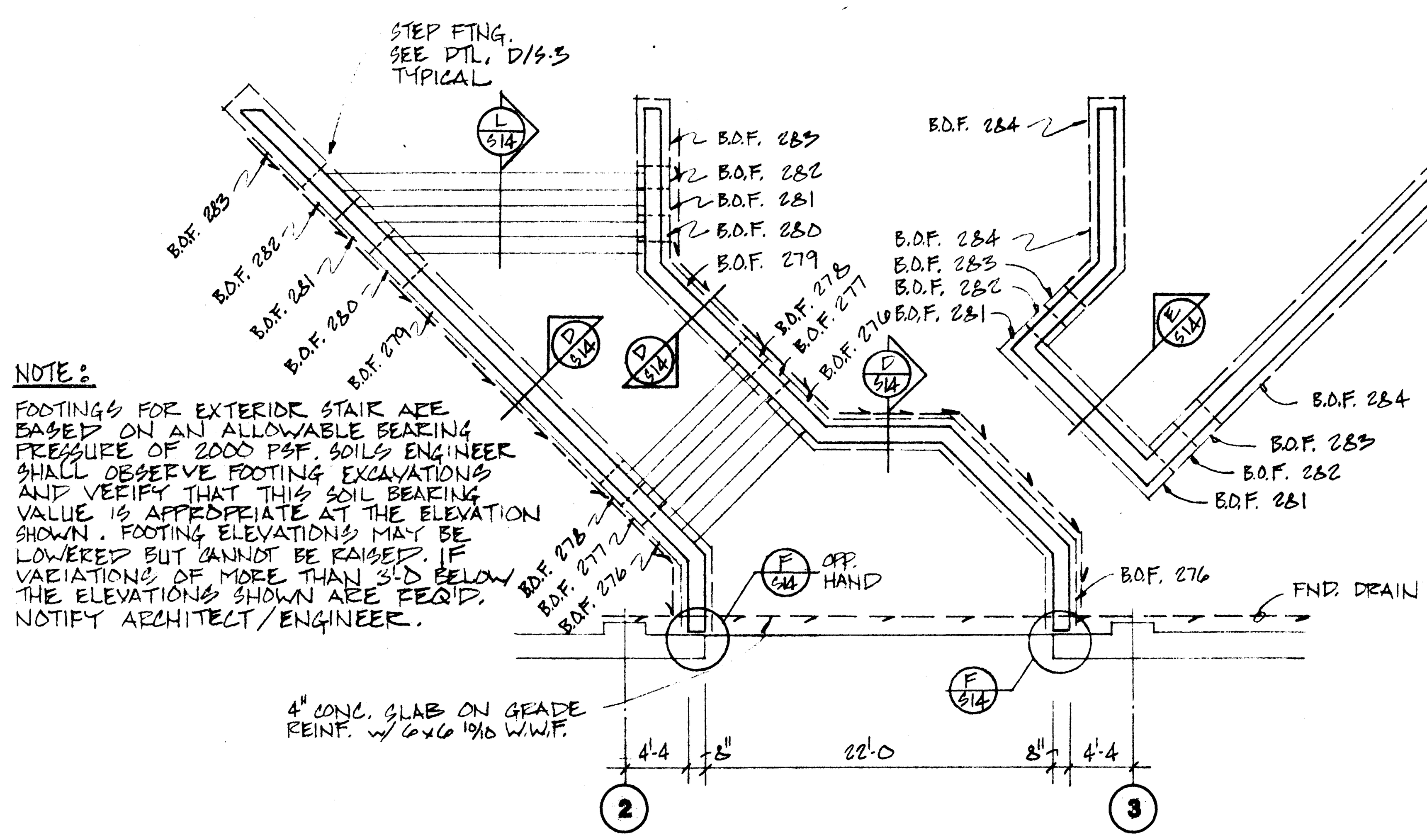
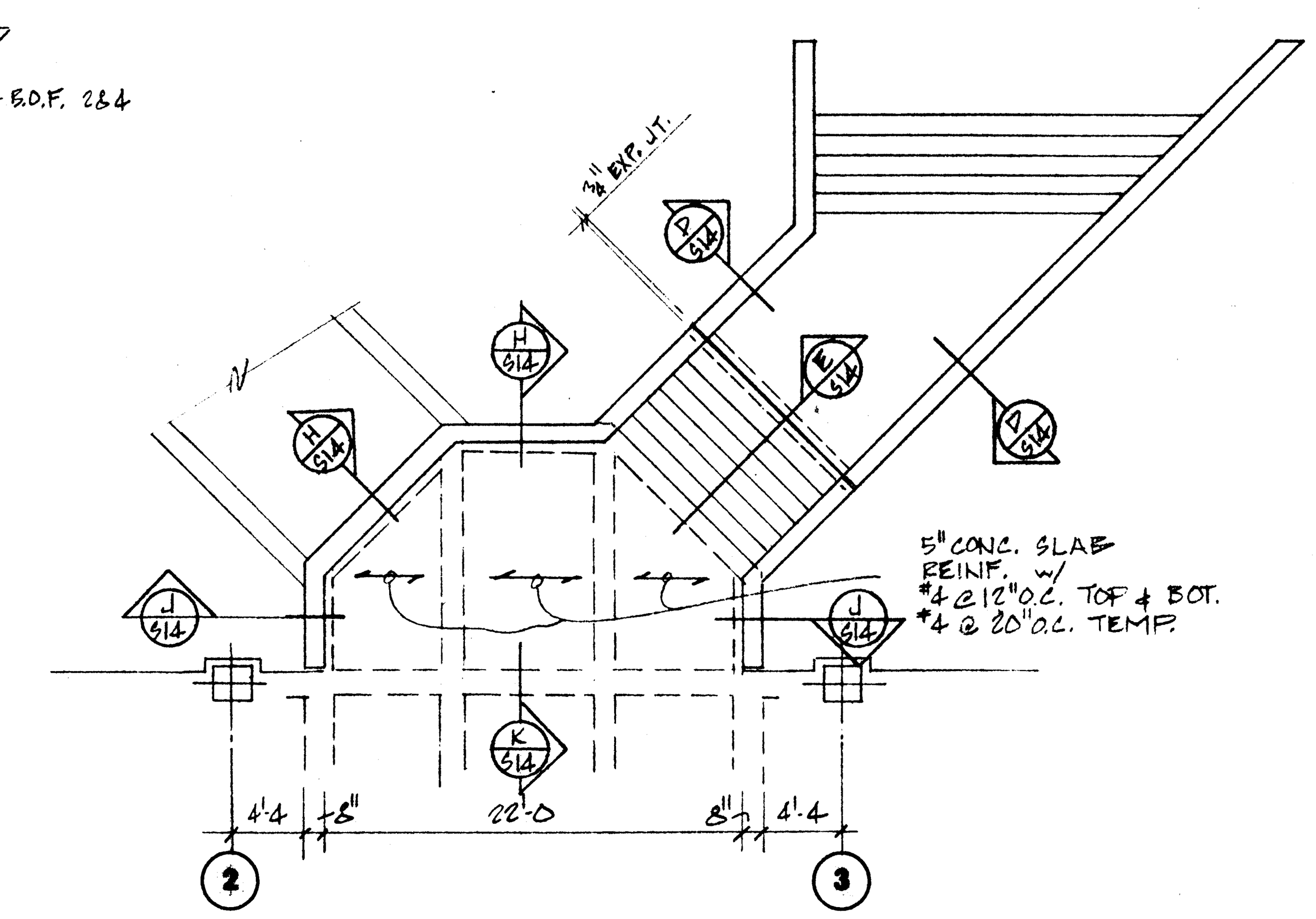
STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 2913
FREDERICK C. HEGI

AF 32526



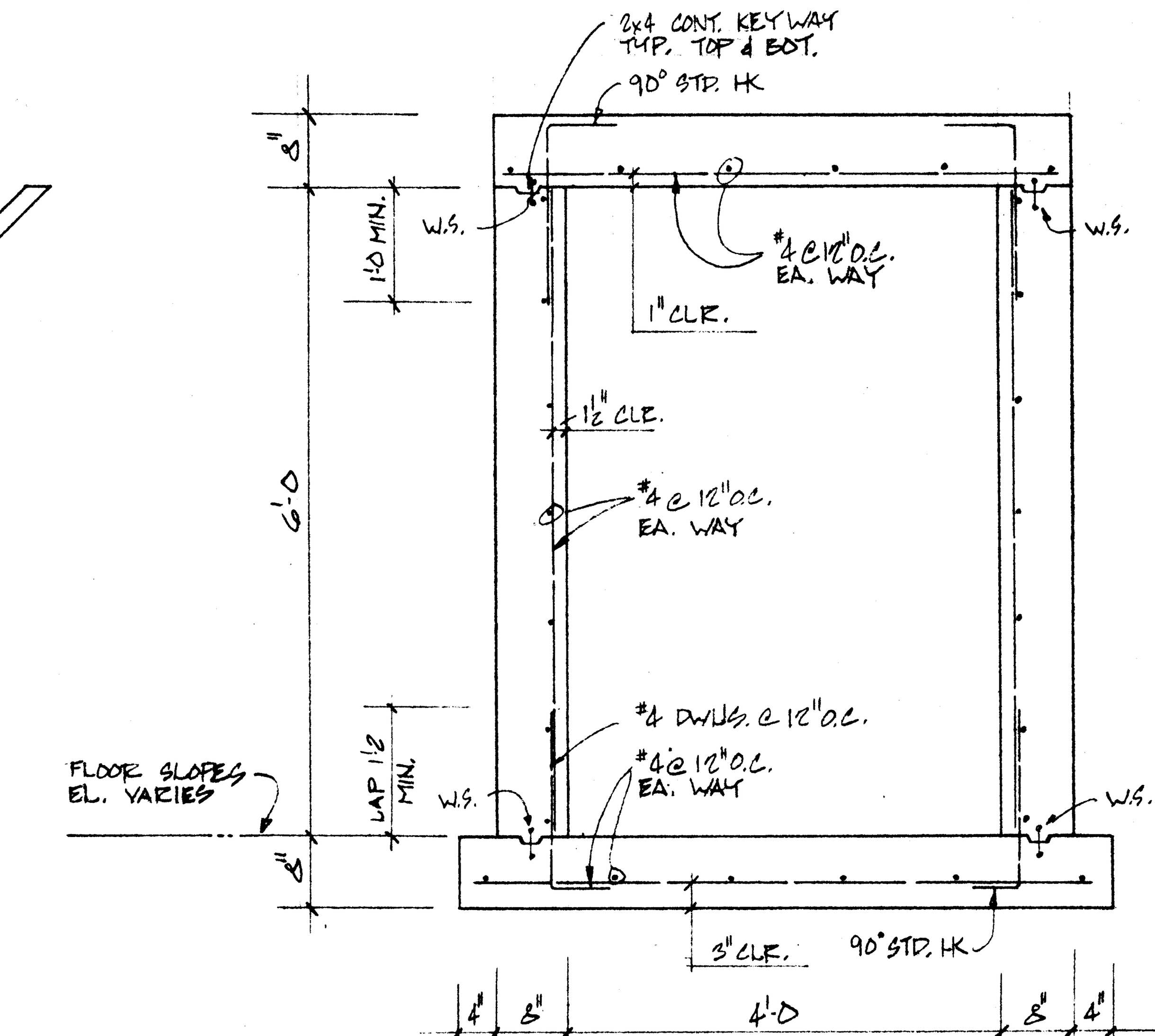
A foundation plan – stair to first level

1/8" = 1'-0



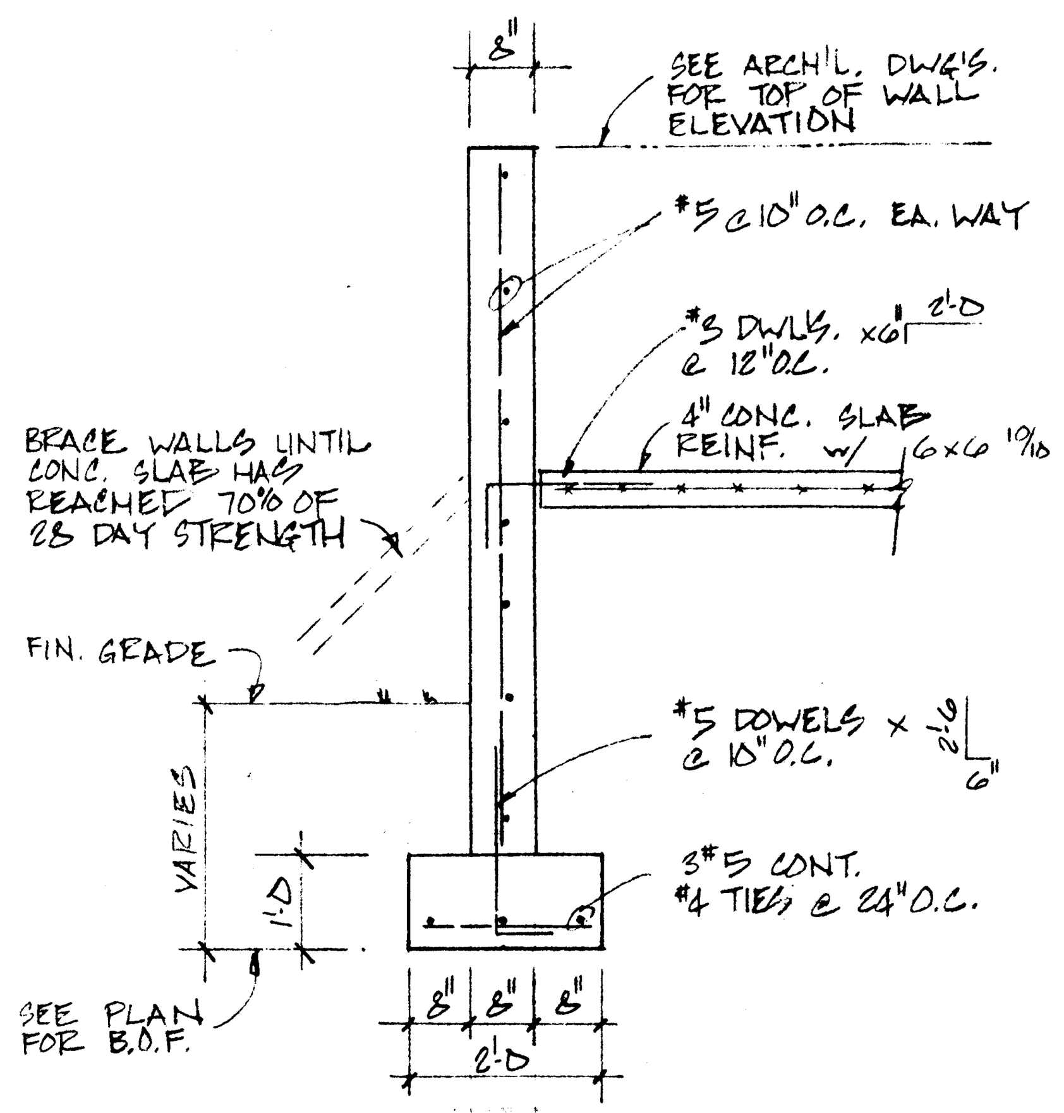
B framing plan – stair to second level

1/8" = 1'-0

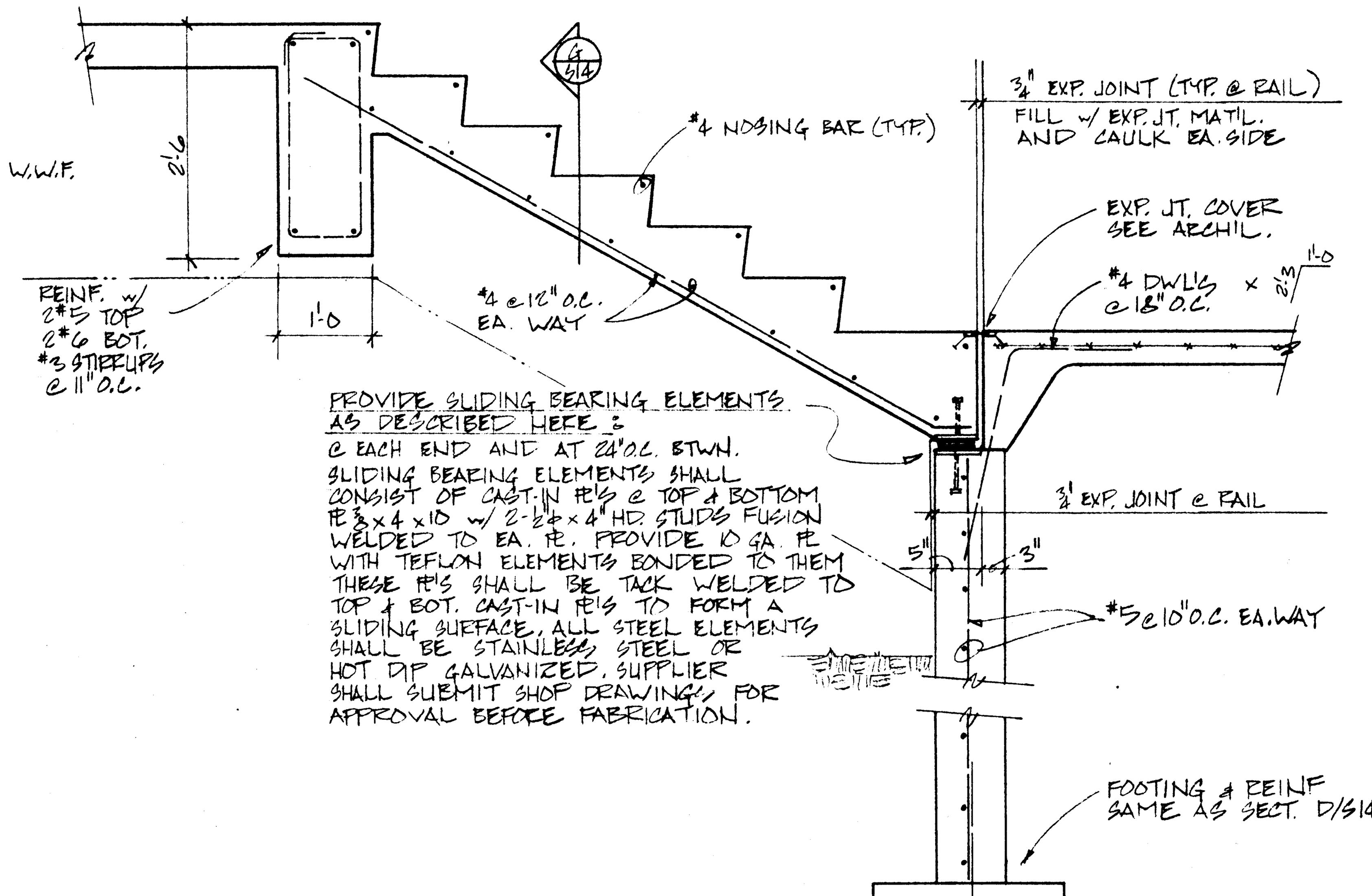


C section thru mech'l tunnel

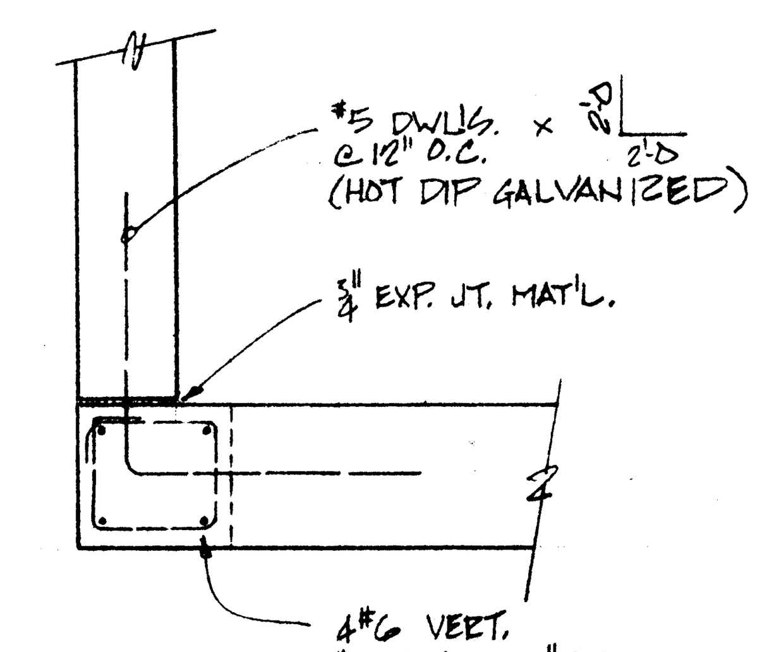
3/4" = 1'-0



D



E



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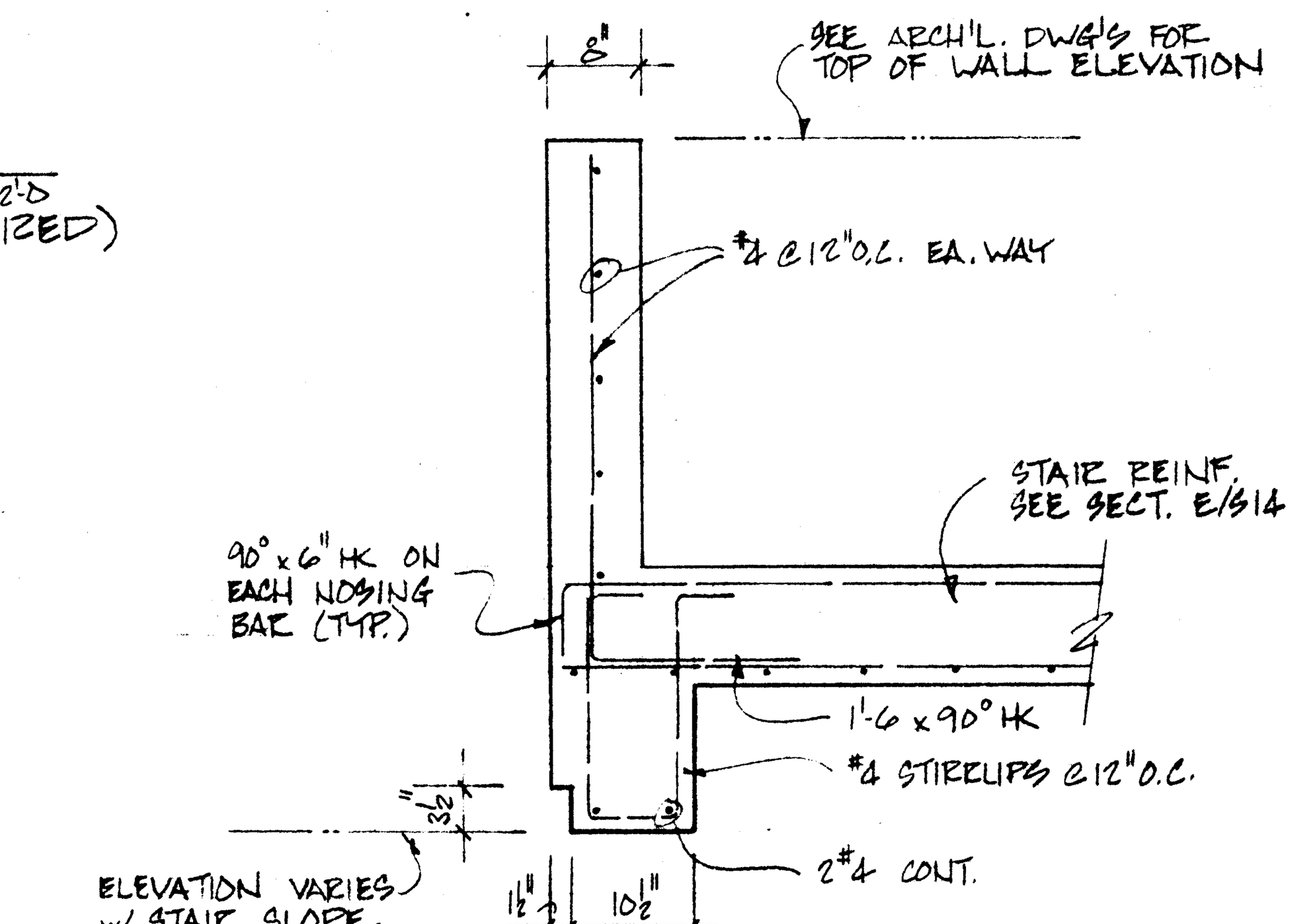

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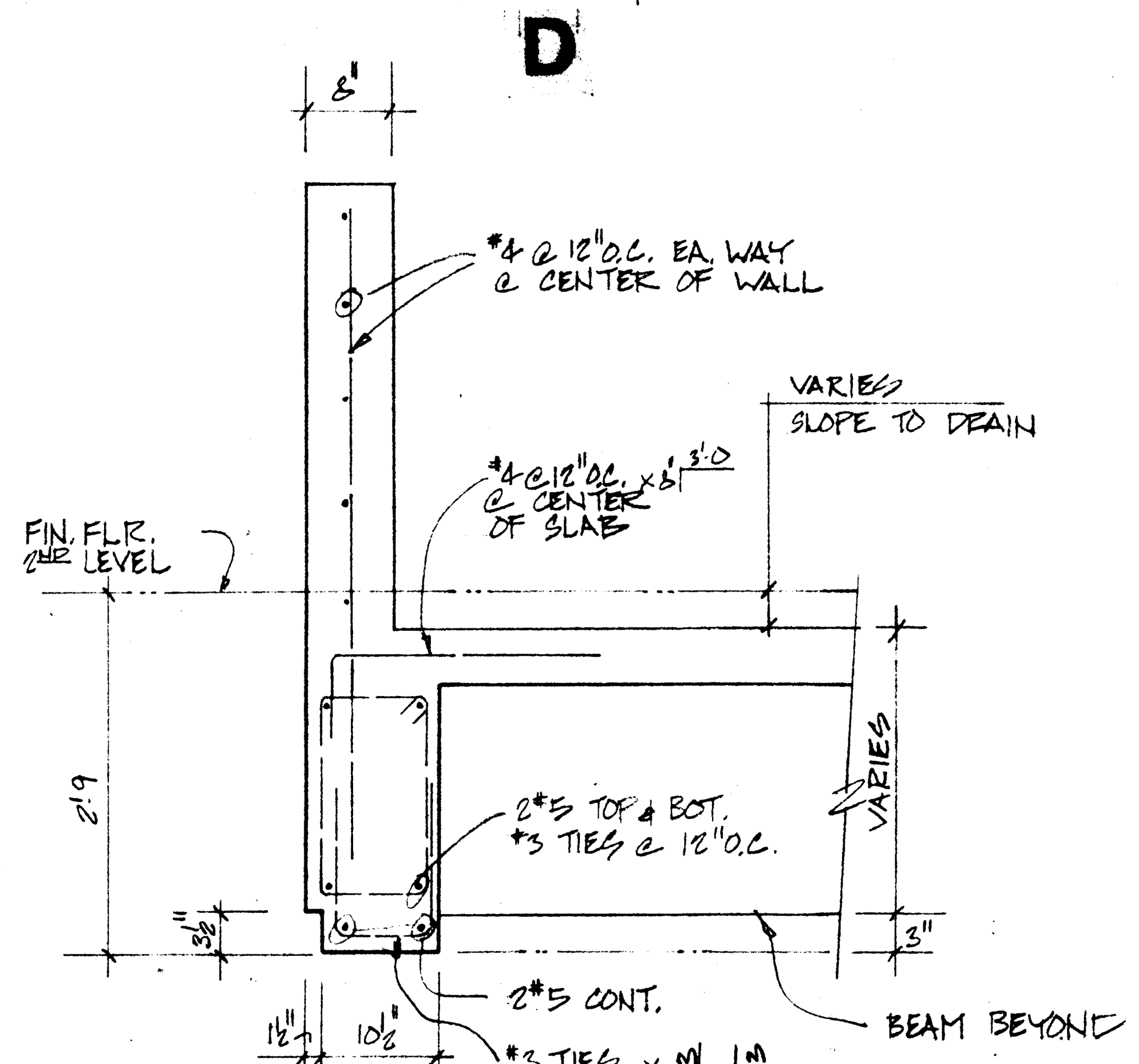

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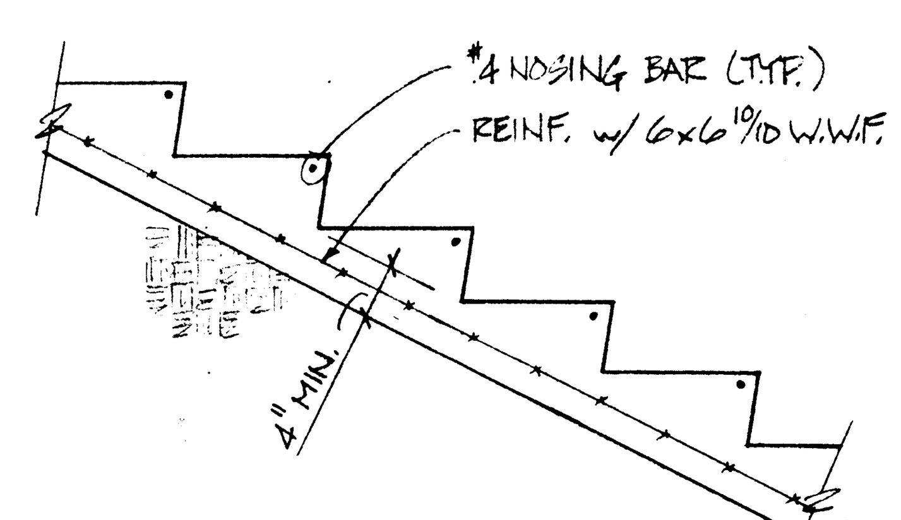
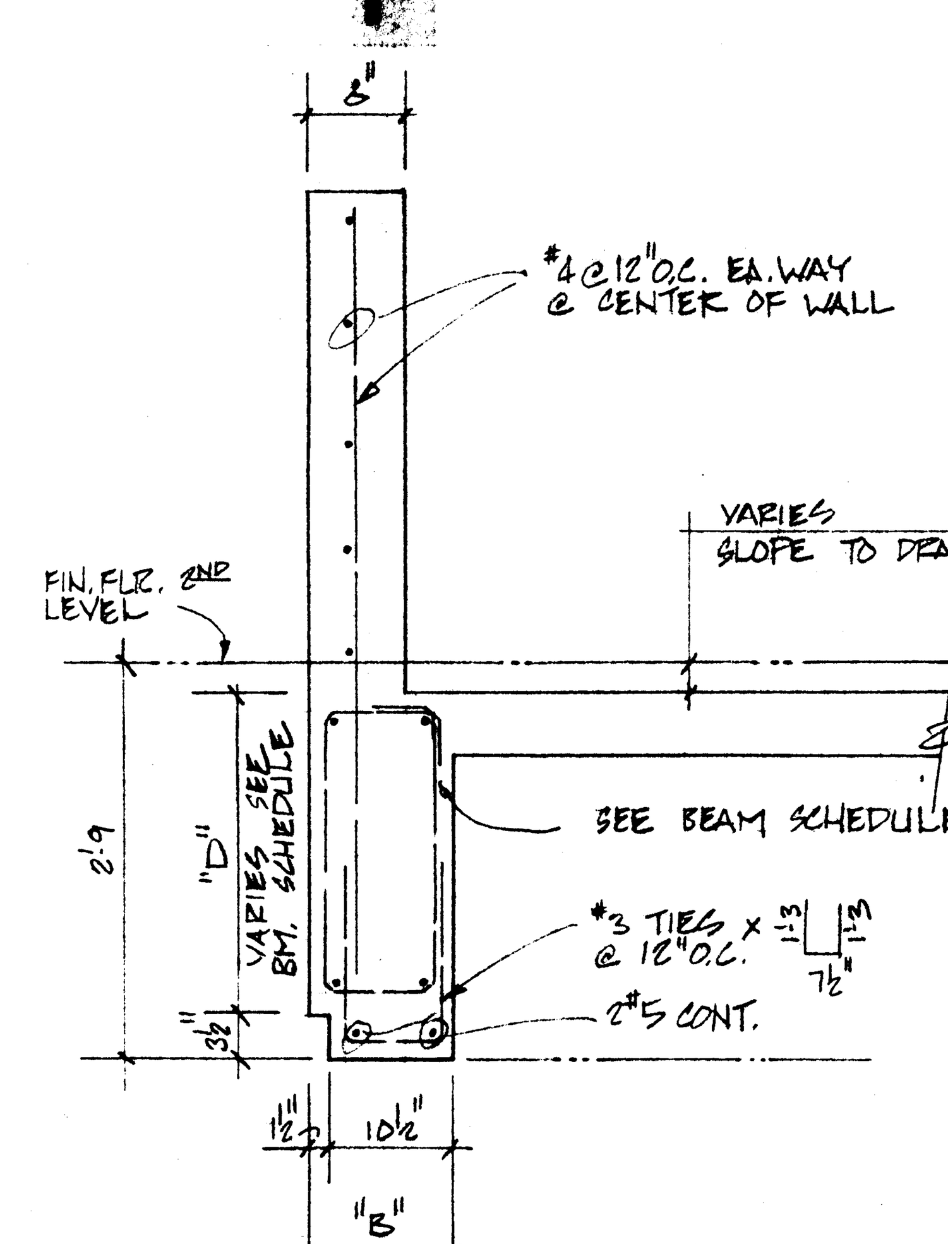
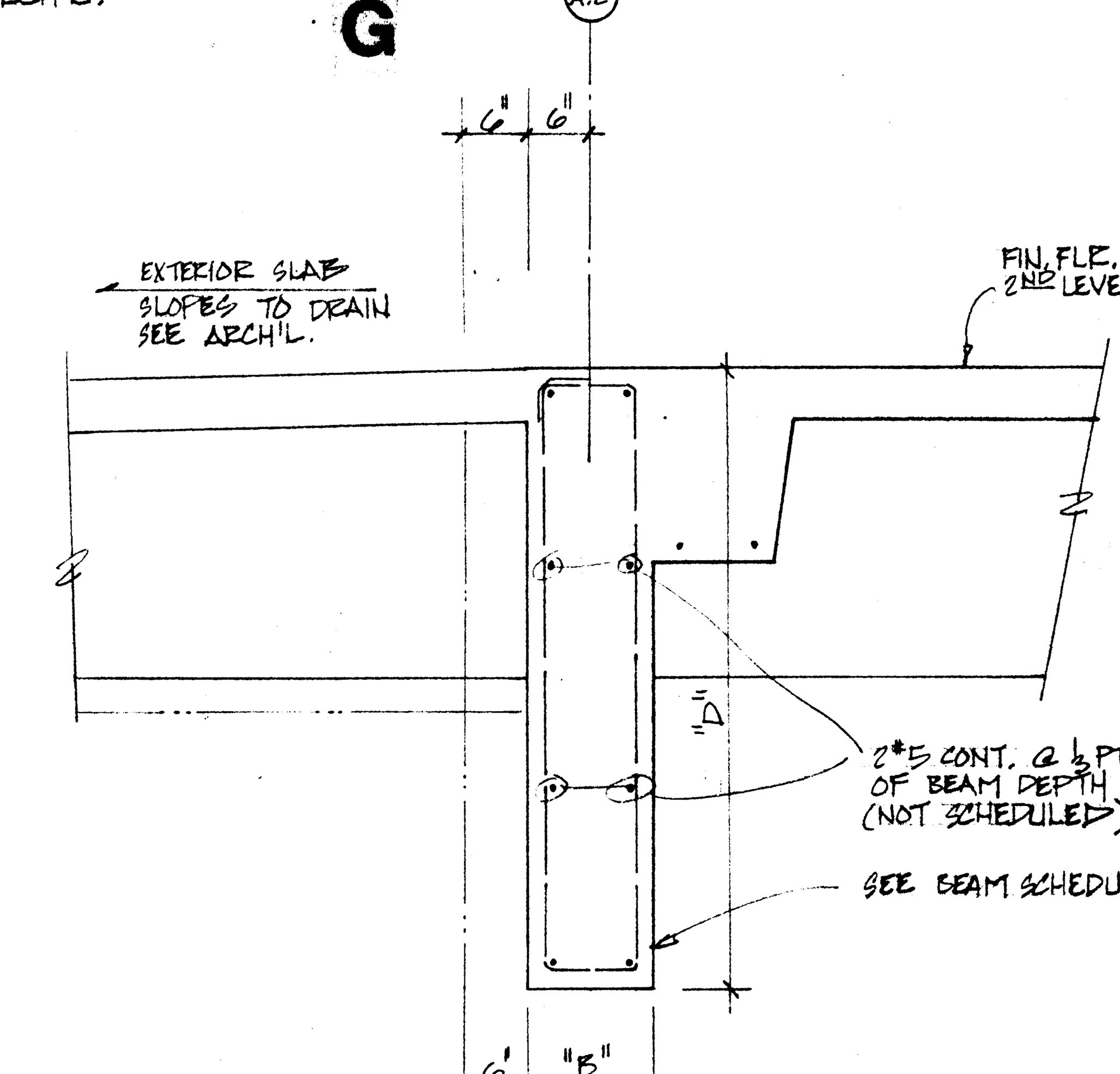


TYP. EXTERIOR STAIR SLAB ON GRADE

L



J



K

COMM. NO. 10186

S-14

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STATE OF ARKANSAS
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No. 2913
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AF 32526

CONTR. NO 10156

MPE-1

DATE: 6/23/86

EXISTING COMPUTER SERVICES CENTER

EXIST PARKING

NOTE: REMOVE SERVICES TO EXIST. GREENHOUSE AND ANIMAL BLDG.

AREA DRAINS (SEE ARCH'L PLANS)

INV. 290.0

INV. 289.70

8" RCP @ 0.5%

INV. 290.0

8" RCP @ 0.5%

INV. 289.60

NEW FIRE HYDRANT

6"

NEW 8" WATER SERVICE

SEE SHT P-6

NEW VALVE

AREA LIGHT

SEE 1/8" SCALE PLANS

EXIST GAS LINE

EXIST GAS VALVE

8"

SEE SHT. P-7

15" RCP @ 0.3%

1/16 BEND

4" C.I.

INV. 289.47

MECH.

SEE SHEET M-6 & SHEET P-6 FOR BELOW GRADE PIPING BETWEEN BUILDINGS

15" INV. 289.39

6" C.I. @ 1.0%

8" C.I. FROM R.D.'S

UTILITY TUNNEL, SEE MECH, ELECT & PLUMB DRAWINGS

SAN. MH #1
INV. IN 290.76
INV. OUT 290.66

6" C.I.

ANIMAL CARE

6" C.I. @ 1.0%

6" C.I.

FD AT WINDOW WELL - TYP.

15" INV. 289.19

INV. 289.65

AREA DRAIN

NEW LABORATORY SCIENCES WING

6" C.I. FROM R.D.'S

8" C.I.

GREEN HOUSE

SEE 1/8" SCALE PLAN

EXIST LAB SCIENCES CENTER

EXIST 12" WATER MAIN (VERIFY)

EXIST 4" GAS (VERIFY)

EXIST COMMUNICATIONS EDUCATION BUILDING

EXISTING TUNNEL

15" RCP @ 0.3%

15" INV. 289.03

1ST. FLR. 277.91
2ND. FLR. 293.24

INV. 291.0

8" RCP @ 1.0%
AREA DRAIN

INV. 290.42

15" RCP

6" C.I. @ 1.0%

INV. 288.97

INV. 289.55

DUCTILE CAST IRON

REPLACE EXIST. 12" STORM WITH NEW 15" CAST IRON THRU TUNNEL - WITH LINK SEAL EACH END. SEE ARCH DWGS.

INV. 288.91

INV. 289.35

8" C.I. FROM R.D.'S

15" RCP

6" C.I.

SAN - AT 1ST FLR. CLG

ACID WASTE AT 1ST FLR CLG

EXIST

SAN BELOW 1ST. FLR

STORM MH #1
TOP 291.0
INV. IN 288.79
INV. OUT 288.69

NEW SAN. THROUGH EXIST. TUNNEL - VERIFY ELEV. @ TUNNEL - PROVIDE WATERTIGHT SEAL AROUND SAN. PIPE AT TUNNEL WALLS.

(SEE DTL. SHT. F-8)
ACID DILUTION BASIN

SAN. MH #2
TOP 291.2 (APPROX)
INV. IN 288.93
INV. OUT 288.83

SAN. MH #5 (STA 4+27)
TOP 283.47
INV. IN 273.37
INV. OUT 273.27

APPROX 85', 8" C.I. @ .63%

ECO

SAN MH #3
TOP 287.6
INV. IN. 274.25
INV. OUT 274.15

15" RCP @ 13.7%

6" C.I. @ 5.6% (APPROX 55')

EXIST. 18" STORM

15" RCP @ 1.9%

INV. 285.91
DROP INLET

EXIST. CATCH BASIN

APPROX 96', 8" C.I. @ .63%

SAN. MH #4
TOP 287.6
INV. IN 274.00
INV. OUT 273.90

STORM MH #2
TOP 286.70
INV. IN 282.92
INV. OUT 282.72

EXIST C.B. TOP INLET 281.57
INV. 279.07

APPROX 96'

NEW CATCH BASIN
SEE ARCH. DWGS.
INV. IN 281.66
INV. OUT. 281.56

MATCH LINE
SEE SHT MPE-2

SAN MH #6
TOP
INV. IN 272.66
INV. OUT 272.56

EXIST 18" STORM

MATCH LINE
SEE SHT MPE-2

utilities site plan • north

SCALE: 1"=20'-0"

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LABORATORY

JONESBORO,

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER No. 7887

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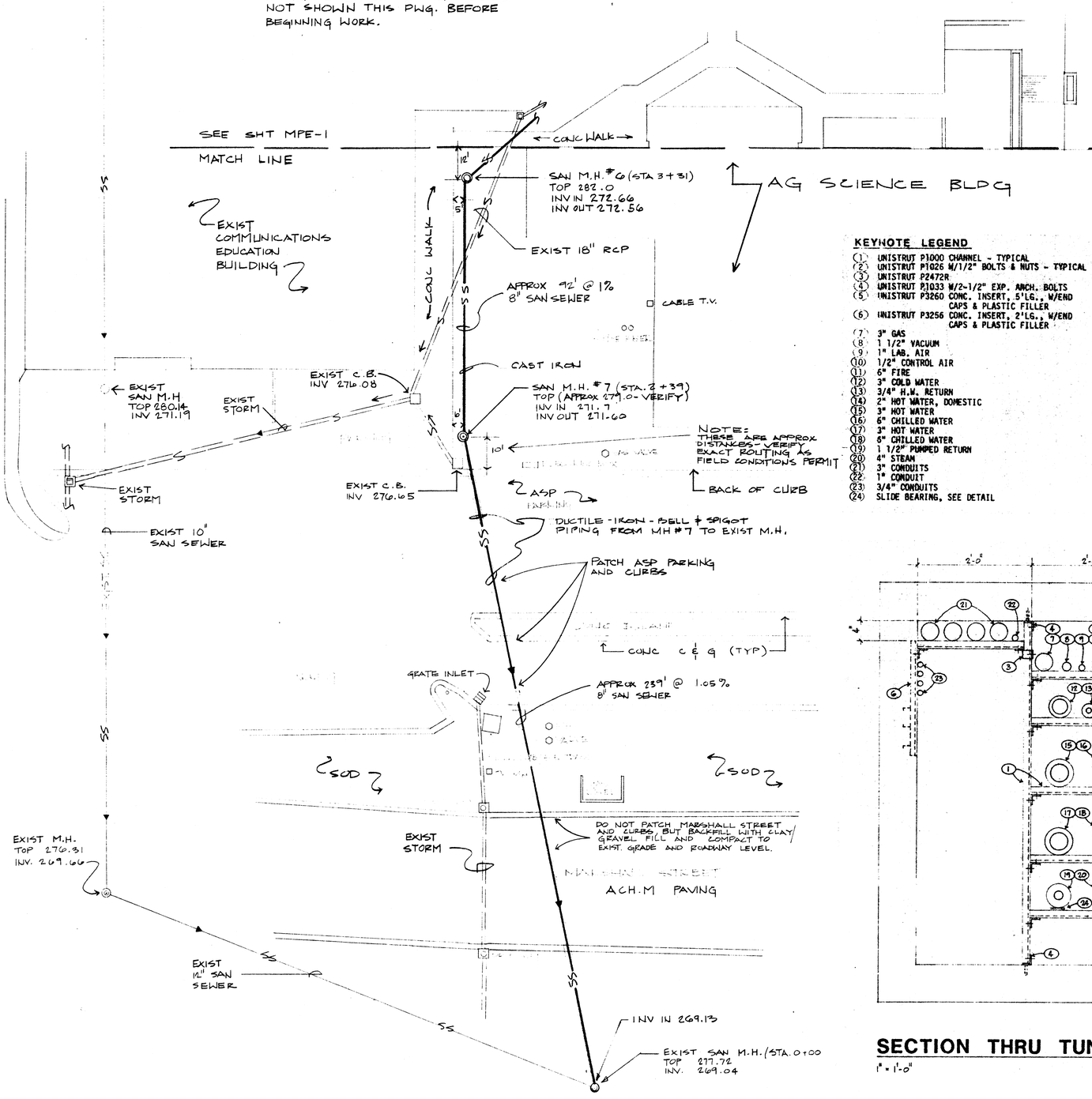
NOTE:
8" SAN SEWER TO GO BETWEEN BLDGS AND UNDER EXIST 18" STORM LINE - HAND EXCAVATE BETWEEN BLDGS, TAKING CARE NOT TO DAMAGE BLDG FOUNDATIONS AND STORM SEWER - REPLACE AND/OR REPAIR ANY DAMAGE TO STORM LINE - VERIFY IF ANY OTHER UTILITIES OR OBSTACLES NOT SHOWN THIS PWG. BEFORE BEGINNING WORK.

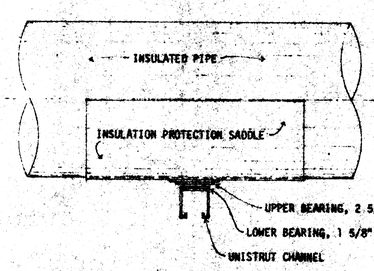


utilities site plan • south

SCALE: 1"=20'-0"

KEYNOTE LEGEND

1. UNISTRUT P1000 CHANNEL - TYPICAL
2. UNISTRUT P1026 W/1/2" BOLTS & NUTS - TYPICAL
3. UNISTRUT P2472R
4. UNISTRUT P1033 W/2-1/2" EXP. ARCH. BOLTS
5. UNISTRUT P3260 CONC. INSERT, 5'LG., W/END CAPS & PLASTIC FILLER
6. UNISTRUT P3256 CONC. INSERT, 2'LG., W/END CAPS & PLASTIC FILLER
7. 3" GAS
8. 1 1/2" VACUUM
9. 1" LAB. AIR
10. 1/2" CONTROL AIR
11. 6" FIRE
12. 3" COLD WATER
13. 3/4" H.W. RETURN
14. 2" HOT WATER, DOMESTIC
15. 3" HOT WATER
16. 6" CHILLED WATER
17. 3" HOT WATER
18. 6" CHILLED WATER
19. 1 1/2" PUMPED RETURN
20. 4" STEAM
21. 3" CONDUITS
22. 1" CONDUIT
23. 3/4" CONDUITS
24. SLIDE BEARING, SEE DETAIL



BEARINGS:
3/32" THICK TEFLON BONDED TO 10 GA. CARBON STEEL PLATE. TEFLON SHALL BE RECESSED 1/4" FROM EA. SIDE. SIZES SHOWN ARE STEEL PLATE. FLUORGOLD FC-1010-CS-1/4L, MFD. BY FLUORO-CARBON, (713) 353-8145.

PIPE SLIDE BEARING DETAIL

N.T.S.

SECTION THRU TUNNEL

1" = 1'-0"

MECHANICAL LEGEND

- SOIL, WASTE OR SANITARY SEWER
- SANITARY VENT
- S — STORM DRAIN
- S — STORM DRAIN ABOVE CEILING
- COLD WATER
- 120° HOT WATER
- 120° HOT WATER RETURN
- X — 180° HOT WATER
- RX — 180° HOT WATER RETURN
- G — NATURAL GAS
- F — FIRE PROTECTION WATER
- HS — HOT WATER SUPPLY
- HR — HOT WATER RETURN
- CS — CHILLED WATER SUPPLY
- CR — CHILLED WATER RETURN
- CHS — CHILLED OR HOT WATER SUPPLY
- CHR — CHILLED OR HOT WATER RETURN
- CONDENSING WATER SUPPLY
- CONDENSING WATER RETURN
- D — CONDENSATE DRAIN
- RL — REFRIGERANT LIQUID
- RS — REFRIGERANT SUCTION
- HG — REFRIGERANT HOT GAS
- ST10 — STEAM SUPPLY, PRESSURE, PSIG
- SCR10 — STEAM CONDENSATE RETURN, PRESS., PSIG
- PR — PUMPED CONDENSATE RETURN
- GATE VALVE
- PLUG COCK
- GLOBE VALVE
- CHECK VALVE
- BUTTERFLY VALVE - LEVER TOP
- BUTTERFLY VALVE - GEAR TOP
- AW — ACID WASTE
- AV — ACID VENT
- CWV — COMBINATION WASTE & VENT
- GW — GREASE WASTE
- SPD — SUMP PUMP DISCHARGE
- STRAINER
- CONNECTION OF NEW TO EXISTING

- RV — RELIEF VALVE
- T — THERMOMETER
- PG — PRESSURE GAGE & COCK
- T.P. — TEMP. & PRESS. TEST PLUG
- MANUAL DAMPER
- MOTORIZED DAMPER
- TURNING VANES
- SPLITTER DAMPER
- AIR EXTRACTOR
- P-1 — PLUMBING FIXTURE
- FD — FLOOR DRAIN
- RD — ROOF DRAIN
- DS — DOWNSPOUT
- FWH — FREEZELESS WALL HYDRANT
- VTR — VENT THRU ROOF
- CD — CEILING DIFFUSER
- SG — SUPPLY GRILLE
- SR — SUPPLY REGISTER
- RG — RETURN GRILLE
- RR — RETURN REGISTER
- EG — EXHAUST GRILLE
- ER — EXHAUST REGISTER
- DG — DOOR GRILLE
- EF-1 — EXHAUST FAN
- CFM — CUBIC FEET PER MINUTE
- T — THERMOSTAT
- H — HUMIDISTAT
- FE — FIRE EXTINGUISHER
- AFF — ABOVE FINISHED FLOOR
- FIRE DAMPER - HORIZ. DUCT
- FIRE DAMPER - VERT. DUCT
- SD — SMOKE DAMPER
- AD — ACCESS DOOR
- HB — HOSE BIBB
- CO — CLEANOUT PLUG
- FCO — FLOOR CLEANOUT
- WCO — WALL CLEANOUT
- ECO — EXTERIOR CLEANOUT
- LV — LAB VACUUM
- LA — LAB COMPRESSED AIR

COMM. NO. 10186
MPE-2
DATE: 6/23/88

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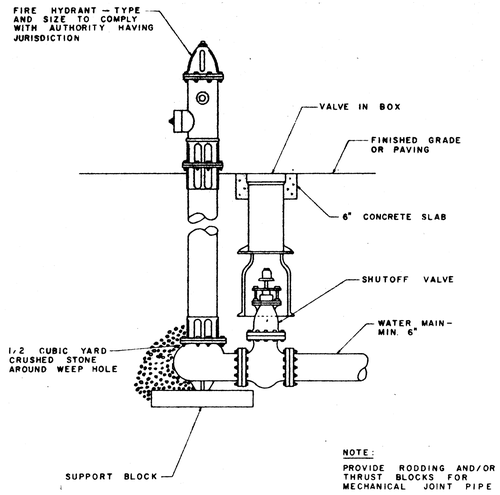
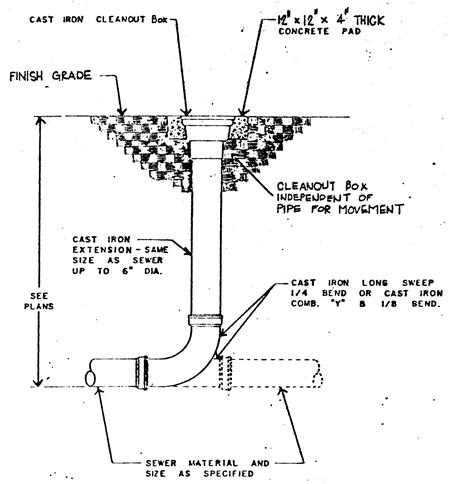
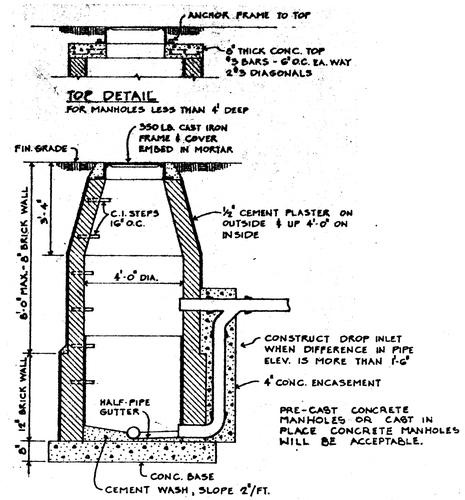


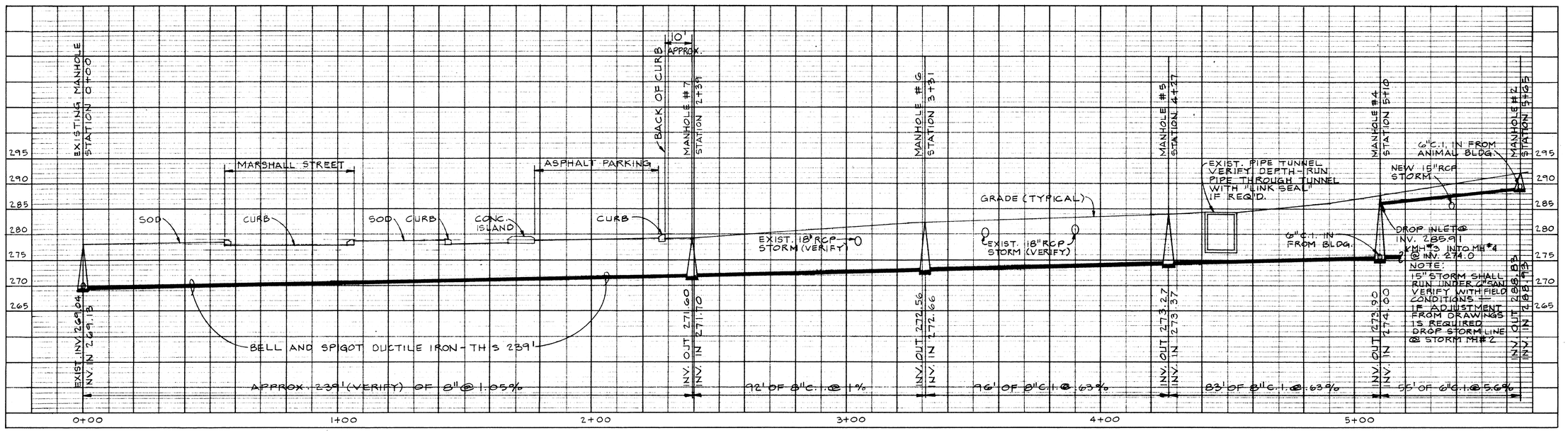
FIRE HYDRANT DETAIL



EXTERIOR CLEANOUT DETAIL



MANHOLE DETAIL



PROFILE - SANITARY SEWER

SCALE:
VERT. - 1"=10'-0"
HORIZ. - 1"=20'-0"

COMM. NO. 10186

MPE-3

DATE: 6/23/86

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REGISTERED PROFESSIONAL ENGINEER H. W. GOODMAN No. 1657

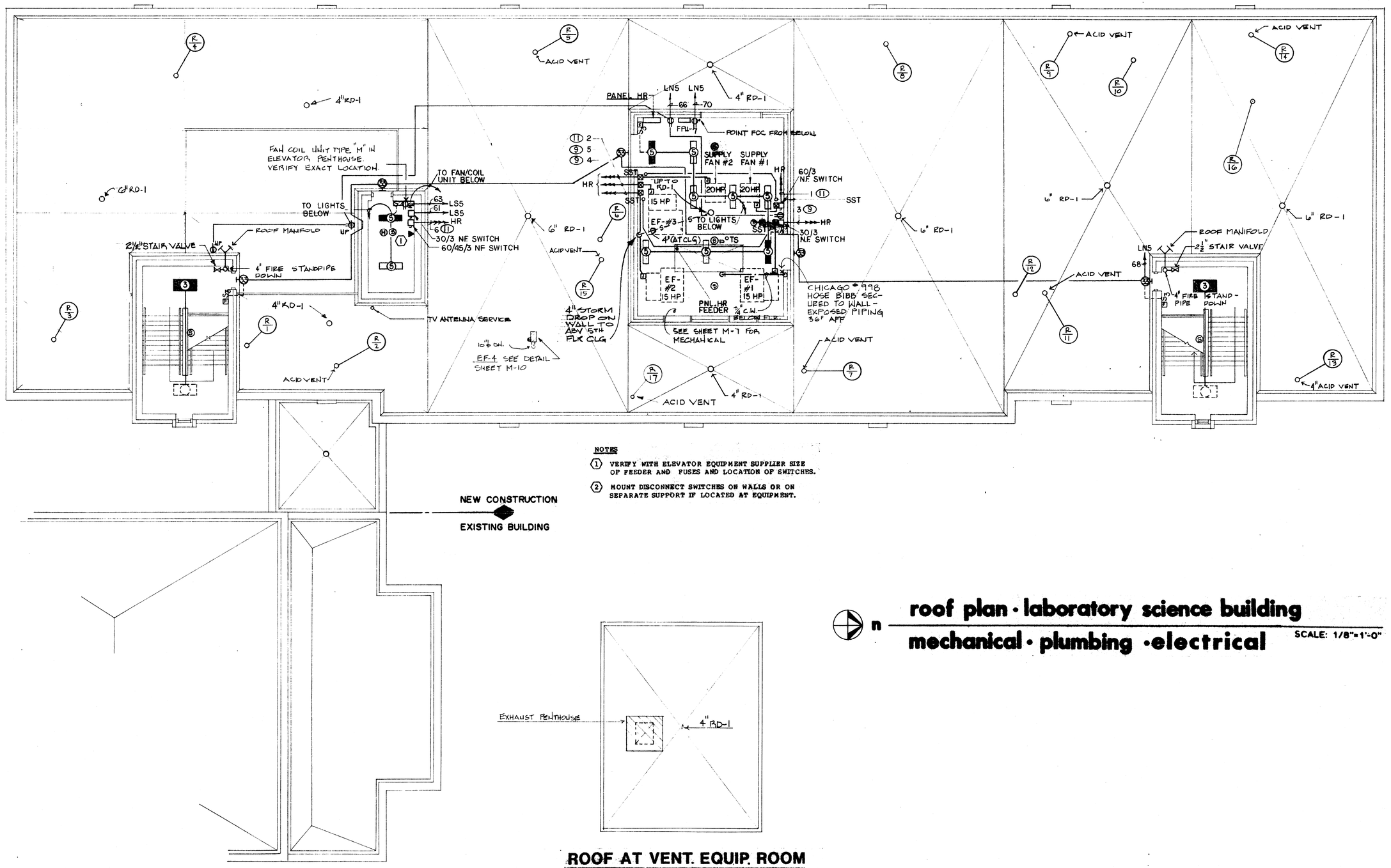
utilities site details

AF 32826

COMM NO. 10486

MPE-4

DATE: 8/23/86



NOTES

1. VERIFY WITH ELEVATOR EQUIPMENT SUPPLIER SIZE OF FEEDER AND FUSES AND LOCATION OF SWITCHES.
2. MOUNT DISCONNECT SWITCHES ON WALLS OR ON SEPARATE SUPPORT IF LOCATED AT EQUIPMENT.

ROOF AT VENT. EQUIP. ROOM

n

roof plan · laboratory science building
mechanical · plumbing · electrical

SCALE: 1/8"=1'-0"

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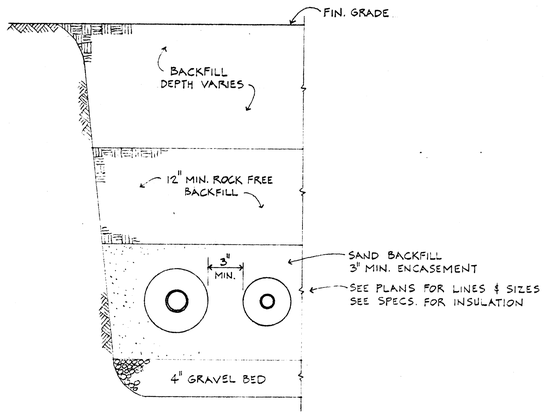
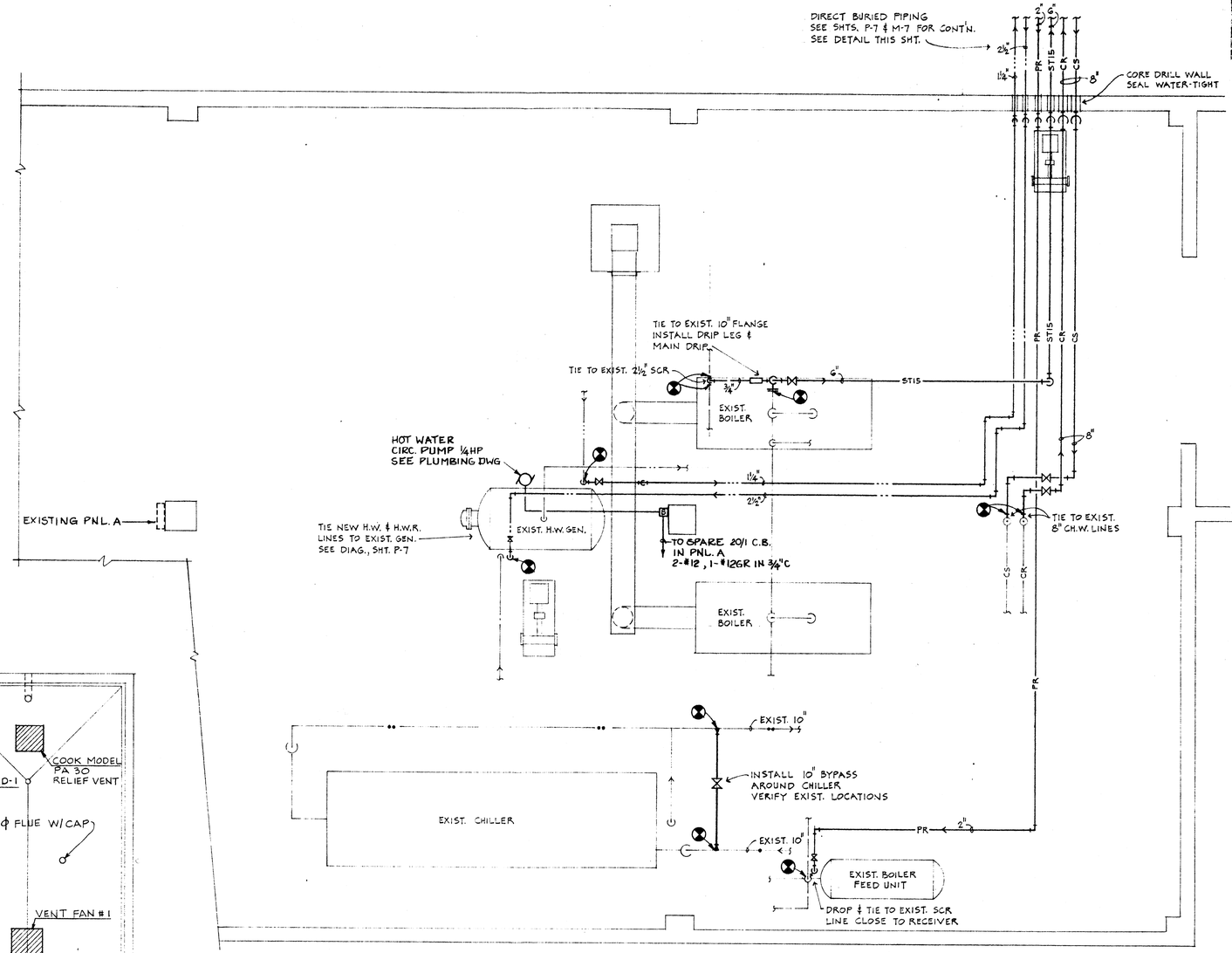
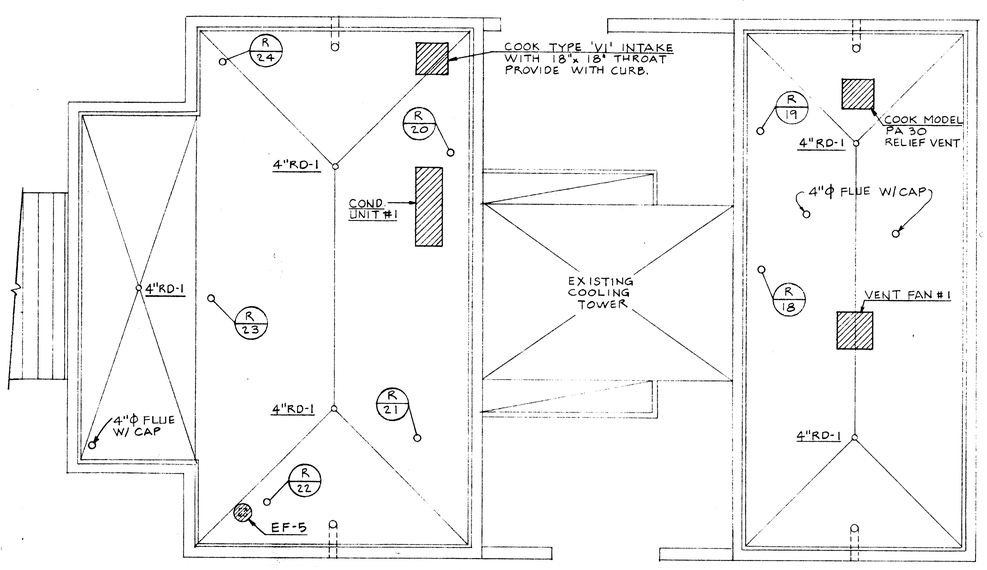


DIRECT BURIED PIPING DETAIL

SCALE : NONE





n roof plan greenhouse · animal care · mechanical building mechanical · plumbing · electrical

SCALE: 1/8"=1'-0"

n existing mechanical room

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

CONTR. NO. 10186

MPE-5

DATE: 8/23/88

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AF 32526

CONTR. NO. 10188

M-1

DATE: 6/23/88

3'-6" x 2'-0" EXHAUST HOOD 20" DEEP, 18 GA. SHEET METAL WITH ENAMEL FINISH. COLOR BY ARCH. CONNECT TO BUILDING EXHAUST SYSTEM WITH 8"ϕ DUCT. BALANCE @ 200 ϕ

OFFICE 131 — LECTURE CLASSROOM 131 — COMPUTER CENTER 137 — ROBOTICS & DIGITAL ELECTRONICS LABORATORY 156 — MACHINE SHOP 155 — POWER/MACHINERY LABORATORY 154 — CLASSROOM 153

1¼" BELOW GRADE

CONNECT HUMIDITY DRAIN TO FOUNDATION DRAIN

ANCHOR H.W. PIPING TO STRUCTURE

HOT WATER CONVECTOR

C.O. (TYP.)

154-A

155-B STORAGE

SECRETARY RECEPTION

DROP H.W. PIPING BEHIND FIRE HOSE CABINET. COORDINATE WITH FIRE PROTECT. PIPING & STANDPIPE.

ELEVATOR ELEC

WOMEN

MEN

GLASS BLOWING

1½" DRAIN UP

SEM. PREP. 124

LIGHT LOCK ROOM

SCOPE ROOM 141

ELECTRICAL ENGR UPPER LEVEL LABS #1 148 — #2 149

SEE 1/4" SCALE PLAN SHT. M-8

MECHANICAL 151

AHU #1

GENERAL ELEC. ENGR STOR. 152

STAIR EE501

STAIR FF501

ACCESS WELL

CHAMBER 148-A

1½" DOWN TO FLOOR SINK SEE PLUMB. DWGS.

CORRIDOR DD601

MICROTECHNIQUE ROOM 145

NOTE:
SEE ARCH. REFLECTED CEILING PLAN FOR EXACT LOCATION OF CEILING DEVICES.

NEW CONSTRUCTION

EXISTING BUILDING

first floor plan · laboratory science building
mechanical

SCALE: 1/8"=1'-0"

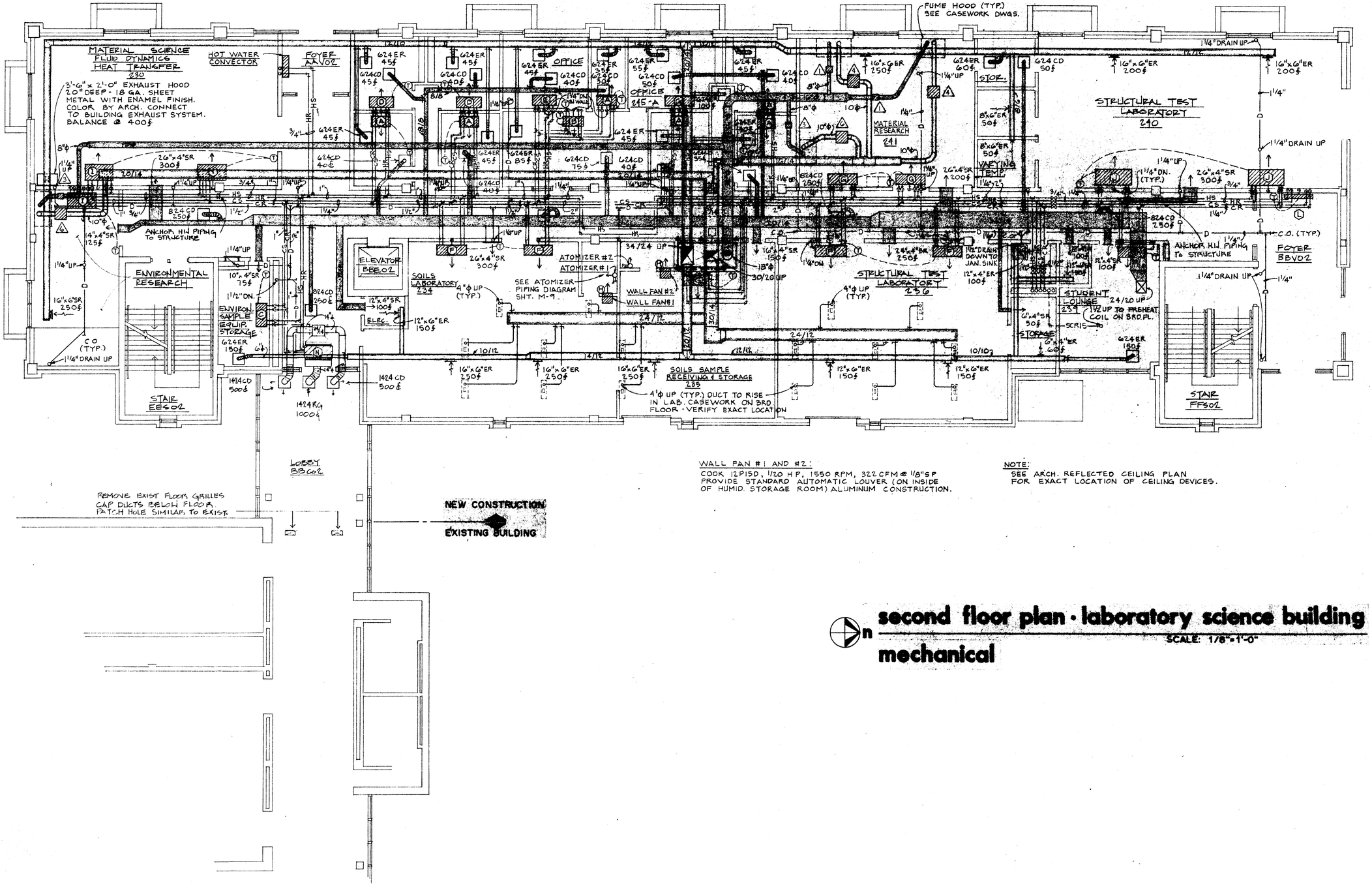
ADDITION TO
LABORATORY SCIENCES CENTER
ARKANSAS STATE UNIVERSITY
JONESBORO, ARKANSAS

P.O. Box 1655 • Jonesboro, Arkansas 72403-1655 • 501/932-0571

REGISTERED PROFESSIONAL ENGINEER — STATE OF ARKANSAS — H. W. GOODWIN JR. — No. 3857

Brackett Krennerich and Associates Inc

AF 32526



WALL FAN #1 AND #2:
COOK 12P150, 1/20 H.P., 1550 RPM, 322 CFM @ 1/8" S.P. PROVIDE STANDARD AUTOMATIC LOUVER (ON INSIDE OF HUMID. STORAGE ROOM) ALUMINUM CONSTRUCTION.

NOTE:
SEE ARCH. REFLECTED CEILING PLAN FOR EXACT LOCATION OF CEILING DEVICES.

second floor plan · laboratory science building
mechanical

SCALE: 1/8"=1'-0"

CONTRACT NO. 10136
M-2
DATE: 6/23/89

ARKANSAS STATE UNIVERSITY
ENGINEERING LABORATORY BUILDING
JONESBORO, ARKANSAS

P.O. Box 1655 • Jonesboro, Arkansas 72403-1655 • 501/932-0571

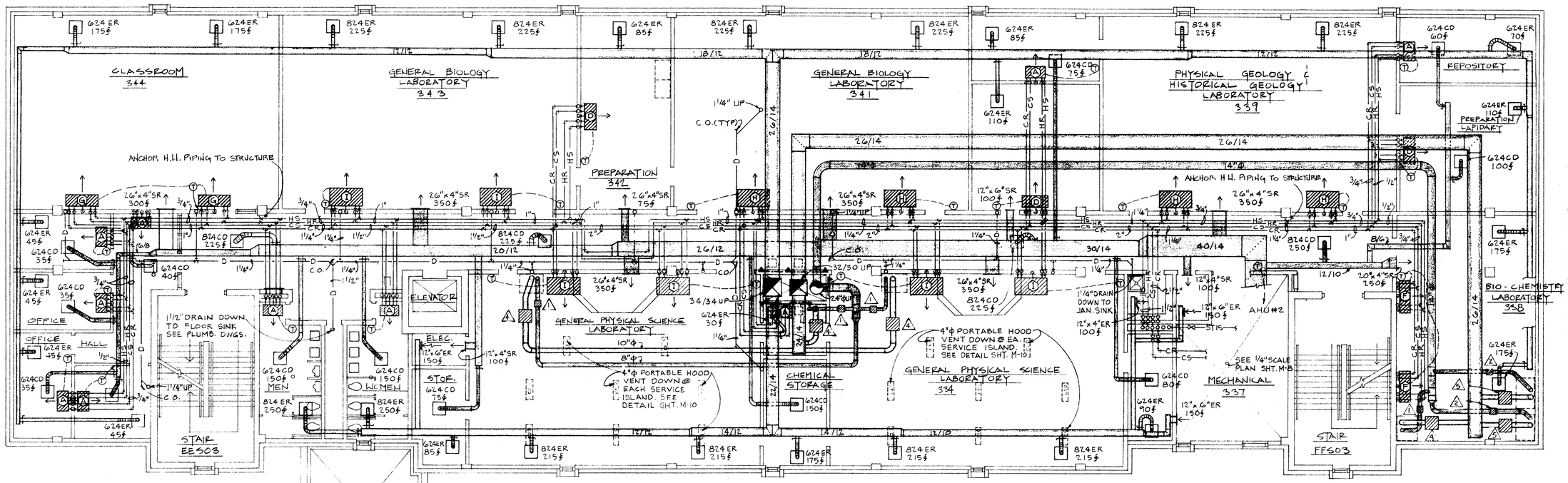
Brackett Krennerich and Associates Inc

AF 32526

COMM. NO 10186

M-3

DATE: 6/23/86



NOTE:
SEE ARCH. REFLECTED CEILING PLAN FOR EXACT LOCATION OF CEILING DEVICES.

n **third floor plan · laboratory science building**
mechanical

SCALE: 1/8"=1'-0"

ADDITION TO
LABORATORY SCIENCES CENTER
ARKANSAS STATE UNIVERSITY
JONESBORO, ARKANSAS

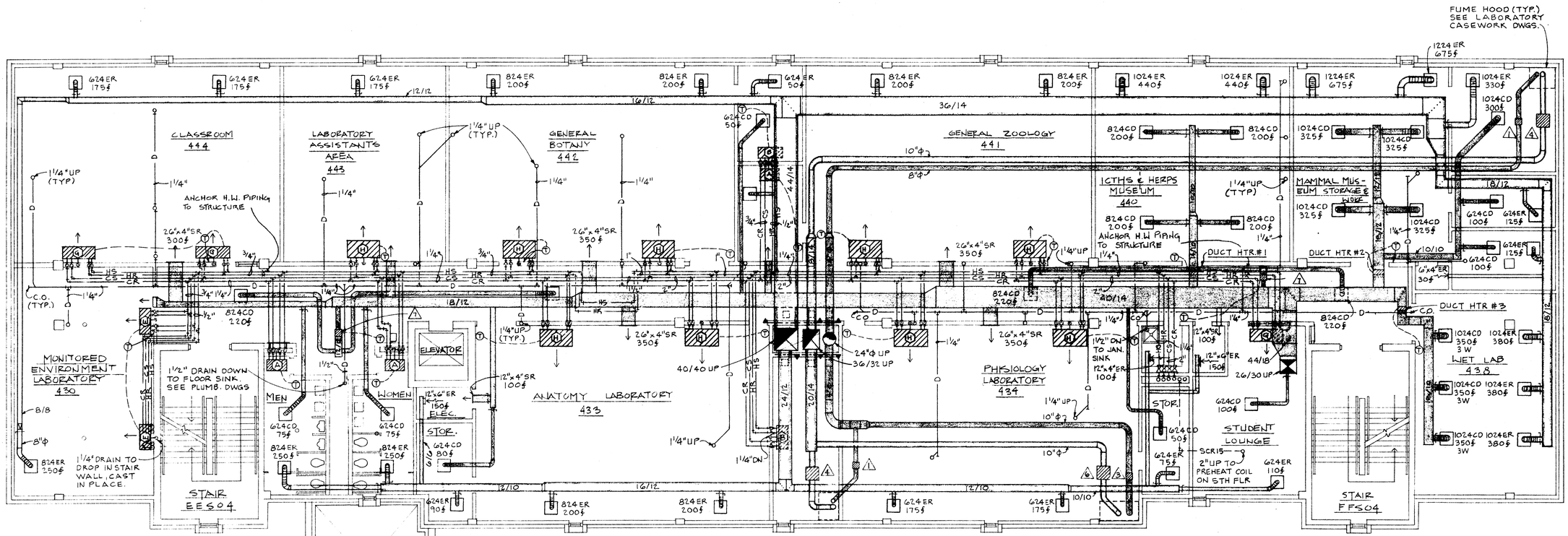
Brackett Krennerich and Associates Inc
Architects
P.O. Box 1655 • Jonesboro, Arkansas 72403-1655 • 501/932-0571

AF 32526

COMM. NO. 10186

M-4

DATE: 6/23/86



NOTE:
SEE ARCH. REFLECTED CEILING PLAN FOR EXACT LOCATION OF CEILING DEVICES.

n **fourth floor plan · laboratory science building**
mechanical

SCALE: 1/8"=1'-0"

ADDITION TO
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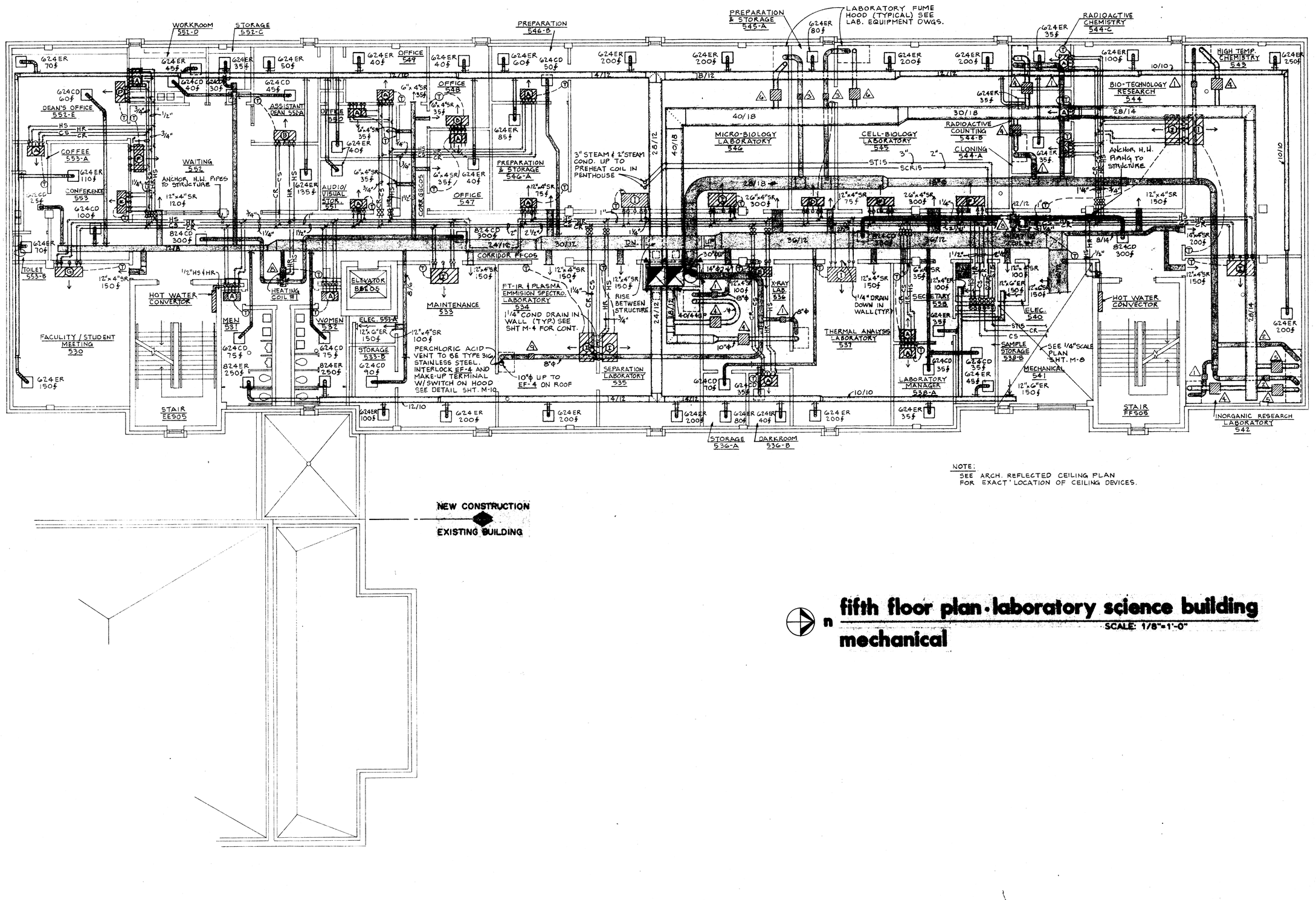
Architects

AF 32526



NOTE:
SEE ARCH. REFLECTED CEILING PLAN FOR EXACT LOCATION OF CEILING DEVICES.

n fifth floor plan · laboratory science building mechanical

SCALE: 1/8"=1'-0"

CONTR. NO. 10184
M-5
DATE: 6/23/86

ADDITION TO
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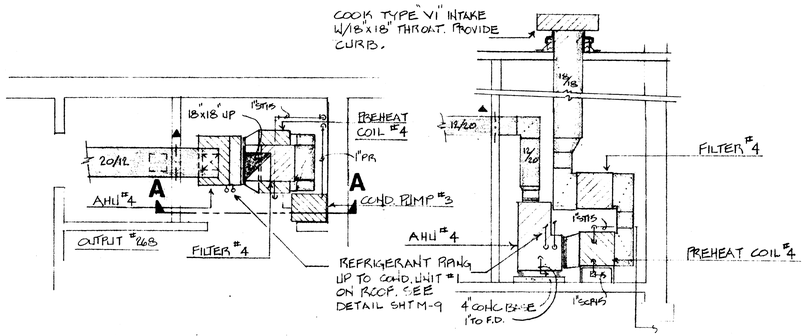

MECH ROOM PLAN
SCALE: 1/4"=1'-0"

SECTION "A-A"
SCALE: 1/4"=1'-0"

NEW CONSTRUCTION

EXISTING BUILDING

4"STEAM, 1½"PR, 3"HS&HR, 6"CS&CR, IN UTILITY TUNNEL

UTILITY TUNNEL - SEE DETAIL ON SHEET MPE-3

624CD 160¢

612ER 50¢ EA

CONNECT 1"STEAM & 1"PR TO STMS & PR PIPES IN TUNNEL

MECH

UTILITY TUNNEL

OSA INTAKE - SEE ARCH DWGS.

20/12

STOR.

SEE ¼" PLAN

DUCT HTR. #4

OUTPUT 260

CONDENSING UNIT #1 ON ROOF

INTAKE

EXISTING COOL. TOWER

ANIMAL ROOMS (TYP FOR 6)

18x4"SR 175¢ EA.

REMOVE 10" COND. AS SHOWN

MECHANICAL RM #273 (SEE ¼" SCALE PLAN)

1024ER 40¢

INPUT

EXIST 10"

16x4"SR 145¢

624ER 145¢

SURGERY

624CD 75¢

INTAKE

UNIT HTR #3

4"ϕ FLUE THRU ROOF

EXHAUST FAN #6

624ER 135¢ (TYP FOR 6)

624ER 80¢

EXIST 12" BELOW GRADE

CHEMICAL STO. #272

624CD 160¢

OFFICE 271

624ER 115¢

EXIST. 10" BELOW GRADE TO REMAIN

16"x14" UP TO EF-5 ON ROOF

16x4"SR. 110¢ (TYP FOR 6)

VERIFY EXACT LOCATION OF EXIST. PIPING

NEW 2"PR, 6"STS, 8"CS & 8"CR BELOW GRADE FROM EXIST MECH. RM. IN BASEMENT OF EXIST. BUILDING, TO NEW MECH. RM #273. CO-ORDINATE WITH EXISTING PIPING.

n

greenhouse . animal care . mechanical floor plan

SCALE: 1/8"=1'-0"

mechanical

COMM. NO. 10186

M-6

DATE: 6/23/86

ADDITION TO
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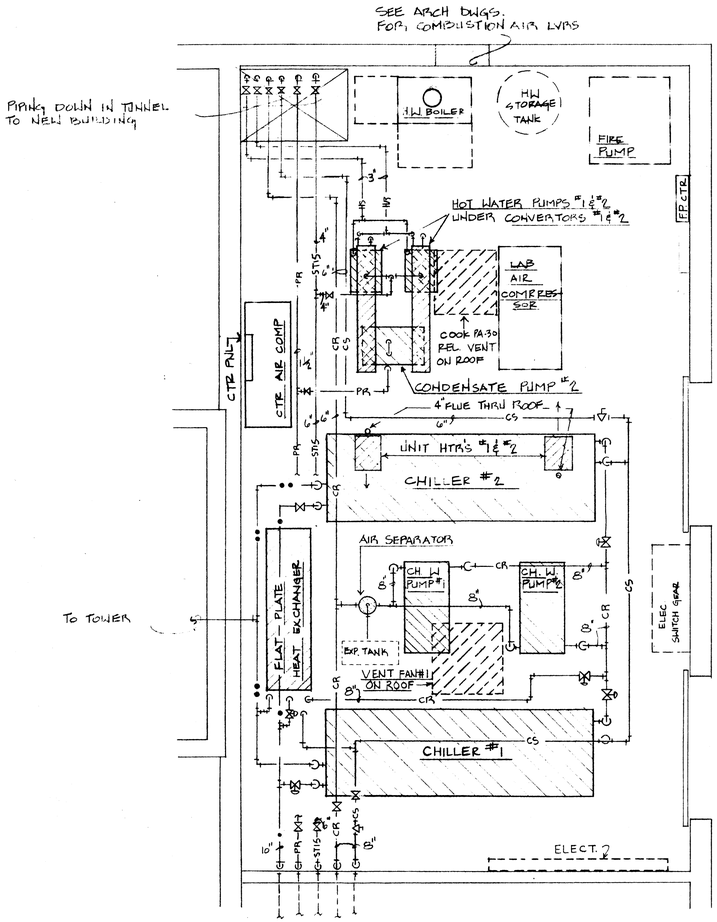
AF 32526

CONTRACT NO. 10184

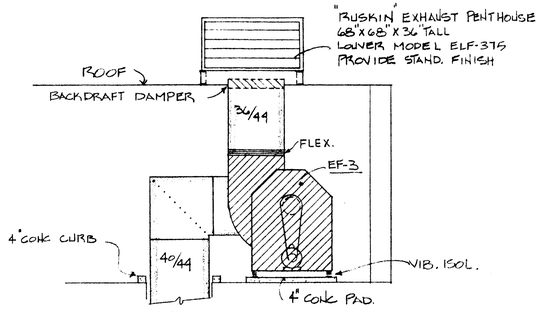
M-7

DATE: 8/23/96



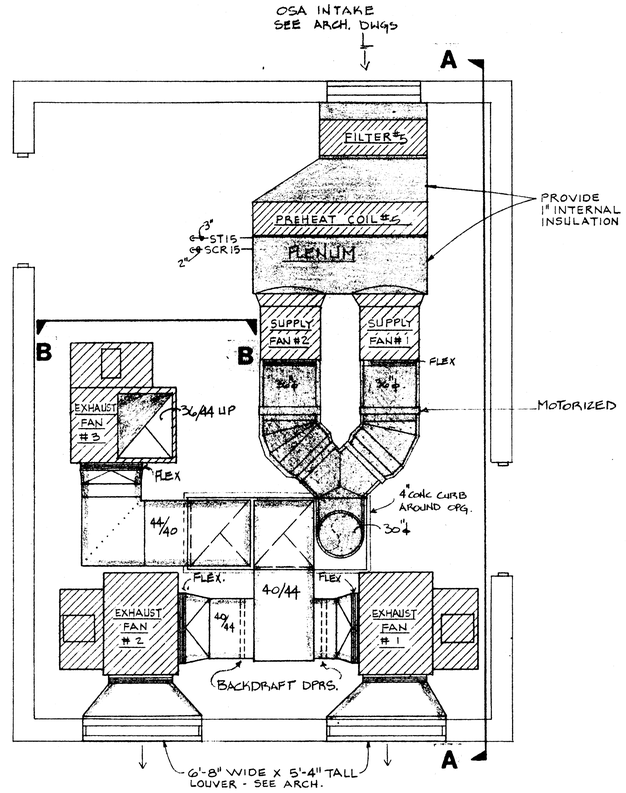
MECHANICAL ROOM # 273

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



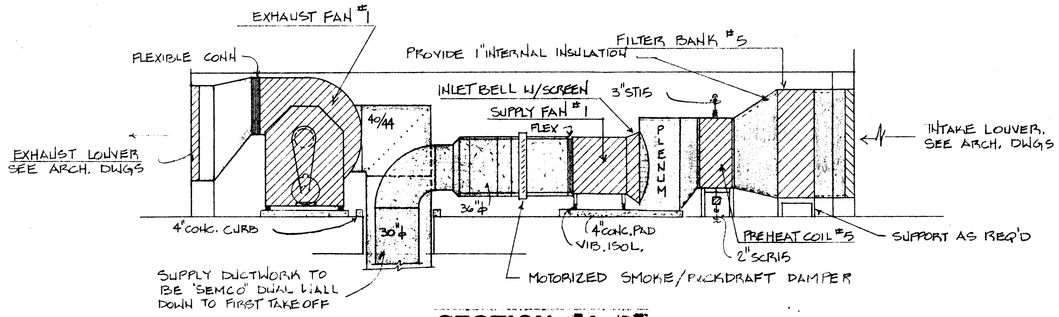
SECTION "B-B"

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



VENTILATION EQUIPMENT ROOM

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



SECTION "A-A"

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

plans & sections of chiller room & penthouse

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

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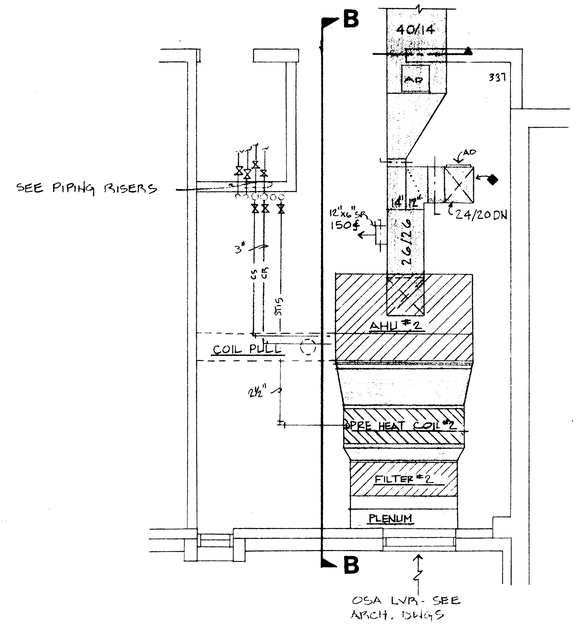
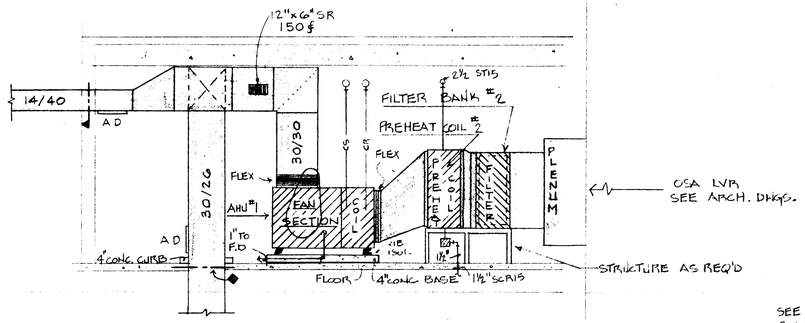
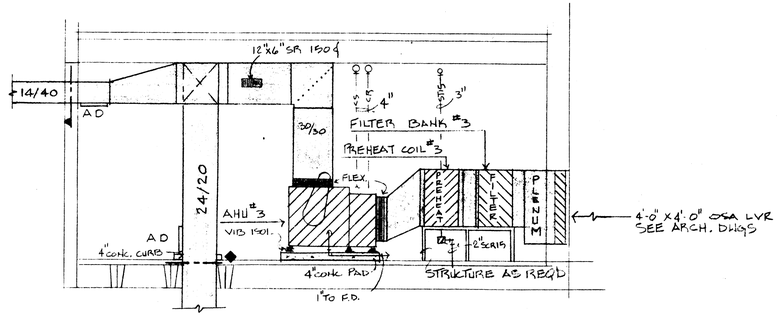
AF 32526



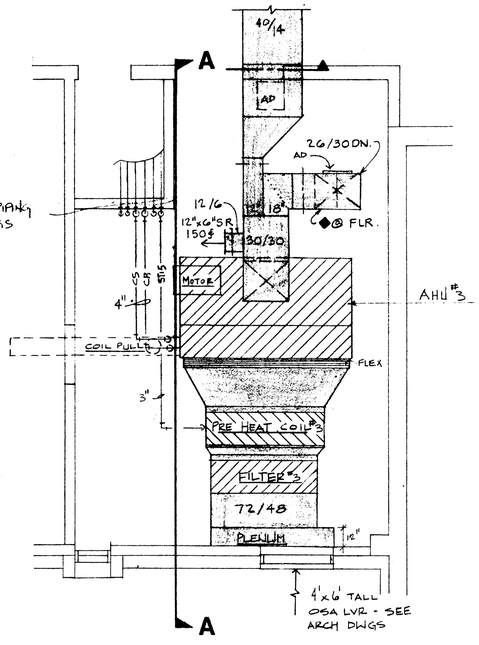
MECH PLAN RM #337



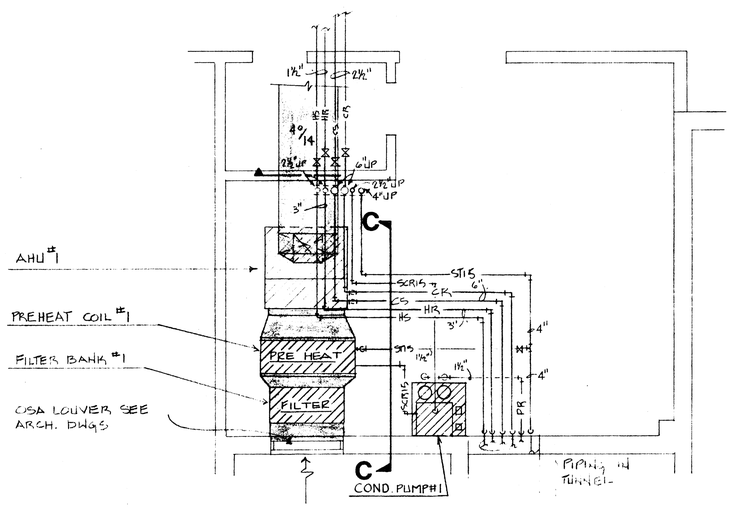
SECTION "A-A"



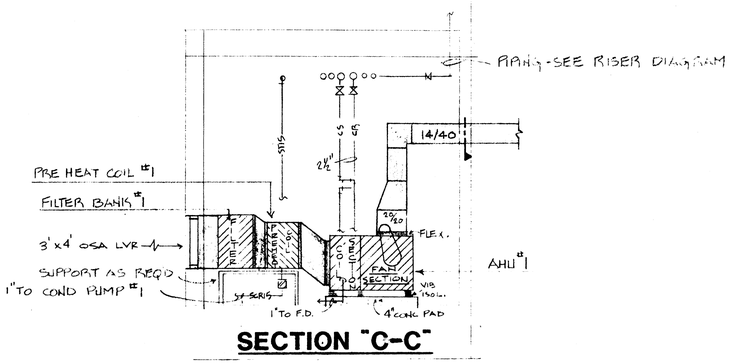
SECTION "B-B"



MECH ROOM #541



MECH ROOM #151



SECTION "C-C"

plans & sections of rooms 151,337,541

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

COMM. NO. 10188

M-8

DATE: 6/23/88

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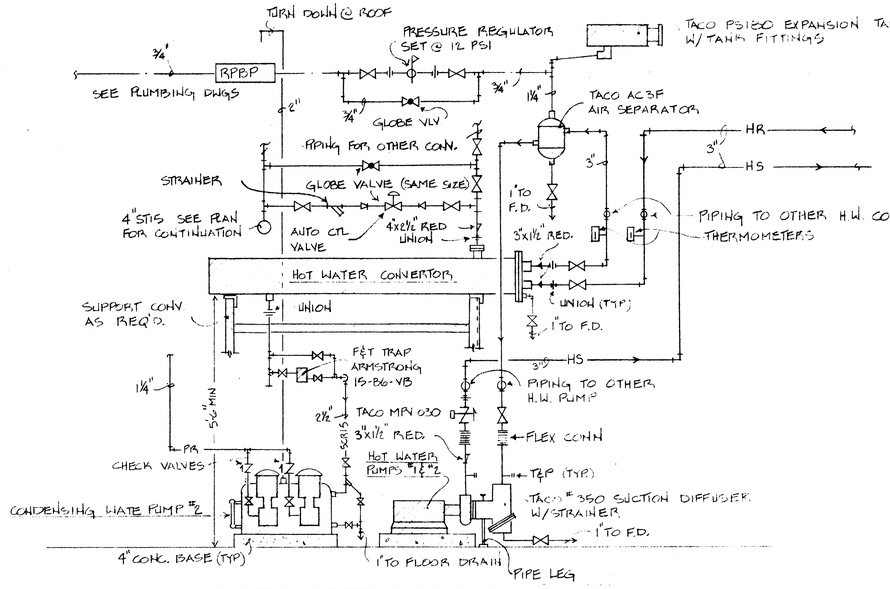
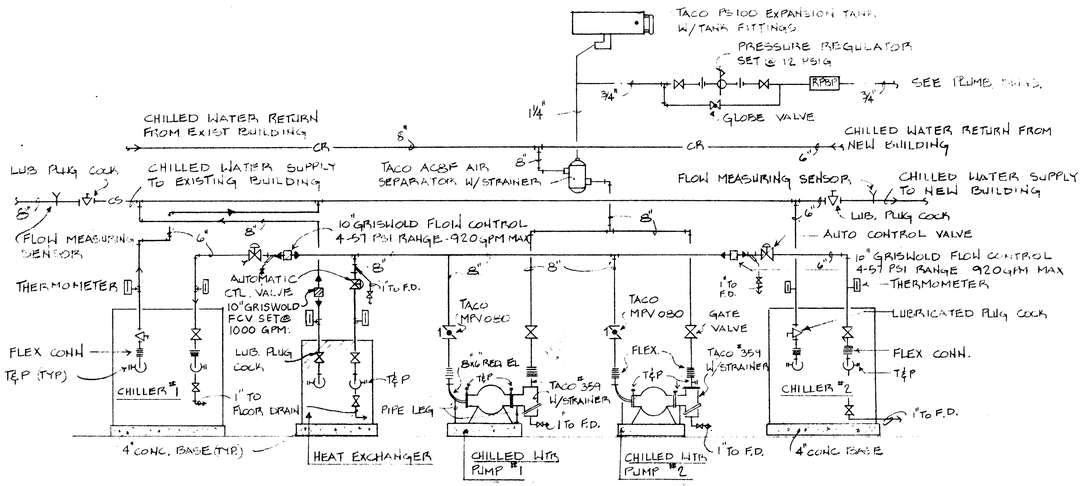
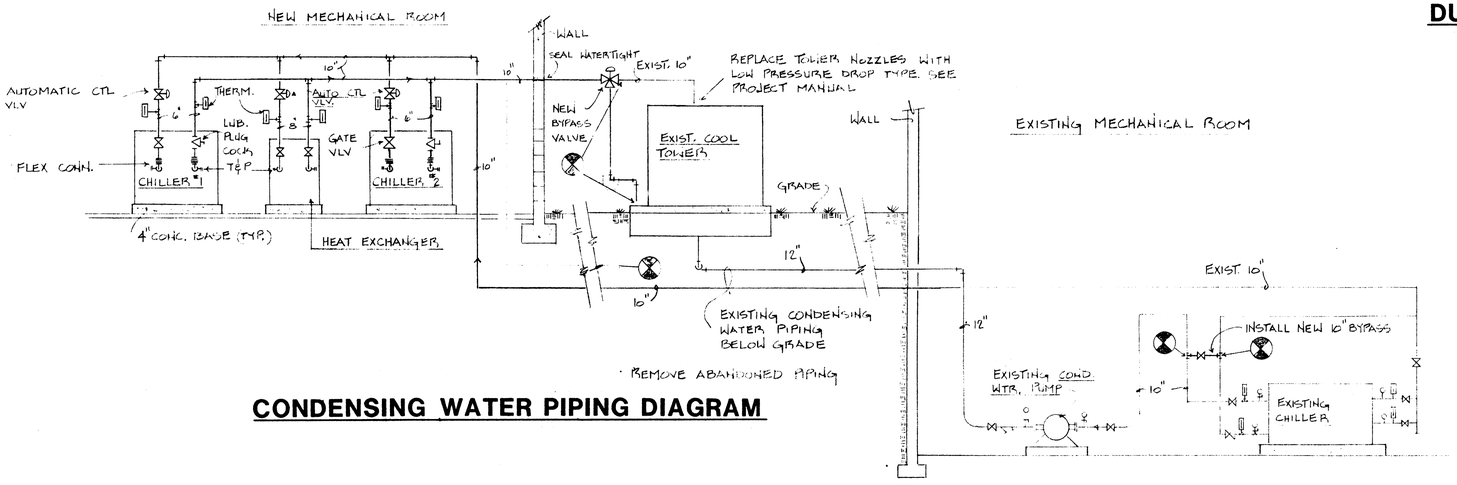
AF 32526



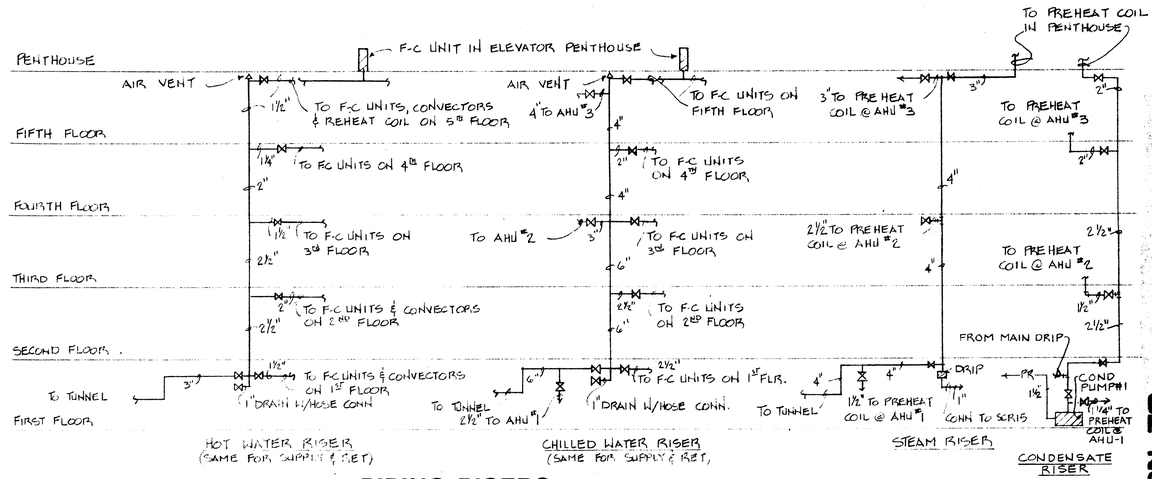
HOT WATER PIPING DIAGRAM



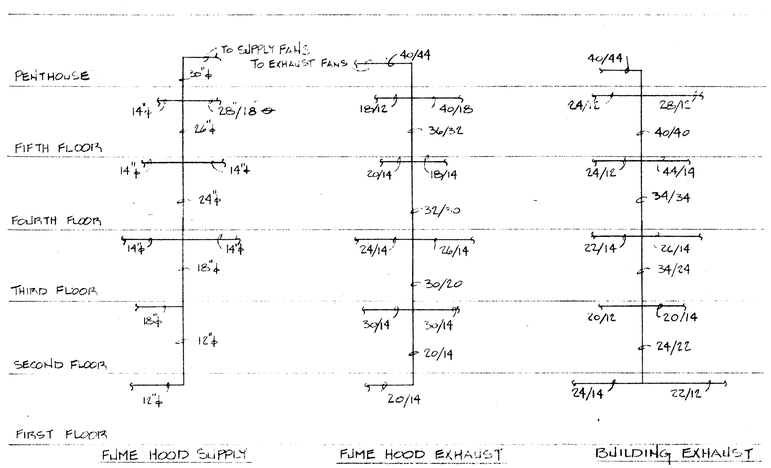
CHILLED WATER PIPING DIAGRAM



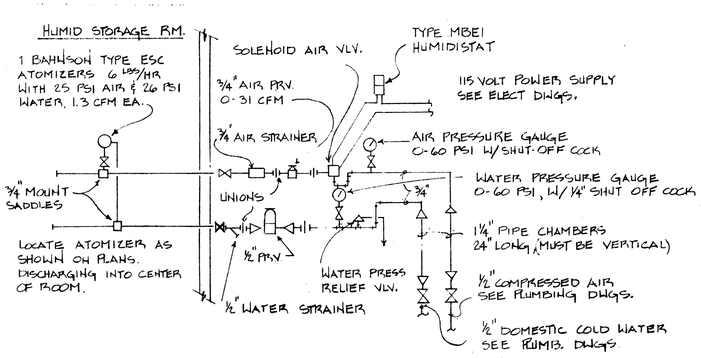
CONDENSING WATER PIPING DIAGRAM



PIPING RISERS



DUCTWORK RISERS



ATOMIZER PIPING DIAGRAM

piping diagrams and risers

SCALE: NONE

COMM. NO. 10186

M-9

DATE: 6/23/86

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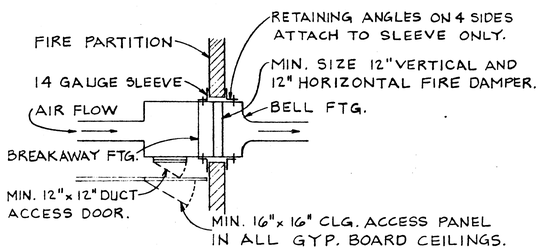
STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER H. M. GOODWIN No. 1657

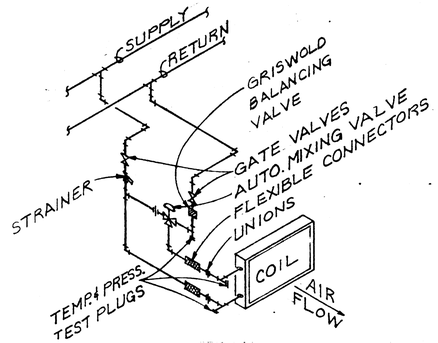
AF 32526



DETAIL - FIRE DAMPER INSTALLATION

NTS FOR ALL DUCTS 12"x12", 12"ϕ OR SMALLER

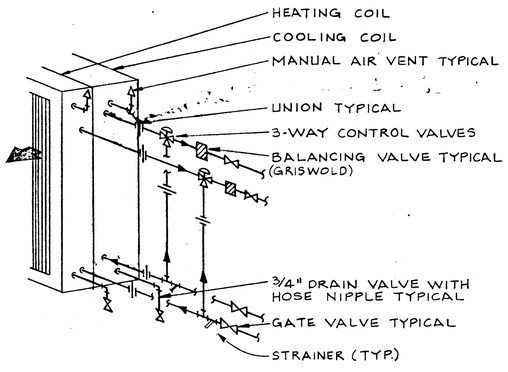
NOTE:
SEE FIRE DAMPER MANUFACTURER'S INSTRUCTIONS FOR INSTALLATION.



WATER COIL AUTOMATIC CONTROL

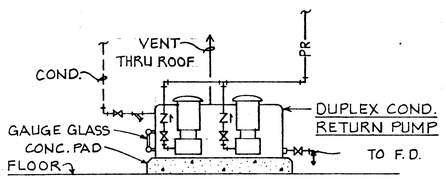
N.T.S.

NOTE:
SUPPLY WATER MUST ENTER LEAVING AIR SIDE OF COIL



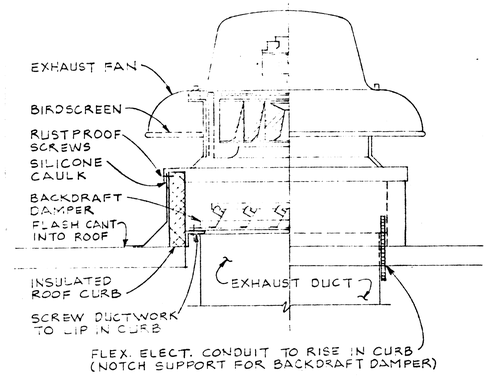
FOUR PIPE COIL

N.T.S. (PIPING CONNECTION TO BE OPPOSITE ENDS)



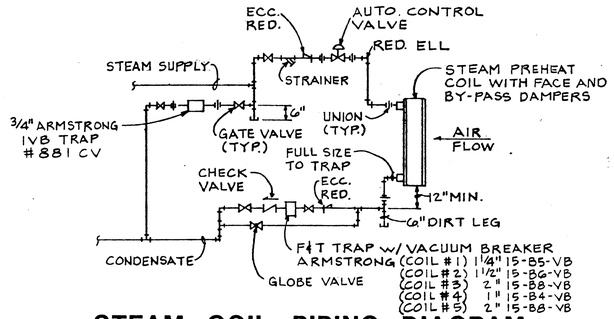
CONDENSATE PUMP PIPING DIAGRAM

N.T.S.



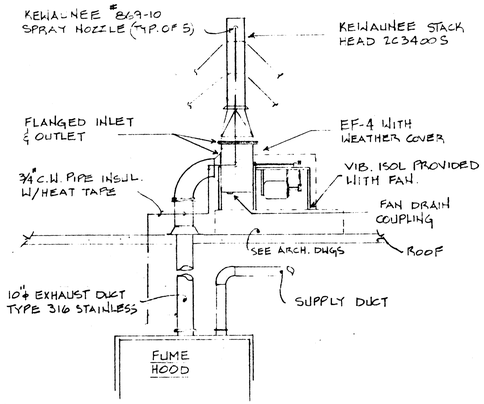
EXHAUST FAN DETAIL

N.T.S.



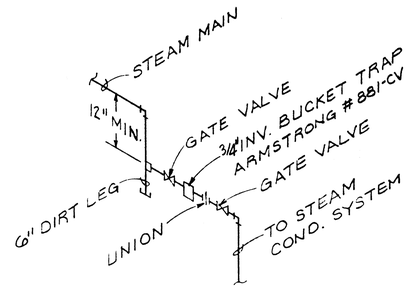
STEAM COIL PIPING DIAGRAM

N.T.S.



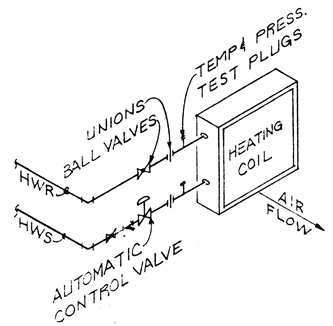
EXHAUST FAN # 4

NTS



MAIN DRIP

N.T.S.

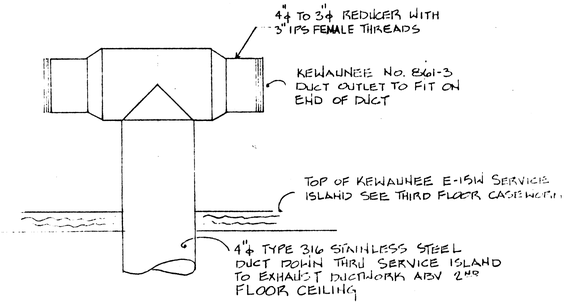


TERMINAL UNIT COIL PIPING DIAGRAM

N.T.S. (HOT WATER REHEAT COILS AND CONVECTORS)

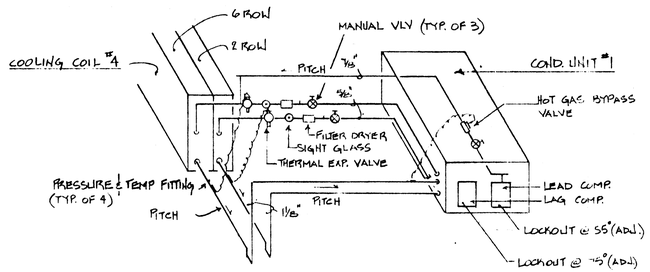
NOTE:
SUPPLY WATER MUST ENTER LEAVING AIR SIDE OF COIL.

NOTE: CO-ORDINATE EXACT REQUIREMENTS WITH LAB EQUIP. SUPPLIER



PORTABLE HOOD CONNECTION DETAIL

NTS



COOLING COIL # 4 PIPING DIAGRAM

NTS

mechanical details

SCALE: NONE

COMM. NO. 10186

M-10

DATE: 6/23/86

ADDITION TO
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AF 32526

COMM. NO 10186

M-11

DATE: 8/23/86

FAN COIL UNIT SCHEDULE

UNIT NUMBER		(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)
MANUFACTURER		TRANE	TRANE	TRANE	TRANE	TRANE	TRANE	TRANE	TRANE	TRANE	TRANE	TRANE	TRANE	TRANE	TRANE
MODEL NUMBER		D26AL02	D26AL03	D26DL03	D26AL04	D26DL04	D26AL06	D26DL06	D26AL08	D26DL08	D26DL10	C34DL04	B22DL10	D22AL04	C30DL10
FAN	TOTAL CFM	200	300	300	400	400	600	600	800	800	1000	400	1000	400	1000
	OUTSIDE AIR, CFM	←			→			SEE	PLANS		→	40	N/A	N/A	N/A
	RPM, HIGH SPEED	1100	1100	1100	1075	1075	1075	1075	775	775	775	1075	775	1075	775
	MOTOR WATTS	85	85	85	75	75	90	90	140	140	170	75	170	75	170
	VOLTAGE/PHASE	115/1Φ	115/1Φ	115/1Φ	115/1Φ	115/1Φ	115/1Φ	115/1Φ	115/1Φ	115/1Φ	115/1Φ	115/1Φ	115/1Φ	115/1Φ	115/1Φ
COOLING COIL	ENTERING AIR TEMP., DB/WB	75/63	75/63	75/63	75/63	75/63	75/63	75/63	75/63	75/63	75/63	75/63	80/67	80/67	80/67
	ENTERING WATER TEMP.	45	45	45	45	45	45	45	45	45	45	45	45	45	45
	CAPACITY, MBH, SENSIBLE/TOTAL	4.2/4.7	5.5/6.6	5.9/7.6	7.3/9.4	8.0/10.2	10/12.5	10.3/13.8	14.6/17.1	17.9/21.8	20.9/25.6	8.0/10.2	23/33.9	11.4/13.9	23.7/33.3
	FLOW RATE, GPM	1.0	1.4	1.5	1.9	2.1	2.6	2.9	3.5	4.4	5.2	2.1	6.9	2.3	6.2
	WATER FRICTION, FT.	0.7	2.5	4.5	2.9	5.2	8.3	10.5	8.7	3.2	3.7	5.2	8.9	4.9	5.9
HEATING COIL	ENTERING AIR TEMP., DB	70	70	70	70	70	70	70	70	70	70	70	70	70	70
	ENTERING WATER TEMP.	180	180	180	180	150	180	180	180	180	180	180	180	150	180
	CAPACITY, MBH	5.0	9.0	9.0	12.0	12.0	14.0	14.0	24.0	24.0	32.0	12.0	38.0	12.0	32.0
	FLOW RATE, GPM	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.0	1.0	1.0	0.5	1.5	0.5	1.0
	WATER FRICTION, FT.	0.3	0.3	0.3	0.4	0.4	0.5	0.5	0.75	0.75	0.75	0.4	1.4	1.0	0.75
CABINET	MODEL	HORIZ.	HORIZ.	HORIZ.	HORIZ.	HORIZ.	HORIZ.	HORIZ.	HORIZ.	HORIZ.	HORIZ	HORIZ	VERT.	VERT	HORIZ.
	OUTLET	QUAD. DIFFUSER	QUAD. DIFFUSER	QUAD. DIFFUSER	QUAD. DIFFUSER	QUAD. DIFFUSER	QUAD. DIFFUSER	QUAD. DIFFUSER	QUAD. DIFFUSER	QUAD. DIFFUSER	QUAD. DIFFUSER	DUCT COLLAR	QUAD DIFFUSER	QUAD DIFFUSER	DUCT COLLAR
	INLET	BOTT. BACK	BOTTOM BACK	BOTTOM BACK	BOTTOM BACK	BOTTOM BACK	BOTTOM BACK	BOTTOM BACK	BOTTOM BACK	BOTTOM BACK	BOTTOM BACK	DUCT COLLAR	TOE SPACE	TOE SPACE	DUCT COLLAR
RUNOUT PIPE SIZES	SUPPLY & RETURN CHILL/HOT-O.D.	5/8 - 1/2"	5/8 - 1/2"	5/8 - 1/2"	5/8 - 1/2"	5/8 - 1/2"	5/8 - 1/2"	5/8 - 1/2"	7/8 - 1/2"	7/8 - 1/2"	7/8 - 1/2"	5/8 - 1/2"	7/8 - 1/2"	5/8 - 1/2"	7/8 - 1/2"
	DRAIN	7/8"	7/8"	7/8"	7/8"	7/8"	7/8"	7/8"	7/8"	7/8"	7/8"	7/8"	7/8"	7/8"	7/8"
ACCESSORIES		①②③④⑤													

① BAKED ENAMEL FINISH
② 3-WAY MIXING VALVE
③ 2 GATE VALVES
④ STRAINER
⑤ FLOW CONTROL

FAN SCHEDULE

FAN NUMBER	EF-1	EF-2	EF-3	EF-4	EF-5	EF-6	VENT #1
MANUFACTURER	COOK	COOK	COOK	KEWANNEE	COOK	COOK	COOK
MODEL NUMBER	CKS445	CKS445	CKS445	263306DB	120RAB	24P1B	120LFS
CFM	21765	21765	25245	1075	1650	1932	2606
STATIC PRESSURE, IN.	3	3	2	1	3/8	1/8"	1/2"
FAN RPM	660	660	625	2008	1715	645	1874
MOTOR HP	15	15	15	3/4	1/3	1/6	3/4
VOLTAGE	480	480	480	480	120	120	480
PHASE	3	3	3	3	1	1	3
MOUNTING	PAD	PAD	PAD	ROOF	ROOF	WALL	ROOF
DRIVE	BELT	BELT	BELT	BELT	BELT	BELT	BELT
ACCESSORIES	①③⑥⑦	①③⑥①	①③	③⑧⑨⑩	①③	③④	③④
INTERLOCK WITH	FUME HOODS	FUME HOODS			AHU #4		

① BACKDRAFT DAMPER
② MANUAL STARTER
③ MAGNETIC STARTER
④ THERMOSTAT
⑤ FIRESTAT
⑥ EISENHEISS COATING
⑦ INLET VANES W/EISENHEISS COATING
⑧ FLANGED INLET ADAPTER (KEWANEE #263440)
⑨ STACK HEAD (KEWANEE #263400-S)
⑩ WEATHER COVER & VIB ISOL

FILTER SCHEDULE

FILTER NO.	SYSTEM	MANUFACTURER AND MODEL	QUANTITY AND SIZE	HOUSING	EFFICIENCY
#1	AHU #1	4" FARR 30/30	2-24"x24" & 2-12"x24"	FARR 3P GLIDEPACK	30%
		FARR RIGA FLO 100	2-24"x24" & 2-12"x24"		85%
#2	AHU #2	4" FARR 30/30	3-24"x24" & 3-12"x24"		30%
		FARR RIGA FLO 100	3-24"x24" & 3-12"x24"		85%
#3	AHU #3	4" FARR 30/30	6-24"x24"		30%
		FARR RIGA FLO 100	6-24"x24"		85%
#4	AHU #4	4" FARR 30/30	1-24"x24"		30%
		FARR RIGA FLO 100	1-24"x24"		85%
#5	HOOD SUPPLY	4" FARR 30/30	15-24"x24"		30%
		FARR RIGA FLO 100	15-24"x24"		85%

AIR HANDLING UNIT SCHEDULE

UNIT NUMBER		AHU-1	AHU-2	AHU-3	AHU-4
MANUFACTURER		TRANE	TRANE	TRANE	TRANE
MODEL NUMBER		#1GHDT			
SUMMER DESIGN CONDITIONS	OUTSIDE TEMPERATURE, DB/WB	94/77	94/77	94/77	94/80
	INSIDE TEMPERATURE, DB/WB	75/63	75/63	75/63	75/63
WINTER DESIGN CONDITIONS	OUTSIDE TEMPERATURE	15	15	15	15
	INSIDE TEMPERATURE	75	75	75	75
FAN	TOTAL AIR THRU UNIT, CFM	4500	8255	12270	1650
	MINIMUM OUTSIDE AIR, CFM	4500	8255	12270	1650
	OUTLET VELOCITY, FPM	—	—	—	—
	STATIC PRESSURE, IN., EXT./TOTAL	2.4/3.2	2.7/3.6	2.6/3.45	1.75/3.35
	HORSEPOWER, BRAKE/MOTOR	3.7/5.0	7.4/10.0		1.8/2.0
	VOLTAGE/PHASE	480/3Φ	480/3Φ	480/3Φ	208/3Φ
COOLING COIL	TOTAL AIR THRU COIL, CFM	4500	8255	12270	1650
	ENTERING AIR TEMP., DB/WB	94/77	94/77	94/77	94/80
	LEAVING AIR TEMP., DB/WB	53/52.9	53/52.9	53/52.9	54.9/54.8
	CAPACITY, MBH, SENSIBLE/TOTAL	/376.7	/683.7	/1016.2	/151.7
	ENTERING WATER TEMP.	45	45	45	—
	FLOW RATE, GPM	74.5	136.7	203.2	—
	WATER FRICTION, FT.	7.6	11.9	14.1	—
	FACE VELOCITY, FPM	461	470	510	550
	AIR FRICTION, IN.	0.79	0.91	0.85	1.6
	TUBE ROWS/FINS PER INCH	8/192	8/127	8/129	8/138
	SUCTION TEMPERATURE	—	—	—	*42.5°F/43.7

*CC-4 IS TO BE CIRCUITED AS A TWO ROW & SIX ROW COIL, SEE DIAGRAM SHT M-10

STEAM CONDENSATE PUMP SCHEDULE

DESIGNATION	MANUFACTURER & MODEL NO.	RECEIVER	CAPACITY (FT³ EDR)	DISCHARGE PRESS.	GPM	H.P.	RPM	V/Φ
COND. PUMP #1	PACO LA 1070-5	30 GAL.	15,000	20 PSI	22.5	2-3/4	1750	460/3
COND. PUMP #2	PACO LA 1070-5	15 GAL.	10,000	20 PSI	15	2-1/2	1750	460/3
COND. PUMP #3	PACO LA 1070-5	15 GAL	2000	20 PSI	3	2-1/2	1750	208/1

PROVIDE DUPLEX CONTROL PANEL FOR EACH PUMP

PREHEAT COIL SCHEDULE

DESIGNATION	MANUFACTURER	MODEL NO.	CFM	FACE VELOCITY	APD	MBH	EAT	LAT	NUMBER ROWS
PREHEAT COIL #1	WING	IFB-B-54	4540	442	.19	370	0	75	1
PREHEAT COIL #2	WING	IFB-C-72	8255	550	.27"	671.7	0	75	1
PREHEAT COIL #3	WING	IFB-E-72	12,270	466	.19	998.5	0	75	1
PREHEAT COIL #4	WING	IFB-A-36	1650	351	.13	134.3	0	75	1
PREHEAT COIL #5	WING	IFB-D-114	16465	490	.23	1104.4	0	60	1

DUCT HEATER SCHEDULE

DESIGNATION	MANUFACTURER	CFM	KW	EAT°	LAT°	VOLT/Φ	DUCT SIZE
DUCT HTR #1	ELECTRIC HEATER CO., INC.	8255	5	55	75	480/3	14/12
DUCT HTR #2		12270	8	55	75	480/3	18/12
DUCT HTR #3		16500	7	55	75	480/3	18/10
DUCT HTR #4		1650	12	55	75	480/3	20/12

TERMINAL BOXES

DESIGNATION	MANUFACTURER	MODEL	SIZE	CFM	HW COIL
1	BARBAIRE	HHPE	8"	505	N/A
2	BARBAIRE	HHPE	8"	675	N/A
3	BARBAIRE	HHPE	8"	840	N/A
4	BARBAIRE	RRPE	10"	720	N/A
5	BARBAIRE	RRPE	10"	960	N/A
6	BARBAIRE	RRPE	10"	1200	N/A
7	BARBAIRE	HHPE	7"	400	N/A
8	BARBAIRE	HHPW	8"	600	1 ROW/GPM 16.1 MBH 3004
9	BARBAIRE	HHPE	8"	755	N/A

EQUIPMENT SCHEDULE

CHILLERS 1 & 2: TRANE CVHE-25F-AA-2F-2371CE-13DA, 250 TONS, 155KW, 0.620 KW/TON MAX. 1410 LRA, 214 RLA, 480V/3 PHASE. EVAP: 45 LWT, 52 EWT, 857 GPM @ 27.8'WPD, .0005 FOULING FACTOR COND: 85 EWT, 94.5 LWT, 750 GPM @ 19.1'WPD, .0005 FOULING FACTOR

CHILLED WATER PUMPS 1 & 2; PACIFIC PUMP CO. TYPE KP, MODEL 6012, 1700 GPM @ 120'TDH, 1750 RPM 75 HP, 480V/3 PHASE

HOT WATER PUMPS 1 & 2; PACIFIC PUMP CO. MODEL 1595-7, 100 GPM, @ 90' TDH, 1750 RPM, 5 HP, 480V/3 PHASE

HEAT EXCHANGER; TRANTER SUPERCHANGER UX-496-HP-126 1000 GPM CHILLED WATER, 56 EWT, 50 LWT, 15.9' WPD. 1500 GPM COND. WATER, 47 EWT, 51 LWT, 34' WPD.

HOT WATER CONVERTER 1 @ 2; TACO G6214S, 100 GPM, 140 EWT, 180 LWT, 10 PSI STEAM, 7.3' WPD.

CONDENSING UNIT 1; TRANE RAUC-C12-4-A, 151.7 MBH, 100 AMBIENT, MATCH W/CC-4, 16.73 KW @ ARI, 480V/3 PHASE PROVIDE HOT GAS BYPASS

UNIT HTRS. 1,2 & 3; REZNOR MODEL XL-60, 60 MBH INPUT 46.8 MBH OUTPUT, 680 CFM, 1/50 HP, 120V/1 PHASE

SUPPLY FANS 1 & 2; JOY VANEAXIAL SERIES 1000, MODEL 36-26-1770, 16965 CFM, 5" SP, 5.2" TP, 20 HP, 480V/3 PHASE PROVIDE INLET BELL WITH SCREEN

HOT WATER CONVECTOR; TRANE TYPE "20 S", 2 ROWS, 1 1/4" PIPE, 2 1/2" X 5 1/4" FINS, 180 EWT, 1900 BTU/FT, ELEMENT 4' LONG.

mechanical equipment schedule

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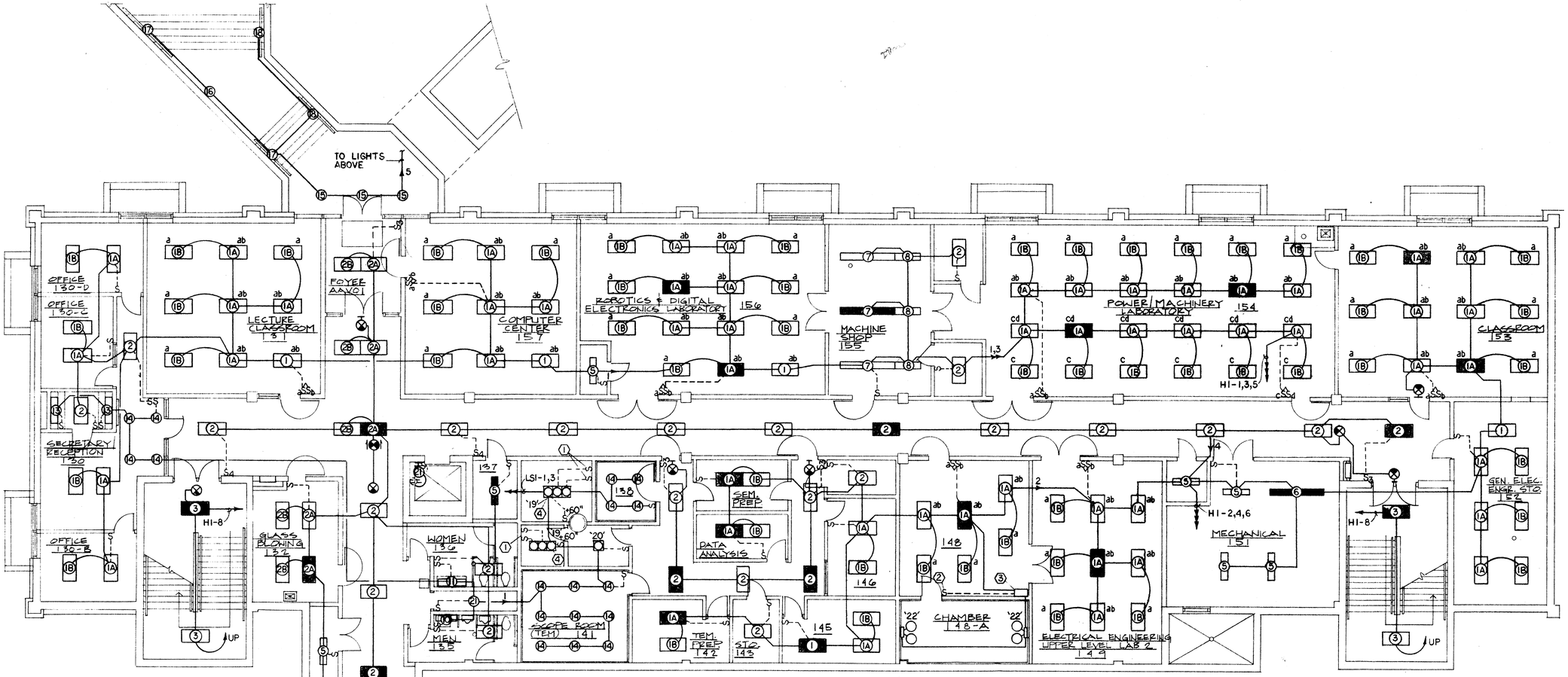

NEW CONSTRUCTION

EXISTING BUILDING

FIXTURE SCHEDULE

TYPE	FIXTURE	VOLTAGE	LAMPS	NOTES
1	METALUX 2GM-340A19/156	277V	3-F40RS	1
1A	METALUX A-QCM-02-*-2GM-340A19/156	277V	3-F40RS	1,2
1B	METALUX QCS-02-X-2GM-340A19/156	277V	3-F40RS	1
2	METALUX 2GS-340A	277V	3-F40RS	1
2A	METALUX A-QCM-02-*-2GS-340A	277V	3-F40RS	1,2
2B	METALUX QSC-02-X-2GS-340A	277V	3-F40RS	1
3	METALUX 2M-340A	277V	3-F40RS	1
4	METALUX 2GM-240A	120V	2-F40RS	1
5	METALUX SS-240	277V	2-F40RS	1
6	METALUX 8TSS-240	277V	4-F40RS	1
7	METALUX DIVM-296HD	277V	2-F96HD	1,3
8	METALUX DIVM-248HD	277V	2-F48HD	1,3
9	METALUX VT-240DR-WL	277V	2-F40RS	1
10	VISTA 3302-3R-KR	120V	2-F30RS	1
11	VISTA ATC-3302-4R-KR	120V	2-F40RS	1
12	VISTA ATC-3302-2TH-KR	120V	2-F20TS	1
13	ALKCO 3246	120V	2-F40RS	1
14	PRESCOLITE 1220-972	120V	1-150R40	
15	PRESCOLITE 1227-982	120V	1-Q250PAR38	12
16	KIM LLF-10	120V	1-70HPS	4,6
17	KIM LLF-20	120V	1-70HPS	4,6
18	KIM LLF-30	120V	1-70HPS	4,6
19	VISTA FL1003-RE	120V	1-150A21 2-15A15	5
20	VISTA FL1001-RE	120V	1-15A15	5
21	P&S 44	120V	1-100A21	13
22	DUAL-LITE REMP/2	12V	2-25 HALOGEN	11
23	LINEAR C9210	277V	3-F40RS	1,3,4
24	LINEAR C9212	277V	6-F40RS	1,3,4
25	PRESCOLITE 1158-985	120V	1-Q250PAR38	3,7,12
26	PRESCOLITE 1271-750	120V	1-75R30	
27	SAME AS 1A EXCEPT WITH PARA-LITE PL1-24SP-* LENS			1,2,8
28	SAME AS 1B EXCEPT WITH PARA-LITE PL1-24SP-* LENS			1,8
29	METALUX CR-240A	277V	2-F40RS	1
30	PRESCOLITE T103	120V	1-75R30	4,9
31	WIDELITE PAX-W-G-*	277V	BY MFGR	10
32	LPI CR24G87R440	277V	4-F40RS	1
33	PRESCOLITE WB-2	120V	1-100A19	

NOTES

1. VERIFY EXACT LOCATION OF SWITCHES WITH OWNER.
2. INSTALL SWITCH IN SUPPLY CIRCUIT TO BATTERY PACK. PROVIDE LABEL "TURN OFF IF CHAMBER ROOM IS NOT IN USE".
3. BATTERY PACK DUAL-LITE 12-EDC-X-120S-277V.
4. COMPARTMENT WITH GLASS LENS SWITCHED AT DOOR.
5. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN FOR EXACT LOCATION OF FIXTURES. TYPICAL ALL FLOORS.

n first floor plan · laboratory science building lighting

SCALE: 1/8"=1'-0"

FIXTURE SCHEDULE NOTES

1. ENERGY SAVING BALLAST GENERAL ELECTRIC WMII OR ADVANCE MARK III OR EQUAL WITH GENERAL ELECTRIC WMII LAMPS OR EQUAL.
2. LENGTH OF FLEX AS REQUIRED.
3. 10'-0" MOUNTING HIGH.
4. FINISH TO BE SPECIFIED BY ARCHITECT.
5. FILTER TYPES TO BE SPECIFIED BY OWNER.
6. MOUNTED 21" ABOVE STAIR.
7. BRONZOTIC FINISH.
8. FINISH OF LENS TO BE SPECIFIED BY ARCHITECT.
9. WITH TWO SINGLE CIRCUIT, 12' TRACK SECTIONS - PRESCOLITE TS 12
10. SINGLE OR DOUBLE FACE, ARROWS AND MOUNTING AS SHOWN ON PLANS.
11. WITH BATTERY PACK DUAL-LITE 12-EDC-X-120S-277V (LOCATED REMOTELY).
12. SUITABLE FOR DAMP LOCATION.
13. FIXTURES IN STEAM TUNNEL AND CHASE WITH WIRE GUARD.

COMM. NO. 10186

E-1

DATE: 6/23/86

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E - 2

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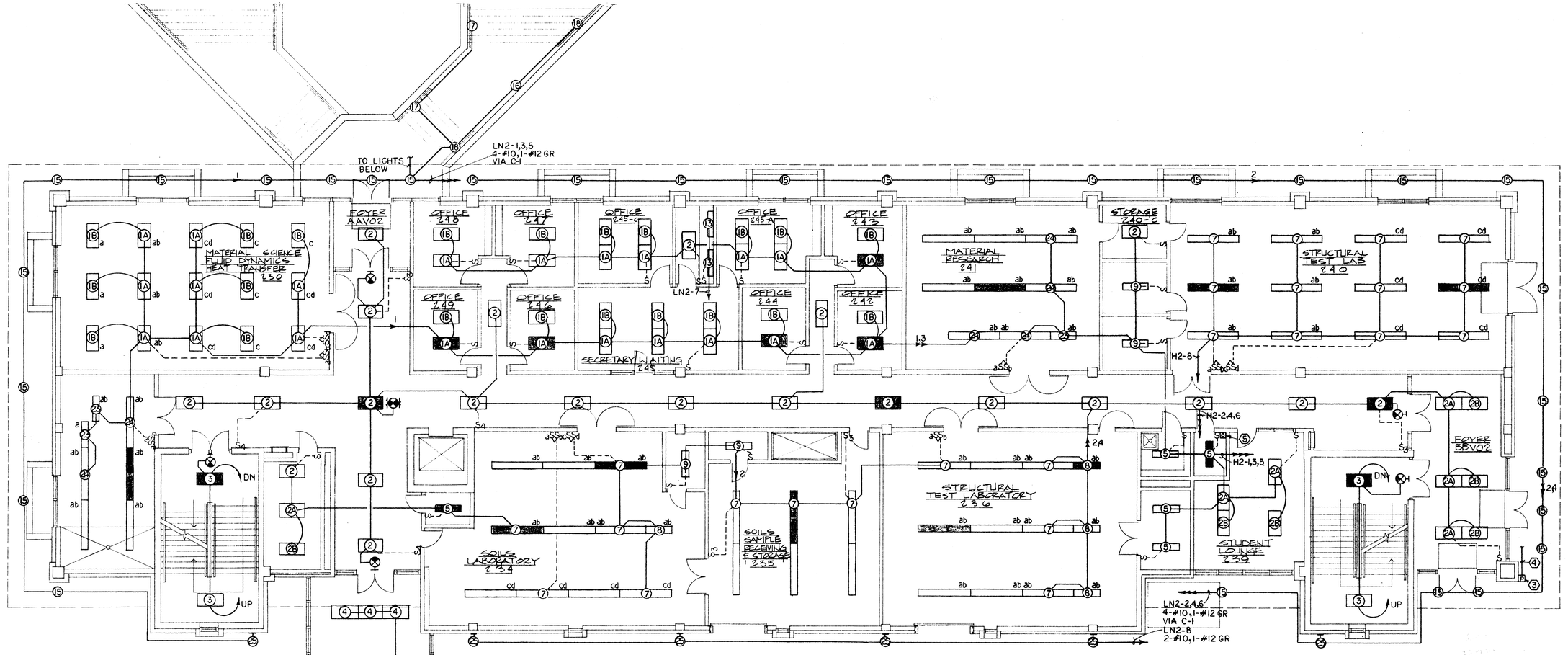

NOTES

1. CONNECT TO EXISTING CIRCUIT.
2. EXISTING LIGHT FIXTURE AND SWITCH TO BE REMOVED.
3. PHOTOCELL P-1 MTD. 15'-0" ABOVE GRADE.
4. 4-#12 IN 3/4" C TO CONTACTOR C-1. SEE DET. 3 SHEET E-25.
5. CONTACTOR C-1 - SEE DET. 3 SHEET E-25.

second floor plan · laboratory science building lighting

SCALE: 1/8"=1'-0"

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E - 3

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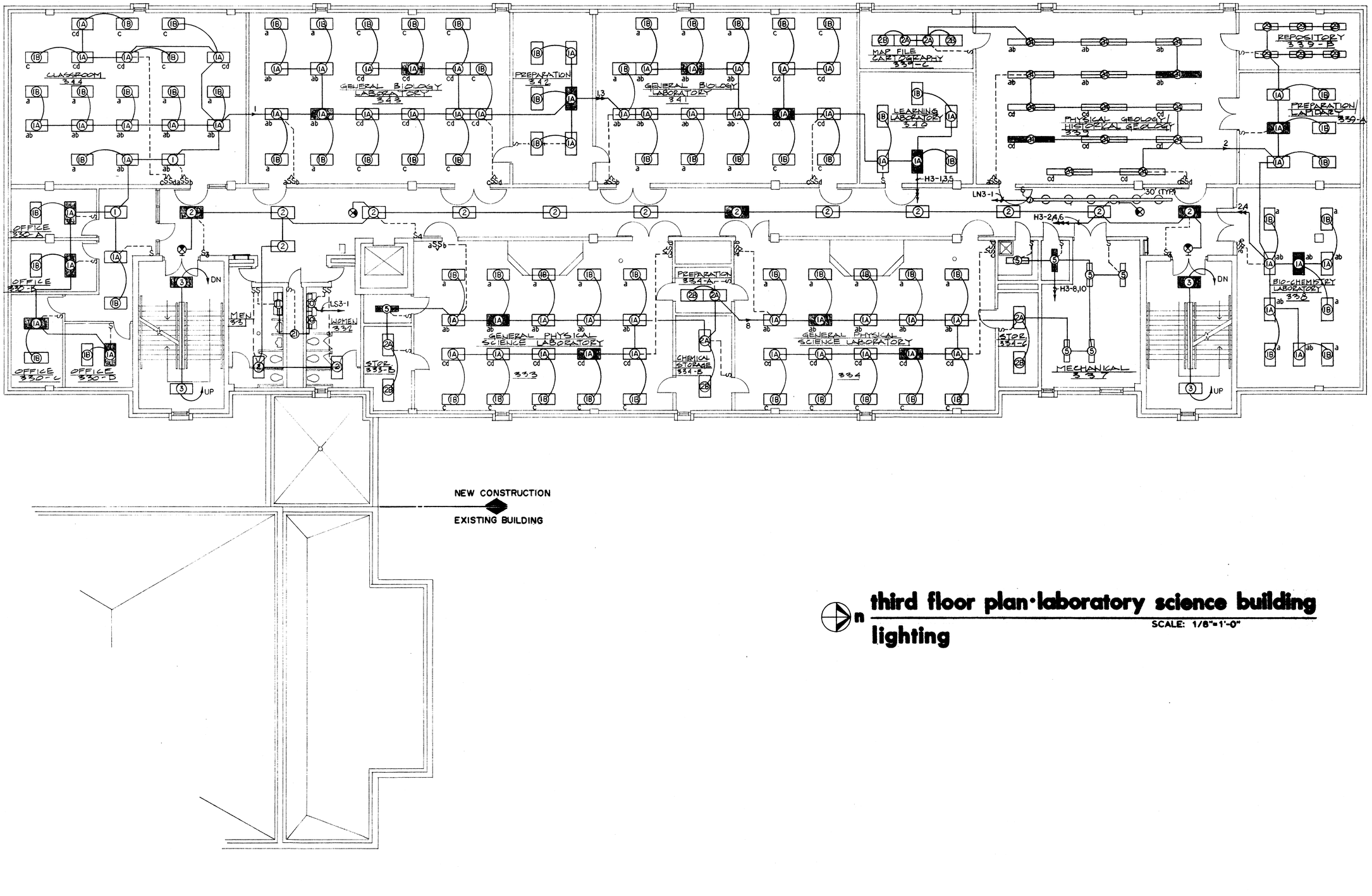

n **third floor plan·laboratory science building lighting**

SCALE: 1/8"=1'-0"

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COMM. NO 10186

E - 4

DATE: 6/23/86

CLASSROOM 444

LABORATORY ASSISTANTS 443

GENERAL BOTANY 442

GENERAL ZOOLOGY 441

ITCHS & HEPPS MUSEUM 440

MAMMAL MUSEUM STORAGE & WORK

PREP LAB 439-D

DARK STOR. 439-C

STORAGE 439-B

LIFT LAB 438

MONITORED ENVIRONMENT LAB 430

MEN 431

WOMEN 432

ELEC.

STOR 433-B

ANATOMY LABORATORY 433

PREPARATION & STORAGE 434-A

PHYSIOLOGY LABORATORY 434

STUDENT LOUNGE 437

H4-1,3,5

H4-8,10

H4-24,6

LS4-1

DN

UP

NEW CONSTRUCTION

EXISTING BUILDING

n **fourth floor plan · laboratory science building**
lighting

SCALE: 1/8"=1'-0"

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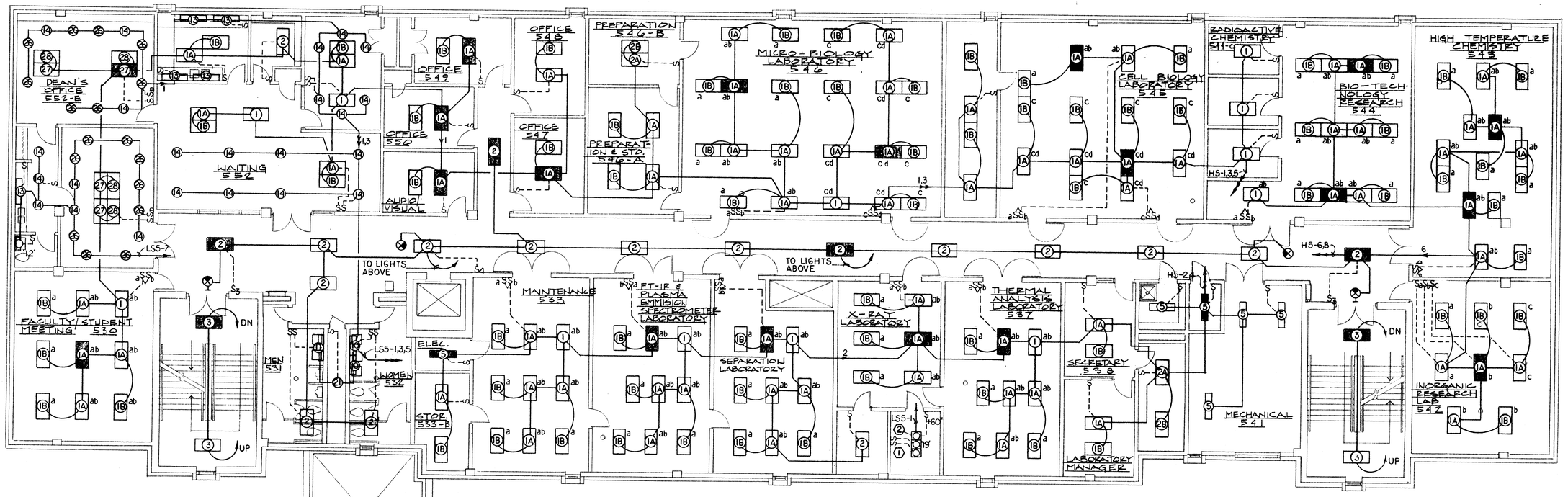

NEW CONSTRUCTION

EXISTING BUILDING

NOTES

(1) VERIFY EXACT LOCATION OF SWITCHES WITH OWNER.

(2) COMPARTMENT WITH GLASS LENS SWITCHED AT DOOR.

n

fifth floor plan · laboratory science building
lighting

SCALE: 1/8"=1'-0"

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E-6

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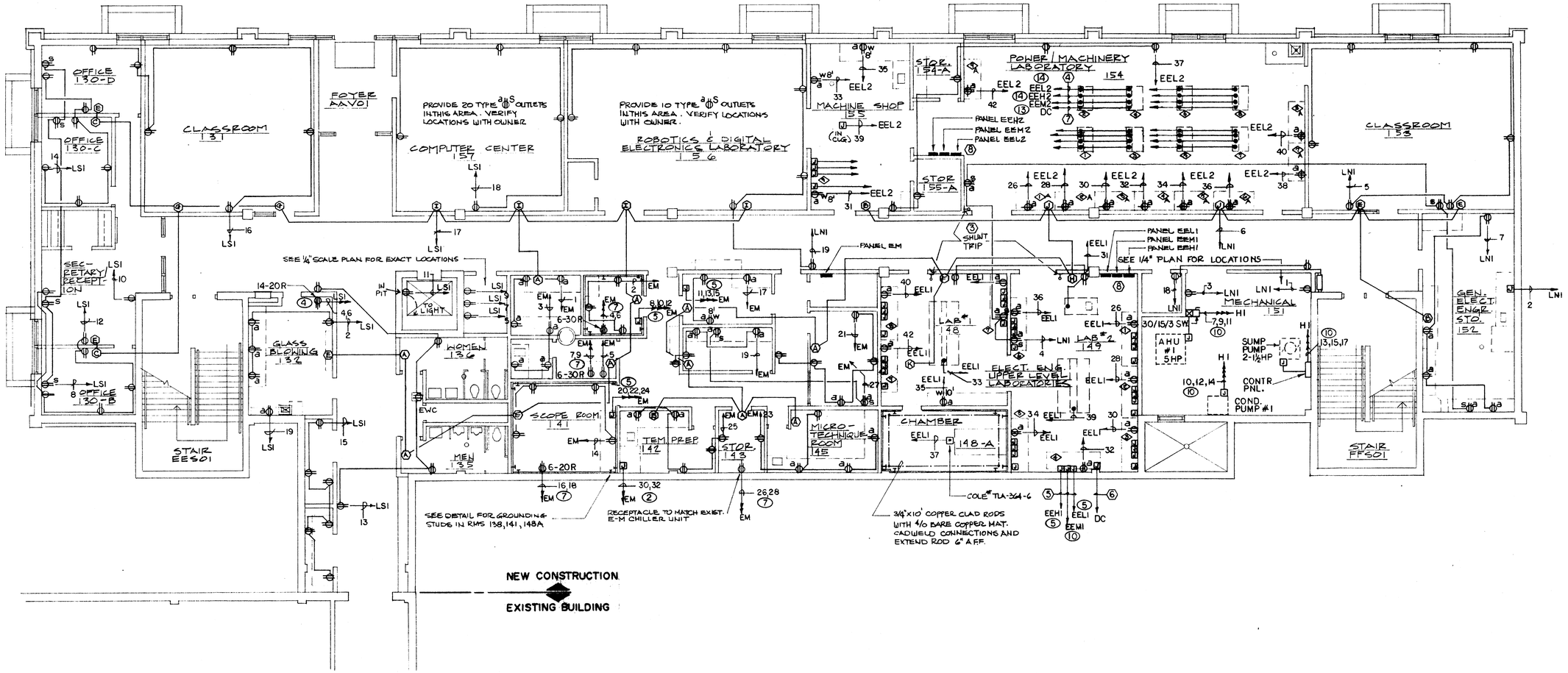
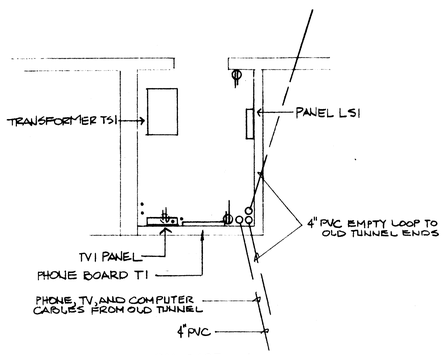
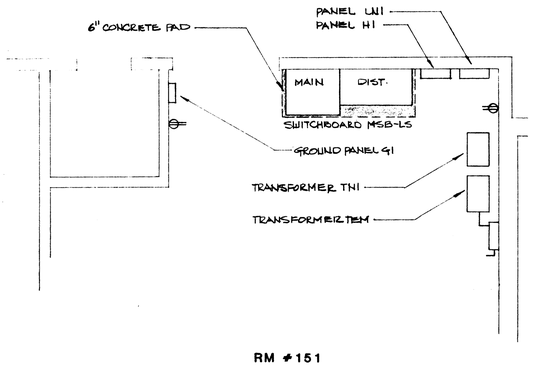




RM #137



RM #151

ELECTRICAL ROOMS DETAIL

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

n first floor plan · laboratory science building power

SCALE: 1/8"=1'-0"

NOTES

1. PROVIDE NAME PLATES "FOR COMPUTER ONLY - LN1-4" FOR RECEPTACLES WITH SPIKE SUPPRESSION IN ROOMS # 148, 149, 154, 155, 156.
2. COIL AND TAPE 3' ADDITIONAL WIRE AT EACH CONDUIT COUPLING IN FLOOR FOR LATER CONNECTION TO LAB EQUIPMENT. ALLOW 1' ADDITIONAL LENGTH AT EACH JUNCTION BOX. TYPICAL ALL FLOORS.
3. PROVIDE AND INSTALL 2" RED MUSHROOM HEAD BUTTON FOR SHUNT TRIPS. INSTALL RED ENGRAVED NAMEPLATE WITH 1" HIGH LETTERS "EMERGENCY DISCONNECT" AT EACH BUTTON.
4. TYPICAL OF 4. PULL 2-3 CIRCUITS IN EACH CONDUIT EXCEPT TABLE 9. EACH BENCH TO BE ON SEPARATE CIRCUIT. SEE LAB OUTLET DETAIL.
5. TYPICAL OF 9. PULL SEPARATE CIRCUIT TO EACH TABLE. SEE LAB OUTLET DETAIL.
6. TYPICAL OF 9. RUN EMPTY 3/4" CONDUIT ABOVE CEILING TO AREA ABOVE PANELS FOR FUTURE CONNECTION OF DC IN THIS ROOM.
7. TYPICAL OF 5. RUN 3/4" EMPTY CONDUIT IN SLAB AND TURN UP AT PANEL FOR FUTURE CONNECTION OF DC IN THIS ROOM.
8. SUSPEND TRANSFORMERS ON CHANNEL TRAPEZE HANGERS ABOVE CEILING AT PANELS.
9. PROVIDE MATCHING CORD CAP WITH EACH 208V AND 480V RECEPTACLE SHOWN TYPICAL ALL FLOORS.
10. MOUNT DISCONNECT SWITCHES ON WALLS OR ON SEPARATE SUPPORT IF LOCATED AT EQUIPMENT.
11. ALL CIRCUITS (EXCEPT LIGHTING) ARE 3/4" WITH 3-#12 THHN UNLESS NOTED. TYPICAL ALL FLOORS.
12. SEE MECHANICAL DRAWINGS FOR LOCATIONS OF FAN/COIL UNIT SPEED SWITCHES AND THERMOSTATS. SEE DET. 11 SHT. E-25. TYPICAL ALL FLOORS.
13. USE #10 WIRE ON ALL FAN/COIL UNIT CIRCUITS. TYPICAL ALL FLOORS.

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER No. 5467 H. W. ROGERS

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AF 32526

COMM. NO. 10186

E - 7

DATE: 8/23/86

ADDITION TO

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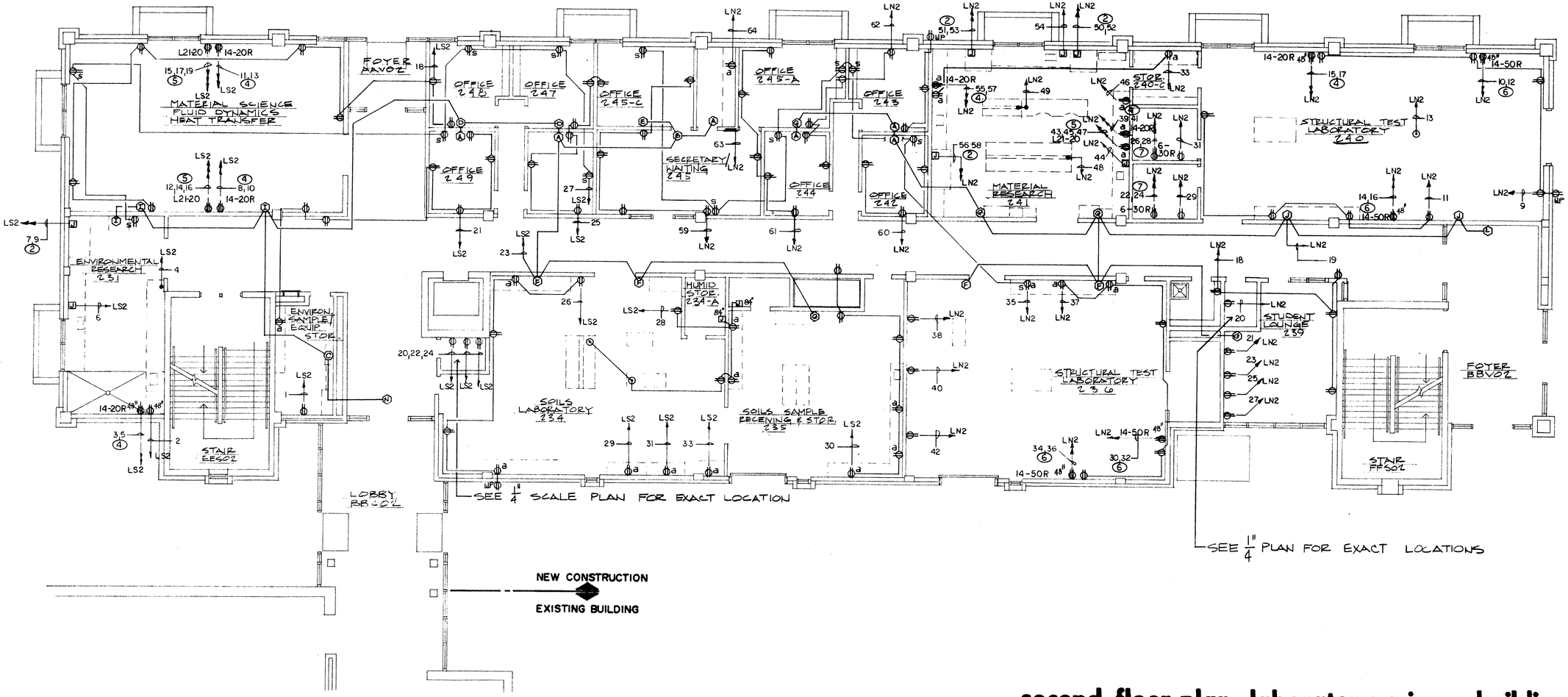
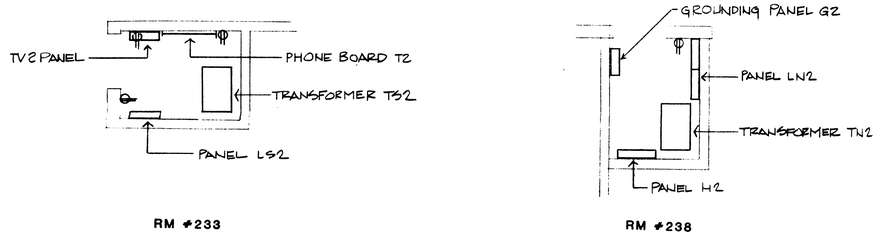
JONESBORO, ARKANSAS



n **second floor plan · laboratory science building power**

SCALE: 1/8"=1'-0"



ELECTRICAL ROOMS DETAIL

SCALE: 1/4" - 1' - 0"

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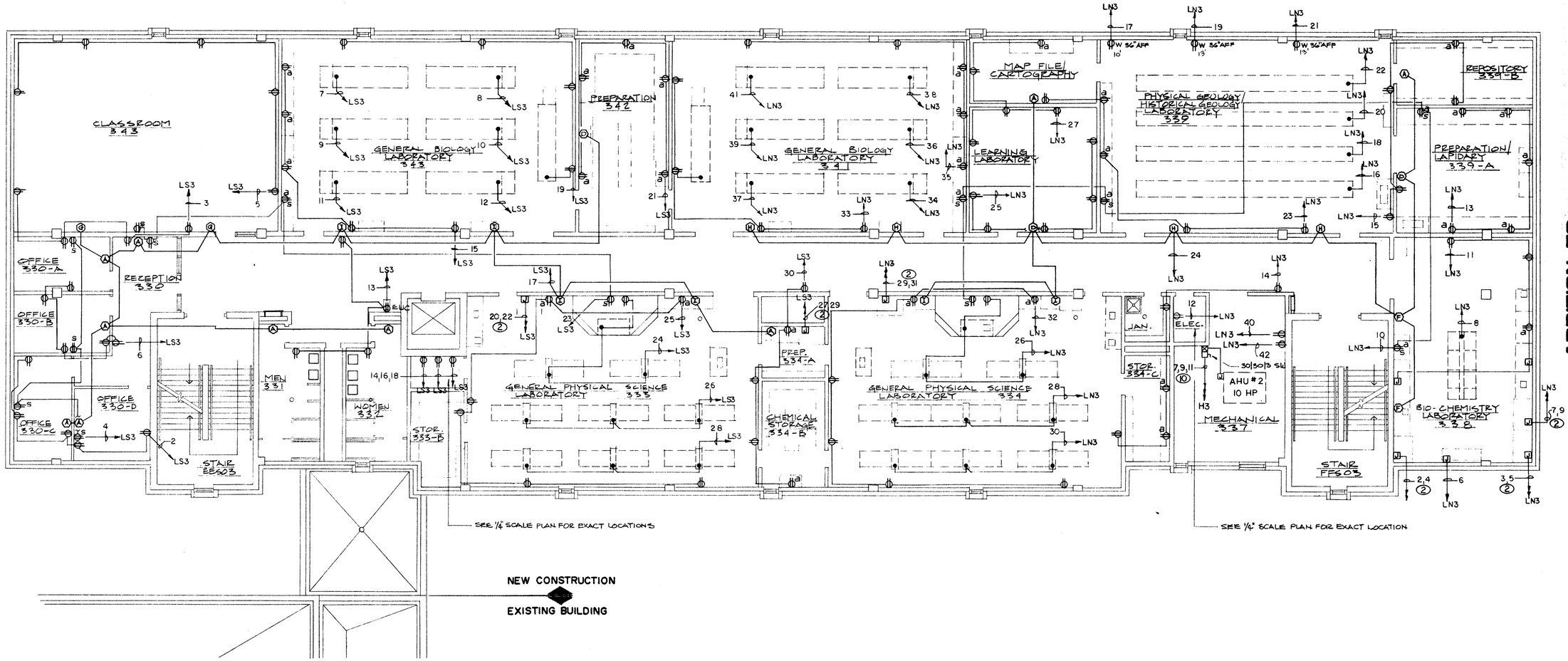
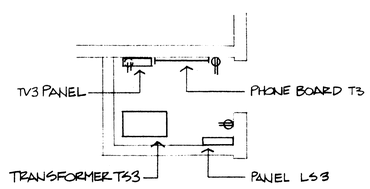
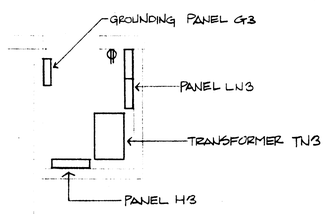




RM #333-A



RM #336

ELECTRICAL ROOMS DETAIL

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

n third floor plan · laboratory science building power

SCALE: 1/8" = 1'-0"

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E - 9

DATE: 8/23/00

CLASSROOM 444

LABORATORY ASSISTANTS AREA 443

GENERAL BOTANY 442

PREP & STOR. 442-A

PREP & STOR.

GENERAL ZOOLOGY 441

ITCHS & HERPS MUSEUM 440

MAMMAL MUSEUM STOR. & WORK 439

PREP LAB 439-D

DARK STORAGE 439-C

STORAGE 439-B

WET LAB 430

MONITORED ENVIRONMENT LABORATORY 430

MEN 431

WOMEN 432

STOR. 433-B

ANATOMY LABORATORY 433

PREP & STOR. 434-A

PHYSIOLOGY LABORATORY 434

JAN.

STOR. 434-B

STUDENT LOUNGE 437

STAIR EES04

STAIR FFS04

DUCT HTR.#1 5KW

DUCT HTR.#2 8 KW

DUCT HTR.#3 7 KW

30/3 N.F. SWITCH ABOVE CLG.

30/3 NF SWITCH ABOVE CLG.

(IN CLG.)

14-20R

SEE 1/4" SCALE PLAN FOR EXACT LOCATIONS

SEE 1/4" SCALE PLAN FOR EXACT LOCATION

NEW CONSTRUCTION

EXISTING BUILDING

TV4 PANEL

PHONE BOARD T4

TRANSFORMER TS4

PANEL LS4

RM #433-A

GROUNDING PANEL 44

PANEL LN4

TRANSFORMER TN4

PANEL H4

RM #436

ELECTRICAL ROOMS DETAIL

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

n fourth floor plan · laboratory science building power

SCALE: 1/8"=1'-0"

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E-10

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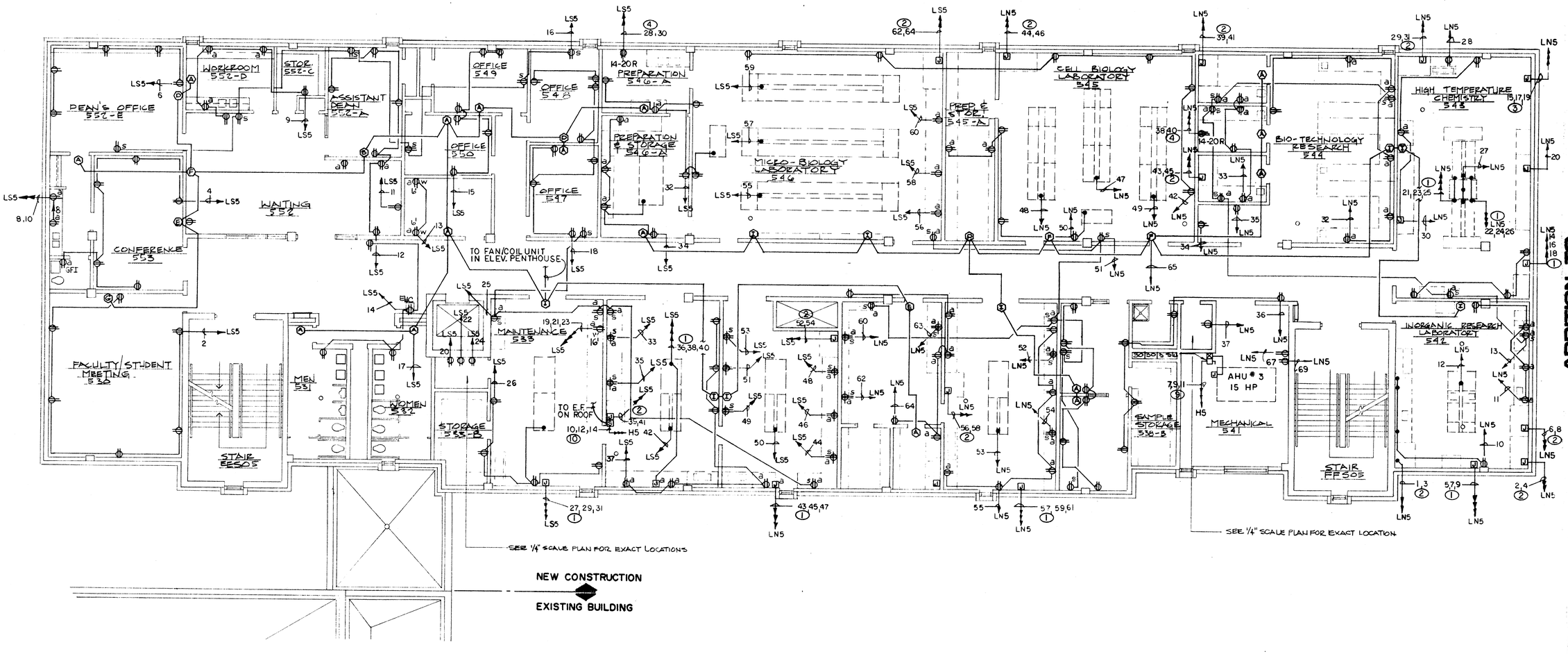
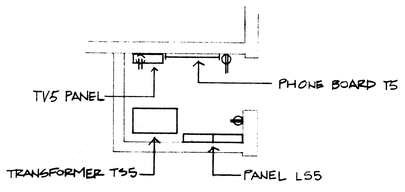
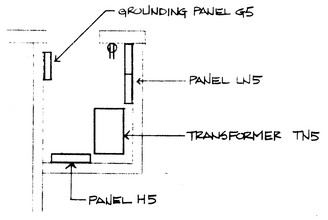




RM #533-A



RM #540

ELECTRICAL ROOMS DETAIL

SCALE: 1/4" - 1' - 0"

n. fifth floor plan · laboratory science building power

SCALE: 1/8"=1'-0"

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COMM. NO. 10186

E-11

DATE: 6/23/86

OFFICE 130-D
OFFICE 130-C
SECRETARY/ RECEPTION 130
OFFICE 130-B
LECTURE CLASSROOM 131
FOYER AA V01
CORRIDOR EEC01
PROVIDE 20 TYPE a ▽ OUTLETS IN THIS AREA. VERIFY LOCATIONS.
COMPUTER CENTER 157
PROVIDE 10 TYPE a ▽ OUTLETS IN THIS AREA. VERIFY LOCATIONS.
ROBOTICS & DIGITAL ELECTRONICS LABORATORY 156
MACHINE SHOP 155
STORAGE 154-A
STORAGE 155-A
POWER/ MACHINERY LABORATORY 154
CLASSROOM 153
CORRIDOR FFC01
GLASS BLOWING 132
STAIR EE501
ELEVATOR BBE01
PRINT ROOM 140-B
SCOPE ROOM 138
LIGHT LOCK ROOM 140
TV PANEL PHONE BOARD
SEM PREP 139
DATA ANALYSIS 144
STORAGE 147
MICRO-SCOPE DIRECTOR 146
LAB #1 148
LAB #2 149
ELECTRICAL ENGR. UPPER LEVEL LABS
GROUND PANEL
DOWN FROM 2ND FLR
FPU-3
TO OLD LAB BLDG.
CLOCK TRANSMITTER
MECHANICAL 151
ACCESS HELL
GENERAL ELECT. ENGR. STORAGE 152
STAIR FF501
SCOPE ROOM 141
TEM. PREP 142
STORAGE 143
MICROTECHNIQUE ROOM 145
CHAMBER 148-A
CORRIDOR DDL01

NEW CONSTRUCTION
EXISTING BUILDING

n **first floor plan · laboratory science building systems**

SCALE: 1/8"=1'-0"

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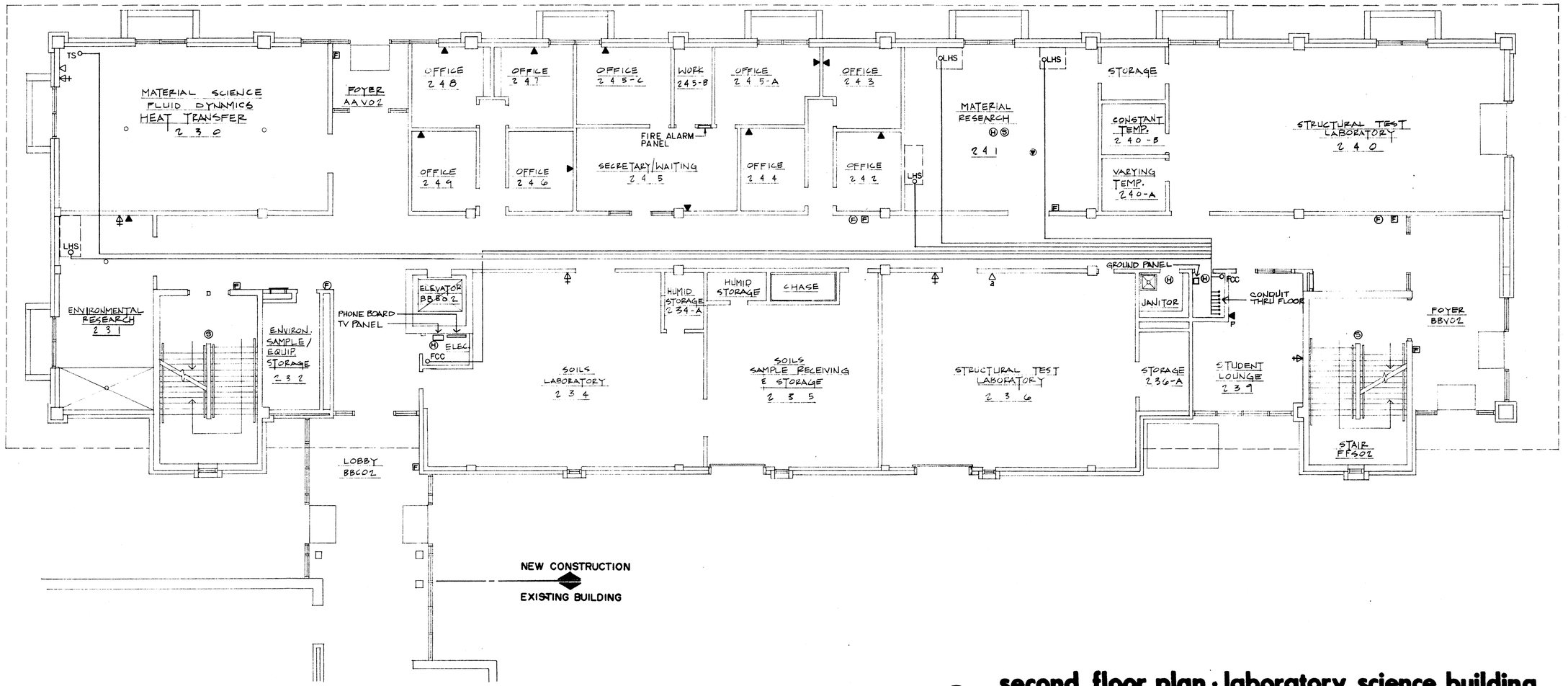

n **second floor plan · laboratory science building systems**

SCALE: 1/8"=1'-0"

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E-13

DATE: 8/23/88

CLASSROOM 344
GENERAL BIOLOGY LABORATORY 343
PREPARATION 342
GENERAL BIOLOGY LABORATORY 341
MAP FILE/ CARTOGRAPHY 339-C
LEARNING LABORATORY 340
PHYSICAL GEOLOGY / HISTORICAL GEOLOGY LABORATORY 339
REPOSITORY 339-B
PREPARATION/ LAPIDARY 339-A
OFFICE 330-A
RECEPTION 330
CORRIDOR FFC03
OFFICE 330-B
HALL 330-E
OFFICE 330-C
OFFICE 330-D
STAIR EES03
MEN
WOMEN
ELEVATOR BBE03
ELEC.
FCC
STORAGE 333-B
TV PANEL
PHONE BOARD
GENERAL PHYSICAL SCIENCE LABORATORY 333
CHASE
PREPARATION 334-A
CHEMICAL STORAGE 334-B
GENERAL PHYSICAL SCIENCE LABORATORY 334
GROUND PANEL
JANITOR
STOR 334-C
FCC
ELEC
SST
FPU-4
FPU-5
MECHANICAL 337
STAIR FFS03
BIO-CHEMISTRY LABORATORY 338
CORRIDOR FFC03
LHS
TS

NEW CONSTRUCTION

EXISTING BUILDING

n third floor plan · laboratory science building systems

SCALE: 1/8"=1'-0"

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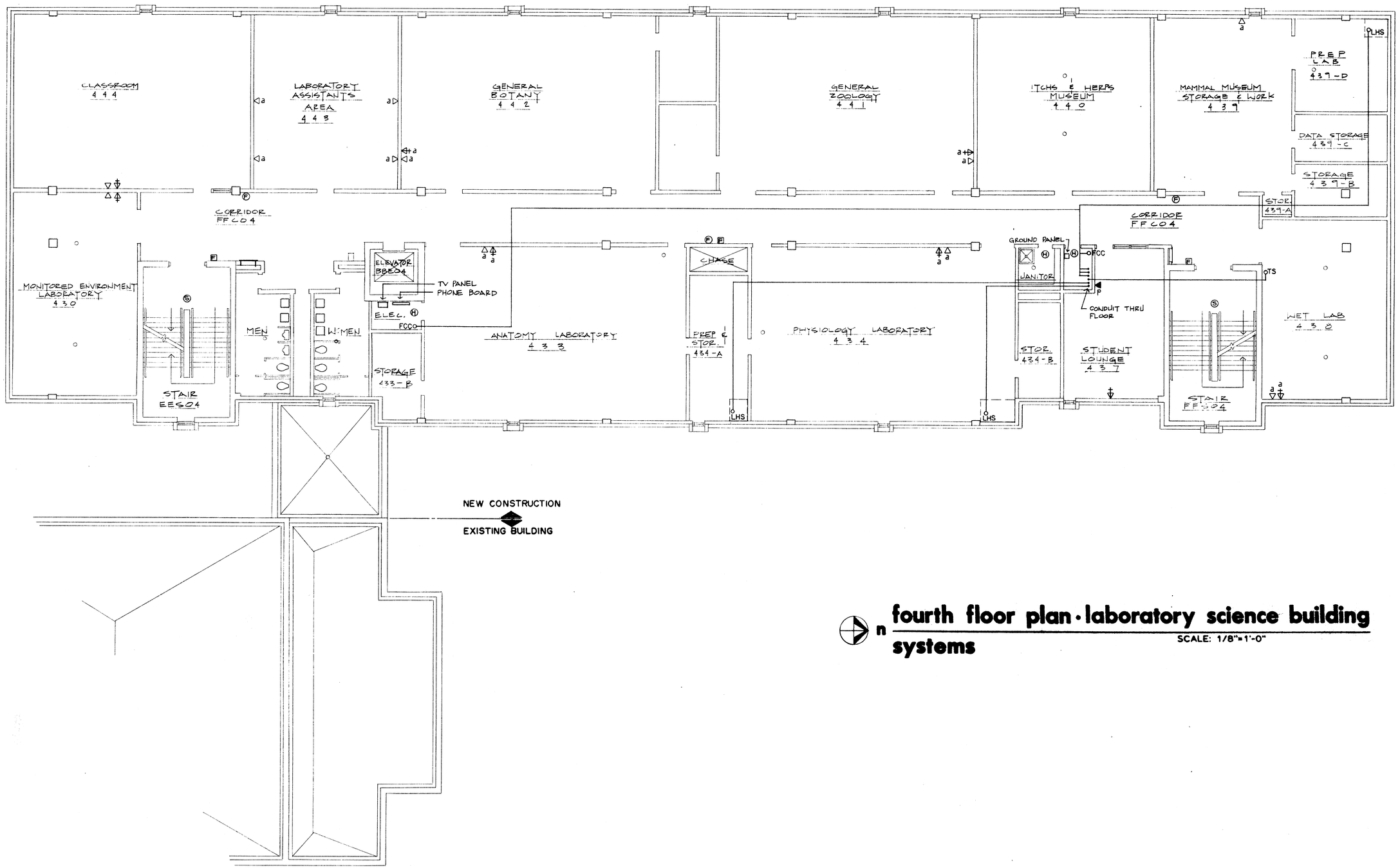
E-14

DATE: 6/23/86



n **fourth floor plan · laboratory science building systems**

SCALE: 1/8"=1'-0"

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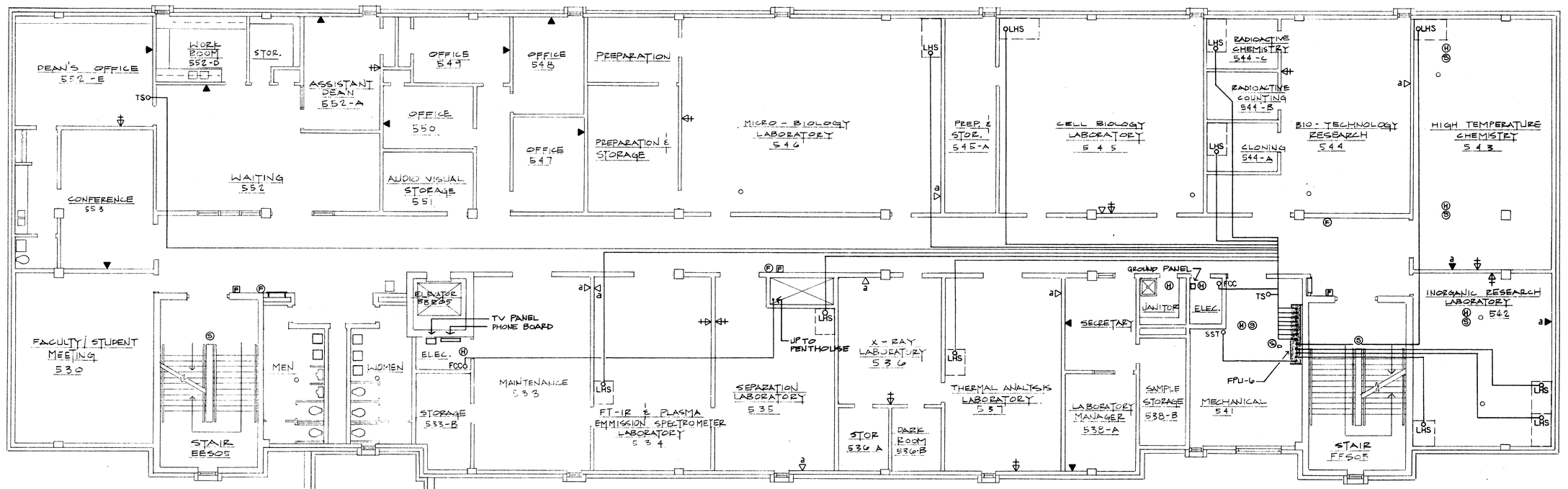
COMM. NO. 10188

E-15

DATE: 6/23/86



n **fifth floor plan · laboratory science building systems**

SCALE: 1/8"=1'-0"

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COMM. NO. 10169

E-16

DATE: 6/23/86

NEW CONSTRUCTION

EXISTING BUILDING

LIGHT FIXTURE IN TUNNEL (TYP.)

GREENHOUSE 260-A

HEAD HOUSE 260

ANIMAL ROOM 266

STO.

MECH.

265

264

263

261

OUTPUT 268

CAGE WASH 269

INPUT

SURGERY 269

EXISTING BOILER

LEQ-1

MECHANICAL 272

LEQ-3,5

VIA C-2

HEQ-1,3

C-2+6

CHEMICAL STORAGE 273

TO NEXT LIGHT

LEQ-7,9 VIA C-2 (2)

SEE SH A-3 FOR BASE DETAIL

TO NEXT LIGHT

AREA LIGHT FURNISHED BY OWNER INSTALLED BY E.C. (TYPICAL)

LEQ-11,13 VIA C-2 (2)

greenhouse • animal care • mechanical floor plan lighting

SCALE: 1/8"=1'-0"

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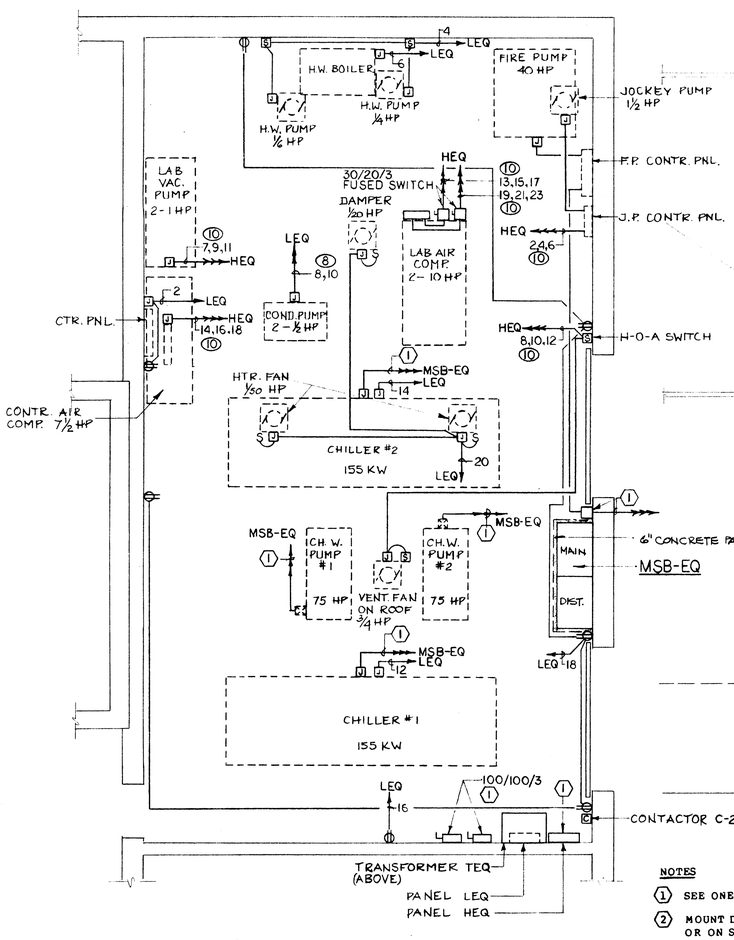
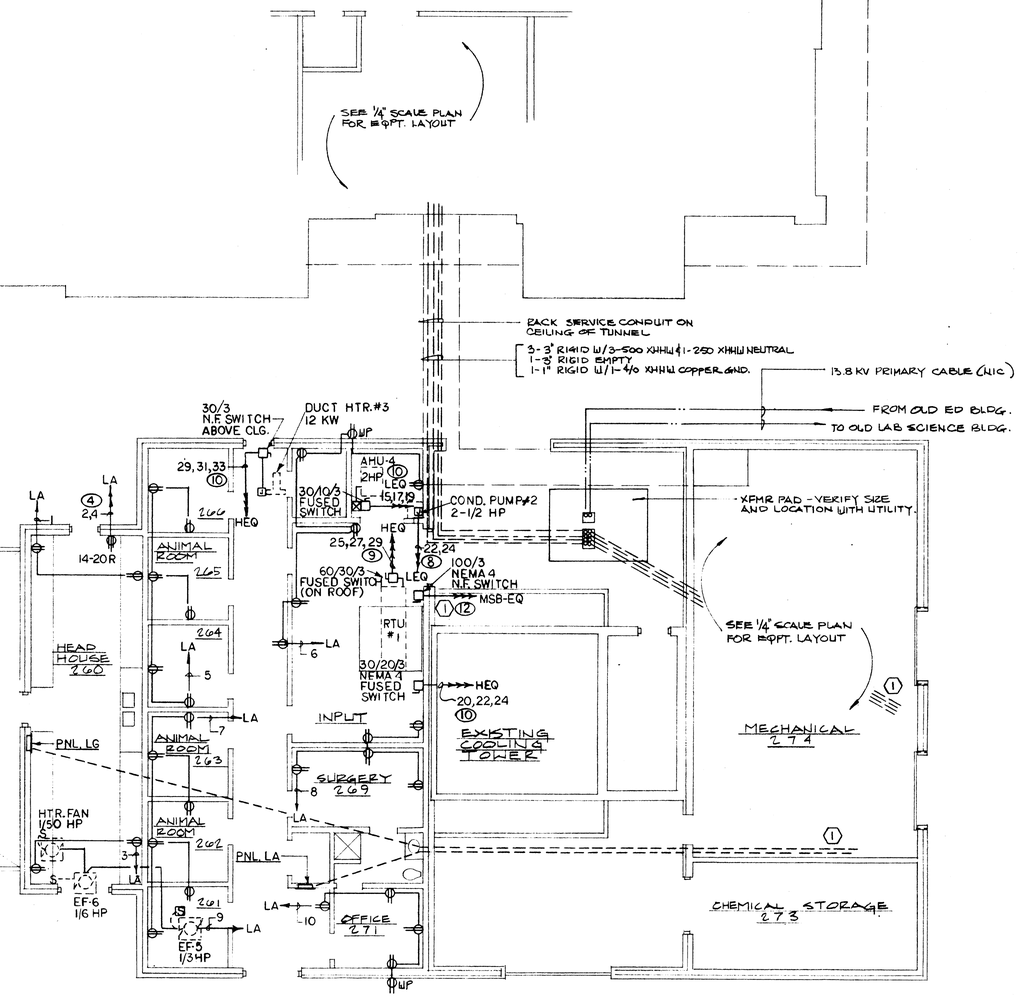
NEW CONSTRUCTION

EXISTING BUILDING





NOTES

1. SEE ONE LINE DIAGRAM SHT. E-19.
2. MOUNT DISCONNECT SWITCHES ON WALLS OR ON SEPARATE SUPPORT IF LOCATED AT EQUIPMENT.

MECHANICAL ROOM # 273

SCALE: ¼" = 1'-0"

greenhouse · animal care · mechanical floor plan power

SCALE: 1/8" = 1'-0"

COMM. NO. 10186

E-17

DATE: 6/23/86

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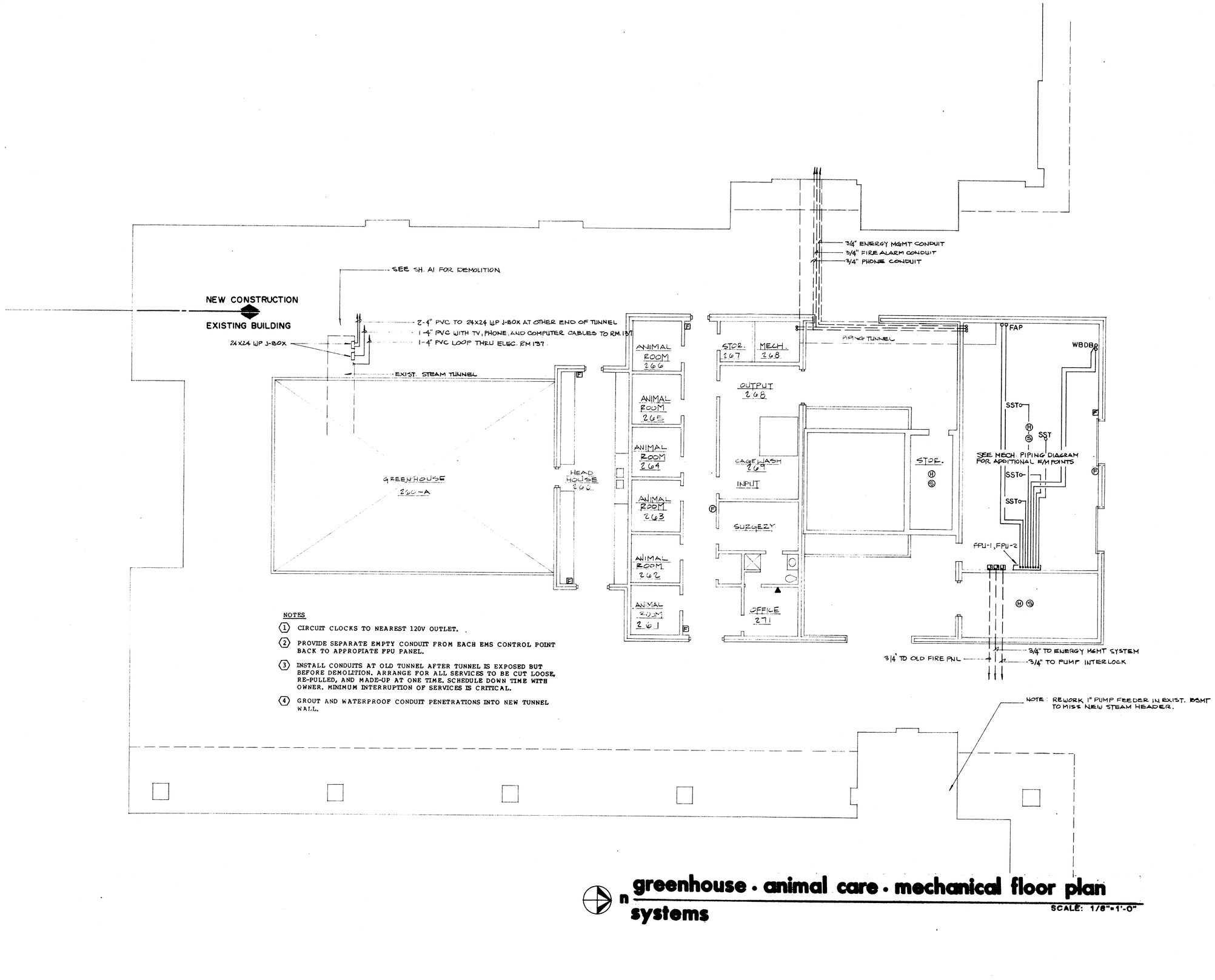

NOTES

1. CIRCUIT CLOCKS TO NEAREST 120V OUTLET.
2. PROVIDE SEPARATE EMPTY CONDUIT FROM EACH EMS CONTROL POINT BACK TO APPROPIATE FPU PANEL.
3. INSTALL CONDUITS AT OLD TUNNEL AFTER TUNNEL IS EXPOSED BUT BEFORE DEMOLITION. ARRANGE FOR ALL SERVICES TO BE CUT LOOSE, RE-PULLED, AND MADE-UP AT ONE TIME. SCHEDULE DOWN TIME WITH OWNER. MINIMUM INTERRUPTION OF SERVICES IS CRITICAL.
4. GROUT AND WATERPROOF CONDUIT PENETRATIONS INTO NEW TUNNEL WALL.

n **greenhouse . animal care . mechanical floor plan**
systems

SCALE: 1/8"=1'-0"

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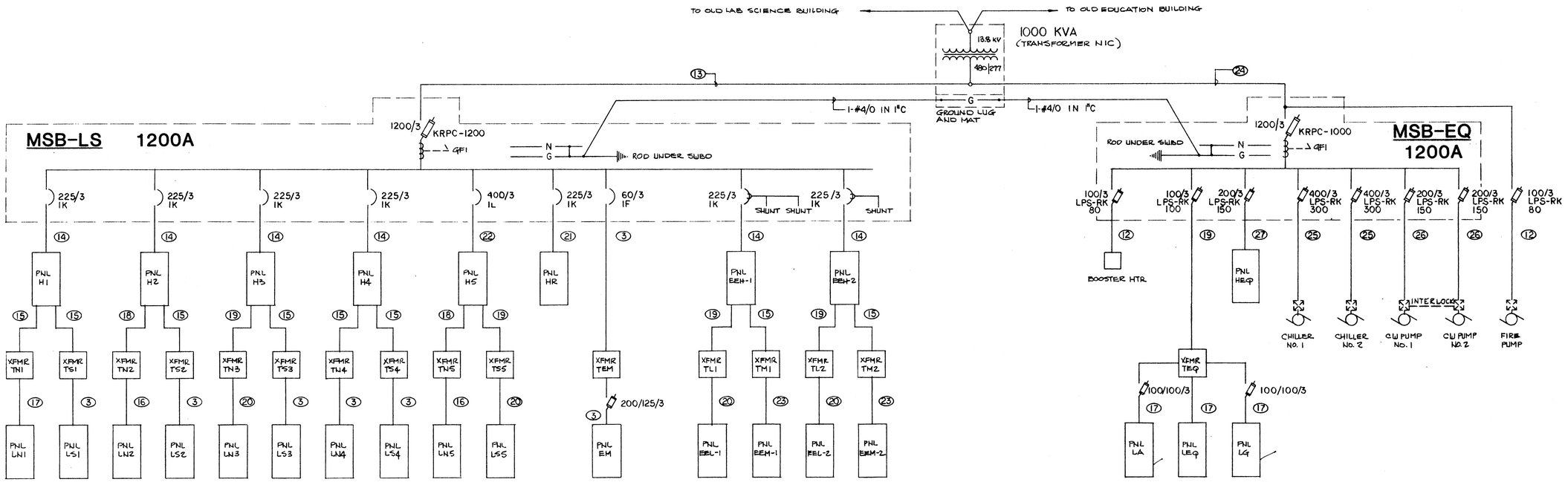

ONE LINE DIAGRAM

FEEDER SCHEDULE

(1) 3-#10, 1-#10 N, 1-#10 GR IN .75" C.
(2) 2-#10, 1-#10 N, 1-#10 GR IN .75" C.
(3) 3-#2, 1-#2 N, 1-#8 GR IN 1.25" C.
(4) 2-#12, 1-#12 N, 1-#12 GR IN .75" C.
(5) 3-#12, 1-#12 N, 1-#12 GR IN .75" C.
(6) 2-#8, 1-#8 N, 1-#10 GR IN .75" C.
(7) 2-#10, 1-#10 GR IN .75" C.
(8) 2-#12, 1-#12 GR IN .75" C.
(9) 3-#10, 1-#10 GR IN .75" C.
(10) 3-#12, 1-#12 GR IN .75" C.
(11) 3-#8, 1-#10 GR IN .75" C.
(12) 3-#4, 1-#8 GR IN 1" C.
(13) 3 SETS (3-#500MCM, 1-#250MCM N IN 3" C.)
(14) 3-#3/0, 1-#1 N, 1-#4 GR IN 2" C.
(15) 3-#8 IN .75" C.
(16) 3-#300MCM, 1-#300MCM N, 1-#2 GR IN 3" C.
(17) 3-#4, 1-#4 N, 1-#8 GR IN 1.25" C.
(18) 3-#1 IN 1.25" C.
(19) 3-#4 IN 1" C.
(20) 3-#3/0, 1-#3/0 N, 1-#4 GR IN 2" C.
(21) 3-#3/0, 1-#4 GR IN 2" C.
(22) 3-#500MCM, 1-#250MCM N, 1-#2 GR IN 3" C.
(23) 3-#2, 1-#8 GR IN 1.25" C.
(24) 3 SETS (3-#350MCM, 1-#3/0 N IN 2.5" C.)
(25) 3-#250MCM, 1-#4 GR IN 2" C.
(26) 3-#1/0, 1-#6 GR IN 1.5" C.
(27) 3-#1, 1-#4 N, 1-#6 GR IN 1.5" C.

EQUIPMENT SCHEDULE

TRANSFORMERS

480V△/208Y-120V, 150 C. RISE, 6-2.5% TAPS, 2 ABOVE, 4 BELOW, SQUARE D SORGEL OR EQUAL.

TN1	30	KVA	
TS1	45	KVA	
TN2	112.5	KVA	
TS2	45	KVA	
TN3	75	KVA	
TS3	45	KVA	
TN4	45	KVA	
TS4	45	KVA	
TN5	112.5	KVA	
TS5	75	KVA	
TEM	45	KVA	
TL1	75	KVA	
TL2	75	KVA	
TEQ	75	KVA	
TM1	45	KVA	480V△/240V△, 3ø, 3W
TM2	45	KVA	480V△/240V△, 3ø, 3W

PHOTOCELL P

TORK MODEL 5420, 120V SPDT, TYPE III RAINTITE ENCLOSURE

DIMMER S

PRESCOLITE DS15A, 120V 1500W

CONTACTORS C-1, C-2

MECHANICALLY HELD LIGHTING CONTACTOR SQUARE D LLG-80 WITH 8 POLES, 120V IN CLASS 9991 ENCLOSURE

one line diagram and details

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E-19

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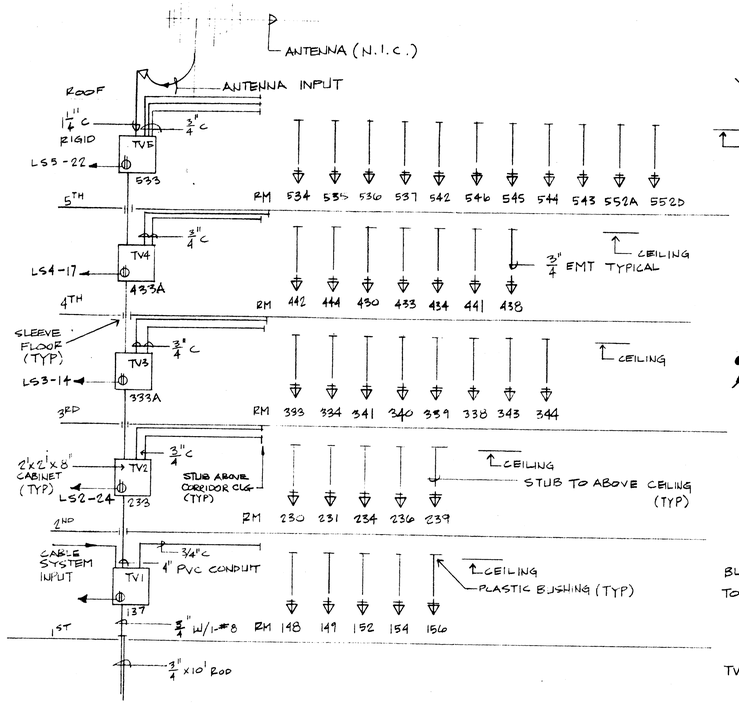
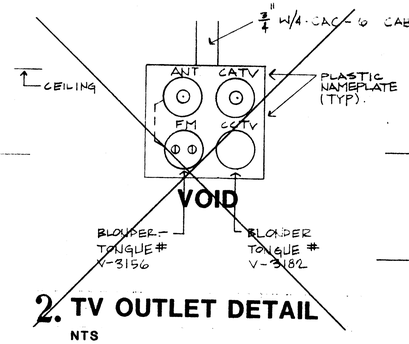
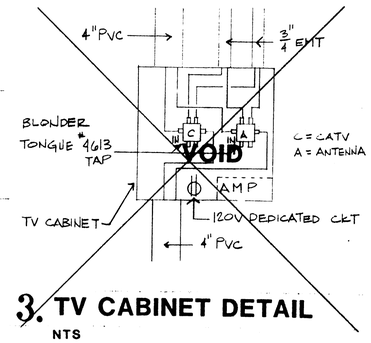


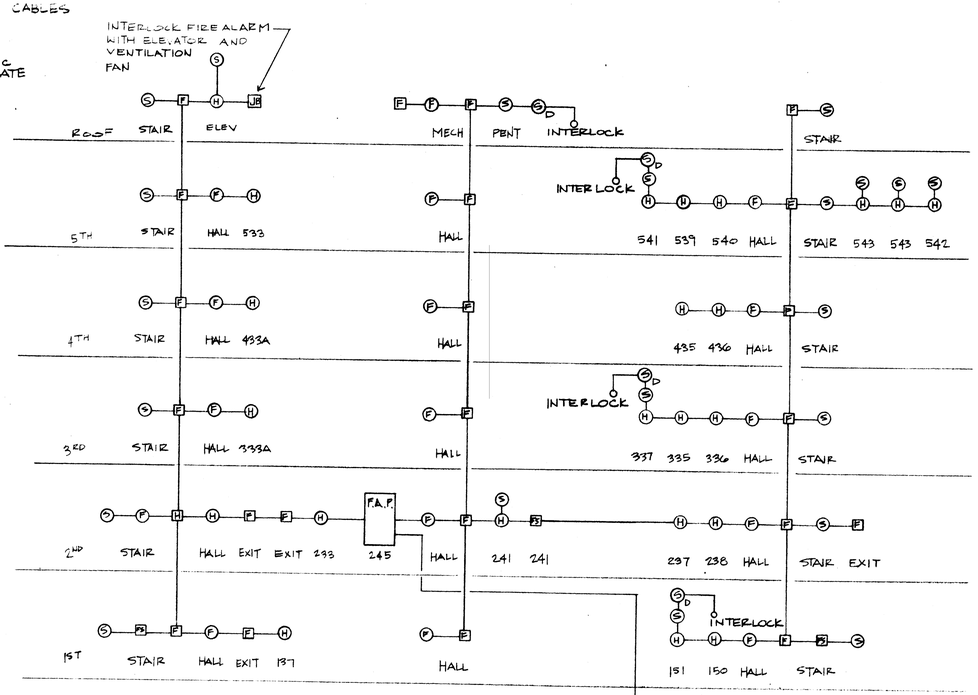
1. TV SYSTEM RISER
NTS



2. TV OUTLET DETAIL
NTS

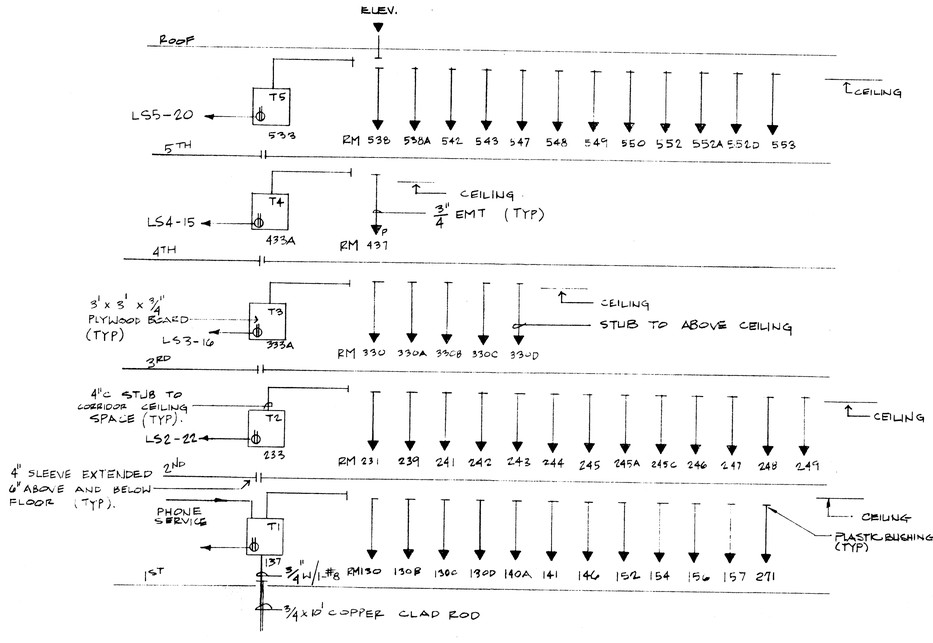


3. TV CABINET DETAIL
NTS

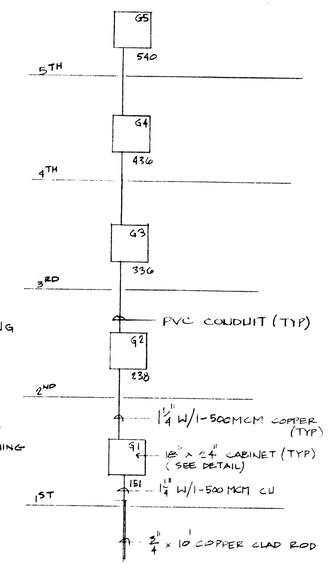


4. FIRE ALARM RISER
NTS

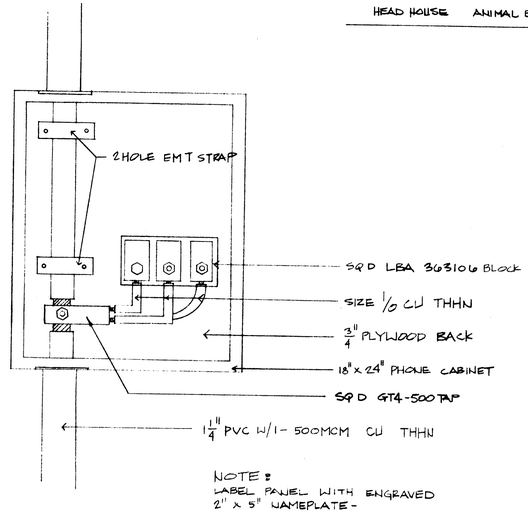
ZONE	DESCRIPTION
1	FIRST FLOOR
2	SECOND FLOOR
3	THIRD FLOOR
4	FOURTH FLOOR
5	FIFTH FLOOR
6	MECHANICAL PENTHOUSE
7	HEAD HOUSE/ANIMAL BLDG./MECH.BLDG.



5. PHONE SYSTEM RISER
NTS



6. GROUND SYSTEM RISER
NTS



7. GROUND PANEL DETAIL
NTS

systems risers and details
SCALE: NONE

COMM. NO. 10186

E-20

DATE: 8/23/86

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DISTRIBUTION EQUIPMENT SCHEDULE

NAME MSB-EQ VOLTS 480/277 ø 3 4 W MAINS 1200/1000 A ☐ LUGS ☒ DEVICE COPPER BUS GROUND BAR FED FROM UTILITY
TYPE POWER STYLE ☐ FLUSH MTD. ☒ SURFACE MTD. FEEDER: ☐ TOP ☒ BOTTOM SEE ONE LINE DIAGRAM INTERRUPTING RATING 50,000 A

BRANCH CIRCUITS

ITEM/FEEDER	O.C. DEVICE	CKT. NO.	LOAD (KVA) A	B	C	LOAD (KVA) A	B	C	CKT. NO.	O.C. DEVICE	ITEM/FEEDER
BOOSTER HEATER	100/3		18.0			25.0				100/3	XFMR 'TEQ'
	100 F	1		18.0			25.0		2	100 F	
FEEDER NO.12	SW.				18.0			25.0		SW.	FEEDER NO.19
PANEL 'HEQ'	200/3		29.24			51.67				400/3	CHILLER #1
	150 F	3		30.16			51.67		4	300 F	
FEEDER NO.27	SW.				26.66			51.67		SW.	FEEDER NO.25
CHILLER #2	400/3		51.67			26.56				200/3	C.W. PUMP #1
	300 F	5		51.67			26.56		6	150 F	
FEEDER NO.25	SW.				51.67			26.56		SW.	FEEDER NO.26
C.W. PUMP #2 75HP	200/3		ST.BY.								SPACE (9 UNIT IN.)
	150 F	7		ST.BY.							
FEEDER NO.26	SW.				ST.BY.						
			38.91	99.82	99.33	103.23	103.23	101.23			
			92.14	29.306	292.62						TOTALS
			607.76								TOTAL CONN. LOAD KVA

PANELBOARD SCHEDULE

PANEL LG VOLTS 208/120 ø 3 4 W MAINS 100A ☒ LUGS ☐ BREAKER COPPER BUS GROUND BAR FED FROM: TEQ
TYPE NQOB ☐ SURFACE MTD. ☒ FLUSH MTD. FEEDER: ☐ TOP ☒ BOTTOM 3-#4, 1-#4N, 1-#8GR, 1/4"C INTERRUPTING RATING 10,000 A

BRANCH BREAKERS

ITEM	CKT. BRKR.	CKT. NO.	LOAD (KVA) A	B	C	LOAD (KVA) A	B	C	CKT. NO.	CKT. BRKR.	ITEM
GREENHOUSE EQUIP.	20/1	1							2	20/1	GREENHOUSE EQUIP.
" "	20/1	3							4	20/1	" "
" "	20/1	5							6	20/1	" "
" "	20/1	7							8	20/1	" "
" "	20/1	9							10	20/1	" "
" "	20/1	11							12	20/1	" "
SPACE W/BUS		13							14		SPACE W/BUS
" "		15							16		" "
" "		17							18		" "
" "		19							20		" "
" "		21							22		" "
		23							24		" "
		25							26		
		27							28		
		29							30		
		31							32		
		33							34		
		35							36		
		37							38		
		39							40		
		41							42		
											TOTALS
											TOTAL CONN. LOAD KVA

PANELBOARD SCHEDULE

PANEL HEQ VOLTS 480/277 ø 3 4 W MAINS 225 A ☒ LUGS ☐ BREAKER COPPER BUS GROUND BAR FED FROM: MSB-EQ
TYPE NEHB ☒ SURFACE MTD. ☐ FLUSH MTD. FEEDER: ☒ TOP ☐ BOTTOM 3-#1, 1-#4N, 1-#6GR, 1/2"C INTERRUPTING RATING 14,000 A

BRANCH BREAKERS

	ITEM	CKT. BRKR.	CKT. NO.	LOAD (KVA) A	B	C	LOAD (KVA) A	B	C	CKT. NO.	CKT. BRKR.	ITEM	
L	HEAD HOUSE, ANIMAL CARE	20/1	1	2.58			.72			2	15/3	JOCKEY PUMP 1½ HP	M
L	ANIMAL CARE, MECH. RM	20/1	3		3.5			.72		4	—	—	
	SPARE	20/1	5			-			.72	6	—	—	
M	LAB. VAC. PUMP 2-1HP	15/3	7	1.0			.39			8	15/3	VENT FAN ¾ HP	M
	—	—	9		1.0			.39		10	—	—	
	—	—	11			1.0			.39	12	—	—	
M	LAB. AIR COMP. 10 HP	20/3	13	3.9			3.1			14	20/3	CONTR. AIR COMP. 7½ HP	M
	—	—	15		3.9			3.1		16	—	—	
	—	—	17			3.9			3.1	18	—	—	
M	LAB. AIR COMP. 10 HP	20/3	19	3.9			3.1			20	20/3	CAGE WASHER 7½ HP	M
	—	—	21		3.9			3.1		22	—	—	
	—	—	23			3.9			3.1	24	—	—	
M	R.T.U.	40/3	25	6.55						26	20/1	SPARE	
	—		27		6.55					28	20/1	SPARE	
	—		29			6.55				30	—	SPACE W/BUS	
H	DUCT HTR.	20/3	31	4						32	—	—	
	—	—	33		4					34	—	—	
	—	—	35			4				36	—	—	
	SPACE W/BUS	—	37							38	—	—	
	—	—	39							40	—	—	
	—	—	41							42	—	—	
				21.83	22.05	19.35	7.31	7.31	7.31				
				29.24	30.16	26.66						TOTALS	
				86.06								TOTAL CONN. LOAD KVA	

PANELBOARD SCHEDULE

PANEL LA VOLTS 208/120 ø 3 4 W MAINS 100A ☒ LUGS ☐ BREAKER COPPER BUS GROUND BAR FED FROM: TEQ
TYPE NQOB ☒ FLUSH MTD. ☐ SURFACE MTD. FEEDER: ☒ TOP ☐ BOTTOM 3-#4, 1-#4N, 1-#8GR, 1/4"C INTERRUPTING RATING 10,000 A

BRANCH BREAKERS

	ITEM	CKT. BRKR.	CKT. NO.	LOAD (KVA) A	B	C	LOAD (KVA) A	B	C	CKT. NO.	CKT. BRKR.	ITEM	
R	HEAD HOUSE	20/1	1	.6			1.7			2	20/2	HEAD HOUSE	E
R	HEAD HOUSE	20/1	3		.6			1.7		4	—	—	
R	ANIMAL ROOMS	20/1	5			1.26			1.26	6	20/1	STORAGE, INPUT/OUTPUT	R
R	ANIMAL ROOMS	20/1	7	1.26			.9			8	20/1	SURGERY, INPUT	R
M	E.F. - ANIMAL CARE	15/1	9		1.22			.9		10	20/1	OFFICE	R
	SPARE	20/1	11							12		SPACE W/BUS	
	SPARE	20/1	13							14		—	
	SPACE W/BUS		15							16		—	
	—		17							18		—	
	—		19							20		—	
	—		21							22		—	
	—		23							24		—	
			25							26			
			27							28			
			29							30			
			31							32			
			33							34			
			35							36			
			37							38			
			39							40			
			41							42			
				1.88	1.88	1.26	2.6	2.6	1.26				
				4.48	4.48	2.52						TOTALS	
				11.48								TOTAL CONN. LOAD KVA	

PANELBOARD SCHEDULE

PANEL LEQ VOLTS 208/120 ø 3 4 W MAINS 100 A ☐ LUGS ☒ BREAKER COPPER BUS GROUND BAR FED FROM: TEQ
TYPE NQOB ☐ FLUSH MTD. ☒ SURFACE MTD. ☒ TOP FEEDER: ☐ BOTTOM 4-#4, 1-#8GR IN 1¼"C INTERRUPTING RATING 10,000 A

BRANCH BREAKERS

	ITEM	CKT. BRKR.	CKT. NO.	LOAD (KVA) A	B	C	LOAD (KVA) A	B	C	CKT. NO.	CKT. BRKR.	ITEM	
L	TUNNEL LIGHTS	20/1	1	.5			.6			2	20/1	CONTROL PNL. - DRYER	E
L	OUTDOOR LIGHTING	20/1	3		1.25			1.4		4	20/1	H.W. PUMPS ½ HP 1/6 HP	M
	" "	20/1	5			1.25			.6	6	20/1	BOILER CONTROLS	E
	" "	20/1	7	.5			.56			8	15/2	COND. PUMP #2 ½ HP	M
	" "	20/1	9		.5			.56		10	—		
	" "	20/1	11			.25			.6	12	20/1	CHILLER #1 - CONTROL PNL	E
	" "		13	.25			.6			14	20/1	CHILLER #2 - CONTROL PNL	E
M	A.H.U. ANIMAL CARE 2HP	15/3	15		.9			.6		16	20/1	ENERGY MAN. PNL.	E
	—	—	17			.9			.9	18	20/1	MECH. RM	R
	—	—	19	.9			.3			20	20/1	DAMPER, FANS	M
	SPARE	20/1	21					.56		22	15/2	COND. PUMP # 3 ½ HP	M
	SPARE	20/1	23						.66	24	—	—	
	SPACE W/BUS		25							26		SPACE W/BUS	
	" "		27							28		" "	
	" "		29							30		" "	
			31							32			
			33							34			
			35							36			
			37							38			
			39							40			
			41							42			
				2.15	2.65	2.41	2.26	3.12	2.66				
				4.41	5.77	5.06						TOTALS	
				15.24								TOTAL CONN. LOAD KVA	

panel schedules

LEGEND

LIGHTING

- FLUORESCENT FIXTURE, TYPE AND SWITCHING INDICATED
- BRACKET OR UNDERCOUNTER MOUNTED FLUORESCENT FIXTURE, TYPE AND SWITCHING INDICATED
- FLUORESCENT FIXTURE WITH BODINE B50D EMERGENCY BALLAST
- INCANDESCENT FIXTURE, TYPE AND SWITCHING INDICATED
- BRACKET MOUNTED INCANDESCENT FIXTURE, TYPE AND SWITCHING INDICATED
- AREA LIGHT
- DC LIGHT FIXTURE WITH REMOTELY MOUNTED BATTERY
- DARK ROOM LIGHT FIXTURE
- EXIT LIGHT, SHADING INDICATES FACES, ARROW INDICATES DIRECTION
- EXISTING LIGHT FIXTURE
- S_a SINGLE POLE TOGGLE SWITCH, LETTER INDICATES DEVICE SWITCHED
- S_3 THREE-WAY SWITCH
- S_4 FOUR-WAY SWITCH
- S_D DIMMER SWITCH
- BRANCH CIRCUIT - HOMERUN INDICATED
- P PHOTOCELL
- LIGHTING CONTACTOR
- NOTE NUMBER
- FEEDER TYPE - SEE FEEDER SCHEDULE

POWER

- DUPLEX OUTLET
- $\oplus_S$ INDICATES SURGE PROTECTED DEVICE CIRCLE F 11592-IGR
- 2 OR 3 POLE RECEPTACLE - TYPE AS NOTED
- 10' PLUGMOLD WITH OUTLETS 12" O.C. LENGTH AS NOTED
- QUADRAPLEX OUTLET
- $\oplus_S$ QUADRAPLEX OUTLET SURGE PROTECTED - SEE DETAIL 12 SHT. E-25
- J JUNCTION BOX - COORDINATE HEIGHT WITH CASEWORK
- FLOOR BOX
- CONDUIT COUPLING IN FLOOR
- E FAN/COIL UNIT
- STARTER
- DISCONNECT SWITCH
- MANUAL MOTOR STARTER
- a INDICATES ABOVE COUNTER
- WP WEATHER PROOF
- BRANCH CIRCUIT - HOMERUN INDICATED
- FEEDER TYPE - SEE FEEDER SCHEDULE
- NOTE NUMBER
- LAB TABLE NUMBER

SYSTEMS

- PHONE OUTLET
- FLOOR PHONE OUTLET
- COMPUTER OUTLET
- FLOOR COMPUTER OUTLET
- TV OUTLET
- ~~CLOCK OUTLET~~
- F FIRE ALARM PULL STATION
- FIRE ALARM SIGNAL DEVICE
- SMOKE DETECTOR
- HEAT DETECTOR
- D_D DUCT SMOKE DETECTOR
- FLOW SWITCH
- ECC ENERGY MANAGMENT CONTROL POINT
- a INDICATES ABOVE COUNTER
- NOTE NUMBER

COMM. NO. 10186

E - 21

DATE: 6/23/86

ADDITION TO
LABORATORY SCIENCES CENTER
ARKANSAS STATE UNIVERSITY
JONESBORO, ARKANSAS

P.O. Box 1655 • Jonesboro, Arkansas 72403-1655 • 501/932-0571

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER No. 1657 H. W. GOODMAN

Brackett Krennerich and Associates Inc. Architects

AF 32526

COMM. NO. 10186

E-22

DATE: 6/23/86

DISTRIBUTION EQUIPMENT SCHEDULE

NAME MSB-LS VOLTS 480/277 ø 3 4 W MAINS 1200A ☐ FLUSH MTD. ☒ TOP ☐ SURFACE MTD. FEEDER: ☐ BOTTOM SEE ONE LINE DIAGRAM ☐ LUGS ☒ DEVICE COPPER BUS GROUND BAR INTERRUPTING RATING 50,000 A FED FROM UTILITY

TYPE POWER STYLE

BRANCH CIRCUITS

ITEM/FEEDER	O.C. DEVICE	CKT. NO.	LOAD (KVA) A	B	C	LOAD (KVA) A	B	C	CKT. NO.	O.C. DEVICE	ITEM/FEEDER
PANEL H1	225/3 IK CB	1	25.4			54.3			2	225/3 IK CB	PANEL H2
FEEDER NO. 14				25.2			59.2				FEEDER NO. 13
PANEL H3	225/3 IK CB	3			24.5			52.9	4	225/3 IK CB	PANEL H4
FEEDER NO. 14			40.7			31.4					FEEDER NO. 15
PANEL H5	400/3 IL CB	5		39.1			30.9				PANEL H6
FEEDER NO. 22					34.2			29.6	6	225/3 IK CB	PANEL H7
TRANSFORMER TEH	60/3 IF CB	7	88.8	88.8		23.3					FEEDER NO. 21
FEEDER NO. 3					81.1		23.3				FEEDER NO. 20
PANEL EEH-2	225/3 IK CB	9	13.6			54.1			8	225/3 IK CB	PANEL EEH-1
FEEDER NO. 16			54.1	15.1			54.1				FEEDER NO. 17
				54.1	13.4			54.1			FEEDER NO. 18
					54.1						
			223	216	207	163	168	160			
			386	384	367	TOTALS					
			1137			TOTAL CONN. LOAD KVA					

PANELBOARD SCHEDULE

PANEL H1 VOLTS 480/277 ø 3 4 W MAINS 225 A ☐ FLUSH MTD. ☒ TOP ☐ SURFACE MTD. FEEDER: ☐ BOTTOM 3-#3/0, 1-#1N, 1-#4GR ☒ LUGS ☐ BREAKER COPPER BUS GROUND BAR INTERRUPTING RATING 14,000 A FED FROM: MSB-LS

TYPE NEHB

BRANCH BREAKERS

	ITEM	CKT. BRKR.	CKT. NO.	LOAD (KVA) A	B	C	LOAD (KVA) A	B	C	CKT. NO.	CKT. BRKR.	ITEM	
L	OFFICES, CLASSROOM LTS	20/1	1	3.96			2.98			2	20/1	EMLAB, EE LAB LTS	L
L	ROBOT, MACHINE LAB LTS	20/1	3		3.92			3.73		4	20/1	CORRIDOR LTS	L
L	POWER LAB LTS	20/1	5			3.72			3.84	6	20/1	MATERIALS STORAGE LTS	L
M	AHU-1 5HP	20/3	7	2.1			2.66			8	20/1	STAIR LTS	L
	—	—	9		2.1			.4		10	15/3	DUPLEX COND. PUMP	M
	—	—	11			2.1			.4	12	—	—	
M	DUPLEX SUMP PUMP	15/3	13	1.23			.4			14	—	—	
	—	—	15		1.23					16	20/1	SPARE	
	—	—	17			1.23				18	20/1	SPARE	
	TRANSFORMER TN1	60/3	19	5.38			7.14			20	60/3	TRANSFORMER TS1	
	—	—	21		3.9			9.78		22	—	—	
	—	—	23			4.7			8.45	24	—	—	
	SPACE W/BUS		25							26		SPACE W/BUS	
			27							28			
			29							30			
			31							32			
			33							34			
			35							36			
			37							38			
			39							40			
			41							42			
				12.3	11	11.8	13.2	14.1	12.7				
				26.4	25.2	24.5	TOTALS						
				75.1			TOTAL CONN. LOAD KVA						

PANELBOARD SCHEDULE

PANEL H4 VOLTS 480/277 ø 3 4 W MAINS 225 A ☐ FLUSH MTD. ☐ TOP ☒ SURFACE MTD. FEEDER: ☒ BOTTOM 3-#3/0, 1-#1N, 1-#4GR, 2"C ☒ LUGS ☐ BREAKER COPPER BUS GROUND BAR INTERRUPTING RATING 14,000 A FED FROM: MSB-LS

TYPE NEHB

BRANCH BREAKERS

	ITEM	CKT. BRKR.	CKT. NO.	LOAD (KVA) A	B	C	LOAD (KVA) A	B	C	CKT. NO.	CKT. BRKR.	ITEM	
L	ENVIRONMENT LAB LTS	20/1	1	3.96			3.36			2	20/1	ICTHS, HERPS, MUSEUM LTS	L
L	LAB ASSIST., BIO LAB LTS	20/1	3		4.08			2.52		4	20/1	PREP LAB, WET LAB LTS	L
L	GEN. ZOOLOGY LAB LTS	20/1	5			3.36			1.95	6	20/1	CORRIDOR LTS	L
	TRANSFORMER TN4	60/3	7	12.9			11.2			8	60/3	TRANSFORMER TS4	
	—	—	9		11.9			12.4		10	—	—	
	—	—	11			11.6			12.8	12	—	—	
	SPACE W/BUS		13							14	20/1	SPARE	
			15							16	20/1	SPARE	
			17							18		SPACE W/BUS	
			19							20			
			21							22			
			23							24			
			25							26			
			27							28			
			29							30			
			31							32			
			33							34			
			35							36			
			37							38			
			39							40			
			41							42			
				16.9	16	14.8	14.6	14.5	14.7				
				91.4	30.9	29.5	TOTALS						
				91.8			TOTAL CONN. LOAD KVA						

PANELBOARD SCHEDULE

PANEL EEH-1 VOLTS 480/277 ø 3 4 W MAINS: 225 A ☐ FLUSH MTD. ☒ TOP ☒ SURFACE MTD. FEEDER: ☐ BOTTOM 3-#3/0, 1-#1N, 1-#4GR, 2"C ☒ LUGS ☐ BREAKER COPPER BUS GROUND BAR INTERRUPTING RATING 14,000 A FED FROM: MSB-LS

TYPE NEHB

BRANCH BREAKERS

	ITEM	CKT. BRKR.	CKT. NO.	LOAD (KVA) A	B	C	LOAD (KVA) A	B	C	CKT. NO.	CKT. BRKR.	ITEM	
E	TEST BENCH NO. 1	20/3	1	1.67			1.67			2	20/3	TEST BENCH NO. 2	E
	—	—	3		1.69			1.67		4	—	—	
	—	—	5			1.69			1.67	6	—	—	
E	TEST BENCH NO. 3	20/3	7	1.67			1.67			8	20/3	TEST BENCH NO. 4	E
	—	—	9		1.67			1.67		10	—	—	
	—	—	11			1.67			1.67	12	—	—	
E	TEST BENCH NO. 5	20/3	13	1.67			1.67			14	20/3	TEST BENCH NO. 6	E
	—	—	15		1.67			1.67		16	—	—	
	—	—	17			1.67			1.67	18	—	—	
E	TEST BENCH NO. 7	20/3	19	1.67			1.67			20	20/3	TEST BENCH NO. 8	E
	—	—	21		1.67			1.67		22	—	—	
	—	—	23			1.67			1.67	24	—	—	
E	TEST BENCH NO. 9	20/3	25	1.67			24			26	100/3	TRANSFORMER TL2	
	—	—	27		1.67			24		28	—	—	
	—	—	29			1.69			24	30	—	—	
	SPARE	20/3	31				15			32	60/3	TRANSFORMER TM1	
	—	—	33					15		34	—	—	
	—	—	35						15	36	—	—	
	SPACE W/BUS		37							38		SPACE W/BUS	
			39							40			
			41							42			
				8.35	8.35	8.35	45.7	45.7	45.7				
				54.1	54.1	54.1	TOTALS						
				162.3			TOTAL CONN. LOAD KVA						

DISTRIBUTION EQUIPMENT SCHEDULE

NAME H2 VOLTS 480/277 ø 3 4 W MAINS 225 A ☐ FLUSH MTD. ☒ TOP ☒ SURFACE MTD. FEEDER: ☒ BOTTOM 3-#3/0, 1-#1N, 1-#4GR, 2"C ☒ LUGS ☐ DEVICE COPPER BUS GROUND BAR INTERRUPTING RATING 14,000 A FED FROM MSB-LS

TYPE I LINE 45 UNIT IN.

BRANCH CIRCUITS

ITEM/FEEDER	O.C. DEVICE	CKT. NO.	LOAD (KVA) A	B	C	LOAD (KVA) A	B	C	CKT. NO.	O.C. DEVICE	ITEM/FEEDER
RESEARCH, MATERIALS LAB LTS	20/1 FA CB	1	3.24			2.98			2	20/1 FA CB	SOILS LAB, CLASSROOM LTS
				—			—				
OFFICE AREA LTS	20/1 FA CB	3	—			—			4	20/1 FA CB	SOILS, STRUCTURAL LAB LTS
			3.48				3.96				
CLASSROOM, LOUNGE LTS	20/1 FA CB	5	—			—			6	20/1 FA CB	CORRIDOR LTS
				—			—				
					3.12			3.2			
TRANSFORMER TN2	150/3 KA CB	7	3.6			2.86			8	20/1 FA CB	CONCRETE PREP LAB LTS
FEEDER NO. 18				38			—				
					38.5			—	10	20/1 FA CB	SPARE
									12	20/1 FA CB	SPARE
						13.4			14	60/3 FA CB	TRANSFORMER TS2
							13.8				
								12.7			FEEDER NO 15
			35	41.5	36.6	19.3	17.8	15.9			
			54.3	59.2	52.9	TOTALS					
			166.4			TOTAL CONN. LOAD KVA					

DISTRIBUTION EQUIPMENT SCHEDULE

NAME H5 VOLTS 480/277 ø 3 4 W MAINS 400A ☐ FLUSH MTD. ☒ TOP ☒ SURFACE MTD. FEEDER: ☐ BOTTOM 3-#500MCM, 1-#250MCM N, 1-#2GR IN 3"C ☒ LUGS ☐ DEVICE COPPER BUS GROUND BAR INTERRUPTING RATING 14,000 FED FROM MSB-LS

TYPE I LINE 45 UNIT IN.

BRANCH CIRCUITS

ITEM/FEEDER	O.C. DEVICE	CKT. NO.	LOAD (KVA) A	B	C	LOAD (KVA) A	B	C	CKT. NO.	O.C. DEVICE	ITEM/FEEDER
CLASSROOM, OFFICE LTS	20/1 FA CB	1	3.84			5.92			2	20/1 FA CB	PLASMA, SEPARATION LAB LTS
				—			—				
OFFICE, MICRO-BIOLOGY LTS	20/1 FA CB	3	—			—			4	20/1 FA CB	X-RAY, THERMO LAB LTS
			5.96				7.88				
PREP, CELL BIOLOGY LTS	20/1 FA CB	5	—			—			6	20/1 FA CB	BIO TECH, CHEM LAB LTS
				—			—				
					3.0			4.2			
AHU-5 15HP	40/3 FA CB	7	5.81			2.95			8	20/1 FA CB	CORRIDOR, TOILET, ROOF LTS
FEEDER NO. 9				5.81			—				
DUCT HEATERS 1,2,3	30/3 FA CB	9	6.67			.39			10	15/3 FA CB	EXHAUST FAN 3/4HP
FEEDER NO. 9				6.67			.39				FEEDER NO. 10
TRANSFORMER TN5	150/3 KA CB	11	37.8			25.6			12	100/3 FA CB	TRANSFORMER TS5
FEEDER NO. 18				37.5			26.8				FEEDER NO. 19
SPARE	20/1 FA CB	13			34.6			26.4	14	20/1 FA CB	SPARE
			56.1	56.7	50	32.9	29.1	31			
			88.8	98.8	81.1	TOTALS					
			252.7			TOTAL CONN. LOAD KVA					

PANELBOARD SCHEDULE

PANEL EEH-2 VOLTS 480/277 ø 3 4 W MAINS 225 A ☐ FLUSH MTD. ☒ TOP ☒ SURFACE MTD. FEEDER: ☐ BOTTOM 3-#3/0, 1-#4GR, 2"C ☒ LUGS ☐ BREAKER COPPER BUS GROUND BAR INTERRUPTING RATING 14,000 A FED FROM: MSB-LS

TYPE NEHB

BRANCH BREAKERS

	ITEM	CKT. BRKR.	CKT. NO.	LOAD (KVA) A	B	C	LOAD (KVA) A	B	C	CKT. NO.	CKT. BRKR.	ITEM	
E	TEST BENCH NO. 1	20/3	1	1.67			1.67			2	20/3	TEST BENCH NO. 2	E
	—	—	3		1.67			1.67		4	—	—	
	—	—	5			1.67			1.67	6	—	—	
E	TEST BENCH NO. 3	20/3	7	1.67			1.67			8	20/3	TEST BENCH NO. 4	E
	—	—	9		1.67			1.67		10	—	—	
	—	—	11			1.67			1.67	12	—	—	
E	TEST BENCH NO. 5	20/3	13	1.67			1.67			14	20/3	TEST BENCH NO. 6	E
	—	—	15		1.67			1.67		16	—	—	
	—	—	17			1.67			1.67	18	—	—	
E	TEST BENCH NO. 7	20/3	19	1.67			1.67			20	20/3	TEST BENCH NO. 8	E
	—	—	21		1.67			1.67		22	—	—	
	—	—	23			1.67			1.67	24	—	—	
E	TEST BENCH NO. 9	20/3	25	1.67			24			26	100/3	TRANSFORMER TL2	
	—	—	27		1.67			24		28	—	—	
	—	—	29			1.69			24	30	—	—	
	SPARE	20/3	31				15			32	60/3	TRANSFORMER TM2	
	—	—	33					15		34	—	—	
	—	—	35						16	36	—	—	
	SPACE W/BUS		37							38		SPACE W/BUS	
			39							40			
			41							42			
				8.36	8.35	8.35	46.7	45.7	45.7				
				54.1	54.1	54.1	TOTALS						
				162.8			TOTAL CONN. LOAD KVA						

PANELBOARD SCHEDULE

PANEL H3 VOLTS 480/277 ø 3 4 W MAINS 225 A ☐ FLUSH MTD. ☒ TOP ☒ SURFACE MTD. FEEDER: ☒ BOTTOM 3-#3/0, 1-#1N, 1-#4GR, 2"C ☒ LUGS ☐ BREAKER COPPER BUS GROUND BAR INTERRUPTING RATING 14,000 A FED FROM: MSB-LS

TYPE NEHB

BRANCH BREAKERS

	ITEM	CKT. BRKR.	CKT. NO.	LOAD (KVA) A	B	C	LOAD (KVA) A	B	C	CKT. NO.	CKT. BRKR.	ITEM	
L	OFFICE, CLASSROOM LTS	20/1	1	3.84			3.6			2	20/1	MAP RM., GEOLOGY LTS	L
L	BIOLOGY, PREP RM LTS	20/1	3		3.36			2.4		4	20/1	LAPIDARY, BIO-CHEM LTS	L
L	BIOLOGY, LEARNING LAB LTS	20/1	5			3.24			1.95	6	20/1	CORRIDOR, TOILET LTS	L
M	AHU-2 10HP	25/3	7	3.87			5.22			8	20/1	PHYSICAL SCIENCE LTS	L
	—	—	9		3.87			3.24		10	20/1	PHYSICAL SCIENCE LTS	L
	—	—	11			3.87				12	20/1	SPARE	
	TRANSFORMER TN3	100/3	13	16.7			9.92			14	60/3	TRANSFORMER TS3	
	—	—	15		15.8			10.5		16	—	—	
	—	—	17			14.6			10.5	18	—	—	
	SPACE W/BUS		19							20		SPACE W/BUS	
			21							22			
			23							24			
			25							26			
			27							28			
			29							30			
			31							32			
			33							34			
			35							36			
			37							38			
			39							40			
			41							42			
				23.9	23	21.8	16.7	16.1	12.4				
				40.7	39	34.2	TOTALS						
				114.0			TOTAL CONN. LOAD KVA						

DISTRIBUTION EQUIPMENT SCHEDULE

NAME HR VOLTS 480 ø 3 3 W MAINS 225 A ☐ FLUSH MTD. ☐ TOP ☒ SURFACE MTD. FEEDER: ☒ BOTTOM 3-#3/0, 1-#4GR, 2"C ☒ LUGS ☐ DEVICE COPPER BUS GROUND BAR INTERRUPTING RATING 14,000 A FED FROM MSB-LS

TYPE QMB 30 UNIT IN.

BRANCH CIRCUITS

ITEM/FEEDER	O.C. DEVICE	CKT. NO.	LOAD (KVA) A	B	C	LOAD (KVA) A	B	C	CKT. NO.	O.C. DEVICE	ITEM/FEEDER
SUPPLY FAN NO. 1 20HP	60/3 45 FRS SW	1	7.47			STBY			2	60/3 45 FRS SW	SUPPLY FAN NO. 2 20HP
FEEDER NO. 11				7.47			STBY				FEEDER NO. 11
EXHAUST FAN NO. 1 15HP	30/3 30 FRS SW	3	5.81			STBY			4	30/3 30 FRS SW	EXHAUST FAN NO. 2 15HP
FEEDER NO. 9				5.81			STBY				FEEDER NO. 9
EXHAUST FAN NO. 3 15HP	30/3 30 FRS SW	5	5.81			4.17			6	60/3 45 FRS SW	ELEVATOR
FEEDER NO. 9				5.81			4.17				FEEDER NO. 11
			19.1	19.1	19.1	4.17	4.17	4.17			
			23.3	23.5	23.3	TOTALS					
			69.9			TOTAL CONN. LOAD KVA					

panel schedules

ADDITION TO
LABORATORY SCIENCES CENTER
ARKANSAS STATE UNIVERSITY
JONESBORO, ARKANSAS

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER H. W. GOODKNIGHT JR.

Brackett Krennerich and Associates Inc
Architects

P.O. Box 1655 • Jonesboro, Arkansas 72403-1655 • 501/932-0571

AF 32526

COMM. NO. 10186

E-23

DATE: 6/23/86

PANELBOARD SCHEDULE

PANEL EEM-1 VOLTS 240 ø 3 3 W MAINS: 100 A ☐ LUGS COPPER BUS FED FROM: TM1
☐ FLUSH MTD. ☒ TOP ☒ BREAKER GROUND BAR
TYPE NQOB ☒ SURFACE MTD. FEEDER: ☐ BOTTOM 3-#2, 1-#8GR, 1¼"C INTERRUPTING RATING 10,000 A

BRANCH BREAKERS

	ITEM	CKT. BRKR.	CKT. NO.	LOAD (KVA) A	B	C	LOAD (KVA) A	B	C	CKT. NO.	CKT. BRKR.	ITEM	
E	TEST BENCH NO.1	20/3	1	1.67	·		1.67	·		2	20/3	TEST BENCH NO.2	E
	—	—	3		1.67			1.67		4	—	—	
	—	—	5			1.67			1.67	6	—	—	
E	TEST BENCH NO.3	20/3	7	1.67			1.67			8	20/3	TEST BENCH NO.4	E
	—	—	9		1.67			1.67		10	—	—	
	—	—	11			1.67			1.67	12	—	—	
E	TEST BENCH NO.5	20/3	13	1.67			1.67			14	20/3	TEST BENCH NO.6	E
	—	—	15		1.67			1.67		16	—	—	
	—	—	17			1.67			1.67	18	—	—	
E	TEST BENCH NO.7	20/3	19	1.67			1.67			20	20/3	TEST BENCH NO.8	E
	—	—	21		1.67			1.67		22	—	—	
	—	—	23			1.67			1.67	24	—	—	
E	TEST BENCH NO.9	20/3	25	1.67						26	20/3	SPARE	
	—	—	27		1.67					28	—	—	
	—	—	29			1.67				30	—	—	
			31							32			
			33							34			
			35							36			
			37							38			
			39							40			
			41							42			
				8.35	8.35	8.35	6.68	6.68	6.68				
				15	15	15						TOTALS	
				45								TOTAL CONN. LOAD KVA	

PANELBOARD SCHEDULE

PANEL EEL-1 VOLTS 208/120 ø 3 4 W MAINS: 225 A ☐ LUGS COPPER BUS FED FROM: TL1
☐ FLUSH MTD. ☒ TOP ☒ BREAKER GROUND BAR
TYPE NQOB ☒ SURFACE MTD. FEEDER: ☐ BOTTOM 3-#3/0, 1-#3/0N, 1-#6GR, 2"C INTERRUPTING RATING 10,000 A

BRANCH BREAKERS

	ITEM	CKT. BRKR.	CKT. NO.	LOAD (KVA) A	B	C	LOAD (KVA) A	B	C	CKT. NO.	CKT. BRKR.	ITEM	
E	TEST BENCH NO. 1	20/3	1	1.67	·		1.67	·		2	20/3	TEST BENCH NO. 2	E
	—	—	3		1.67			1.67		4	—	—	
	—	—	5			1.67			1.67	6	—	—	
E	TEST BENCH NO. 3	20/3	7	1.67			1.67			8	20/3	TEST BENCH NO. 4	E
	—	—	9		1.67			1.67		10	—	—	
	—	—	11			1.67			1.67	12	—	—	
E	TEST BENCH NO. 5	20/3	13	1.67			1.67			14	20/3	TEST BENCH NO. 6	E
	—	—	15		1.67			1.67		16	—	—	
	—	—	17			1.67			1.67	18	—	—	
E	TEST BENCH NO. 7	20/3	19	1.67			1.67			20	20/3	TEST BENCH NO. 8	E
	—	—	21		1.67			1.67		22	—	—	
	—	—	23			1.67			1.67	24	—	—	
E	TEST BENCH NO. 9	20/3	25	1.67			1.8			26	20/1	TEST BENCH NO. 1A	E
	—	—	27		1.67			1.8		28	20/1	TEST BENCH NO. 2A	E
	—	—	29			1.67			1.8	30	20/1	TEST BENCH NO. 3A	E
	MACHINE SHOP	20/1	31	1.8			1.8			32	20/1	TEST BENCH NO. 4A	E
	MACHINE SHOP	20/1	33		1.8			1.8		34	20/1	TEST BENCH NO. 5A	E
	MACHINE SHOP	20/1	35			1.8			1.8	36	20/1	TEST BENCH NO. 6A	E
	RECEPTACLES	20/1	37	1.8			1.8			38	20/1	TEST BENCH NO. 7A	E
	HOIST	20/1	39		1.8			1.8		40	20/1	TEST BENCH NO. 8A	E
	SPARE	20/1	41			1.8			1.8	42	20/1	TEST BENCH NO 9A	E
				11.9	11.9	11.9	12.1	12.1	12.1				
				24	24	24						TOTALS	
				72								TOTAL CONN. LOAD KVA	

PANELBOARD SCHEDULE

PANEL L61 VOLTS 208/120 ø 3 4 W MAINS: 125 A ☐ LUGS COPPER BUS FED FROM: TS1
☐ FLUSH MTD. ☐ TOP ☒ BREAKER GROUND BAR
TYPE NQOB ☒ SURFACE MTD. FEEDER: ☒ BOTTOM 3-#2, 1-#2N, 1-#8GR, 1¼"C INTERRUPTING RATING 10,000 A

BRANCH BREAKERS

	ITEM	CKT. BRKR.	CKT. NO.	LOAD (KVA) A	B	C	LOAD (KVA) A	B	C	CKT. NO.	CKT. BRKR.	ITEM	
L	TOILETS, WORKROOM, DARKROOM	20/1	1	.9	·		.72	·		2	20/1	RECEPTACLES ROOM 132	R
L	DARKROOM, MICROSCOPE ROOM	20/1	3		1.5			1.9		4	20/2	EQUIPMENT ROOM 132	E
R	ELECTRIC ROOM 137	20/1	5			.6			1.9	6	—	—	
R	PHONE BOARD	20/1	7	.6			.72			8	20/1	COMPUTER CIRCUIT (L)	R
R	TV PANEL	20/1	9		.6			1.8		10	20/1	COPY MACHINE	R
R	ELEVATOR PIT	20/1	11			1.0			1.08	12	20/1	OFFICE RECEPTACLES	R
R	TOILETS, CORRIDOR	20/1	13	.72			1.08			14	20/1	OFFICE RECEPTACLES	R
R	RECEPTACLES ROOMS 133, 134	20/1	15		1.08			.9		16	20/1	RECEPTACLES ROOM 131	R
E	FAN/COIL UNITS	20/1	17			1.72			.72	18	20/1	RECEPTACLES ROOM 137	R
R	RECEPTACLES ROOM 132	20/1	19	.6			.6			20	20/1	COMPUTER CIRCUIT (L)	R
R	COMPUTER CIRCUIT (L)	20/1	21		.6			.6		22	20/1	— " — — " — — " —	R
R	— " — — " — — " —	20/1	23			.6			.6	24	20/1	— " — — " — — " —	R
R	— " — — " — — " —	20/1	25	.6			.6			26	20/1	— " — — " — — " —	R
R	— " — — " — — " —	20/1	27		.6			.6		28	20/1	— " — — " — — " —	R
R	— " — — " — — " —	20/1	29			.6				30	20/1	SPARE	
	SPARE	20/1	31							32	20/1	SPARE	
	SPARE	20/1	33							34		SPACE W/BUS	
	SPACE W/BUS		35							36		— " — — " —	
	— " — — " —		37							38		— " — — " —	
	— " — — " —		39							40		— " — — " —	
	— " — — " —		41							42		— " — — " —	
				3.42	4.38	4.52	3.72	5.6	4.1				
				7.14	9.78	8.62						TOTALS	
				25.74								TOTAL CONN. LOAD KVA	

PANELBOARD SCHEDULE

PANEL EEM-2 VOLTS 240 ø 3 3 W MAINS: 100 A ☐ LUGS COPPER BUS FED FROM: TM2
☐ FLUSH MTD. ☒ TOP ☒ BREAKER GROUND BAR
TYPE NQOB ☒ SURFACE MTD. FEEDER: ☐ BOTTOM 3-#2, 1-#8GR, 1¼"C INTERRUPTING RATING 10,000 A

BRANCH BREAKERS

	ITEM	CKT. BRKR.	CKT. NO.	LOAD (KVA) A	B	C	LOAD (KVA) A	B	C	CKT. NO.	CKT. BRKR.	ITEM	
E	TEST BENCH NO.1	20/3	1	1.67	·		1.67	·		2	20/3	TEST BENCH NO.2	E
	—	—	3		1.67			1.67		4	—	—	
	—	—	5			1.67			1.67	6	—	—	
E	TEST BENCH NO.3	20/3	7	1.67			1.67			8	20/3	TEST BENCH NO.4	E
	—	—	9		1.67			1.67		10	—	—	
	—	—	11			1.67			1.67	12	—	—	
E	TEST BENCH NO.5	20/3	13	1.67			1.67			14	20/3	TEST BENCH NO.6	E
	—	—	15		1.67			1.67		16	—	—	
	—	—	17			1.67			1.67	18	—	—	
E	TEST BENCH NO.7	20/3	19	1.67			1.67			20	20/3	TEST BENCH NO.8	E
	—	—	21		1.67			1.67		22	—	—	
	—	—	23			1.67			1.67	24	—	—	
E	TEST BENCH NO.9	20/3	25	1.67						26	20/3	SPARE	
	—	—	27		1.67					28	—	—	
	—	—	29			1.67				30	—	—	
			31							32			
			33							34			
			35							36			
			37							38			
			39							40			
			41							42			
				8.35	8.35	8.35	6.68	6.68	6.68				
				15	15	15						TOTALS	
				45								TOTAL CONN. LOAD KVA	

PANELBOARD SCHEDULE

PANEL EEL-2 VOLTS 208/120 ø 3 4 W MAINS: 225 A ☐ LUGS COPPER BUS FED FROM: TL2
☐ FLUSH MTD. ☒ TOP ☒ BREAKER GROUND BAR
TYPE NQOB ☒ SURFACE MTD. FEEDER: ☐ BOTTOM 3-#3/0, 1-#3DN, 1-#4GR, 2"C INTERRUPTING RATING 10,000 A

BRANCH BREAKERS

	ITEM	CKT. BRKR.	CKT. NO.	LOAD (KVA) A	B	C	LOAD (KVA) A	B	C	CKT. NO.	CKT. BRKR.	ITEM	
E	TEST BENCH NO. 1	20/3	1	1.67	·		1.67	·		2	20/3	TEST BENCH NO. 2	E
	—	—	3		1.67			1.67		4	—	—	
	—	—	5			1.67			1.67	6	—	—	
E	TEST BENCH NO. 3	20/3	7	1.67			1.67			8	20/3	TEST BENCH NO. 4	E
	—	—	9		1.67			1.67		10	—	—	
	—	—	11			1.67			1.67	12	—	—	
E	TEST BENCH NO. 5	20/3	13	1.67			1.67			14	20/3	TEST BENCH NO. 6	E
	—	—	15		1.67			1.67		16	—	—	
	—	—	17			1.67			1.67	18	—	—	
E	TEST BENCH NO. 7	20/3	19	1.67			1.67			20	20/3	TEST BENCH NO. 8	E
	—	—	21		1.67			1.67		22	—	—	
	—	—	23			1.67			1.67	24	—	—	
E	TEST BENCH NO. 9	20/3	25	1.67			1.8			26	20/1	TEST BENCH NO. 1A	E
	—	—	27		1.67			1.8		28	20/1	TEST BENCH NO. 2A	E
	—	—	29			1.67			1.8	30	20/1	TEST BENCH NO. 3A	E
	MACHINE SHOP	20/1	31	1.8			1.8			32	20/1	TEST BENCH NO. 4A	E
	MACHINE SHOP	20/1	33		1.8			1.8		34	20/1	TEST BENCH NO. 5A	E
	MACHINE SHOP	20/1	35			1.8			1.8	36	20/1	TEST BENCH NO 6A	E
	RECEPTACLES	20/1	37	1.8			1.8			38	20/1	TEST BENCH NO. 7A	E
	HOIST	20/1	39		1.8			1.8		40	20/1	TEST BENCH NO. 8A	E
	SPARE	20/1	41			1.8			1.8	42	20/1	TEST BENCH NO 9A	E
				11.9	11.9	11.9	12.1	12.1	12.1				
				24	24	24						TOTALS	
				72								TOTAL CONN. LOAD KVA	

PANELBOARD SCHEDULE

PANEL LS2 VOLTS 208/120 ø 3 4 W MAINS: 125 A ☐ LUGS COPPER BUS FED FROM: TS2
☐ FLUSH MTD. ☐ TOP ☒ BREAKER GROUND BAR
TYPE NQOB ☒ SURFACE MTD. FEEDER: ☒ BOTTOM 3-#2, 1-#2N, 1-#8GR, 1¼"C INTERRUPTING RATING 10,000 A

BRANCH BREAKERS

	ITEM	CKT. BRKR.	CKT. NO.	LOAD (KVA) A	B	C	LOAD (KVA) A	B	C	CKT. NO.	CKT. BRKR.	ITEM	
E	FREEZER ROOM 232	20/1	1	LO	·			.6		2	20/1	RECEPTACLES ROOM 231	R
E	EQUIPMENT ROOM 231	20/2	3		1.7				1.08	4	20/1	LAB TABLE ROOM 231	E
	—	—	5			1.7			1.08	6	—	" "	
E	EQUIPMENT ROOM 232	20/2	7	1.7			1.7			8	20/2	EQUIPMENT ROOM 230	E
	—	—	9		1.7			1.7		10			
E	EQUIPMENT ROOM 230	20/2	11			1.7			1.7	12	20/3	EQUIPMENT ROOM 230	E
			13	1.7			1.7			14			
E	EQUIPMENT ROOM 230	20/3	15		1.7			1.7		16			E
	—	—	17			1.7			1.08	18	20/1	RECEPTACLES ROOM 230	R
R	OFFICE RECEPTACLES	20/1	19	1.7			.6			20	20/1	PHONE BOARD	R
R	OFFICE RECEPTACLES	20/1	21		1.08			.6		22	20/1	TV PANEL	R
E	FAN/COIL UNITS	20/1	23			1.82			.6	24	20/1	ELECTRICAL ROOM 233	R
R	OFFICE RECEPTACLES	20/1	25	1.08			.9			26	20/1	RECEPTACLES ROOM 234	R
R	COMPUTER CIRCUIT (L)	20/1	27		1.08			.9		28	20/1	" " "	R
R	RECEPTACLES ROOM 234	20/1	29			.6			1.08	30	20/1	RECEPTACLES ROOM 835	R
R	— " — — " — — " —	20/1	31	.6						32	20/1	SPARE	
R	— " — — " — — " —	20/1	33		.6					34	20/1	SPARE	
	SPARE	20/1	35							36		SPACE W/BUS	
	SPARE	20/1	37							38		— " — — " —	
	SPACE W/BUS		39							40		— " — — " —	
	— " — — " —		41							42		— " — — " —	
				7.78	7.86	7.12	5.5	5.98	5.54				
				18.4	18.8	12.7						TOTALS	
				39.9								TOTAL CONN. LOAD KVA	

PANELBOARD SCHEDULE

PANEL EM VOLTS 208/120 ø 3 4 W MAINS: 125 A ☐ LUGS COPPER BUS FED FROM: TEM
☐ FLUSH MTD. ☒ TOP ☒ BREAKER GROUND BAR
TYPE NQOB ☒ SURFACE MTD. FEEDER: ☐ BOTTOM 3-#2, 1-#2N, 1-#8GR, 1½"C INTERRUPTING RATING 10,000 A

BRANCH BREAKERS

	ITEM	CKT. BRKR.	CKT. NO.	LOAD (KVA) A	B	C	LOAD (KVA) A	B	C	CKT. NO.	CKT. BRKR.	ITEM	
R	RECEPTACLES ROOM 140-B	20/1	1	.6	·		.6	·		2	20/1	RECEPTACLE ROOM 138	R
R	— " — — " — 140-A	"	3		.6			8.25		4	30/2	EQUIPMENT ROOM 138	E
R	— " — — " — 140	"	5			.6			2.25	6	—	—	
E	DRYER — " — 140	30/2	7	1.7			1.7			8	20/3	EQUIPMENT ROOM 138	E
	—	—	9		1.7			1.7		10	—	—	
E	EQUIPMENT ROOM 139	20/3	11			1.7			1.7	12	—	—	
	—	—	13	1.7			.6			14	20/1	RECEPTACLES ROOM 141	R
	—	—	15		1.7			2.25		16	30/2	EQUIPMENT ROOM 141	E
R	RECEPTACLES ROOM 139	20/1	17			.6			2.25	18	—	—	
R	— " — — " — 144	20/1	19	.72			1.7			20	20/3	EQUIPMENT ROOM 141	E
R	— " — — " — 146	20/1	21		.9			1.7		22	—	—	
R	— " — — " — 145	20/1	23			.9			1.7	24	—	—	
R	— " — — " — 142	20/1	25	.9			1.7			26	30/2	EQUIPMENT ROOM 143	E
R	COMPUTER CIRCUIT (L)	20/1	27		.6			1.7		28	—	—	
	SPARE	20/1	29						1.7	30	30/2	FUME HOOD ROOM 142	E
	SPARE	20/1	31				1.7			32	—	—	
	SPACE W/BUS		33							34	20/1	SPARE	
	— " — — " —		35							36	20/1	SPARE	
	— " — — " —		37							38		SPACE W/BUS	
	— " — — " —		39							40		— " — — " —	
	— " — — " —		41							42		— " — — " —	
				5.62	5.5	3.8	8.0	9.6	9.6				
				13.6	15.1	13.4						TOTALS	
				42.1								TOTAL CONN. LOAD KVA	

PANELBOARD SCHEDULE

PANEL LN1 VOLTS 208/120 ø 3 4 W MAINS: 100 A ☐ LUGS COPPER BUS FED FROM: TN1
☐ FLUSH MTD. ☐ TOP ☒ BREAKER GROUND BAR
TYPE NQOB ☒ SURFACE MTD. FEEDER: ☒ BOTTOM 3-#4, 1-#4N, 1-#8GR, 1¼"C INTERRUPTING RATING 10,000 A

BRANCH BREAKERS

	ITEM	CKT. BRKR.	CKT. NO.	LOAD (KVA) A	B	C	LOAD (KVA) A	B	C	CKT. NO.	CKT. BRKR.	ITEM	
R	MECHANICAL ROOM 151	20/1	1	.6	·		1.0	·		2	20/1	EQUIPMENT ROOM 152	E
R	ELECTRICAL ROOM 150	20/1	3		.6			.9		4	20/1	COMPUTER CIRCUIT (L)	R
R	RECEPTACLE ROOM 158	20/1	5			.9			1.5	6	20/1	FAN/COIL UNITS	E
R	— " — — " — 152	20/1	7	.72			.6			8	20/1	COMPUTER CIRCUIT (L)	R
R	COMPUTER CIRCUIT (L)	20/1	9		.6			.6		10	20/1	— " — — " —	R
R	— " — — " — — " —	20/1	11			.6			.6	12	20/1	— " — — " —	R
R	— " — — " — — " —	20/1	13	.6			.6			14	20/1	— " — — " —	R
R	— " — — " — — " —	20/1	15		.6			.6		16	20/1	— " — — " —	R
R	— " — — " — — " —	20/1	17			.6			.6	18	20/1	JANITOR ROOM	R
R	RECEPTACLE ROOM 156	20/1	19	1.26			.6			20	20/1	SPARE	
	SPARE		21							22	20/1	SPARE	
	SPARE		23							24	20/1	SPARE	
	SPACE W/BUS		25							26		SPACE W/BUS	
	— " — — " —		27							28		— " — — " —	
	— " — — " —		29							30		— " — — " —	
			31							32			
			33							34			
			35							36			
			37							38			
			39							40			
			41							42			
				3.18	1.8	2.1	2.8	2.1	2.7				
				5.98	3.9	4.8						TOTALS	
				14.68								TOTAL CONN. LOAD KVA	

panel schedules

(L) INDICATES CIRCUIT BREAKER WITH HANDLE LOCK.

ADDITION TO
LABORATORY SCIENCES CENTER
ARKANSAS STATE UNIVERSITY
JONESBORO, ARKANSAS

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER No. 1657 H. W. GOODMAN JR.

Brackett Kennerich and Associates Inc. Architects
P.O. Box 1655 • Jonesboro, Arkansas 72403-1655 • 501/932-0571

AF 32526

PANELBOARD SCHEDULE

PANEL LN2 VOLTS 208/120 ø3 4W MAINS: 300A ☐ LUGS COPPER BUS FED FROM: TN2
☐ FLUSH MTD. ☐ TOP ☒ BREAKER GROUND BAR
TYPE NQOB ☒ SURFACE MTD. FEEDER: ☒ BOTTOM 3-#300MCM, 1-#300MCM N, 1-#2GR, 3"C INTERRUPTING RATING 10,000 A

SECTION 1 — BRANCH BREAKERS

	ITEM	CKT. BRKR.	CKT. NO.	LOAD (KVA) A	B	C	LOAD (KVA) A	B	C	CKT. NO.	CKT. BRKR.	ITEM	
L	CANOPY LIGHTS	20/1	1	1.8			1.75			2	20/1	CANOPY LIGHTS	L
L	CANOPY LIGHTS	20/1	3		1.65			1.5		4	20/1	"	L
L	CANOPY LIGHTS, STAIR L.	20/1	5			1.4			1.5	6	20/1	"	L
L	UNDERCOUNTER LIGHTS	20/1	7	.2			1.0			8	20/1	"	L
R	STRUCT. TEST LAB. RM 240	20/1	9		.72			4.0		10	50/2	STRUCT. TEST LAB RM. 240	E
R	" "	20/1	11			.72			4.0	12	—	—	
R	" "	20/1	13	.6			4.0			14	50/2	STRUCT. TEST LAB RM. 240	E
E	" "	20/2	15		1.7			4.0		16	—	—	
	—		17			1.7			.72	18	20/1	JANITOR RM. 237	R
M	FAN/COIL UNITS	20/1	19	1.39			.6			20	20/1	ELECT. RM. 236	R
E	VENDING MACHINE RM. 239	20/1	21		1.2			1.7		22	30/2	STORAGE RM. 240A	E
E	" "	20/1	23			1.2			1.7	24	—	—	
E	" "	20/1	25	1.2			1.7			26	30/2	CONST. TEMP. RM 240B	E
E	" "	20/1	27		1.2			1.7		28	—	—	
R	STORAGE RM. 240A	20/1	29			.6			4.0	30	50/2	STRUCT. TEST LAB RM. 236	E
R	CONST. TEMP. RM. 240B	20/1	31	.6			4.0			32	—	—	
R	VARYING TEMP. RM 240C	20/1	33		.6			4.0		34	50/2	STRUCT. TEST LAB RM. 236	E
R	COMPUTER OUTLETS (L)	20/1	35			1.26			4.0	36	—	—	
R	STRUCT. TEST LAB RM. 236	20/1	37	.9			.6			38	20/1	STRUCT. TEST LAB RM. 236	R
E	MAT. RESEARCH	20/2	39		1.7			.6		40	20/1	"	R
	—	—	41			1.7			.6	42	20/1	"	R

SECTION 2 — BRANCH BREAKERS

	ITEM	CKT. BRKR.	CKT. NO.	LOAD (KVA) A	B	C	LOAD (KVA) A	B	C	CKT. NO.	CKT. BRKR.	ITEM	
E	MAT. RESEARCH RM. 241	20/3	43	1.7			1.0			44	20/1	MAT. RESEARCH RM. 241	E
	—	—	45		1.7			.6		46	20/1	" "	R
	—	—	47			1.7			1.08	48	20/1	" "	R
R	MAT. RESEARCH RM. 241	20/1	49	1.08			1.7			50	30/2	FUME HOOD RM. 241	E
E	FUME HOOD RM. 241	30/2	51		1.7			1.7		52	—	—	
	—	—	53			1.7			1.0	54	20/1	MAT. RESEARCH RM. 241	E
E	MAT. RESEARCH RM. 241	20/2	55	1.7			1.7			56	30/2	FUME HOOD RM. 241	E
	—	—	57		1.7			1.7		58	—	—	
R	OFFICES	20/1	59			.9			.9	60	20/1	OFFICES	R
R	OFFICES	20/1	61	.9			.6			62	20/1	WORK RM. 245B	R
E	F.A.P. RM. 245	20/1	63		.6			.9		64	20/1	OFFICES	R
	SPARE	20/1	65							66	20/1	SPARE	
	SPARE	20/1	67							68	20/1	SPARE	
	SPARE	20/1	69							70	20/1	SPARE	
	SPACE W/BUS		71							72		SPACE W/BUS	
	"		73							74		"	
	"		75							76		"	
	"		77							78		"	
	"		79							80		"	
	"		81							82		"	
	"		83							84		"	
				12.07	14.47	12.88	19.75	23.5	20.6				
				31.82	37.97	33.48	TOTALS						
				103.27			TOTAL CONN. LOAD KVA						

PANELBOARD SCHEDULE

PANEL LN3 VOLTS 208/120 ø3 4W MAINS: 225 A ☐ LUGS COPPER BUS FED FROM: TN3
☐ FLUSH MTD. ☐ TOP ☒ BREAKER GROUND BAR
TYPE NQOB ☒ SURFACE MTD. FEEDER: ☒ BOTTOM 3-#3/0, 1-#3/0N, 1-#4GR, 2"C INTERRUPTING RATING 10,000 A

SECTION 1 — BRANCH BREAKERS

	ITEM	CKT. BRKR.	CKT. NO.	LOAD (KVA) A	B	C	LOAD (KVA) A	B	C	CKT. NO.	CKT. BRKR.	ITEM	
L	TRACK LIGHTING CORRIDOR	20/1	1	.9			1.7			2	30/2	FUME HOOD RM. 338	E
E	FUME HOOD	30/2	3		1.7			1.7		4	—	—	
	—	—	5			1.7			1.2	6	20/1	BIO-CHEM. LAB RM. 338	R
E	FUME HOOD	30/2	7	1.7			1.08			8	20/1	" "	R
	—	—	9		1.7			.9		10	20/1	COMPUTER OUTLETS (L)	R
R	BIO-CHEM. LAB RM. 338	20/1	11			.9			.6	12	20/1	ELECT. RM. RM. 336	R
R	PREP/LAPIDARY RM. 339A	20/1	13	.9			.9			14	20/1	GEN. PHYS. LAB RM. 334	R
R	BIO-CHEM. LAB RM. 338	20/1	15		.9			1.08		16	20/1	PHYS/HISTOR. GEOLOGY RM 339	R
R	" "	20/1	17			1.08			1.08	18	20/1	" "	R
R	" "	20/1	19	1.08			1.08			20	20/1	" "	R
R	" "	20/1	21		1.08			1.08		22	20/1	" "	R
R	" "	20/1	23			.9			1.34	24	20/1	FAN/COIL UNITS	M
R	LEARNING LAB. RM. 340	20/1	25	.9			1.08			26	20/1	GEN. PHYS. LAB RM. 334	R
R	" "	20/1	27		.9			1.08		28	20/1	" "	R
E	FUME HOOD RM. 334	30/2	29			1.7			1.08	30	20/1	" "	R
	—	—	31	1.7			1.08			32	20/1	" "	R
R	GEN. BIOL. LAB RM. 341	20/1	33		.9			1.08		34	20/1	PHYS./HISTOR. GEOLOGY RM. 339	R
R	" "	20/1	35			.9			1.08	36	20/1	" "	R
R	" "	20/1	37	1.08			1.08			38	20/1	" "	R
R	" "	20/1	39		1.08			.6		40	20/1	MECH. RM. RM. 337	R
R	" "	20/1	41			1.08			.6	42	20/1	PANELS FPU-4 & FPU-5	R

SECTION 2 — BRANCH BREAKERS

	ITEM	CKT. BRKR.	CKT. NO.	LOAD (KVA) A	B	C	LOAD (KVA) A	B	C	CKT. NO.	CKT. BRKR.	ITEM	
	SPARE	20/1	43							44	20/1	SPARE	
	SPARE	20/1	45							46	20/1	SPARE	
	SPARE	20/1	47							48	20/1	SPARE	
	SPACE W/BUS		49							50		SPACE W/BUS	
	"		51							52		"	
	"		53							54		"	
	"		55							56		"	
	"		57							58		"	
	"		59							60		"	
	"		61							62		"	
	"		63							64		"	
	"		65							66		"	
	"		67							68		"	
	"		69							70		"	
	"		71							72		"	
			73							74			
			75							76			
			77							78			
			79							80			
			81							82			
			83							84			
				8.26	8.26	8.26	8.0	7.52	6.98				
				16.26	15.78	14.70	TOTALS						
				47.28			TOTAL CONN. LOAD KVA						

PANELBOARD SCHEDULE

PANEL LS3 VOLTS 208/120 ø3 4W MAINS: 125 A ☐ LUGS COPPER BUS FED FROM: TS3
☐ FLUSH MTD. ☐ TOP ☒ BREAKER GROUND BAR
TYPE NQOB ☒ SURFACE MTD. FEEDER: ☒ BOTTOM 3-#2, 1-#2N, 1-#8GR, 1¼"C INTERRUPTING RATING 10,000A

BRANCH BREAKERS

	ITEM	CKT. BRKR.	CKT. NO.	LOAD (KVA) A	B	C	LOAD (KVA) A	B	C	CKT. NO.	CKT. BRKR.	ITEM	
L	TOILETS	20/1	1	.3			.9			2	20/1	OFFICES	R
R	CLASSROOM RM. 344	20/1	3		.72			.72		4	20/1	COMPUTER OUTLETS (L)	R
R	" "	20/1	5			.9			.9	6	20/1	OFFICES	R
R	GEN. BIOL. LAB RM. 343	20/1	7	1.08			1.08			8	20/1	GEN. BIOL. LAB RM. 343	R
R	" "	20/1	9		1.08			1.08		10	20/1	" "	R
R	" "	20/1	11			1.08			1.08	12	20/1	" "	R
R	EWC, TOILETS	20/1	13	1.2			.6			14	20/1	PHONE BOARD RM. 333A	R
R	GEN. BIOL. LAB RM. 343	20/1	15		.9			.6		16	20/1	TV BOX RM. 333A	R
M	FAN/COIL UNITS	20/1	17			1.5			.6	18	20/1	ELECT. RM. RM. 333A	R
R	GEN. BIOL. LAB RM. 343	20/1	19	.9			1.7			20	30/2	FUME HOOD RM. 333	E
R	PREPARATION RM. 342	20/1	21		.9			1.7		22	—	—	
R	COMPUTER OUTLETS (L)	20/1	23			.72			1.08	24	20/1	GEN. PHYS. LAB RM. 333	R
R	GEN. PHYS. LAB RM. 333	20/1	25	1.08			1.08			26	20/1	" "	R
E	FUME HOOD RM. 334A	30/2	27		1.7			1.08		28	20/1	" "	R
	—	—	29			1.7			.9	30	20/1	" "	R
	SPARE	20/1	31							32	20/1	SPARE	
	SPARE	20/1	33							34	20/1	SPARE	
	SPACE W/BUS		35							36		SPACE W/BUS	
	"		37							38		"	
	"		39							40		"	
	"		41							42		"	
				4.56	5.3	5.9	5.36	6.18	4.56				
				9.92	10.48	10.46	TOTALS						
				30.86			TOTAL CONN. LOAD KVA						

PANELBOARD SCHEDULE

PANEL LN4 VOLTS 208/120 ø3 4W MAINS: 125 A ☐ LUGS COPPER BUS FED FROM: TN4
☐ FLUSH MTD. ☐ TOP ☒ BREAKER GROUND BAR
TYPE NQOB ☒ SURFACE MTD. FEEDER: ☒ BOTTOM 3-#2, 1-#2N, 1-#8GR, 1¼"C INTERRUPTING RATING 10,000A

BRANCH BREAKERS

	ITEM	CKT. BRKR.	CKT. NO.	LOAD (KVA) A	B	C	LOAD (KVA) A	B	C	CKT. NO.	CKT. BRKR.	ITEM	
R	WET LAB RM. 438	20/1 GFI	1	.9			.6			2	20/1 GFI	WET LAB RM. 438	R
E	FUME HOOD RM. 439D	30/2	3		1.7			.6		4	20/1 GFI	" "	R
	—	—	5			1.7			.6	6	20/1 GFI	" "	R
R	MAMMAL MUSEUM RM. 439	20/1	7	1.26			.9			8	20/1	ICTHS & HERPS MUSEUM RM. 440	R
R	" "	20/1	9		.9			.9		10	20/1	GEN. ZOOLOGY RM. 441	R
R	PHYSIOLOGY LAB RM. 434	20/1	11			1.08			1.08	12	20/1	JANITOR, STUDENTS LOUNGE	R
M	FAN/COIL UNITS	20/1	13	.91			.6			14	20/1	ELECT. RM. RM. 436	R
R	COMPUTER OUTLETS (L)	20/1	15		.72			1.08		16	20/1	GEN. ZOOLOGY RM. 441	R
R	GEN ZOOLOGY RM. 441	20/1	17			1.08			1.08	18	20/1	" "	R
R	" "	20/1	19	1.08			1.08			20	20/1	" "	R
R	" "	20/1	21		1.08			1.08		22	20/1	" "	R
R	PHYSIOLOGY LAB RM. 434	20/1	23			1.08			1.08	24	20/1	PHYSIOLOGY LAB RM. 434	R
R	" "	20/1	25	1.08			1.08			26	20/1	"	R
R	" "	20/1	27		1.08			1.08		28	20/1	"	R
R	" "	20/1	29			.9			1.7	30	30/2	FUME HOOD RM. 434	E
E	FUME HOOD RM. 434A	30/2	31	1.7			1.7			32	—	—	
	—	—	33		1.7					34	20/1	SPARE	
	SPARE	20/1	35							36	20/1	SPARE	
	SPARE	20/1	37							38		SPACE W/BUS	
	SPACE W/BUS		39							40		"	
	"		41							42		"	
				6.93	7.18	5.84	5.96	4.74	5.54				
				12.89	11.92	11.38	TOTALS						
				36.19			TOTAL CONN. LOAD KVA						

PANELBOARD SCHEDULE

PANEL LS4 VOLTS 208/120 ø3 4W MAINS: 125A ☐ LUGS COPPER BUS FED FROM: TS4
☐ FLUSH MTD. ☐ TOP ☒ BREAKER GROUND BAR
TYPE NQOB ☒ SURFACE MTD. FEEDER: ☒ BOTTOM 3-#2, 1-#2N, 1-#8GR, 1¼"C INTERRUPTING RATING 10,000A

BRANCH BREAKERS

	ITEM	CKT. BRKR.	CKT. NO.	LOAD (KVA) A	B	C	LOAD (KVA) A	B	C	CKT. NO.	CKT. BRKR.	ITEM	
L	TOILETS	20/1	1	.3			1.7			2	20/2	MONITORED ENVIR. RM. 430	E
E	MONITORED ENVIR. RM. 430	20/2	3		1.7			1.7		4	—	—	
	—	—	5			1.7			1.7	6	20/2	MONITORED ENVIR. RM. 430	E
R	MONITORED ENVIR. RM. 430	20/1	7	.9			1.7			8	—	—	
R	COMPUTER OUTLETS (L)	20/1	9		.72			1.08		10	20/1	CLASSROOM RM. 444	R
R	"	20/1	11			.72			1.08	12	20/1	LAB ASSIST. RM. 443	R
R	GEN BOTANY, LAB ASSIST.	20/1	13	1.08			1.26			14	20/1	ANATOMY LAB RM. 433	R
R	PHONE BOARD RM. 433A	20/1	15		.6			1.2		16	20/1	FAN/COIL UNITS	M
R	TV BOX RM. 433A	20/1	17			.6			1.08	18	20/1	ANATOMY LAB RM. 433	R
R	ELECT. RM. RM. 433A	20/1	19	.6			1.08			20	20/1	" "	R
R	ANATOMY LAB RM. 433	20/1	21		1.08			1.08		22	20/1	" "	R
R	" "	20/1	23			1.08			1.08	24	20/1	PREPARATION RM. 441A, 442A	R
R	" "	20/1	25	1.08			.9			26	20/1	GEN. BOTANY RM. 442	R
R	PREPARATION RM. 434A	20/1	27		1.08			1.08		28	20/1	" "	R
R	GENERAL BOTANY RM. 442	20/1	29			1.08			1.08	30	20/1	" "	R
R	" "	20/1	31	1.08			1.08			32	20/1	" "	R
R	" "	20/1	33		1.08					34	20/1	SPARE	
	SPARE	20/1	35							36	20/1	SPARE	
	SPARE	20/1	37							38		SPACE W/BUS	
	SPACE W/BUS		39							40		"	
	"		41							42		"	
				5.04	6.26	5.18	7.72	6.14	6.02				
				12.76	12.4	11.2	TOTALS						
				36.36			TOTAL CONN. LOAD KVA						

PANELBOARD SCHEDULE

PANEL LN5 VOLTS 208/120 ø3 4W MAINS: 300 A ☐ LUGS COPPER BUS FED FROM: TN5
☐ FLUSH MTD. ☐ TOP ☒ BREAKER GROUND BAR
TYPE NQOB ☒ SURFACE MTD. FEEDER: ☒ BOTTOM 3-#300MCM, 1-#300MCM N, 1-#2GR, 3"C INTERRUPTING RATING 10,000 A

SECTION 1 — BRANCH BREAKERS

	ITEM	CKT. BRKR.	CKT. NO.	LOAD (KVA) A	B	C	LOAD (KVA) A	B	C	CKT. NO.	CKT. BRKR.	ITEM	
E	FUME HOOD RM. 542	30/2	1	1.7			1.7			2	30/2	FUME HOOD RM. 542	E
	—	—	3		1.7			1.7		4	—	—	
E	INORGANIC LAB RM. 542	30/3	5			2.0			1.7	6	30/2	FUME HOOD RM. 542	E
	—	—	7	2.0			1.7			8	—	—	
	—	—	9		2.0			1.08		10	20/1	INORGANIC LAB RM. 542	R
R	INORGANIC LAB RM. 542	20/1	11			.72			1.08	12	20/1	" "	R
R	COMPUTER OUTLETS (L)	20/1	13	1.08			2.0			14	30/3	HIGH TEMP. CHEM. RM. 543	E
E	HIGH TEMP. FURNACE RM. 543	100/3	15		8.0			2.0		16	—	—	
	—	—	17			8.0			2.0	18	—	—	
	—	—	19	8.0			.6			20	20/1	HIGH TEMP. CHEM. RM. 543	R
E	DISTILLATION RACK RM. 543	30/3	21		2.0			2.0		22	30/3	DISTILLATION RACK RM. 543	E
	—	—	23			2.0			2.0	24	—	—	
	—	—	25	2.0			2.0			26	—	—	
R	HIGH TEMP CHEM. RM. 543	20/1	27		.6			.6		28	20/1	RADIOACTIVE HOOD RM. 543	E
E	FUME HOOD RM. 543	30/2	29			1.7			.6	30	20/1	HIGH TEMP. CHEM. RM. 543	R
	—	—	31	1.7			1.08			32	20/1	BIO-TECH. RESEARCH RM. 544	R
R	BIO-TECH. RESEARCH RM. 544		33		.72			1.04		34	20/1	REFRIGERATOR RM. 544	E
	FREEZER RM. 544	20/1	35			1.0			.9	36	20/1	JANITOR, OFFICE	R
R	ELECT. RM. RM. 540	20/1	37	.6			1.7			38	20/2	RADIOACTIVE COUNT. RM. 544B	E
E	FUME HOOD RM. 544C	30/2	39		1.7			1.7		40	—	—	
	—	—	41			1.7			1.08	42	20/1	CELL BIOLOGY LAB RM. 545	R

SECTION 2 — BRANCH BREAKERS

	ITEM	CKT. BRKR.	CKT. NO.	LOAD (KVA) A	B	C	LOAD (KVA) A	B	C	CKT. NO.	CKT. BRKR.	ITEM	
E	FUME HOOD RM. 544A	30/2	43	1.7			1.7			44	30/2	FUME HOOD RM. 545	E
	—	—	45		1.7			1.7		46	—	—	
R	CELL BIOL. LAB RM. 545	20/1	47			1.08			1.08	48	20/1	CELL BIOL. LAB RM. 545	R
R	" "	20/1	49	1.08			1.08			50	20/1	" "	R
R	COMPUTER OUTLETS (L)	20/1	51		1.08			.6		52	20/1	THERMAL ANAL. RM. 537	R
R	THERM. ANAL. LAB RM. 537	20/1	53			.6			.6	54	20/1	" "	R
R	" "	20/1	55	.9			1.7			56	30/2	FUME HOOD RM. 537	E
E	" "	30/3	57		2.0			1.7		58	—	—	
	—	—	59			2.0			.6	60	20/1	X-RAY LAB RM. 536	R
	—	—	61	2.0			.6			62	20/1	" "	R
R	X-RAY LAB RM. 536	20/1	63		.6			1.08		64	20/1	" "	R
M	FAN/COIL UNITS	20/1	65			1.6			.6	66	20/1	PENTHOUSE	R
R	MECH. RM. RM. 541	20/1	67	.6			.6			68	20/1	ROOF LIGHTING	L
E	PNL. FPU-6	20/1	69		.6			.6		70	20/1	PANEL FPU-7	E
	SPARE	20/1	71							72	20/1	SPARE	
	SPARE	20/1	73							74	20/1	SPARE	
	SPARE	20/1	75							76	20/1	SPARE	
	SPACE W/BUS		77							78		SPACE W/BUS	
	"		79							80		"	
	"		81							82		"	
	"		83							84		"	
				23.36	22.7	22.4	16.46	15.76	12.24				
				39.82	38.46	34.64	TOTALS						
				112.92			TOTAL CONN. LOAD KVA						

PANELBOARD SCHEDULE

PANEL LS5 VOLTS 208/120 ø3 4W MAINS: 225A ☐ LUGS COPPER BUS FED FROM: TS5
☐ FLUSH MTD. ☐ TOP ☒ BREAKER GROUND BAR
TYPE NQOB ☒ SURFACE MTD. FEEDER: ☒ BOTTOM 3-#3/0, 1-#3/0N, 1-#4GR, 2"C INTERRUPTING RATING 10,000 A

SECTION 1 — BRANCH BREAKERS

	ITEM	CKT. BRKR.	CKT. NO.	LOAD (KVA) A	B	C	LOAD (KVA) A	B	C	CKT. NO.	CKT. BRKR.	ITEM	
L	DEAN'S OFFICE, DARK. RM.	20/1	1	1.1			1.08			2	20/1	FACULTY RM. 530	R
L	WORK RM., ASSIS. DEAN	20/1	3		1.1			1.08		4	20/1	MAINTENANCE RM. 533	R
L	WAITING, TOILETS	20/1	5			1.5			.9	6	20/1	DEAN'S OFFICE RM. 552E	R
L	CONFERENCE RM	20/1	7	1.6			.6			8	20/2	COFFEE BAR	E
R	WORK RM RM. 552D	20/1	9		.9			.6		10	—	—	
R	COPY MACHINE RM. 552	20/1	11			1.8			1.08	12	20/1	WAITING RM. 552	R
R	A/V STORAGE RM. 551	20/1	13	1.08			1.2			14	20/1	EWC, TOILETS	R
R	OFFICES RM. 550 & 549	20/1	15		1.08			1.08		16	20/1	COMPUTER OUTLETS (L)	R
M	FAN/COIL UNITS	20/1	17			1.84			1.44	18	20/1	OFFICES RM. 547, 548	R
R	MAINTENANCE RM. 533	20/1	19	1.08			.6			20	20/1	TV BOX RM. 533A	R
R	" "	20/1	21		1.08			.6		22	20/1	PHONE BOARD RM. 533A	R
R	" "	20/1	23			1.08			.6	24	20/1	ELECT. RM. RM. 533A	R
R	COMPUTER OUTLETS (L)	20/1	25	.9			1.08			26	20/1	MAINTENANCE RM. 533	R
E	MAINTENANCE RM. 533	30/3	27		2.0			1.7		28	20/2	PREPARATION RM 546B	E
	—	—	29			2.0			1.7	30	—	—	
	—	—	31	2.0			1.08			32	20/1	PREPARATION RM. 546A/B	E
R	FT-IR & PLASMA LAB RM. 534	20/1	33		.6			.9		34	20/1	PREPARATION RM. 546A	R
R	" "	20/1	35			.6			2.0	36	30/3	FT-IR & PLASMA LAB RM 534	E
R	" "	20/1	37	1.08			2.0			38	—	—	
E	FUME HOOD RM. 534	30/2	39		1.7			2.0		40	—	—	
	—	—	41			1.7			1.08	42	20/1	FT-IR & PLASMA LAB RM. 534	R

SECTION 2 — BRANCH BREAKERS

	ITEM	CKT. BRKR.	CKT. NO.	LOAD (KVA) A	B	C	LOAD (KVA) A	B	C	CKT. NO.	CKT. BRKR.	ITEM	
E	SEPARATION LAB RM. 535	30/3	43	2.0			.6			44	20/1	SEPARATION LAB RM. 535	R
	—	—	45		2.0			.6		46	20/1	" "	R
	—	—	47			2.0			.6	48	20/1	" "	R
R	SEPARATION LAB RM. 535	20/1	49	.6			1.08			50	20/1	" "	R
R	" "	20/1	51		.6			1.7		52	30/2	FUME HOOD RM. 535	E
R	" "	20/1	53			.6			1.7	54	—	—	
R	MICRO-BIOL. LAB RM. 546	20/1	55	1.08			1.08			56	20/1	MICRO-BIOL. LAB RM. 546	R
R	" "	20/1	57		1.08			1.08		58	20/1	" "	R
R	" "	20/1	59			1.08			1.08	60	20/1	" "	R
E	ELEV. EQUIP. RM. 8BE06	20/1	61	1.0			1.7			62	30/2	FUME HOOD RM. 546	E
R	ELEV. EQUIP. RM 8BE06	20/1	63		.6			1.7		64	—	—	
	SPARE	20/1	65							66	20/1	SPARE	
	SPARE	20/1	67							68	20/1	SPARE	
	SPARE	20/1	69							70	20/1	SPARE	
	SPACE W/BUS		71							72		SPACE W/BUS	
	"		73							74		"	
	"		75							76		"	
	"		77							78		"	
	"		79							80		"	
	"		81							82		"	
	"		83							84		"	
				13.52	12.74	14.2	12.1	13.04	12.18				
				25.62	25.78	26.38	TOTALS						
				77.78			TOTAL CONN. LOAD KVA						

(L) INDICATES CIRCUIT BREAKER WITH HANDLE LOCK.

panel schedules

COMM. NO. 10186

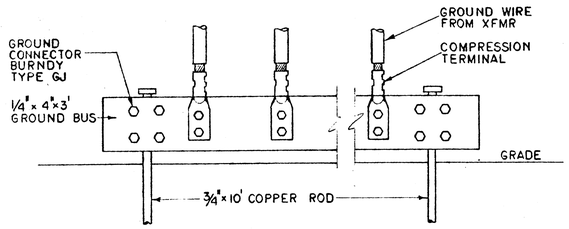
E-24

DATE: 6/23/86

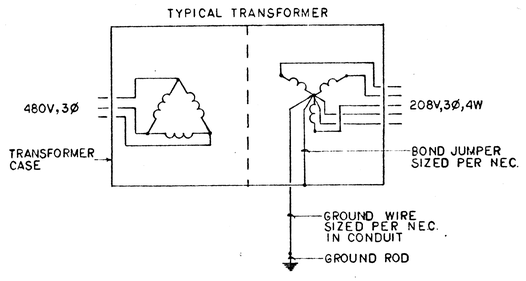
ADDITION TO
LABORATORY SCIENCES CENTER
ARKANSAS STATE UNIVERSITY
JONESBORO, ARKANSAS

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER No. 1657 H. W. GOODMAN, JR.

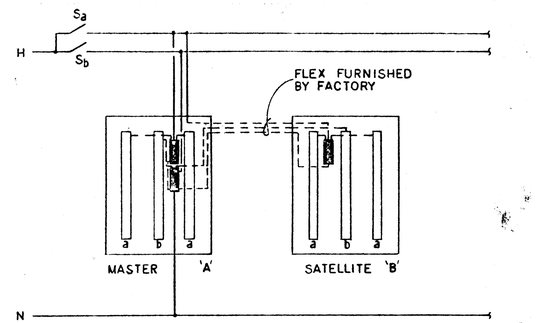
Brackett Krennerich and Associates Inc. Architects
P.O. Box 1655 • Jonesboro, Arkansas 72403-1655 • 501/932-0571



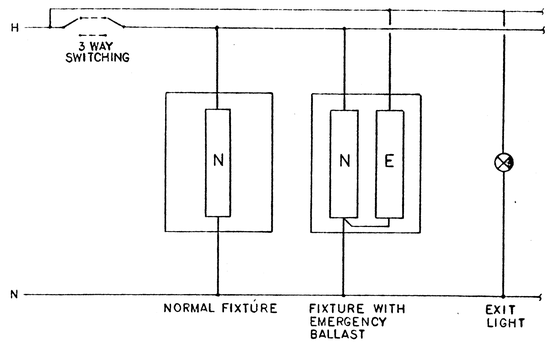
1. TRANSFORMER GROUND BUS DETAIL
NTS



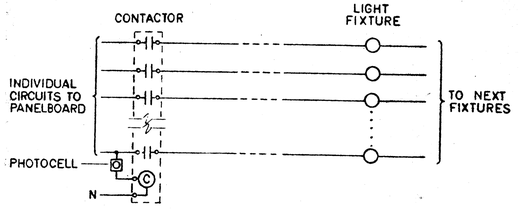
6. TRANSFORMER GROUNDING DETAIL
NTS



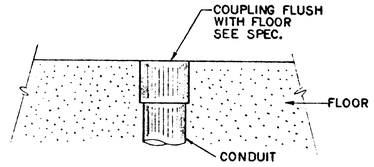
2. TANDEM FIXTURE SWITCHING DETAIL
NTS



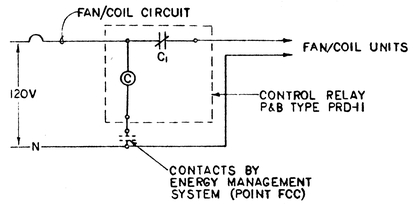
7. EMERGENCY LIGHTING WIRING DETAIL
NTS



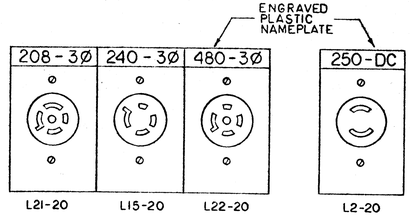
3. OUTDOOR LIGHTING CONTROL DIAGRAM
NTS



4. CONDUIT STUB-UP DETAIL
NTS



NOTE: LOCATE RELAY IN JUNCTION BOX ADJACENT TO PANELBOARD

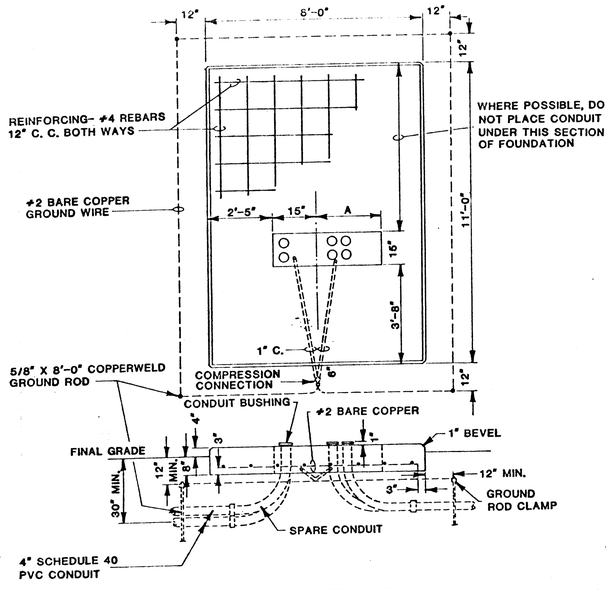


LAB OUTLET COLOR CODE:

VOLTAGE	COVER	PLATE/LETTERS
208	BLACK	BLACK/WHITE
240	WHITE	WHITE/BLACK
480	RED	RED/WHITE
250	GREY	GREY/BLACK

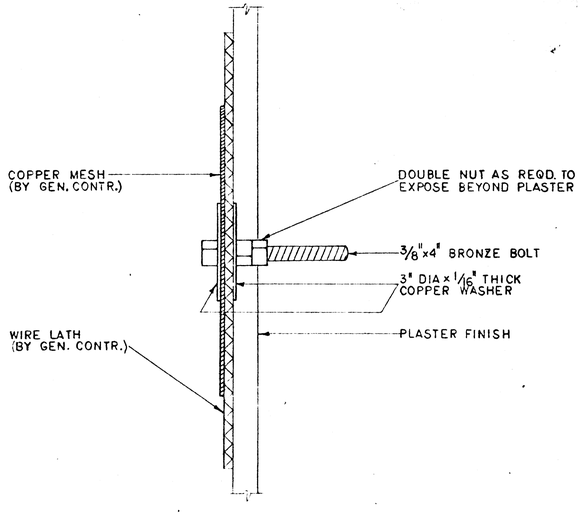
PROVIDE MATCHING CAP FOR EACH RECEPTACLE

5. EE LAB OUTLET DETAIL
NTS



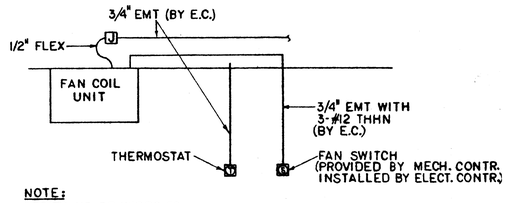
TRANSFORMER KVA	DIMENSION A
150-500	20"
750-2500	29"

9. THREE PHASE TRANSFORMER PAD DETAIL
NOT TO SCALE



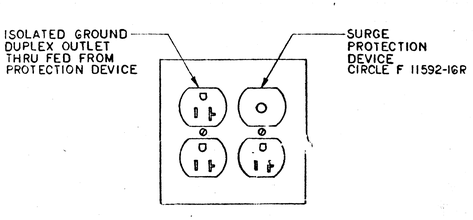
NOTE:
1. LOCATE BOLT WITHIN 2" OF PLASTER CHANNEL AND 6" FROM CORNERS.
2. BOLT OCCURS AT EACH CORNER OF EACH WALL AND AT ALL CORNERS OF CEILING (20 BOLTS/ROOM TYP.).

10. RF MESH GROUNDING DETAIL
NTS



NOTE:
VERIFY NO. OF WIRES TO FAN SWITCH W/ MECH. CONTR.

8. FAN/COIL UNIT CONTROL DETAIL
NTS



11. FAN/COIL UNIT SWITCHING DETAIL
NTS

12. QUADRAPLEX OUTLET W/ SURGE PROTECTION
NTS

COMM. NO. 10186

E-25

DATE: 6/23/86

ADDITION TO
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JONESBORO, ARKANSAS

P.O. Box 1655 • Jonesboro, Arkansas 72403-1655 • 501/932-0571

STATE OF ARKANSAS 5345 REGISTERED PROFESSIONAL ENGINEER No. 1657 H. W. GOODMAN JR.

Hackett Barrich & Gates Inc

electrical details

AF 32826

COMM. NO. 10186

P-1

DATE: 6/23/86

NOTE:
ALL SAN & WASTE PIPING BELOW FIRST FLOOR SHALL BE DURIRON UNLESS OTHERWISE NOTED - ALL ACID VENTS UP FROM BASEMENT CAN BE DURIRON OR GLASS - ALL ACID WASTE PIPING & VENT PIPING AT 2ND FLR AND ABOVE SHALL BE GLASS PIPING ONLY. WHEN CAST IRON CONNECTS TO DURIRON, USE DURIRON FITTING AT CONNECTION POINT.

COORDINATE SPACING OF (2) 6" ACID WASTE & 6" SAN SEWER FROM SOUTH END OF BLDG WITH SPACING REQUIRED TO SET ACID DILUTION BASIN AND MANHOLES - SEE SHT MPE-1

AREA DRAIN (SEE ARCH DWGS)

4" PVC SCHEDULE 40 DRAIN FROM AREA DRAIN - DROP CONNECT TO FOUNDATION DRAIN - SEE ARCH & STRUCT DWGS.

BOTTOM OF WINDOW WELLS APPROX 280.91' ELEV. (TYP)

CONNECT 3" PVC SCHEDULE 40 PIPING FROM FD-1 AT WINDOW WELL DOWN TO AND CONNECT TO FOUNDATION DRAIN W/ A WYE - SEE ARCH & STRUCTURAL DWGS FOR FOUNDATION DRAIN LOCATIONS (TYP 8 PLACES).

OFFICE 130-D

LECTURE CLASSROOM 131

LOBBY AAVOT

COMPUTER CENTER 157

ROBOTICS & DIGITAL ELECTRONICS LABORATORY 156

MACHINE SHOP 155

POWER/MACHINERY LABORATORY 154

CLASSROOM 153

SECRETARY RECEPTION 130

OFFICE 130-B

CORRIDOR DDL01

MICROSCOPE DIRECTOR 146

CHAMPEIL 145-A

MICROTECHNIC ROOM 145

ELECTRICAL ENGINEERING LAB 148

ELECTRICAL ENG LAB 149

SAN SEWER INV AT WALL 275.0

WCO (ACCESSIBLE IN CAB.) THRU WALL AT BASE

6" SAN AND 6" ACID WASTE UP TO ABV. CLG

SEE SHT P-2 FOR CONTIN.

SEE SHT P-2 AND P-8

COMBINATION WASTE & VENT SYSTEM

EXPANSION LOOPS

DURIRON FITTING

AIR QUICK DISCONNECT MTD IN WALL - 36" AFF

AIR QUICK DISCONNECT 36" AFF

NOTE, SLEEVE THRU ALL CORRIDOR WALLS FOR ALL BRANCH RUN OUTS

SEE SHT P-2 FOR BRANCH TAKE OFFS THAT SERVE 2ND FLR (TYP).

NOTE THAT ALL BRANCHES THAT SERVE 2ND FLR ARE VALVED SEPARATE FROM BRANCHES THAT SERVE 1ST FLR

AIR QUICK DISCONNECT OUT OF WALL 36" AFF ABOVE CLG

FCO MUST MISS PILE CAP

COMBINATION WASTE & VENT SYSTEM

WATER TIGHT SEAL THRU CONC. WALL W/ "LINK SEAL" WALL SEAL

OS&Y W/ALARM AND FLOW SWITCH

18"x18"x18" SUMP WITH SUMP PUMP

4" A.V. UP INV. 274.45 (AT WALL)

6" A.V. ABV. CLG.

4" A.V. UP

6" STORM BELOW GRADE

15" STORM DRAIN RCP

6" SAN SEWER

SEE SHT. P-6

TO 15" STORM SEE SHT P-6 & MPE-1

WATER TIGHT SEAL THRU CONC WALL W/ "LINK SEAL" WALL SEAL.

FOUNDATION DRAINS TO SUMP PUMP - SEE ARCH AND STRUCT. DWGS.

SAND TRAP IN ACCESS WELL - SEE SHT P-8 DTL. 6

8" STORM TO 15" STORM - SEE SHT MPE-1.

PIPING IN TUNNEL TO MECH. RM 278 SEE SHT P-6

START WASTE LINE INV. HIGH AS POSSIBLE 12" BELOW FIN FLR MAX.

WATER TIGHT SEAL THRU WALL - PROVIDE PROPER SIZE "LINK SEAL"

CONNECT SUMP PUMP TO STORM

4' SUMP PUMP DROP INTO 8" STORM

6" STANDPIPE UP AND 2½" DN TO VALVE

2½" STAIR VALVE

1/2" H&C, 1/2" GAS DOWN

1½" C.W. DN IN WALL

1½" H&C DOWN IN WALL

1/2" C.W. 1/2" GAS UP

1/2" C.W. 1/2" GAS DOWN IN WALL

1/2" H&C, 1/2" AIR DN IN WALL

3" VENT UP

2" VENT UP

DROP INTO SAN

DROP IN WALL

C.I. WITH "LINK SEAL" THRU WALL

- WATER TIGHT SEAL THRU CONC WALL WITH "LINK SEAL" WALL SEAL.

- NOTES WHERE CONCRETE WAS USE TO COVER CRACKS IN SEAM PIPE

VALVES IN ALL SERVICES LEAVING MECH. ROOM

PIPING AT MECH RM CLG - COORDINATE W/ HVAC DWGS.

ACID VENT ABV. CLG

CHICAGO #952 HOSE BIBB, UNDER LAVS, DA, TLT, MTD 12" AFF

FD MUST MISS PILE CAP

SAN & STORM LINES THRU NEW CORRIDOR CONNECTION, ABV CLG - PROVIDE WATER TIGHT SEAL AT PIPE THRU WALL WITH PROPER SIZE LINK-SEAL. (4) PLACES.

NEW CONSTRUCTION

EXISTING BUILDING

- STORM & SAN SEWER LINES THRU BLDG AND 5' BEYOND EA SIDE SHALL BE DUCTILE IRON, BELL AND SPIGOT PIPING

NOTE "A":
4" SAN, 4" VENT STACKS, 2½" C.W., 2" H.W., ¾" H.W.R., 6" STORM, 6" ACID WASTE, 4" ACID VENT, 1½" LAB AIR, 2" GAS UP TO CHASE ON 2ND FLR. COORDINATE PIPING IN THIS CHASE WITH HVAC PIPING, SEE HVAC DRAWINGS.

GENERAL PLUMBING NOTES

1. ROUGH IN ONLY FOR LABORATORY EQUIPMENT, STUB ALL SERVICES (ACID WASTE, HOT AND COLD WATER, ~~[illegible]~~ AIR, GAS, AS SHOWN ON DRAWINGS) UP THROUGH FLOOR, TO LABORATORY EQUIPMENT, ALL FLOORS EXCEPT FIRST FLOOR, CONCRETE SLAB SHALL BE SLEEVED FOR SERVICES, LAB EQUIPMENT SUPPLIER SHALL FURNISH DETAILED, SIZED, DIMENSIONED SLEEVE DRAWINGS, VERIFY SERVICES REQUIRED AND EXACT LOCATIONS WITH LAB EQUIPMENT SUPPLIER. SLEEVES TYPICALLY SHOULD BE TWO PIPE SIZES LARGER THAN THE SERVICE PIPE. NOTE THAT ALL GLASS PIPING SHALL BE COMPLETELY PROTECTED WITH ALUMINUM FOIL TAPE THROUGH SLEEVES OR CONSTRUCTION. PACK SPACE BETWEEN SLEEVE AND PIPE WITH FIBERGLASS.
2. COORDINATE IN FIELD TO MISS ALL CONCRETE FLOOR JOIST WITH PIPING AND/OR PLUMBING FIXTURES.
3. (1A) DENOTES LAB EQUIPMENT IDENTIFICATION - SEE LAB EQUIPMENT DRAWINGS.
4. ALL FLOOR DRAINS ON COMBINATION WASTE AND VENT SYSTEM SHALL HAVE P-TRAPS TWO PIPE SIZES SMALLER THAN CONNECTING PIPING.
5. NOTE ALL GLASS PIPING SHALL BE SUPPORTED WITH APPROVED PADDED PIPE HANGERS.
6. AT ALL ACID VENT THROUGH ROOF PENETRATIONS, CHANGE FROM GLASS TO DURIRON THROUGH ROOF. PROVIDE APPROXIMATELY 36" SECTION OF DURIRON AT EACH VERTICAL TERMINAL, WITH APPROVED COUPLINGS AND ADAPTERS.
7. ALL FLOOR CLEANOUTS (FCO) IN GLASS ACID WASTE LINES SHALL CONSIST OF A GLASS SWEEP AND CLEANOUT PLUG WITH BEAD TO BEAD COUPLING, SET INSIDE AND INDEPENDENT OF, A WADE CLEANOUT BOX SET IN CONCRETE FLOOR WITH NICKEL BRONZE TOP, FLUSH WITH FINISHED FLOOR.
8. EACH JANITOR CLOSET AT EACH FLOOR SHALL HAVE ONE AUTOMATIC FIRE SPRINKLER HEAD AND A HOSE THREADED GLOBE VALVE, CONNECTED TO STANDPIPE SYSTEM BY AN OS&Y VALVE WITH FLOW AND TAMPER SWITCHES.
9. NOTE THAT ALL SERVICES, EXCEPT DRAIN, ARE TO DROP DOWN TO LAB EQUIPMENT, FIRST FLOOR ONLY; WHEN POSSIBLE DROP DOWN IN WALL, STUB OUT OF WALL AND INTO LAB EQUIPMENT, VERIFY EXACT LOCATION AND HEIGHT ABOVE FINISHED FLOOR TO STUB OUT WITH EQUIPMENT SUPPLIER.

n **first floor plan · laboratory science building**
plumbing

SCALE: 1/8"=1'-0"

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ARKANSAS STATE UNIVERSITY
JONESBORO, ARKANSAS

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER H. W. GOODMAN No. 1657

Brackett Krennerich and Associates Inc. Architects

P.O. Box 1655 • Jonesboro, Arkansas 72403-1655 • 501/932-0571

AF 32526

NOTE THAT ALL GLASS PIPING UNDER FLOOR OF LAB 241 SHALL BE KIMAX (O.I. SCHOTT) "CLEARGARD" REINFORCED DRAIN LINE WITH SINGLE WRAP OF FIBER-GLASS TAPE, FITTINGS TO BE SAME.

P.GE SINK - SAME AS P.GC EXCEPT WITH T&S B-0714 FAUCET, HOSE THREAD END, SMITH #3710 INTERCEPTOR, ACID RESISTANT COATING INSIDE AND OUTSIDE, STAINLESS STEEL SCREENS, FLOOR MOUNT

SERVICES STUB UP TO LAB EQUIP - TYP, VERIFY EXACT SIZE & LOCATION WITH LAB EQUIP. SUPPLIER

3"W, 1½"H&C, ½" AIR UP

3"W, ½" C.W., ½" AIR UP

MATERIAL RESEARCH 241

UP IN BLOCK WALL

IN BLOCK WALL

CHICAGO #952 HOSE BIBB

MATERIAL SCIENCE FLUID DYNAMICS HEAT TRANSFER 230

FOYER AAVO1

OFFICE 248

OFFICE 247

OFFICE 245-C

WORK 245-B

OFFICE 245-A

OFFICE 243

OFFICE 249

OFFICE 246

SECRETARY/WAITING 245

OFFICE 244

OFFICE 242

STOR. 240-C

STRUCTURAL TEST LABORATORY 240

AIR Q.D.

FCO

FD-6

4" ACID VENT DOWN

3"W, 1½"C.W. & ½" AIR UP

3"W, ½"C.W. & ½" GAS UP

BELOW FLR

SEE SHT. P-1 FOR CONTIN.

THIS PIPING IS BELOW FLR & ABV 1ST FLR CLG - SEE SHT P-1, P-3 FOR CONTIN.

1" ACID WASTE & SAN DROP TO BELOW GRADE

4" ACID VENT UP FROM BELOW

4" ACID VENT ABV. CLG.

4" SAN & 4" V UP & 3" V DN

C.W. UP (2½")

6" FIRE STANDPIPE UP

2½" STAIR VALVE

FHC

HWR UP

8" STORM UP

ENVIRON SAMPLE/ EQUIP STOR. 232

6" ACID WASTE 4" ACID VENT UP

ELEC. 233

VENTS UP IN WALL

6" STORM UP & DN.

3" AV UP

ABV CLG

P-6

SOILS LABORATORY 234

SOILS SAMPLE RECEIVING & STORAGE 235

3" A.V. DN. IN WALL

-AV-

CHICAGO 952 FAUCET

VENT UP IN WALL

STRUCTURAL TEST LABORATORY 236

4" SAN & 4" VENT STACKS UP

1½" VENT ABV CLG

HOSE END GLOBE VALVE

STUDENT LOUNGE 239

FD-2

½" C.W. STUBS UP WITH VALVE

THIS PIPING IS BELOW FLR SEE SHT. P-1 FOR CONTIN. (TYP)

"OSET W/FLOW & TAMPER SWITCH

6" FIRE STANDPIPE UP

2½" STAIR VALVE

FOYER 238V02

STAIR FFS02

STAIR EES02

CHICAGO #952 HOSE BIBB - VERIFY MOUNT HEIGHT

NOTE THAT ALL C.W. PIPING TO BE IN CONC. BLOCK WALL AND INSULATION BETWEEN PIPING AND OUTSIDE WALL.

NOTE 3" ROOF DRAIN MUST HAVE 4" PIPE SLEEVES THRU JOISTS AND BEAM - SLEEVE AT CENTER OF SPANS - COORDINATE WITH STRUCTURAL DWGS

3" STORM

CHICAGO #952 HOSE BIBB VERIFY MOUNT HEIGHT

UP TO 4" P.D-1

NOTE A J.R. SMITH #3710 INTERCEPTOR REQ'D EA SINK

C.W., H.W., HWR, LAB AIR, STORM GAS UP & DN IN CHASE; SEE SHT P-1 & P-3.

NEW CONSTRUCTION

EXISTING BUILDING

second floor plan · laboratory science building

plumbing

SCALE: 1/8"=1'-0"

COMM. NO. [redacted]

P - 2

DATE: 6/23/86

ADDITION TO

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JONESBORO, ARKANSAS

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER H. W. GOODMAN, JR. No. 1657

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AF 32526

COMM. NO. 10186

P - 3

DATE: 6/23/86

TYPICAL BRANCH TAKEOFF

NOTE: MOUNT CHICAGO #952 HOSE BIBB UNDER LAVS - EA TLT - 12' AFF (TYP)

NEW CONSTRUCTION

EXISTING BUILDING

n third floor plan · laboratory science building
plumbing

SCALE: 1/8"=1'-0"

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COMM. NO. 10186

P - 4

DATE: 6/23/86

fourth floor plan · laboratory science building
plumbing

SCALE: 1/8"=1'-0"

NEW CONSTRUCTION

EXISTING BUILDING

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COMM. NO. 10186

P-5

DATE: 6/23/86

PROVIDE F.D. & 3/4" C.W. W/VALVE FOR OWNER FURNISHED AUTOCLAVE VERIFY EXACT LOCATION AND REQUIREMENTS WITH OWNER. NOTE THAT A REDUCED PRESSURE BACKFLOW PREVENTER MUST BE INSTALLED ON C.W. BEFORE CONNECTING TO AUTOCLAVE.

3"W, 1/2"C.W., 1/2"AIR AND 1/2"GAS UP (TYPICAL 6 PLACES THIS LAB)

PROVIDE F.D. & 3/4" C.W. W/VALVE FOR OWNER FURNISHED AUTOCLAVE VERIFY EXACT LOCATION AND REQUIREMENTS WITH OWNER. NOTE THAT A REDUCED PRESSURE BACKFLOW PREVENTER MUST BE INSTALLED ON C.W. BEFORE CONNECTING TO AUTOCLAVE.

INSULATION MUST BE BETWEEN PIPING AND OUTSIDE WALL TO PREVENT FREEZING

SEE SHT A-37 DTL.5 FOR ACID VENT THRU ROOF (TYPICAL)

3"W, 1/2"C.W., 1/2"AIR AND 1/2"GAS UP (TYP. 3 PLACES THIS LAB)

(2) CHICAGO #952 HOSE BIBBS 36" AFF (VERIFY W/ OWNER)

ROUGH-IN CONC. BLOCK WALL-INSULATION BETWEEN WATER PIPING AND OUTSIDE WALL.

CHICAGO #952 HOSE BIBB UNDER LAVS, REMOVABLE HANDLE 12" A.F.F. EACH TOILET (TYPICAL)

BEECO, 1 1/2" REDUCED PRESSURE BACKFLOW PREVENTER, BRACKET TO WALL INSIDE CHASE - RUN DRAIN TO F.D.-2 (AT 4TH FLR) WITH VALVE, UNIONS, DIELECTRIC FITTINGS

C.W. FROM REDUCED PRESSURE BACKFLOW PREVENTER (IN PLUMB. CHASE) TO HOOD WASH DOWN SYSTEM.

NOTE THAT C.W. FROM RED. PRESS. BACKFLOW PREVENTER TO ITEM 43A (PERCHLORIC HOOD) IS FOR EXHAUST DUCT SPRAY WASHDOWN - NOZZLES AND SYSTEM FURNISHED BY LAB EQUIPMENT SUPPLIER. ROUGH IN C.W. WITH VALVE TO HOOD - ALL PIPING OF NOZZLES AND DRAIN AS WELL AS INSULATION OF C.W. AND HEAT TRACE ON ROOF TO BE PART OF FINAL CONNECT CONTRACT - VERIFY EXACT REQUIREMENTS WITH LAB EQUIPMENT SUPPLIER.

R.I. ONLY FOR FUTURE OWNER FURNISHED EQUIPMENT - PLUG 3" WASTE, VALVE AND CAP BELOW FLOOR 1/2" C.W., 1/2"GAS AND 3/4" VAC. VERIFY WITH OWNER EXACT REQUIREMENTS.

4"SAN. & 4" VENT STACK, 6" ACID WASTE & 4" ACID VENT STACK, 2 1/2"C.W. & 1/2" H.W. 3/4" HWR, 6" FIRE LINE, 1" LAB AIR, 1 1/4" GAS AND 6" STORM IN CHASE AND DOWN TO 4TH FLOOR.

NEW CONSTRUCTION

EXISTING BUILDING

n **fifth floor plan - laboratory science building**
plumbing

SCALE: 1/8"=1'-0"

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COMM. NO. 10186

P - 6

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NEW LABORATORY SCIENCE WING

NEW CONSTRUCTION

EXISTING BUILDING

SOLIDS INTERCEPTOR AND TRAP
TOP 293.2 (APPROX.)
INVERT IN 290.1
INVERT OUT 290.0

SEE SHT. P-1 FOR CONT.

2"HW, 3/4" HWR., 2" AIR
4"C.W., 2½" GAS, 6" FIRE IN
UTILITY TUNNEL

SEE SHT. MPE-1 FOR CONTIN.

COORDINATE PIPING WITH HVAC DWGS

VALVES IN RISERS

UTILITY TUNNEL - SEE ARCH + HVAC DETAILS

SEE SHT P-7 FOR CONTIN

GAS DROP INTO TUNNEL

WH-1

DROP

C.O. AT BASE

FIRE PUMP

SEE SHT MPE-1 FOR CONT.

SEE SHT MPE-1 FOR CONTIN.

8"C.I.

ECO

4"C.I.

FLOOR TRENCH WITH GRATE SEE ARCH. DWG.

4"C.I.

ABV CLG

FWH

FCO

DROP

FD-1

6"C.I.@ 1.0%

AREA DRAIN
INVERT 289.89
SEE ARCH DWGS

VAC PUMP

BELOW GRADE

STUB UP 120° HW THRU FLR FOR OWNER FURNISHED HOT WATER BOOSTER

ROUGH IN ONLY FOR OWNER FURNISHED CAGE WASHER - VERIFY EXACT PLUMB. REQUIREMENTS.

EXISTING COOLING TOWER

REMOVE EXIST. GAS METER AND REG.

FD-3

AIR COMP

UP TO 4"RD-1

ABANDON EXIST. 3" GAS LINE

SEE SHT P-7 FOR ¼ SCALE PLBG PLAN

3/4" GAS DROP TO UNIT HTR #1 & 2 - SEE SHT M-10

RISE OUTSIDE SLEEVE WALL W/ESCUTCHEONS BOTH SIDES OF WALL

GREENHOUSE

SEE SHT MPE-1 FOR AREA DRAINS

8"C.I.@ 1.0%

STUB 1" C.W. UP THRU FLOOR + CAP

STUB 1¼" GAS UP THRU FLR + CAP

FLOOR TRENCH WITH GRATE SEE ARCH. DWGS.

WRAPPED STEEL GAS SLEEVE BELOW FLR

4"C.I.

ECO

4"C.I.

EXIST. TUNNEL SEE SHT A-1

4" OPEN HUB DRAIN WITH TYLER 547 BAR GRATE STUB UP IN BOTTOM OF TRENCH (TYP. 6 PLACES)

GAS VA IN BOX

8"C.I.

AREA DRAIN
INVERT 290.23
SEE ARCH. DWGS.

DROP 1" GAS TO UNIT HTR - AT CLG

UP IN WALL BELOW FLR

GAS VA IN RISE

UP TO 4"RD-1

P-6D

P-7

P-3C

P-1B

ECO

FWH

CHICAGO #952 FAUCET MOUNT 36" AFF TYPICAL EACH ANIMAL ROOM - SECURE IN WALL

BELOW GRADE

1½"

NEW 2½" HW & 1½" HWR TO EXIST HW GENERATOR

EXIST. 4" DRAIN FROM COOLING TOWER TO REMAIN - VERIFY EXACT LOCATION AND INVERT.

AT CLG

SEE SHT P-7 DTL.

REMOVE EXIST. 10" GAS LINE

AREA DRAIN
INVERT 290.80
SEE ARCH DWGS

GAS VALVE IN RISE

NEW GAS REG. - 35 LB. TO OZ. - VERIFY EXIST. REG. CAP. - PLUS 1190 ADDITIONAL CFH.

NEW 3" GAS LINE (35 LB)

GAS VALVES EA SIDE OF REG

EXIST. 3"

SEE SHT. MPE-1 FOR CONT.

BELOW GRADE

1½" (NEW)

NEW 10" GAS LINE

ABANDON

EXIST. 10" GAS LINE TO REMAIN (VERIFY EXACT LOCATION BEFORE INSTALLING NEW H.W. & H.W.R.

EXIST. YARD HYDRANTS - REMOVE - ABANDON PIPING.

SLEEVE ALL GAS PIPING UNDER NEW WALKS, DRIVE, ETC. WITH MILL WRAPPED STEEL SLEEVES (2) PIPE SIZES LARGER THAN GAS PIPE.

SEE SHT. MPE-5 FOR CONT.

CAP EXIST. C.W. INSIDE EXIST BASEMENT

EXISTING LABORATORY SCIENCE BUILDING

greenhouse . animal care . mechanical floor plan
plumbing

SCALE: 1/8"=1'-0"

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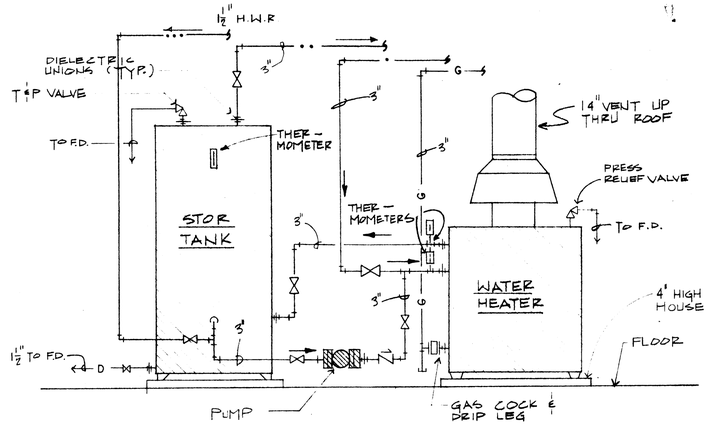
32526

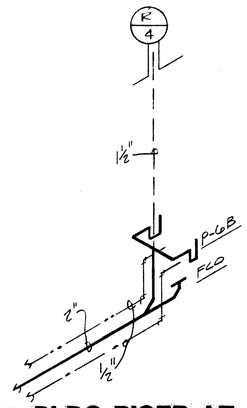


1 WATER HEATER PIPING DETAIL (WH-1)

SCALE: NONE

NOTE

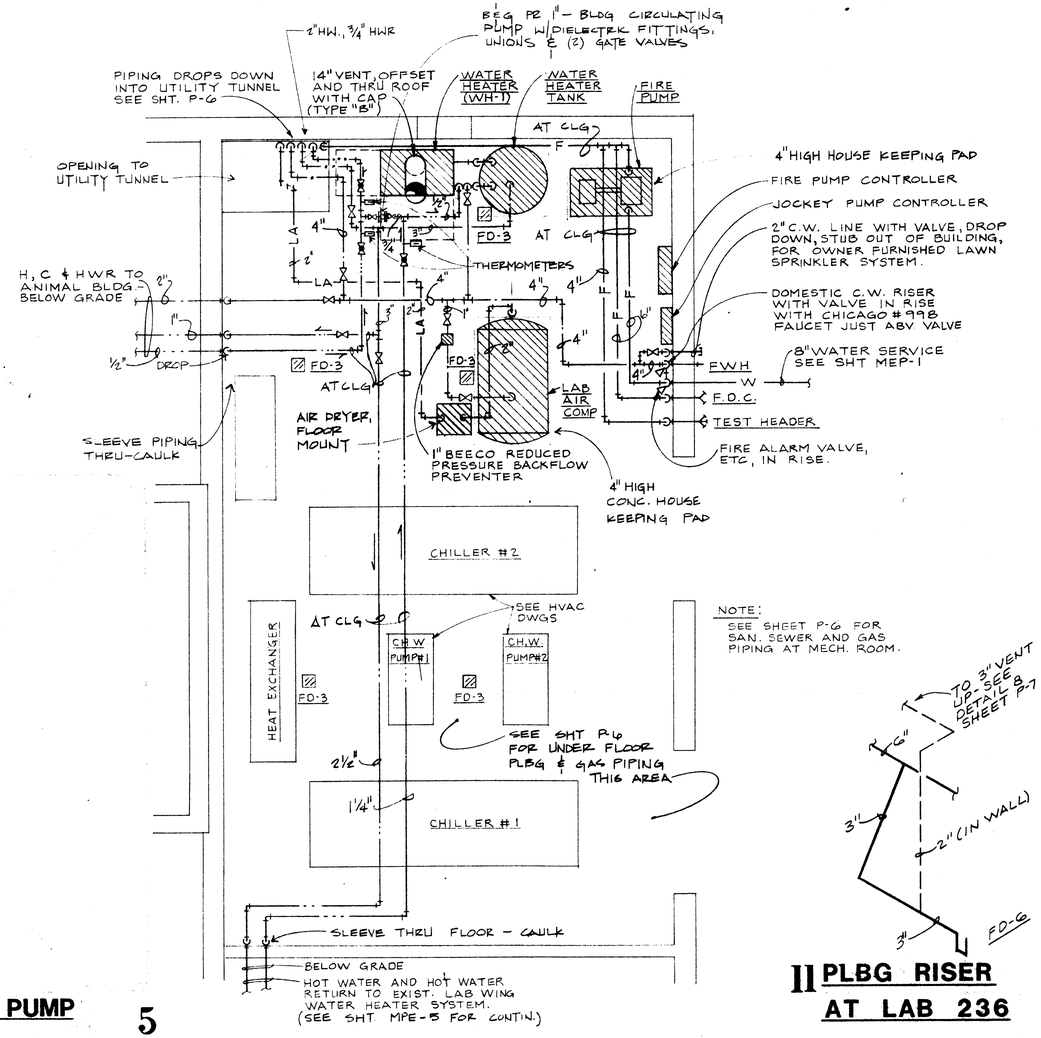
1. SET & MAINTAIN HOT WATER TEMP AT 125°F



2 PLBG RISER AT WORKRM #552-D

NOTE

ALL FIRE PROTECTION PIPING (INSIDE BLDG) SIZES SHALL BE VERIFIED BY CONTRACTOR, AND SIZED ON SHOP DWGS AS PER NFPA, STATE & LOCAL CODES.

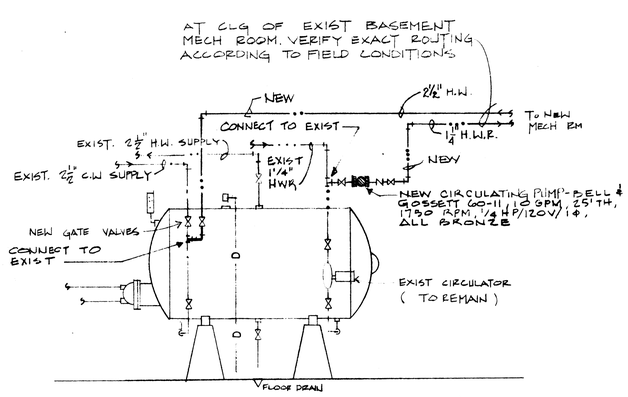


NOTE:
SEE SHEET P-6 FOR SAN. SEWER AND GAS PIPING AT MECH. ROOM.

5 PARTIAL PLUMBING PLAN - MECHANICAL BUILDING

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

AT CLG OF EXIST BASEMENT MECH ROOM. VERIFY EXACT ROUTING ACCORDING TO FIELD CONDITIONS



3 PIPING DETAIL AT EXIST. H.W. GENERATOR

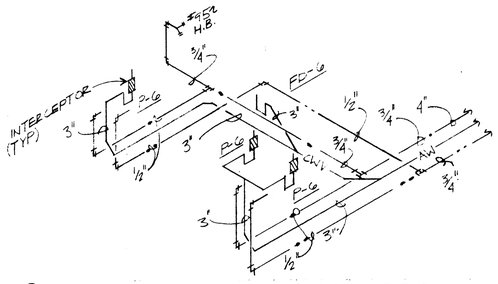
SCALE: NONE

NOTE:

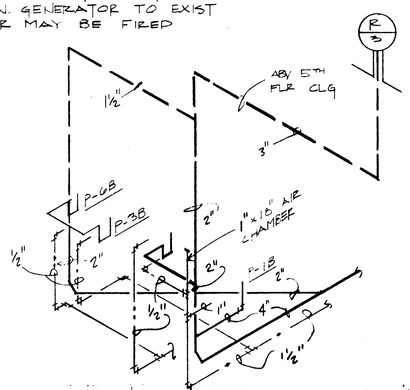
1. THE EXIST STEAM FIRED H.W. GENERATOR MAY BE SHUT DOWN IN SUMMER AND HOT WATER FED FROM NEW GAS WATER HEATER (WH-1) THRU EXIST H.W. GENERATOR TO EXIST WING - ALSO EXIST WATER HEATER MAY BE FIRED ANYTIME AS STANDBY.

DETAIL VOIDED

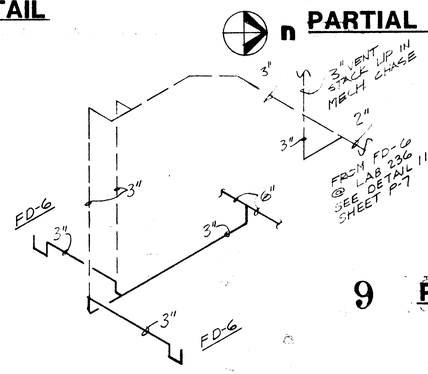
4 LABORATORY VACUUM PUMP PIPING DETAIL



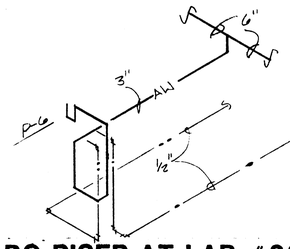
6 PLBG RISER AT LAB #234



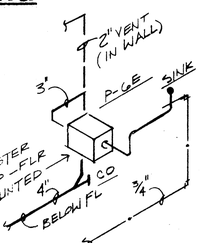
7 PLBG RISER AT TLT #553-B



8 PLBG RISER AT HUMID STO. #234-A & #235-A



9 PLBG RISER AT LAB #235



10 PLBG RISER AT STRUCTURAL TEST LAB #240

11 PLBG RISER AT LAB 236

plumbing risers and details

COMM. NO. 10186

P-7

DATE: 6/23/86

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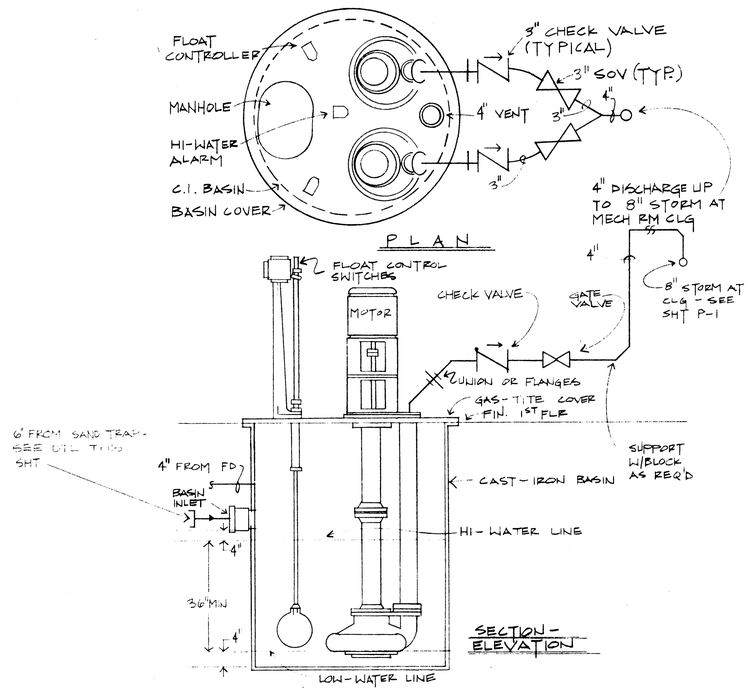
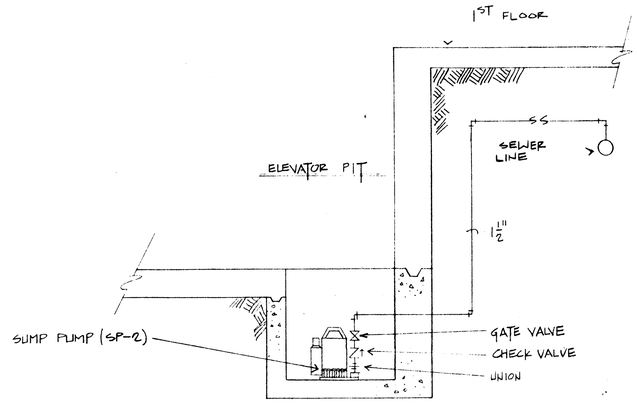


1 SUMP PUMP DETAIL (SP-1)

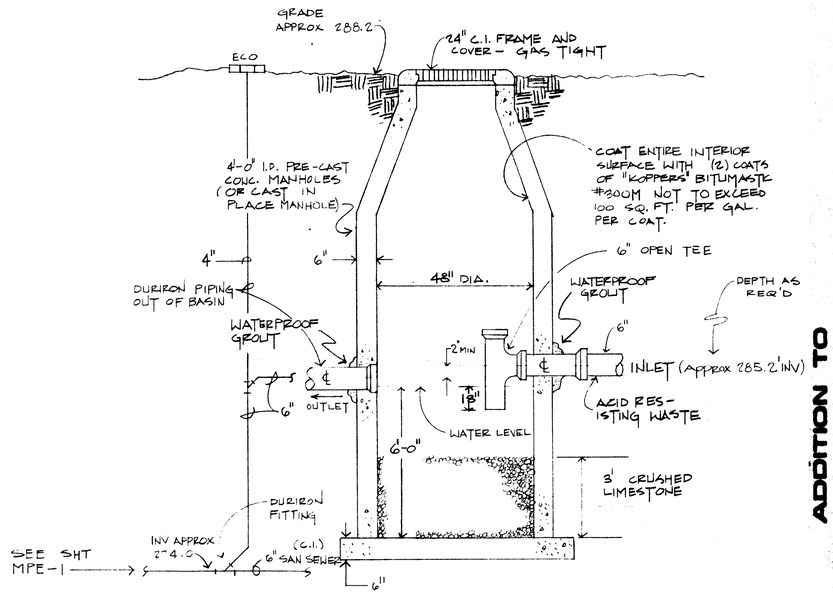
NO SCALE



NOTE: 1. SUMP PUMP IN 18" x 18" x 18" CONCRETE PIT BELOW ELEVATOR PIT.
2. FOR LOCATION, SEE 1ST FLOOR PLAN, SHEET P-1.

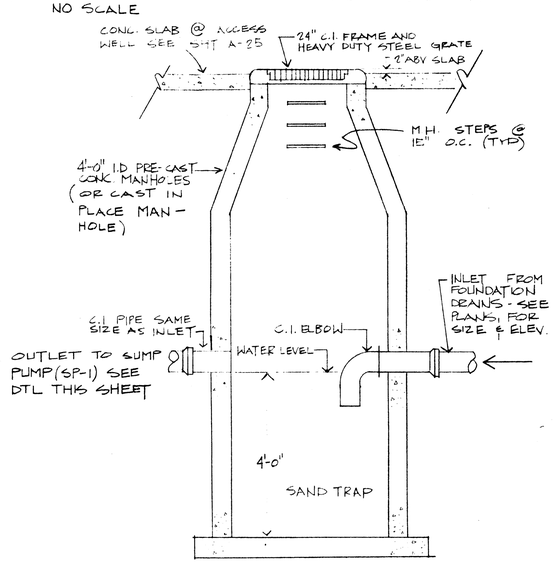
2 SUMP PUMP DETAIL (SP-2)

NO SCALE



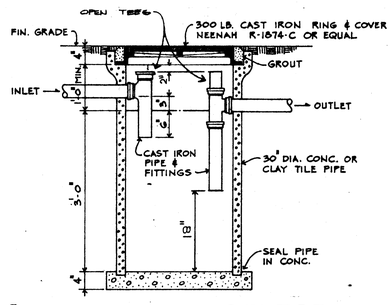
3 ACID DILUTION BASIN DETAIL

NO SCALE

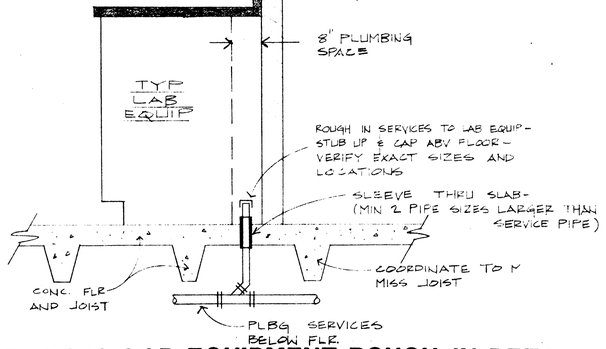


8 SAND TRAP DETAIL

NO SCALE



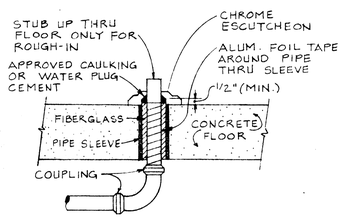
4 SOLIDS INTERCEPTOR AND TRAP DETAIL



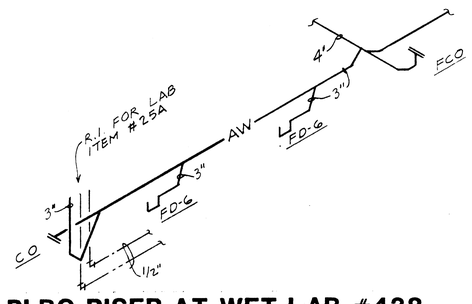
5 TYPICAL LAB EQUIPMENT ROUGH-IN DETAIL

GLASS PIPE NOTES

1. PIPE PASSING THROUGH FLOORS OR SLABS SHOULD BE FITTED WITH PIPE SLEEVE AT LEAST 2" GREATER IN DIAMETER THAN PIPE O.D.
2. PACK SPACE BETWEEN PIPE AND SLEEVE WITH FIBERGLASS INSULATION.
3. INSTALL COUPLING WITHIN 6" OF FLOOR OR SLAB TO GIVE FLEXIBILITY.
4. NOTE: FOR FIRE, WATER OR EXPLOSION PROOF FLOORS, PACK TOP OF SLEEVE WITH CAULKING MATERIAL OR WATER PLUG CEMENT.



6 TYPICAL GLASS ACID WASTE PIPE ROUGH-IN FOR LAB EQUIPMENT



7 PLBG RISER AT WET LAB #438

plumbing risers and details

COMM. NO. 10186

P - 8

DATE: 8/23/86

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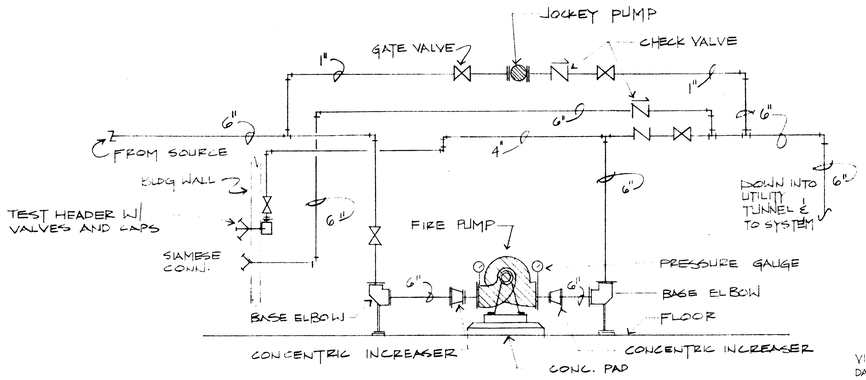
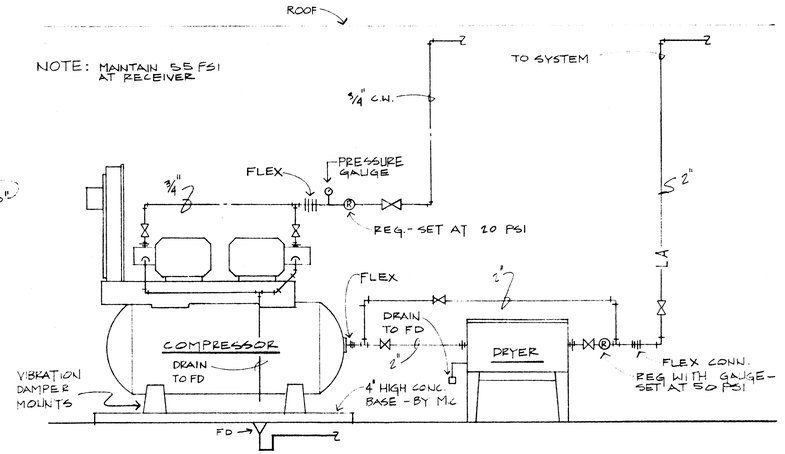
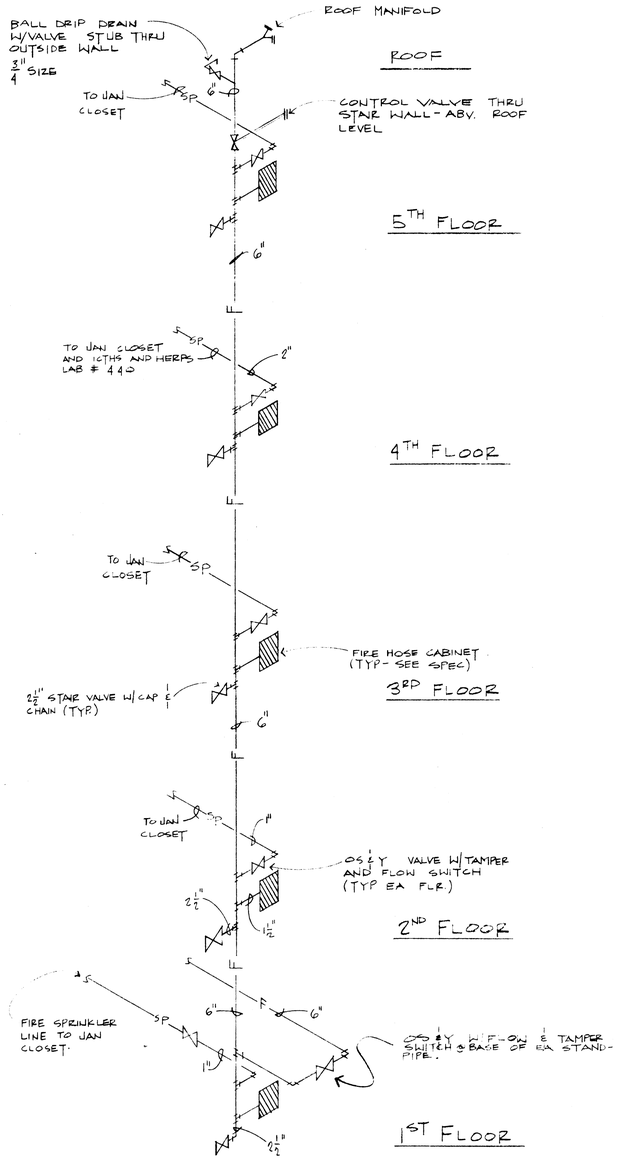


1 FIRE PUMP PIPING DETAIL

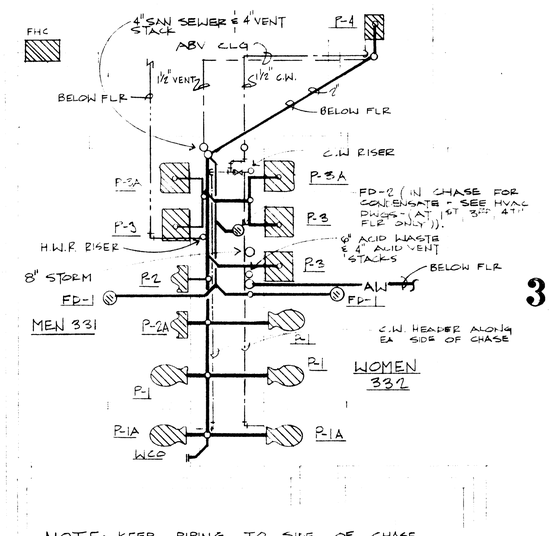


2 LAB AIR COMPRESSOR DETAIL



6 STANDPIPE AT NORTH STAIR

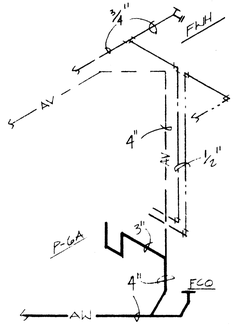
NO SCALE (STANDPIPE AT SOUTH STAIR SIMILAR)



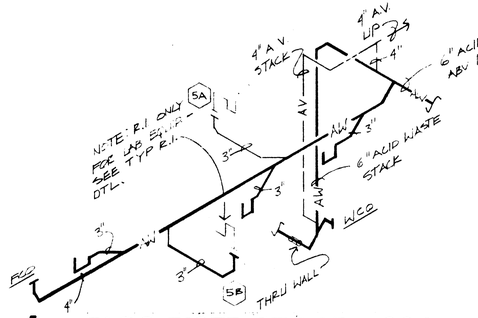
NOTE: KEEP PIPING TO SIDE OF CHASE & LOW IN CHASE AS MUCH AS POSSIBLE, FOR ACCESS.

5 PARTIAL PLUMBING PLAN AT TOILET 431 & 432

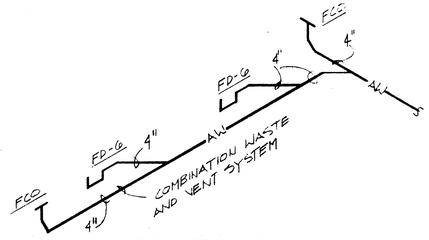
(TOILET 331 &332, TOILET 531 & 532 SIMILAR).



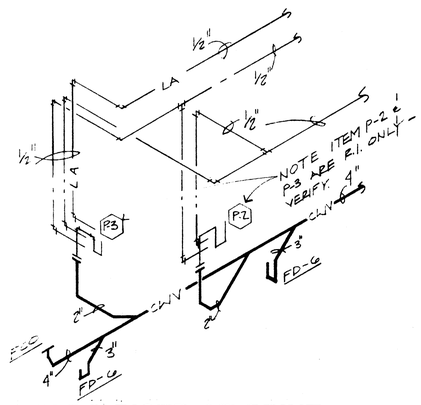
3 PLBG RISER AT POWER MACH. #154



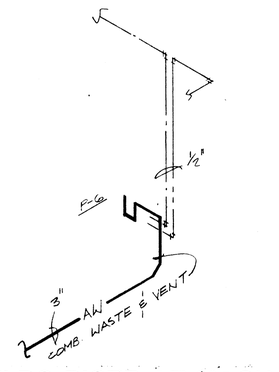
4 PLBG RISER AT LAB #231



7 PLBG RISER AT LAB #430



8 PLBG RISER AT PRINT RM #140-B & 140-A



9 PLBG RISER AT MACH. SHOP #155

plumbing risers and details

COMM. NO. 10186

P - 9

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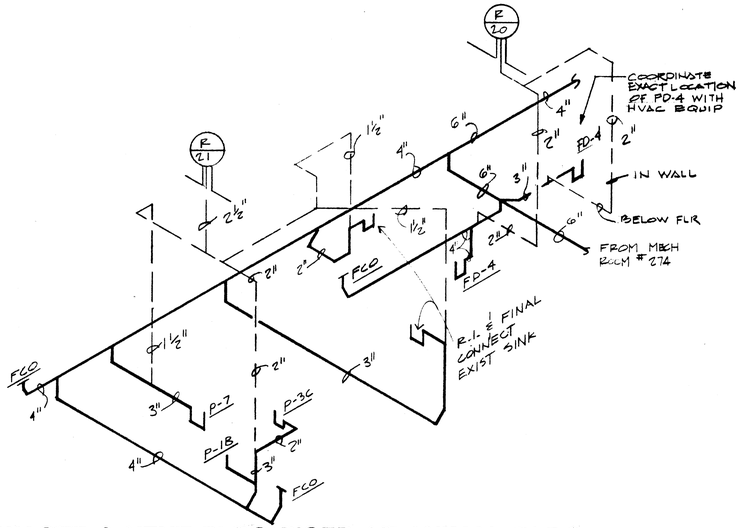
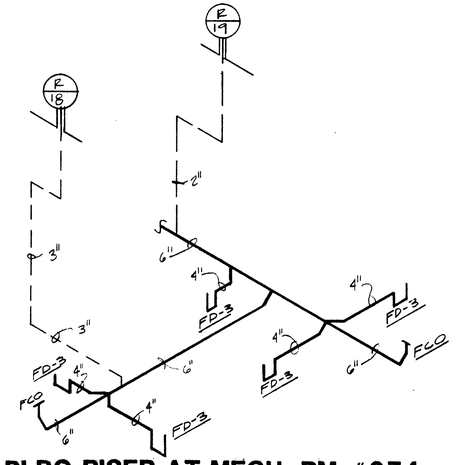
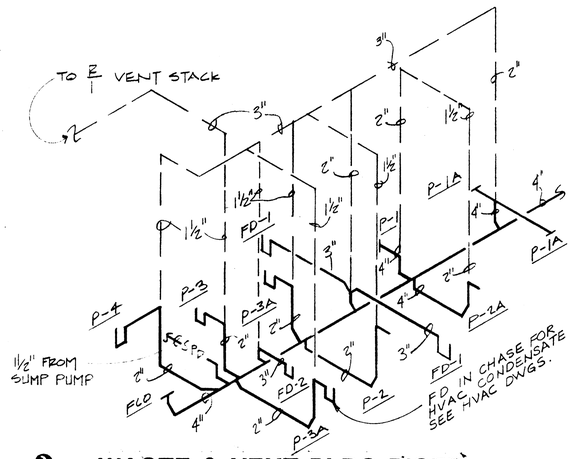


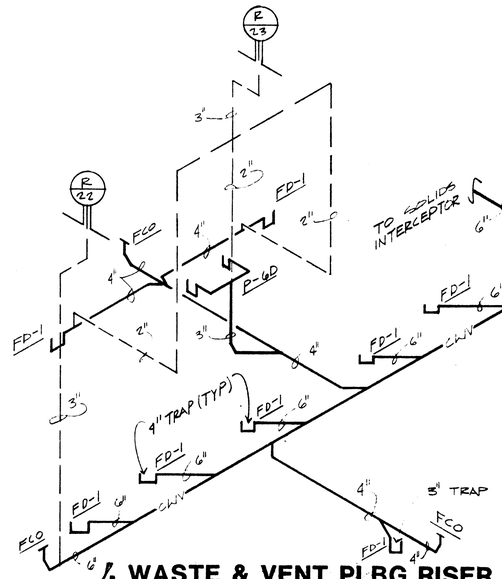
1 WASTE & VENT PLBG RISER AT ANIMAL BLDG



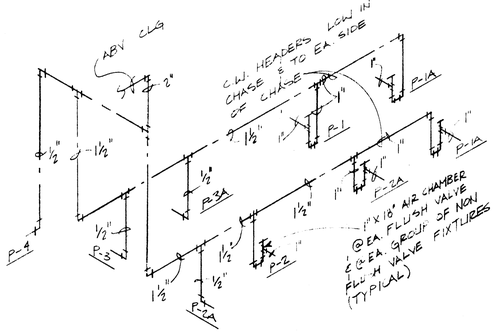
2 PLBG RISER AT MECH. RM #274



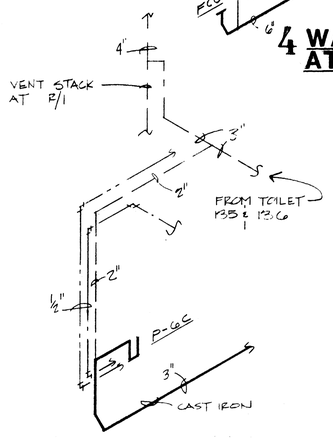
3 WASTE & VENT PLBG RISER AT TLT #135 & #136



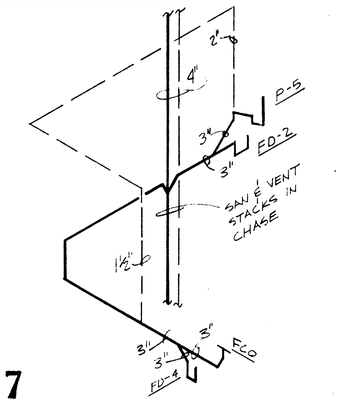
4 WASTE & VENT PLBG RISER AT ANIMAL BLDG



5 WATER PLBG RISER AT TLT #135 & #136

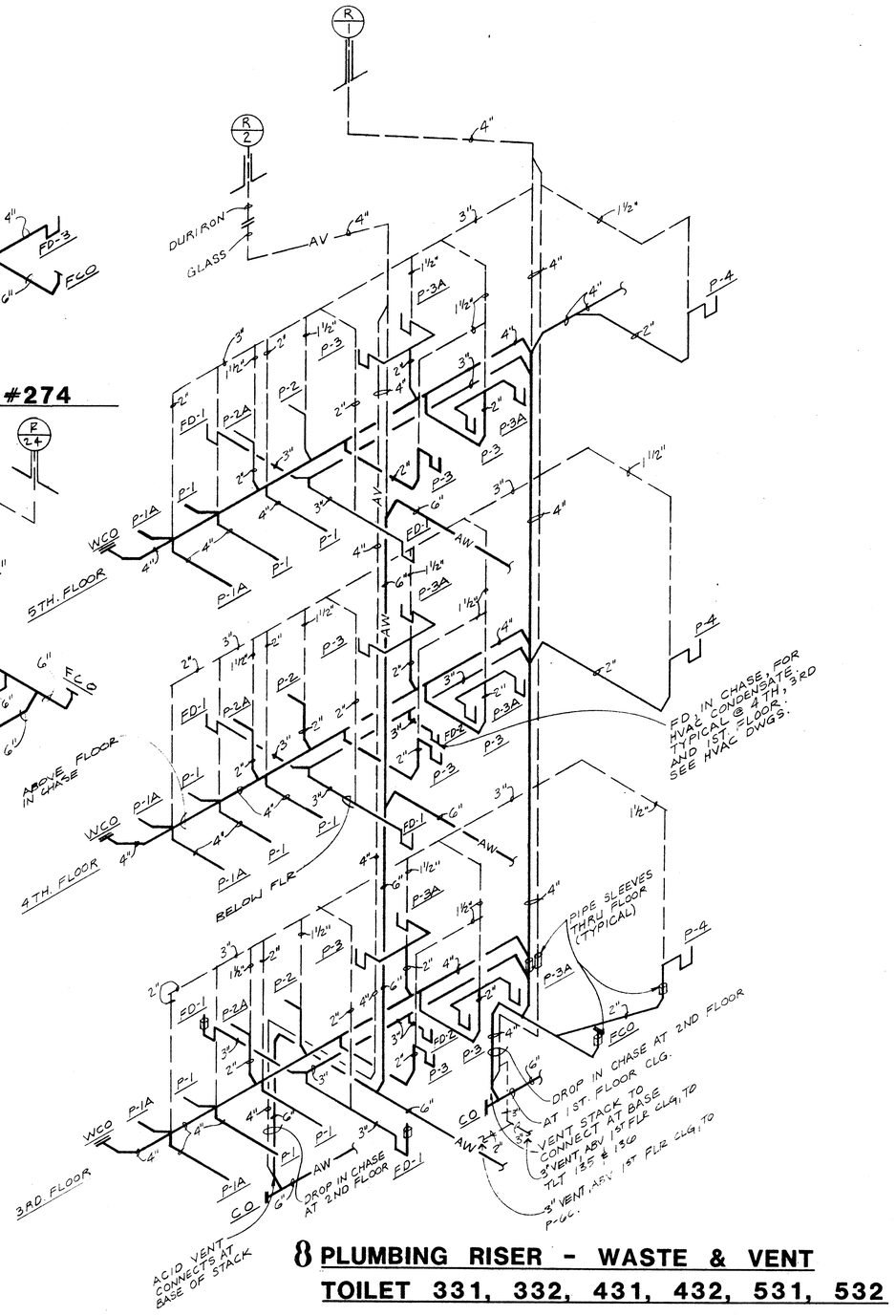


6 PLBG RISER AT GLASS BLOWING #132



7 PLBG RISER AT JAN. #335 & MECH. #337

(JAN. #539 & MECH. #541, JAN. #237 & LOUNGE #239, JAN. #435 & LOUNGE #437 SIMILAR)



8 PLUMBING RISER - WASTE & VENT TOILET 331, 332, 431, 432, 531, 532

plumbing risers and details

COMM. NO. 10186

P-10

DATE: 6/23/86

ADDITION TO
LABORATORY SCIENCES CENTER
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JONESBORO, ARKANSAS

Brackett Krennerich and Associates Inc Architects
P.O. Box 1655 • Jonesboro, Arkansas 72403-1655 • 501/932-0571

AF 32526

COMM. NO. 10186

C-1

DATE: 6/23/86

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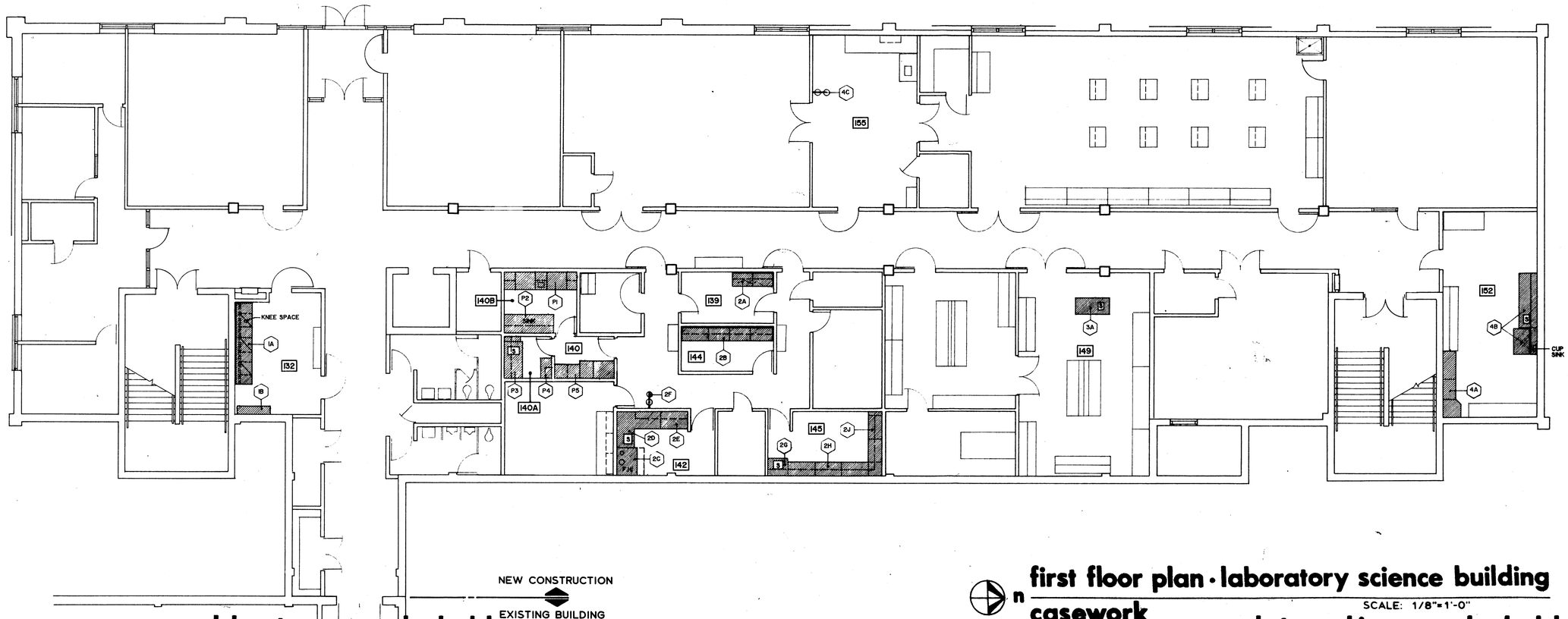
REGISTERED ARCHITECTS C 13 ARKANSAS



first floor plan · laboratory science building

SCALE: 1/8"=1'-0"

casework

laboratory casework schedules

ITEM NUMBER	KEWAUNEE CATALOG NO.	REMARKS	TOP MAT	WATER FIXTURE	AIR FIXTURE	GAS FIXTURE	VAC. FIXTURE	ELECT. FIXTURE
		GLASS BLOWING 132						
1A	1A207	BASE CABINET (4 REQ.) (SEE NOTE)	1"S.S.-30"W	—	AIR M-260	GAS M-260	—	—
	1A2001(X)	APRON (3 REQ.)	1S.S.-31"W	—	—	—	—	—
	(X) FINISHED BACK AT APRON							
	KS-4812-T	SHELVES (3 REQ.)	K.S.	—	—	—	—	—
	2-M-31A	SHELVES (66" A.F.)	—	—	—	—	—	—
	2" REAR KENSHIELD CURB		—	—	—	—	—	—
					NOTE: PROVIDE VENTED FILLER FOR HOOKUP TO PORTABLE OXYGEN TANKS BY OWNER			
1B	1A802	ADJ. SHELVING (KENSHIELD)	K.S.	—	—	—	—	—
		BIOL-PREP. 139						
2A	1A219	BASE CABINET (1 REQ.)	1"K.S.-24"W	—	—	—	—	—
	1A167	BASE CABINET (1 REQ.)	1"K.S.-24"W	—	—	—	—	—
	1A623	WALL CASE (2 REQ.)	—	—	—	—	—	—
		DATA ANALYSIS 144						
2B	1A167(X)	BASE CABINET (3 REQ.)	1"K.S.-24"W	—	—	—	—	—
	(X) WITH FILLERS							
	1A168	BASE CABINET (1 REQ.)	1"K.S.-24"W	—	—	—	—	—
	1A623(X)	WALL CASE (3 REQ.)	—	—	—	—	—	—
	(X) WITH FILLERS							
	1A624	WALL CASE (1 REQ.)						

ITEM NUMBER	KEWAUNEE CATALOG NO.	REMARKS	TOP MAT	WATER FIXTURE	AIR FIXTURE	GAS FIXTURE	VAC. FIXTURE	ELECT. FIXTURE
		TEM. PREP. 142						
2C	SH-1504-WS	FUME HOOD	K.R.	C.W.	AIR	GAS	—	ELEC.
	849	ALARM	—	—	—	—	—	—
2D	1D203-R	SINK UNIT W/ 1006 SINK	1"K.R.-31"W	H.W. & C.W.	—	—	—	—
2E	1A176(X)	BASE CABINET (2 REQ.)	1"K.R.-31"W	—	—	—	—	—
	(X) PROVIDE FILLERS AND CORNER TOP							
	1A624	WALL CASE (2 REQ.)	—	—	—	—	—	—
2F	W-926	SAFETY STATION	—	C.W.	—	—	—	—
		MICROTECHNIQUE ROOM 145						
2G	1D203L	WALL SINK W/ 1006 SINK	1"K.R.-31"W	H.W. & C.W.	—	—	—	—
	1D911	PEG BOARD	—	—	—	—	—	—
2H	1A176(X)	BASE CABINET (3 REQ.)	1"K.S.-24"W	—	—	—	—	—
	1A624(X)	WALL CASE (3 REQ.)	—	—	—	—	—	—
	(X) WITH FILLERS							
2J	A175(X)	BASE CABINET (1 REQ.)	1"K.S.-24"W	—	—	—	—	—
	(X) WITH FILLER							
	1A76(X)	BASE CABINET (1 REQ.)	1"K.S.-24"W	—	—	—	—	—
	(X) WITH FILLERS & PROVIDE CORNER TOP							
	1A623(X)	WALL CASE (1 REQ.) W/FILLER	—	—	—	—	—	—
	1A624	WALL CASE (1 REQ.) W/FILLER	—	—	—	—	—	—

ITEM NUMBER	KEWAUNEE CATALOG NO.	REMARKS	TOP MAT	WATER FIXTURE	AIR FIXTURE	GAS FIXTURE	VAC. FIXTURE	ELECT. FIXTURE
		ELEC. ENGINEERING 149 152						
3A	H-1014-L	INSTRUCTORS DEM. TABLE W/1000 SINK	1"K.R.-30"W	C.W.	—	GAS	—	ELEC.
		GEN. ELEC./ENG. HIGH BAY						
4A	SE-2048	BASE CABINET (1 REQ.)	1" OAK-24"W	—	—	—	—	—
	SD-2636	BASE CABINET (1 REQ.)	1" OAK-24"W	—	—	—	—	—
	SG-2149	BASE CABINET (1 REQ.)	1" OAK-24"W	—	—	—	—	—
4B	G-225W	PREP. WALL ASSEMBLY W/1006 SINK	1"K.R.-31"W	H.W. & C.W.	—	GAS	—	ELEC.
		MACHINE SHOP 155						
4C	W-926	SAFETY STATION	—	C.W.	—	—	—	—

photographic casework schedule

ITEM NUMBER	BRANDON CATALOG NO.	DISCRIPTION	WATER	AIR	GAS	ELEC.
		DARK ROOM 140B				
P1	W-18	WALL CABINET (3 REQ.)	—	—	—	—
	EWS-36	BASE CABINET W/EASEL (2 REQ.)	—	—	—	—
	D18 LT2 30-18	BASE DRAWER CAB.-LIGHT TIGHT(2 REQ.)	—	—	—	—
	BL21 W/1012 SVL AND T2 30-81	BASE CABINET W/VIEW LIGHT	—	—	—	ELEC.
P2	2475C RPP1	PROCESSING SINK UNIT ON BASE CABINET	H.W. & C.W.	—	—	—
	KCS12-87 1/2	CHEMICAL SHELF	—	—	—	—
		DARK ROOM 140A				
P3	20HEM570BS	ELECTRON MICROSCOPE PROCESSOR	H.W. & C.W.	AIR	NITRO-GEN	ELEC.
	BF9 W/T2390-9	BASE CAB. FILLER				
		NOTE: CONNECTIONS TO EQUIP. MAY OCCUR THIS CAB.				
	KCS12-72	CHEMICAL SHELF	—	—	—	—
P4	B36x18 W/T3B0-B7	BASE CABINET & TOP	—	—	—	—
	W-18	WALL CAB. (1 REQ.)	—	—	—	—
		LIGHT LOCK 140				
P5	TS2424	STORAGE CABINET (2 REQ.)	—	—	—	—
	D24 W/T2390-80	BASE CABINET & TOP	—	—	—	—
	B36	BASE CABINET	—	—	—	—
		NOTE: 1 TOP COVERS BOTH BASE CABINETS				

NOTES

1.) ONLY ITEMS SHADED AND SCHEDULED ARE A PART OF THE CASEWORK CONTRACT.

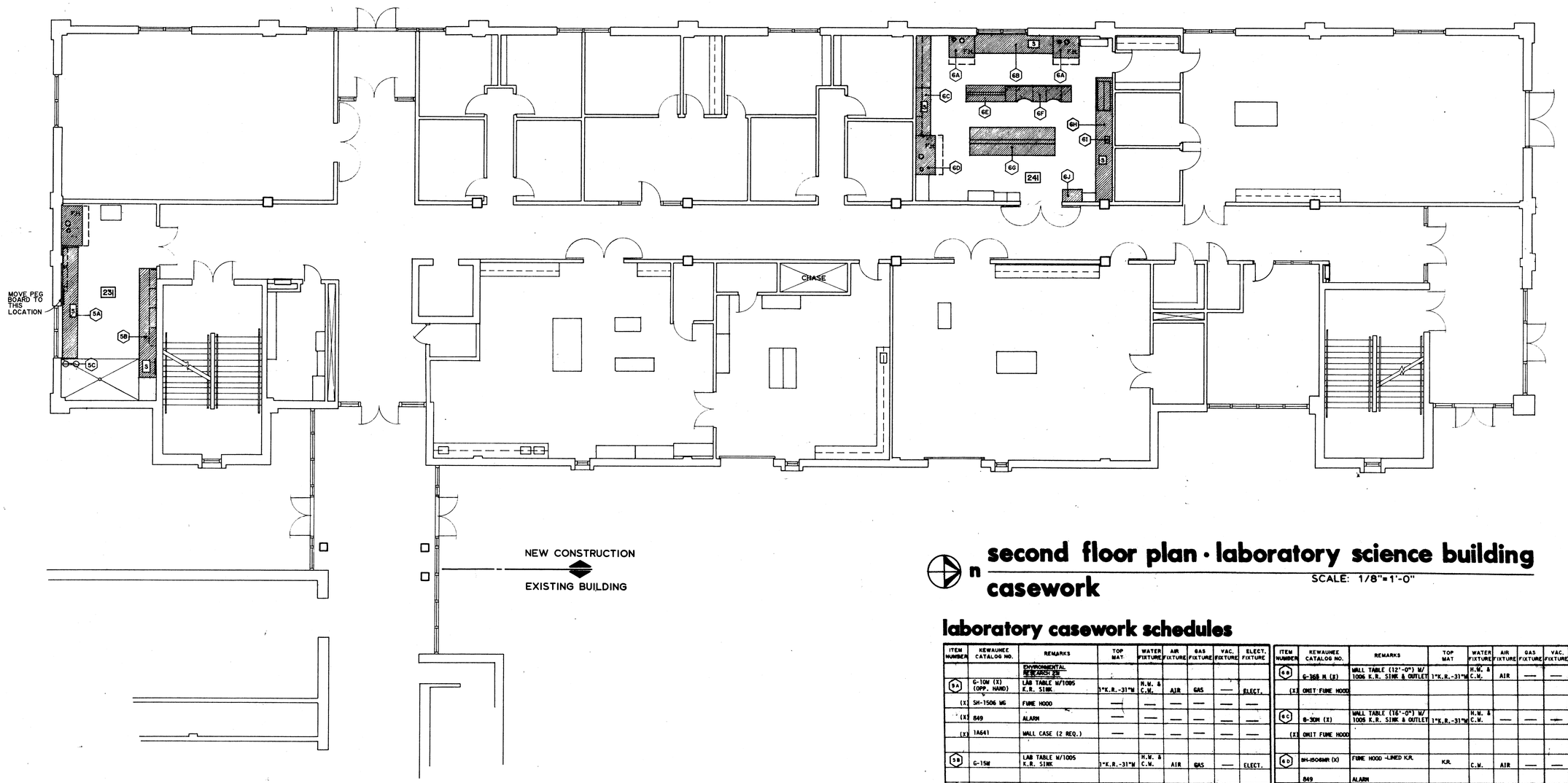
2.) FOR MILLWORK ITEMS SEE FLOOR PLANS AND MILLWORK ELEVATIONS AND DETAILS.

3.) ITEMS NOT SCHEDULED OR INDICATED AS MILLWORK ITEMS OR CASEWORK ITEMS ARE NOT A PART OF THIS CONTRACT AND ARE TO BE SUPPLIED AND INSTALLED BY THE OWNER.

4.) REFER TO FLOOR PLANS FOR ROOM DIMENSIONS. CASEWORK CONTRACTOR RESPONSIBLE FOR CASEWORK TO FIT LOCATION SHOWN. PROVIDE FILLERS AS REQUIRED TO MAKE A COMPLETE INSTALLATION.

5.) 132 DENOTES ROOM NUMBER.

AF 32526



second floor plan · laboratory science building
casework

SCALE: 1/8"=1'-0"

laboratory casework schedules

ITEM NUMBER	KEWAUNEE CATALOG NO.	REMARKS	TOP MAT.	WATER FIXTURE	AIR FIXTURE	GAS FIXTURE	VAC. FIXTURE	ELECT. FIXTURE
		ENVIRONMENTAL RESEARCH 23I						
5A	G-10W (X) (OPP. HAND)	LAB TABLE W/1005 K.R. SINK	1"K.R.-31"W	H.W. & C.W.	AIR	GAS	—	ELECT.
(X)	SH-1506 MG	FUME HOOD	—	—	—	—	—	—
(X)	849	ALARM	—	—	—	—	—	—
(X)	1A641	WALL CASE (2 REQ.)	—	—	—	—	—	—
5B	G-15W	LAB TABLE W/1005 K.R. SINK	1"K.R.-31"W	H.W. & C.W.	AIR	GAS	—	ELECT.
5C	W-926	SAFETY STATION	—	C.W.	—	—	—	—
		MATERNAL RESEARCH 241						
6A	SH-1574MS (X)	FUME HOOD (ISOTOPE HOOD)	S.S. TOP (304)	C.W.	AIR	—	—	E.P. ELECT.
(X)	FUME W/EXPLOSION PROOF LIGHTS & FIXTURES		—					
	849	ALARM	—	—	—	—	—	—
	SG-2688	SOL. STOR. CAB. (FACTORY MUTUAL APP.)	—	—	—	—	—	—
	903	FILTER HOUSING	—	—	—	—	—	—
	863	PRE-FILTER	—	—	—	—	—	—
	864	HIGH EFFICIENCY FILTER	—	—	—	—	—	—

ITEM NUMBER	KEWAUNEE CATALOG NO.	REMARKS	TOP MAT	WATER FIXTURE	AIR FIXTURE	GAS FIXTURE	VAC. FIXTURE	ELECT. FIXTURE
6B	G-36B M (R)	WALL TABLE (12'-0") W/ 1006 K.R. SINK & OUTLET	1"K.R.-31"W	H.W. & C.W.	AIR	—	—	E.P. ELECT.
(X)	OMIT FUME HOOD							
6C	G-30M (X)	WALL TABLE (16'-0") W/ 1005 K.R. SINK & OUTLET	1"K.R.-31"W	H.W. & C.W.	—	—	—	E.P. ELECT.
(X)	OMIT FUME HOOD							
6D	SH-1506MR (X)	FUME HOOD -LINED K.R.	K.R.	C.W.	AIR	—	—	E.P. ELECT.
	849	ALARM						
(X)	EXPLOSION PROOF	LIGHT & FIXTURES						
6E	J-17OM	DISTILLATION BENCH (6 x 3 CUP SINK)	1"K.R.-31"W	C.W.	AIR	—	—	E.P. ELECT.
6F	F-45SM	MICROSCOPE TABLE	1"K.R.-31"W	—	—	—	—	E.P. ELECT.
6G	C-12S M	PHYSICS TABLE	1"K.R.-54"W	—	—	—	—	E.P. ELECT.
6H	G-17SM (X)	WALL TABLE	1"K.R.-31"W	H.W. & C.W.	AIR	—	—	E.P. ELECT.
	2C350-2GR	GLOVE BOX	—	—	—	—	—	ELECT.
(X)	KR-2431-CT	CORNER TOP W/ STRUT & FIN. FRONT	1"K.R.-31"W	—	—	—	—	—
(X)	OPPOSITE HAND							
6I	L-15OM	NARCOTICS LOCKER	—	—	—	—	—	—
6J	L-20O	SAFETY CABINET	—	C.W.	—	—	—	—

COMM. NO. 10186

A-2

DATE: 6/23/86

ADDITION TO
LABORATORY SCIENCES CENTER
ARKANSAS STATE UNIVERSITY
JONESBORO, ARKANSAS

BRACKETT-KENNERICH & ASSOCIATES, P.A. REGISTERED ARCHITECTS ARKANSAS 113

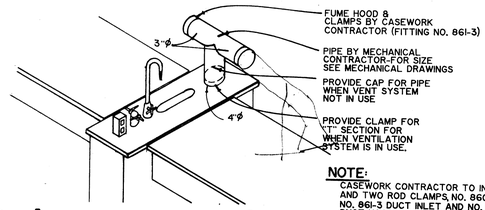
Brackett Kennerich and Associates inc Architects
P.O. Box 1655 • Jonesboro, Arkansas 72403-1655 • 501/93

AF 32526

ITEM NUMBER	KEWAUNEE CATALOG NO.	REMARKS	TOP MAT	WATER FIXTURE	AIR FIXTURE	GAS FIXTURE	VAC. FIXTURE	ELECT. FIXTURE
16C	1A215	BASE CAB. (1 REQ.)						
	1A225	BASE CAB. (1 REQ.)						
16D	H-10W-L(X)	INSTRUCTOR DEMONSTRATION TABLE	1"K.R.-30"W	C.W.	—	GAS	—	ELEC.
(X)	5W221	PORT HOOD W/FUME HOOD CONNECTOR	—	—	—	—	—	—
16E	1A204	BASE CAB. (1 REQ.)	1"K.R.-24"W	—	—	—	—	—
	1A215	BASE CAB. (1 REQ.)	1"K.R.-24"W	—	—	—	—	—
16F	SH-1504-MR	FUME HOOD	K.R.	C.W.	AIR	GAS	—	ELEC.
	849	ALARM	—	—	—	—	—	—

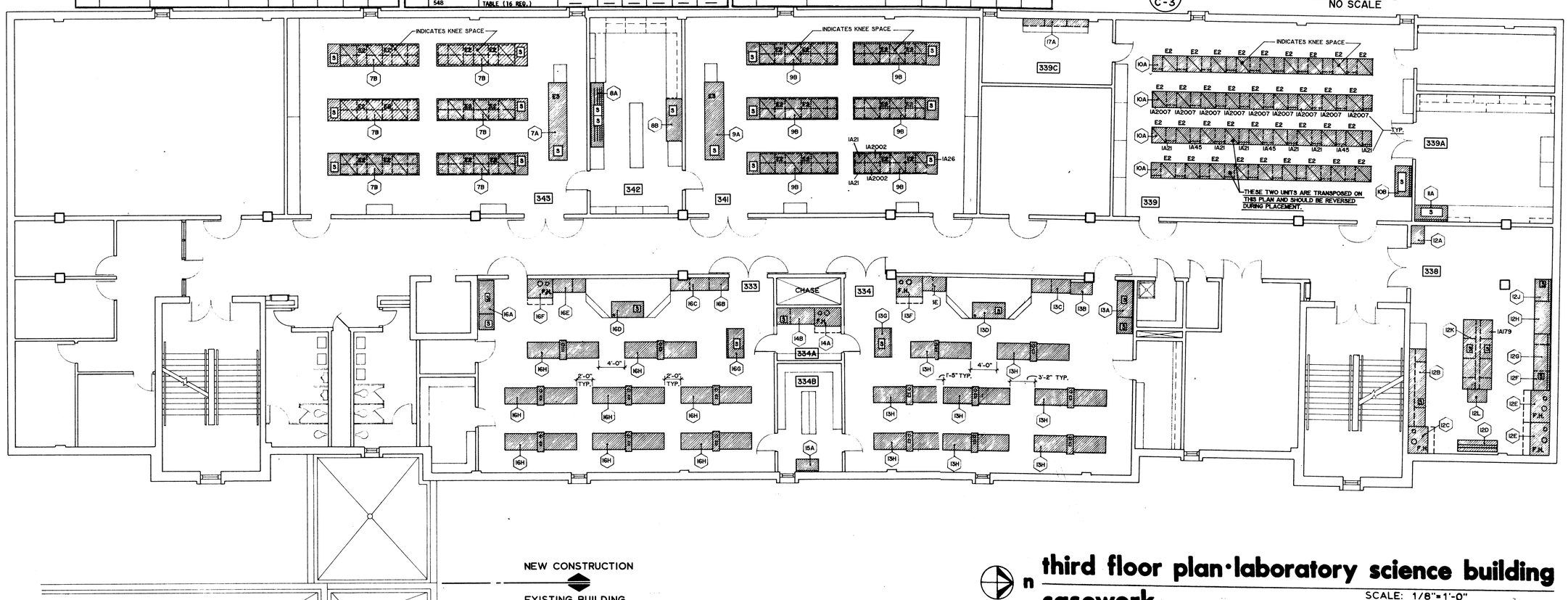
ITEM NUMBER	KEWAUNEE CATALOG NO.	REMARKS	TOP MAT	WATER FIXTURE	AIR FIXTURE	GAS FIXTURE	VAC. FIXTURE	ELECT. FIXTURE
16G	10205W(X)	SINK CABINET W/1007 SINK	1"K.R.-31"W	H.W. & C.W.	—	—	—	—
(X)	FINISHED BACK							
16H	F-72W-LS(X)	TABLE (16 REQ. TOTAL)	1"K.S.-30"W	—	—	—	—	—
	E-15W(X)	SERVICE ISLAND (8 REQ. TOTAL)	1"K.S.-12"W	C.W. 8 REQ.	—	GAS 8 REQ.	—	ELEC. 8 REQ.
(X)	36" WIDE;	1 CUP SINK, 1 C.W.	—	—	—	—	—	—
		1 GAS, 1 ELEC., VENT HOOD IN TOP SEE DETAIL ABOVE	—	—	—	—	—	—
	5W221	PORTABLE HOOD W/ FUME VENT CONNECTOR	(16 REQ.)	—	—	—	—	—
	553	UP RIGHT ROD 36" HT. (16 REQ.)	—	—	—	—	—	—
	550	ROD CLAMP (16 REQ.)	—	—	—	—	—	—
	548	ROD SOCKETS IN TABLE (16 REQ.)	—	—	—	—	—	—

ITEM NUMBER	KEWAUNEE CATALOG NO.	REMARKS	TOP MAT	WATER FIXTURE	AIR FIXTURE	GAS FIXTURE	VAC. FIXTURE	ELECT. FIXTURE
		MAP FILE / CARTOGRAPHY 339-C						
17A	1A631	WALL CASE (2 REQ.)	—	—	—	—	—	—
	1A632	WALL CASE (1 REQ.)	—	—	—	—	—	—



NOTE:
CASEWORK CONTRACTOR TO INCLUDE CROSSROD AND TWO ROD CLAMPS, NO. 860-3 DUCT OUTLET, NO. 861-3 DUCT INLET AND NO. 5W221 PORTABLE DUCT HOOD, TWO REQ'D. PER TABLE.

(1 / C-3) **det. at service island**
NO SCALE



(n / C-3) **third floor plan·laboratory science building**
casework
SCALE: 1/8"=1'-0"

laboratory casework schedules

ITEM NUMBER	KEWAUNEE CATALOG NO.	REMARKS	TOP MAT	WATER FIXTURE	AIR FIXTURE	GAS FIXTURE	VAC. FIXTURE	ELECT. FIXTURE
		GENERAL BIOLOGY LABORATORY 343						
7A	H-25W-L	INSTRUCTOR DESK W/ 1003 K.R. SINK	1"K.S.36"W	H.W. & C.W.	—	GAS	—	ELEC.
7B	1A21(X)	BASE CABINET (6 EA. TABLE)	1"K.S.-42"W	—	—	—	—	ELEC. E2 SH-3
	1A2002(X)	(6 EA. TABLE)	1"K.S.-42"W	—	—	—	—	ELEC. E2 SH-3
(X)	MANUFACTURE TO FIT							
	1A26(X)	SINK UNIT W/ 1006 SINK	1"K.R.-24"	H.W. & C.W.	—	—	—	—
(X)	42" LONG AND FINISHED BACK							
		PREPARATION 342						
8A	1D396-W	WALL SINK UNIT W/ 1024DT SINK	1"K.R. W/ RAISED EDGES	H.W. & C.W.	—	—	—	—
8B	2-215W	WALL ASSEMBLY W/ 1008 SINK	1"K.R.-31"W	H.W. & C.W.	—	GAS	—	
		GENERAL BIOLOGY LABORATORY 341						
9A	H-25W-L	INSTRUCTOR DESK W/1003 K.R. SINK	1"K.S.-36"W	H.W. & C.W.	—	GAS	—	ELEC.
9B	1A21(X)	BASE CABINET (6 EA. TABLE)	1"K.S.-42"W	—	—	—	—	ELEC. E2 SH-3
	1A2002(X)	APRON (6 EA. TABLE)	1"K.S.-42"W	—	—	—	—	ELEC. E2 SH-3
(X)	MANUFACTURE TO FIT							
	1A26(X)	SINK UNIT W/ 1006 SINK	1"K.R.-24"	H.W. & C.W.	—	—	—	—
(X)	42" LONG AND FINISHED BACK							

ITEM NUMBER	KEWAUNEE CATALOG NO.	REMARKS	TOP MAT	WATER FIXTURE	AIR FIXTURE	GAS FIXTURE	VAC. FIXTURE	ELECT. FIXTURE
		PHYSICAL GEOLOGY/ HISTORICAL GEO. 339						
10A	1A21(X)	6 REQUIRED EACH TABLE W/FIN. BACK	1"K.S.-30"W	—	—	—	—	—
	1A45(X)	3 REQUIRED EACH TABLE W/FIN. BACK	1"K.S.-30"W	—	—	—	—	—
(X)	LOCKS REQUIRED ON DOORS AND DRAWERS							
	NOTE: ELECTRICAL OUTLETS TO BE IN FACE OF APRON TO ONE SIDE OF OPENING							
	1A2002(X)	APRON - 1 REQ. EACH TABLE	1"K.S.-30"W	—	—	—	—	ELEC. SEE NOTE
	1A2007(X)	APRON - 8 REQ. EACH TABLE	1"K.S.-30"W	—	—	—	—	ELEC. SEE NOTE
(X)	DENOTES 30" TABLE DEPTH							
	1A74	LEG. ASSEMBLY - (1 PAIR EACH TABLE)	—	—	—	—	—	—
10B	1D425W	SINK UNIT W/ 1035 SINK	1"K.R.-31"W	H.W. & C.W.	—	—	—	—
	1A614	WALL CASE	—	—	—	—	—	—
		PREPARATION/ LAPIDARY 339-A						
11A	1D425W	SINK UNIT W/ 1035 SINK	1"K.R.-31"W	H.W. & C.W.	—	—	—	—
		BIO-CHEMISTRY LABORATORY 338						
12A	L-200W	SAFETY STATION	—	C.W.	—	—	—	—
12B	1A204	BASE CABINET (1 REQ.)	1"K.R.-31"W	—	—	—	—	ELEC.
	G-215W WITH 1D901	WALL TABLE WITH 1008 SINK (1 REQ.)	1"K.R.-31"W	H.W. & C.W.	—	—	—	—
	1A225	BASE CABINET (1 REQ.)	1"K.R.-31"W	—	—	—	—	—
	1A603	WALL CASE (2 REQ.)	—	—	—	—	—	—
12C	SH-1504-MR	FUME HOOD	1"K.R.	C.W.	AIR	GAS	—	ELEC.
	849	ALARM	—	—	—	—	—	—

ITEM NUMBER	KEWAUNEE CATALOG NO.	REMARKS	TOP MAT	WATER FIXTURE	AIR FIXTURE	GAS FIXTURE	VAC. FIXTURE	ELECT. FIXTURE
12D	J170W	DISTILLATION RACK	1"K.R.-24"W	C.W.	AIR	GAS	—	ELEC.
12E	SH-1505-MR	FUME HOOD (2 REQ.)	1"K.R.	C.W.	AIR	GAS	—	ELEC.
	849	ALARM (2 REQ.)	—	—	—	—	—	—
12F	1D217W W/ 1D901	WALL SINK UNIT W/1006 SINK	1"K.R.-31"W	H.W. & C.W.	—	—	—	—
12G	1A608	WALL CASE	—	—	—	—	—	—
	1A314	BASE CAB. (1 REQ.)	1"K.R.-31"W	—	—	—	—	—
	1A203	BASE CAB. (1 REQ.)	1"K.R.-31"W	—	AIR	GAS	—	ELEC. SH-2
	1A665	WALL CASE	—	—	—	—	—	—
12H	H169W	DESK	1"K.S.-30"W	—	—	—	—	—
	1A604	WALL CASE	—	—	—	—	—	—
12J	1D203W-L	SINK UNIT W/ 1006 SINK	1"K.R.-30"W	—	—	—	—	—
	1A601	WALL CASE	—	—	—	—	—	—
12K	1A139(X)	SINK UNIT W/1024 SINK (2 REQ.)	1"K.R.-54"W	H.W. & C.W.	—	—	—	—
(X)	54" LONG CABINET REQUIRED							
	1A203	BASE CAB. (2 REQ.)	1"K.R.-54"W	—	AIR	GAS	—	ELEC. SH-3
	1A215	BASE CAB. (3 REQ.)	1"K.R.-54"W	—	—	—	—	—
	1A179	BASE CAB. (1 REQ.)	1"K.R.-54"W	—	AIR	GAS	—	ELEC. SH-3
12L	2C404R	DRY BOX						
	2C270	STAND						

ITEM NUMBER	KEWAUNEE CATALOG NO.	REMARKS	TOP MAT	WATER FIXTURE	AIR FIXTURE	GAS FIXTURE	VAC. FIXTURE	ELECT. FIXTURE
		GENERAL PHYSICAL SCIENCE LAB 334						
13J	1D205W	SINK CABINET W/1007 SINK	1"K.R.-31"W	H.W. & C.W.	—	—	—	—
	1D203W-L	SINK CABINET W/1006 SINK	1"K.R.-31"W	H.W. & C.W.	—	—	—	—
13I	-200W	SAFETY STATION	—	C.W.	—	—	—	—
13C	4215	BASE CAB. (1 REQ.)	1"K.R.-24"W	—	—	—	—	—
	225	BASE CAB. (1 REQ.)	1"K.R.-24"W	—	—	—	—	—
13D	10W-L(X)	INSTRUCTOR DEMONSTRATION TABLE	1"K.R.-30"W	C.W.	—	GAS	—	ELEC.
	(2)	PORT HOOD W/FUME HOOD CONNECTOR	—	—	—	—	—	—
13E	04	BASE CAB. (1 REQ.)	1"K.R.-24"W	—	—	—	—	—
	15	BASE CAB. (1-REQ.)	1"K.R.-24"W	—	—	—	—	—
13F	1504-MR	FUME HOOD	K.R.	C.W.	AIR	GAS	—	ELEC.
		ALARM	—	—	—	—	—	—
13G	5W(X)	SINK CABINET W/1007 SINK	1"K.R.-31"W	H.W. & C.W.	—	—	—	—
	(SHED BACK							

ITEM NUMBER	KEWAUNEE CATALOG NO.	REMARKS	TOP MAT	WATER FIXTURE	AIR FIXTURE	GAS FIXTURE	VAC. FIXTURE	ELECT. FIXTURE
13H	F-72W-LS(X)	TABLE (16 REQ. TOTAL)	1"K.S.-30"W	—	—	—	—	—
	E-15W(X)	SERVICE ISLAND (8 REQ. TOTAL)	1"K.S.-12"W	C.W. 8 REQ.	—	GAS 8 REQ.	—	ELEC. 8 REQ.
(X)	36" WIDE;	1 CUP SINK, 1 C.W.	—	—	—	—	—	—
		1 GAS, 1 ELECT., VENT HOOD IN TOP SEE DETAIL ABOVE	—	—	—	—	—	—
	5W221	PORTABLE HOOD W/FUME VENT CONNECTOR	(16 REQ.)	—	—	—	—	—
	553	UP RIGHT ROD 36" HT. (16 REQ.)	—	—	—	—	—	—
	550	ROD CLAMP (16 REQ.)	—	—	—	—	—	—
	548	ROD SOCKETS IN TABLE (16 REQ.)	—	—	—	—	—	—
		PREPARATION 334-A						
14A	SH-1504-MR	FUME HOOD	K.R.	C.W.	AIR	GAS	—	ELEC.
	849	ALARM	—	—	—	—	—	—
	SG-2686	SOLVENT STOR. CAB. FACT. MAT. APP.	—	—	—	—	—	—
14B	1A211	BASE CAB.	1"K.R.-31"W	—	—	—	—	—
	1D212	SINK CAB. W/ 1008 SINK	1"K.R.-31"W	H.W. & C.W.	—	—	—	—
		CHEMICAL STORAGE 334-B						
15A	1A215	BASE CABINET	1"K.R.-24"W	—	—	—	—	—
		GENERAL PHYSICAL SCIENCE LAB 333						
16A	1D205W	SINK CABINET W/1007 SINK	1"K.R.-31"W	H.W. & C.W.	—	—	—	—
	1D203W-L	SINK CABINET W/1006 SINK	1"K.R.-31"W	H.W. & C.W.	—	—	—	—
16B	L-200W	SAFETY STATION	—	C.W.	—	—	—	—

COMM. NO. 10186

C-3

DATE: 6/23/86

ADDITION TO
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ARKANSAS STATE UNIVERSITY
JONESBORO, ARKANSAS

Brackett Krennerich and Associates Inc. Architects
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BRACKETT-KRENNERICH & ASSOCIATES, P.A. REGISTERED ARCHITECTS C-13 ARKANSAS

AF 32526

COMM. NO. 10186

C-4

DATE: 6/23/86

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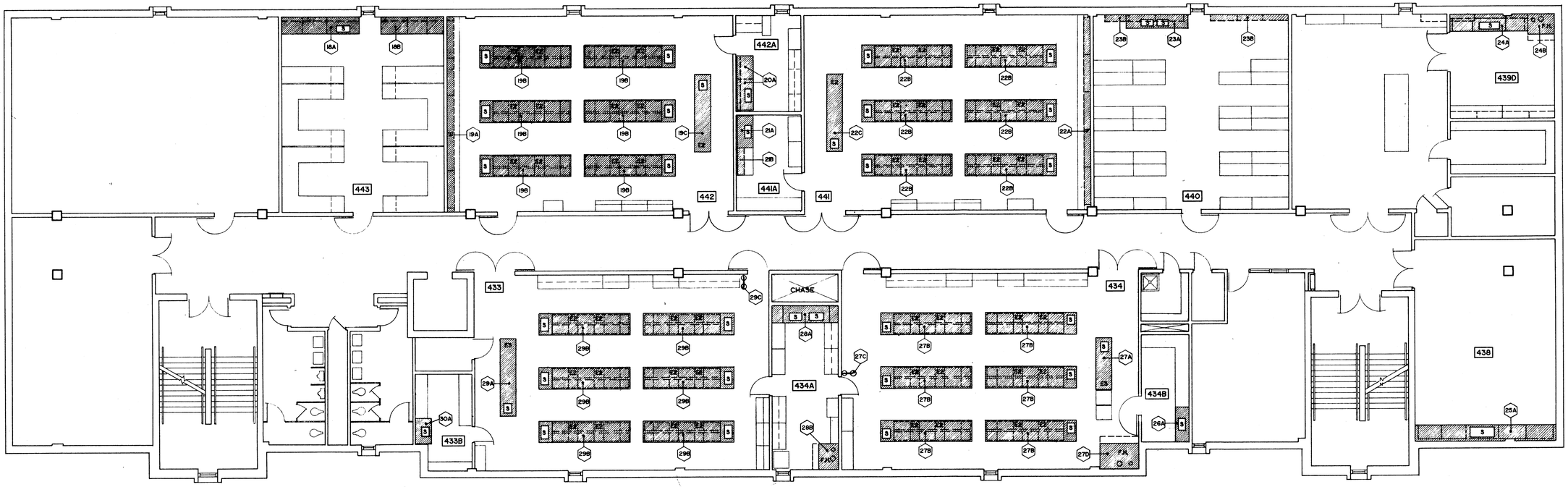

n fourth floor plan · laboratory science building casework

SCALE: 1/8"=1'-0"

laboratory casework schedules

ITEM NUMBER	KEWAUNEE CATALOG NO.	REMARKS	TOP MAT	WATER FIXTURE	AIR FIXTURE	GAS FIXTURE	VAC. FIXTURE	ELECT. FIXTURE
		LABORATORY ASSISTANTS 443						
18A	1A168	BASE CABINET (2 REQ.)	1"K.R.-24"W	—	—	—	—	—
	1A140	SINK CABINET W/1031 SINK	1"K.R.-24"W	C.W. & H.W.	—	—	—	—
18B	1A168	BASE CABINET (1 REQ.)	1"K.R.-24"W	—	—	—	—	—
	1A167	BASE CABINET (2 REQ.)	1"K.R.-24"W	—	—	—	—	—
		GENERAL BOTANY 442						
19A	1A644	WALL CASES W/ FILLERS (5 REQ.)	—	—	—	—	—	—
19B	1A21(X)	BASE CABINET (6 REQ. EACH TABLE)	1"K.S.-42"W	—	—	—	—	ELEC. E-2 SH-8
	1A2003(X)	APRON (6 REQ. EACH TABLE)	1"K.S.-42"W	—	—	—	—	—
(X)	MANUFACTURE TO	FIT 20" DEPTH						
	1A26(X)	SINK UNIT W/ 1031 SINK	1"K.R.-42"W	H.W. & C.W.	—	—	—	—
(X)	MANUFACTURE TO	42" LENGTH; PROVIDE FINISHED BACK						
19C	H-30M-R	INSTRUCTORS DEM. TABLE W/1003 SINK	1"K.R.-30"W	H.W. & C.W.	—	GAS	—	ELEC.
		PREPARATION/ STORAGE 442-A						
20A	1D205-W	SINK CABINET W/1031 SINK	1"K.R.-31"W	C.W.	—	—	—	—
	1D906	PEG BOARD	—	—	—	—	—	—
	WA67	BASE CAB.	1"K.R.-31"W	—	—	—	—	—
		PREPARATION/ STORAGE 442-B						
21A	1D205-W	SINK CABINET W/1031 SINK	1"K.R.-31"W	C.W.	—	—	—	—
	1D901	PEG BOARD	—	—	—	—	—	—

ITEM NUMBER	KEWAUNEE CATALOG NO.	REMARKS	TOP MAT	WATER FIXTURE	AIR FIXTURE	GAS FIXTURE	VAC. FIXTURE	ELECT. FIXTURE
21B	1A604	WALL CASE	—	—	—	—	—	—
		GENERAL ZOOLOGY 441						
22A	1A644	WALL CASES W/ FILLERS (5 REQ.)	—	—	—	—	—	—
22B	1A21(X)	BASE CABINET (6 REQ. EACH TABLE)	1"K.S.-42"W	—	—	—	—	ELEC. E-2 SH-8
	1A2003(X)	APRON (6 REQ. EACH TABLE)	1"K.S.-42"W	—	—	—	—	—
(X)	MANUFACTURE TO	FIT 20" DEPTH						
	1A26(X)	SINK UNIT W/ 1031 SINK	1"K.R.-42"W	H.W. & C.W.	—	—	—	—
(X)	MANUFACTURE TO	42" LENGTH; PROVIDE FINISHED BACK						
22C	H-30M-R	INSTRUCTORS DEM. TABLE W/1003 SINK	1"K.R.-30"W	H.W. & C.W.	—	GAS	—	ELEC.
		ICTHS AND HERPS MUSEUM 440						
23A	1D396-W	WALL SINK ASSEMBLY	1"K.R.-24"W	H.W. & C.W.	—	—	—	—
23B	1A624	WALL CASES (6 REQ. TOTAL)	—	—	—	—	—	—
		PREP LAB 439-D						
24A	1A139	SINK UNIT	1"K.R.-31"W	—	—	—	—	—
	SH-16 W/482	K.R. SINK	1"K.R.-31"W	—	—	—	—	—
	W-34V	SERVICE FITTING	—	H.W. & C.W.	—	—	—	—
	1D916	PEG BOARD	—	—	—	—	—	—
	1A167	BASE CAB. (2 REQ.)	1"K.R.-31"W	—	—	—	—	—
	1A604	WALL CASE	—	—	—	—	—	—

ITEM NUMBER	KEWAUNEE CATALOG NO.	REMARKS	TOP MAT	WATER FIXTURE	AIR FIXTURE	GAS FIXTURE	VAC. FIXTURE	ELECT. FIXTURE
24B	SH-1504-WG	FUME HOOD	K.R.	C.W.	AIR	GAS	—	ELEC.
	849	ALARM	—	—	—	—	—	—
		WET LAB 438						
25A	1D425W	WALL SINK W/ 1035 SINK	1"K.R.-31"W	H.W. & C.W.	—	—	—	—
	1A168	BASE CABINET (4 REQ.)	1"K.R.-31"W	—	—	—	—	—
		STORAGE 434-B						
26A	1D365	SINK UNIT	1"K.R.-31"W	H.W. & C.W.	—	—	—	—
	1D906	PEG BOARD	—	—	—	—	—	—
		PHYSIOLOGY LAB 434						
27A	H-15M-R	INSTRUCTORS DEM. TABLE W/1035 SINK	1"K.R.-31"W	H.W. & C.W.	—	GAS	—	ELEC.
27B	1A45(X)	BASE CABINET (6 REQ. EACH TABLE)	1"K.S.-42"W	—	—	—	—	ELEC. E-2 SH-8
	1A2002(X)	APRON (6 REQ. EACH TABLE)	1"K.S.-42"W	—	—	—	—	—
(X)	MANUFACTURE TO	FIT 20" DEPTH						
	1D343-R(X)	SINK UNIT W/ 1006 SINK	1"K.R.-24"	H.W. & C.W.	—	—	—	—
(X)	42" WIDE AND FI	NISHED BACK						
27C	W926	SAFETY STATION	—	C.W.		—	—	—
27D	SH-1506-WG	FUME HOOD	K.R.	C.W.	AIR	GAS	—	ELEC.
	849	ALARM	—	—	—	—	—	—

ITEM NUMBER	KEWAUNEE CATALOG NO.	REMARKS	TOP MAT	WATER FIXTURE	AIR FIXTURE	GAS FIXTURE	VAC. FIXTURE	ELECT. FIXTURE
		PREPARATION AND STORAGE 434-A						
28A	1D390W(X)	SINK UNIT	1"K.R.-31"W	H.W. & C.W.	—	—	—	—
(X)	ADD TOP AT CORNERS							
28B	SH-1504-WG	FUME HOOD	K.R.	C.W.	AIR	GAS	—	ELEC.
	849	ALARM	—	—	—	—	—	—
		ANATOMY LAB 433						
29A	H-30-W-R	INSTRUCTORS DEM. TABLE W/1003 SINK	1"K.R.-30"W	H.W. & C.W.	—	GAS	—	ELEC.
29B	1A45(X)	BASE CABINET (6 REQ. EACH TABLE)	1"K.S.-42"W	—	—	—	—	ELEC. E-2 SH-8
	1A2002(X)	APRON (6 REQ. EACH TABLE)	1"K.S.-42"W	—	—	—	—	—
(X)	MANUFACTURE TO	FIT 20" DEPTH						
	1D343-R(X)	SINK UNIT W/1006 SINK	1"K.R.-24"	H.W. & C.W.	—	—	—	—
(X)	42" WIDE AND FI	NISHED BACK						
29C	W926	SAFETY STATION	—	C.W.	—	—	—	—
		STORAGE 433-B						
30A	1D390W	SINK UNIT	1"K.R.-31"W	H.W. & C.W.	—	—	—	—

BRACKETT-KENNERICH & ASSOCIATES, P.A. REGISTERED ARCHITECTS C-13 ARKANSAS

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ITEM NUMBER	KEWAUNEE CATALOG NO.	REMARKS	TOP MAT	WATER FIXTURE	AIR FIXTURE	GAS FIXTURE	VAC. FIXTURE	ELECT. FIXTURE
39J	1A37	BASE CABINET	1"K.R.-31"W	—	—	—	—	—
	1A601	WALL CASE	—	—	—	—	—	—
39H	1A203	BASE CABINET (2 REQ.)	1"K.R.-54"W	—	—	—	—	—
	1A211	BASE CABINET (1 REQ.)	1"K.R.-54"W	—	AIR	GAS	—	ELEC. E-2 581-3
	1A225	BASE CABINET 2 REQ.)	1"K.R.-54"W	—	AIR	GAS	—	ELEC. E-2 581-3
	1D202(X)	SINK UNIT (2 REQ.)	1"K.R.-54"W	H.W. & C.W.				
(X)	NO BACK SPLASH - 22" DEPTH				—	—	—	—
	1A179	BASE CABINET (1 REQ.)	1"K.R.-54"W	—	—	GAS	—	ELEC. E-2 581-3
	1A219	BASE CABINET (1 REQ.)	1"K.R.-54"W	—	AIR	GAS	—	ELEC. E-2 581-3

ITEM NUMBER	KEWAUNEE CATALOG NO.	REMARKS	TOP MAT	WATER FIXTURE	AIR FIXTURE	GAS FIXTURE	VAC. FIXTURE	ELECT. FIXTURE
		THERMAL ANALYSIS LAB 537						
40A	SH-1504-WG	FUME HOOD	K.R.	C.W.	—	GAS	—	ELEC.
	849	ALARM	—	—	—	—	—	—
40B	W-926	SAFETY SHOWER	—	C.W.	—	—	—	—
40C	1D425W	SINK UNIT W/ 1035 SINK	1"K.R.-31"W	H.W. & C.W.	—	—	—	—

ITEM NUMBER	KEWAUNEE CATALOG NO.	REMARKS	TOP MAT	WATER FIXTURE	AIR FIXTURE	GAS FIXTURE	VAC. FIXTURE	ELECT. FIXTURE
		DARK ROOM 536-B						
46A	L-15W(X)	BASE CAB. & STOR. CASE	1"K.R.-24"W	—	—	—	—	—
	(X) 31" DEEP TOP							
46B	J-10W	DEVELOPING TABLE W/1032 SINK	1"K.R.-31"W	H.W. & C.W.	—	—	—	ELEC.
		SEPARATION LAB 535						
42A	W926	SAFETY SHOWER	—	C.W.	—	—	—	—
42B	SH-1504-WG	FUME HOOD	K.R.	C.W.	—	GAS	—	ELEC.
	849	ALARM	—	—	—	—	—	—

ITEM NUMBER	KEWAUNEE CATALOG NO.	REMARKS	TOP MAT	WATER FIXTURE	AIR FIXTURE	GAS FIXTURE	VAC. FIXTURE	ELECT. FIXTURE
42C	1D425W	SINK UNIT W/ 1035 SINK	1"K.R.-31"W	H.W. & C.W.	—	—	—	—
		EMMISSION SPECT. LAB 534						
43A	SH-2204-MS(X)	FUME HOOD	S.S. TOP (316)	C.W.	—	—	—	E.P. ELEC.
(X)	PERCHLORIC FUME HOOD; PROVIDE WASHDOWN WATER AND EXPLOSION PROOF LIGHT & FIXTURES							
	NOTE: SEPARATE DUCT SYSTEM W/WASH DOWN SYSTEM BY MECH. CONTRACTOR							
	849	ALARM	—	—	—	—	—	—

ITEM NUMBER	KEWAUNEE CATALOG NO.	REMARKS	TOP MAT	WATER FIXTURE	AIR FIXTURE	GAS FIXTURE	VAC. FIXTURE	ELECT. FIXTURE
43B	W-926	SAFETY SHOWER	—	C.W.	—	—	—	—
		MAINTENENCE 533						
44A	1D425	SINK UNIT W/ 1035 SINK	1"K.R.-31"W	H.W. & C.W.	—	—	—	—

COMM. NO. 10186

C-5

DATE: 6/23/86

ADDITION TO LABORATORY SCIENCES CENTER

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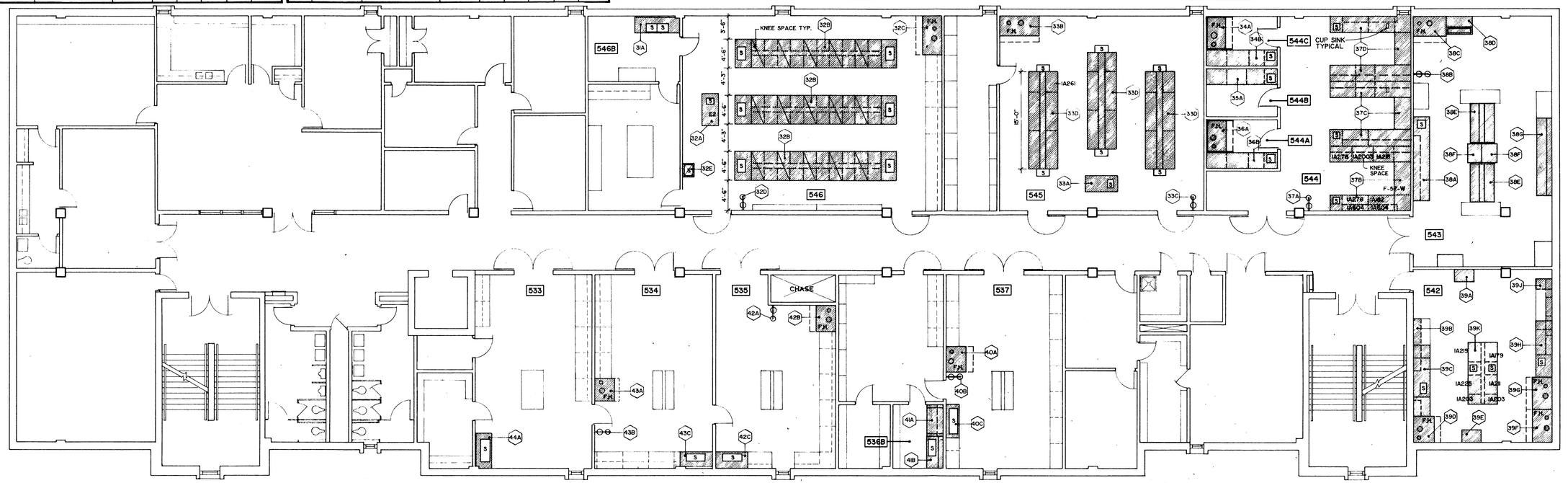


n fifth floor plan · laboratory science building casework

SCALE: 1/8"=1'-0"

laboratory casework schedules

ITEM NUMBER	KEWAUNEE CATALOG NO.	REMARKS	TOP MAT	WATER FIXTURE	AIR FIXTURE	GAS FIXTURE	VAC. FIXTURE	ELECT. FIXTURE
		PREPARATION 546-B						
31A	1D3964W(X)	WALL SINK ASSEMBLY	1"K.R.-31"W	H.W. & C.W.	—	—	—	—
(X)	MANUFACTURE TO	7'-0" LONG UNIT						
		MICRO-BIOLOGY LAB 546						
32A	H-10W-L	INSTRUCTORS DEMONSTRATION TABLE	1"K.R.-30"W	H.W. & C.W.	—	GAS	—	ELEC.
32B	1A40	BASE CABINET (10 REQ. EACH TABLE)	1"K.R.-54"W	—	—	W-472 GAS	—	E-5 581-3
	1A2001	APRON (10 REQ. EA. TABLE)	1"K.R.-54"W	—	—	—	—	—
	1D245A	SINK UNIT W/ 1005 SINK	1"K.R.-31"W	H.W. & C.W.	—	—	—	—
32C	SH-1506-WG	FUME HOOD	K.R.	C.W.	AIR	GAS	—	ELEC.
	849	ALARM	—	—	—	—	—	—
32D	W-926	SAFETY STATION	—	C.W.	—	—	—	—
32E	1D323W(X)	WALL SINK	K.R.	C.W.	—	—	—	—
(X)	FOOT OPERATED FAUCET							
		CELL BIOLOGY LAB 545						
33A	H-10W-R	INSTRUCTORS DEMONSTRATION TABLE	1"K.R.-30"W	C.W.	—	GAS	—	ELEC.
33B	SH-1506-WR	FUME HOOD	K.R.	C.W.	AIR	GAS	—	ELEC.
	849	ALARM	—	—	—	—	—	—
33C	W-926	SAFETY STATION	—	C.W.	—	—	—	—

ITEM NUMBER	KEWAUNEE CATALOG NO.	REMARKS	TOP MAT	WATER FIXTURE	AIR FIXTURE	GAS FIXTURE	VAC. FIXTURE	ELECT. FIXTURE
33D	A78(X)	CENTER TABLE	1"K.R.-54"W	C.W.	AIR	GAS	—	ELEC.
(X)	MANUFACTURE 15 -0" LONG AND PROVIDE SINK AT EACH END.							
	1A261	BASE CAB. (2 REQ. EACH TABLE)	1"K.R.-54"W	C.W.	AIR	GAS	—	ELEC. 581-3
	DRAIN TROUGH 3 -0"							
	SERV. LEDGE	3'-0"	—	—	—	—	—	—
	1D2508	SINKS	1"K.R.	C.W.	—	—	—	—
	W-350-V	FOR 1D2508	—	—	—	—	—	—
		RADIOACTIVE CHEMISTRY 544-C						
34A	SH-1574-MS	FUME HOOD	S.S. TOP (304)	C.W.	AIR	—	—	ELEC.
	849	ALARM	—	—	—	—	—	—
	903	FILTER HOUSING	—	—	—	—	—	—
	863	PRE-FILTER	—	—	—	—	—	—
	864	HIGH EFFICIENCY FILTER	—	—	—	—	—	—
34B	1D202W	SINK UNIT	1"K.R.-31"W	H.W. & C.W.	—	—	—	—
	1A215	BASE CABINET (2 REQ.)	1"K.R.-31"W	—	—	—	—	—
	PROVIDE TOP TO	CLOSE CORNER	1"K.R.-31"W	—	—	—	—	—
		RADIOACTIVE COUNTING 544-B						
36A	1D202W	SINK UNIT	1"K.R.-31"W	H.W. & C.W.	—	—	—	—
	1A215	BASE CABINET (3 REQ.)	1"K.R.-31"W	—	—	—	—	—

ITEM NUMBER	KEWAUNEE CATALOG NO.	REMARKS	TOP MAT	WATER FIXTURE	AIR FIXTURE	GAS FIXTURE	VAC. FIXTURE	ELECT. FIXTURE
		CLONING 544-A						
36A	SH-1574 MS	FUME HOOD	S.S. TOP (304)	C.W.	AIR	—	—	ELEC.
	849	ALARM	—	—	—	—	—	—
	903	FILTER HOUSING	—	—	—	—	—	—
	863	PRE-FILTER	—	—	—	—	—	—
	864	HIGH EFFICIENCY FILTER						
36B	1D202W	SINK UNIT	1"K.R.-31"W	H.W. & C.W.	—	—	—	—
	1A215	BASE CABINET (2 REQ.)	1"K.R.-31"W	—	—	—	—	—
		BIO-TECHNOLOGY RESEARCH 544						
37A	W-926	SAFETY SHOWER	—	C.W.	—	—	—	—
37B	1D202	SINK UNIT	1"K.R.-31"W	H.W. & C.W.	—	—	—	—
	1A682 1A278	BASE CABINET (1 REQ.) BASE CABINET (2 REQ.)	1"K.R.-31"W	—	—	—	—	—
	1A215(X)	BASE CABINET (1 REQ.) (X) CUP SINK	1"K.R.-31"W	C.W.	AIR	GAS	—	ELEC.
	F-57W(X)	DESK	1K.S.-31"W	—	—	—	—	—
(X)	MANUFACTURE TO	FIT						
	1A2003	APRON WITH FINISHED BACK	1"K.R.-31"W	—	—	—	—	—
	1A604	WALL CASE (2 REQ.)	—	—	—	—	—	—
	KS-4812-T(X)	REGANT SHELF	1"K.S.-12"	—	—	—	—	—
	KW-5-1A(X)	UP RIGHT (2 REQ.)	—	—	—	—	—	—
(X)	MANUFACTURE TO FINISHED BACK	FIT & PROVIDE						
(X)	PROVIDE ADDITIONAL ONLY ADD 1A603	UNIT						
(X)	PROVIDE ADDITIONAL ONLY ADD 1A604	UNIT						

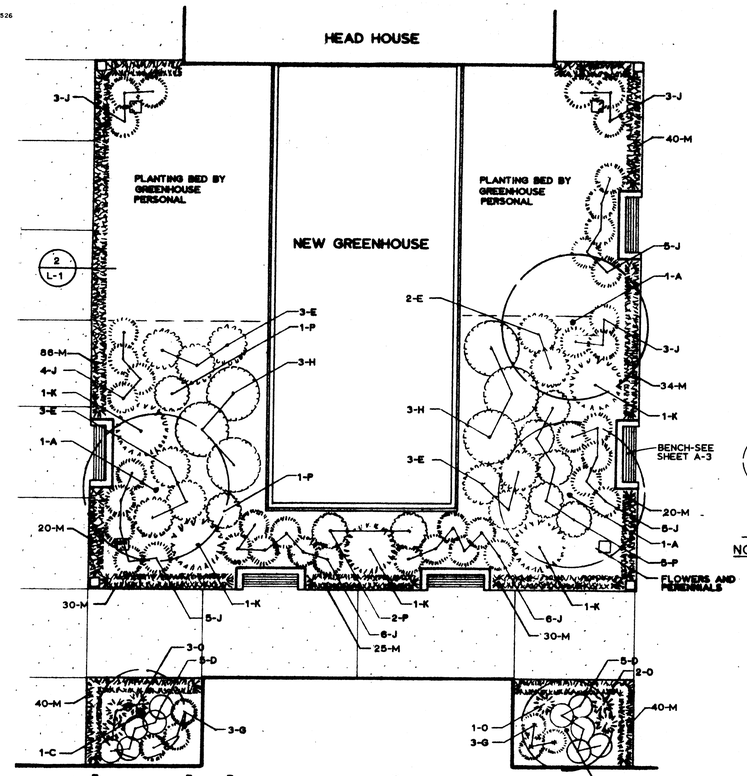
ITEM NUMBER	KEWAUNEE CATALOG NO.	REMARKS	TOP MAT	WATER FIXTURE	AIR FIXTURE	GAS FIXTURE	VAC. FIXTURE	ELECT. FIXTURE
37C	SAME AS	37B						
37D	SAME AS	37B BUT OPPOSITE HAND						
		HIGH TEMPERATURE CHEMISTRY 543						
38A	G-210W	PREPARATION WALL TABLE W/1006 SINK	1"K.R.-31"W	H.W. & C.W.	AIR	GAS	—	ELEC.
38B	W-926	SAFETY SHOWER	—	C.W.	—	—	—	—
38C	SH-1504-WR	FUME HOOD	K.R.	C.W.	AIR	GAS	—	ELEC.
	849	ALARM	—	—	—	—	—	—
38D	2C351-20R	RADIOCHEMICAL ENCLOSURE	—	—	—	—	—	ELEC.
38E	F3-1035	DISTILLATION RACK (2 REQ.TOTAL)	K.R.	C.W.	AIR	GAS	—	ELEC.
38F	1A181	BASE CABINET (2 REQ. TOTAL)	1"K.R.-48"W	—	AIR	GAS	—	ELEC. 581-3
38G	G-160W	WALL TABLE ASSEMBLY	1"K.R.-31"W	—	AIR	GAS	—	ELEC.
		INORGANIC RESEARCH LAB 542						
39A	L-200W	SAFETY STATION	—	C.W.	—	—	—	—
39B	1A604	WOOD SHELF UNIT (2 REQ.)	—	—	—	—	—	—

ITEM NUMBER	KEWAUNEE CATALOG NO.	REMARKS	TOP MAT	WATER FIXTURE	AIR FIXTURE	GAS FIXTURE	VAC. FIXTURE	ELECT. FIXTURE
39C	1A225	BASE CABINET (TYPE A SERVICE)	1"K.R.-31"W	—	—	—	—	581-2 ELEC.
	G-215W	WALL TABLE W/ 1008 SINK	1"K.R.-31"W	H.W. & C.W.	AIR	GAS	—	ELEC.
	1D901	PEGBOARD	—	—	—	—	—	—
	1A204	BASE CABINET (TYPE A SERVICE)	1"K.R.-31"W	—	—	—	—	ELEC. 581-2
	1A602	WOOD SHELF UNIT	—	—	—	—	—	—
39D	SH-1504-MR	FUME HOOD	K.R.	C.W.	AIR	GAS	—	ELEC.
	849	ALARM	—	—	—	—	—	—
	SG-2688	SOLVENT STOR. CAB. FACT. MUTUAL APP.	—	—	—	—	—	—
39E	2C404R	DRY BOX	—	—	—	—	—	—
	2C270	STAND FOR DRY BOX	—	—	—	—	—	—
39F	SH-1505-MR	FUME HOOD	K.R.	C.W.	AIR	GAS	—	ELEC.
	849	ALARM	—	—	—	—	—	—
39G	SH-1505-MR	FUME HOOD	K.R.	C.W.	AIR	GAS	—	ELEC.
	849	ALARM	—	—	—	—	—	—
	SG-2086-6	ACID STOR. CAB. W/ F-1356 VENT	—	—	—	—	—	—
39H	1D203-WL	SINK UNIT	1"K.R.-31"W	H.W. & C.W.	—	—	—	—
	1D901	PEG BOARD	—	—	—	—	—	—
	1A230	BASE CAB.	1"K.R.-31"W	—	—	—	—	—
	1A203	BASE CAB.	1"K.R.-31"W	—	—	—	—	—
	1A603	WALL CASE (2 REQ.)	—	—	—	—	—	—
	1A604	WALL CASE	—	—	—	—	—	—

Brackett Krennerich and Associates Inc. Architects

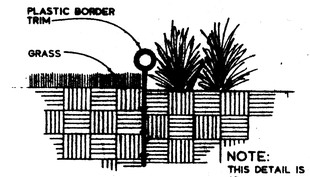
BRACKETT-KRENNERICH & ASSOCIATES, P.A. REGISTERED ARCHITECTS C13 ARKANSAS

AF 32526



enlarged plan · greenhouse area

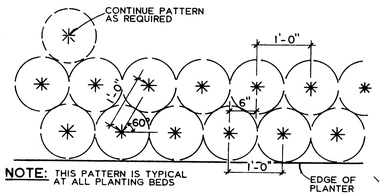
SCALE: 1/8"=1'-0"



NOTE: THIS DETAIL IS TYPICAL AT ALL PLANTING BEDS ADJACENT TO GRASS AREAS

1/L-1 edge detail

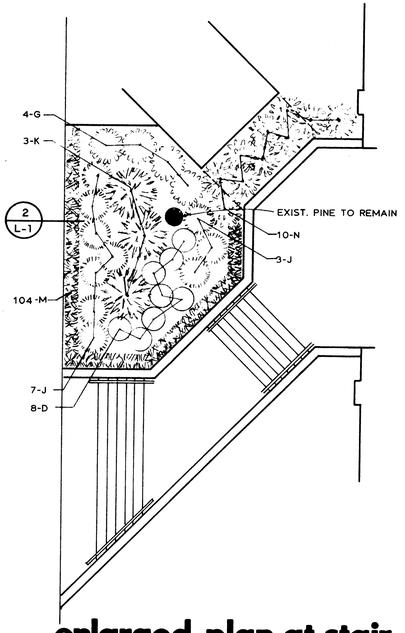
SCALE: 3"=1'-0"



NOTE: THIS PATTERN IS TYPICAL AT ALL PLANTING BEDS

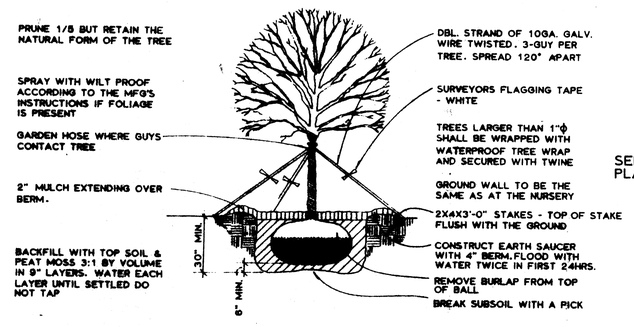
2/L-1 planting pattern (GROUNDCOVER)

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



enlarged plan at stair

SCALE: 1/8"=1'-0"

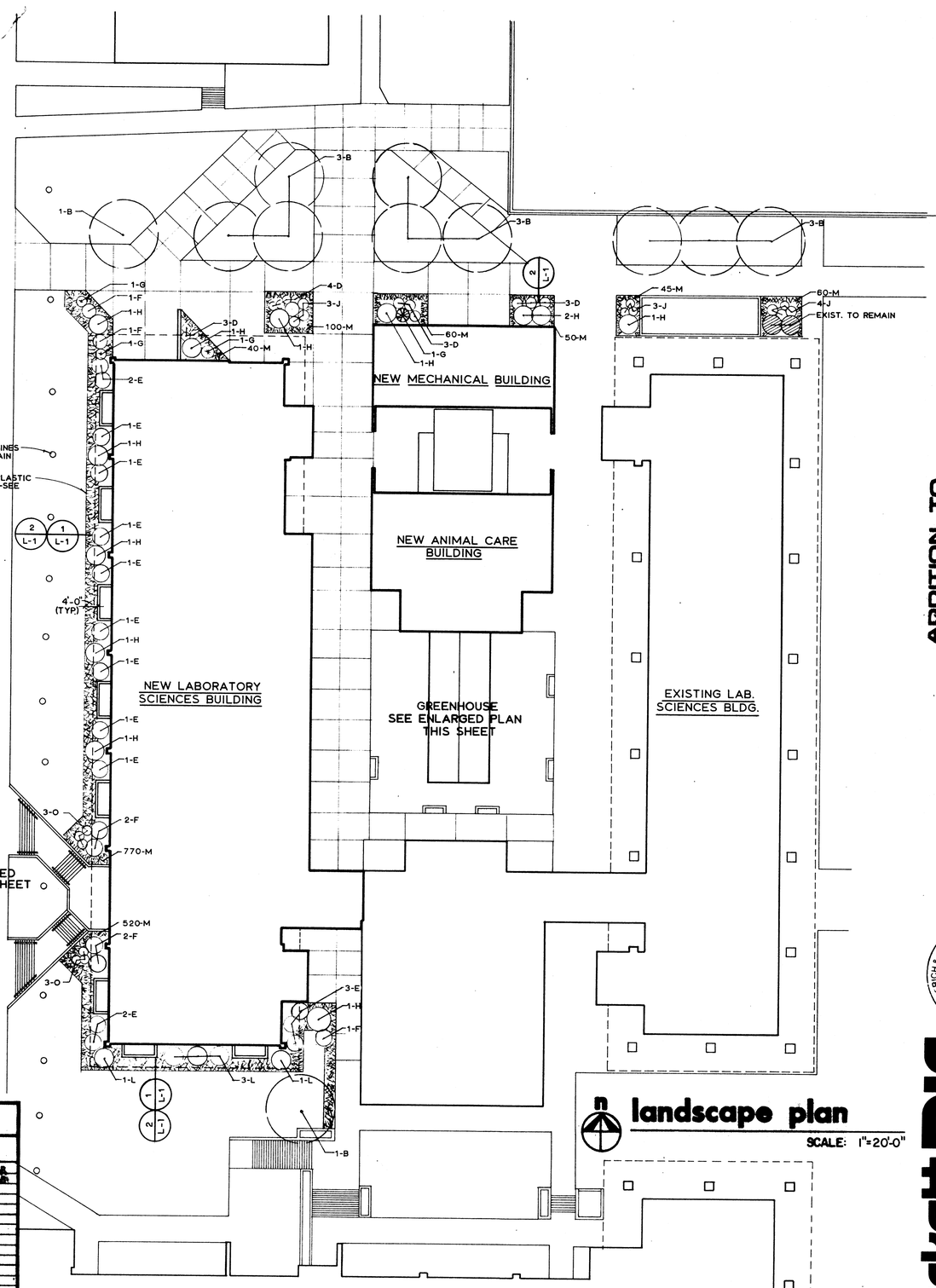


3/L-1 planting detail

NO SCALE

PLANT MATERIAL LIST

DESIG.	COMMON NAME	SCIENTIFIC NAME	NO. REQ'D.	SIZE
A	JAPANESE MAPLE (RED)	ACER PALMATUM 'ATROPURPUREUM'	3	2 TO 2 1/2" CAL. - B&B
B	EASTERN REDBUD	CERCIS CANADENSIS	11	2 TO 2 1/2" CAL. - B&B
C	FOSTER'S HOLLY	ILEX OPACA 'FOSTERI'	2	4 TO 5 FT. B&B
D	NATIVE FLAME AZALEA	AZALEA SPECIOSUM	31	3 GALLON CONTAINER
E	WINTERGREEN BARBERRY	BERBERIS JULIANAE	28	30 TO 36" B&B
F	ROUNDLEAF HOLLY	ILEX CRENATA 'ROTUNDIFOLIA'	7	24 TO 30" B&B
G	LEATHERLEAF MAHONIA	MAHONIA BEALEI	14	3 GALLON CONTAINER
H	CHINESE HOLLY	ILEX CORNUTA	18	24 TO 36" B&B
J	DWARF TAUPON	ILEX VOMITORIA 'NANA'	60	2 GALLON CONTAINER
K	PFITZER JUNIPER	JUNIPERUS CHINENSIS 'PFITZERANA'	8	24 TO 30" B&B
L	GLOSSY ABELIA	ABELIA GRANDIFLORA	5	30 TO 36" B&B
M	MONKEY GRASS	LIRIOPE MUSCARI	2114	3" POT
N	DWARF AUCUBA	AUCUBA JAPONICA 'NANA'	10	2-GALLON CONTAINER
O	HELLER HOLLY	ILEX CRENATA 'HELLERI'	12	1 GALLON CONTAINER
P	NANDINA	NANDINA DOMESTICA	9	3 GALLON CONTAINER



landscape plan

SCALE: 1"=20'-0"

NOTES:
* WEED CONTROL FABRIC TO BE PLACED ON EVERY PLANTING BED.
* PLASTIC EDGING WHERE INDICATED.

COMM. NO. 10186

L-1

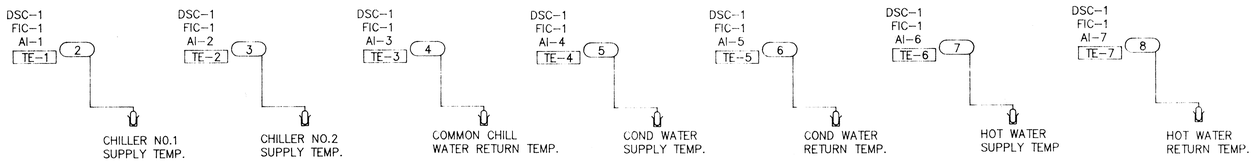
DATE: 6/23/86

ADDITION TO
LABORATORY SCIENCES CENTER
ARKANSAS STATE UNIVERSITY
JONESBORO, ARKANSAS

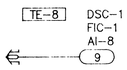
BRACKETT-KRENNERICH & ASSOCIATES, P.A. REGISTERED ARCHITECTS C13 ARKANSAS

Brackett Krennerich and Associates Inc

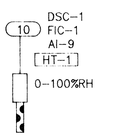
P.O. Box 1655 • Jonesboro, Arkansas 72403-1655 • 5°



CHILLED AND HOT WATER PIPING SYSTEM TEMPERATURE SENSORS



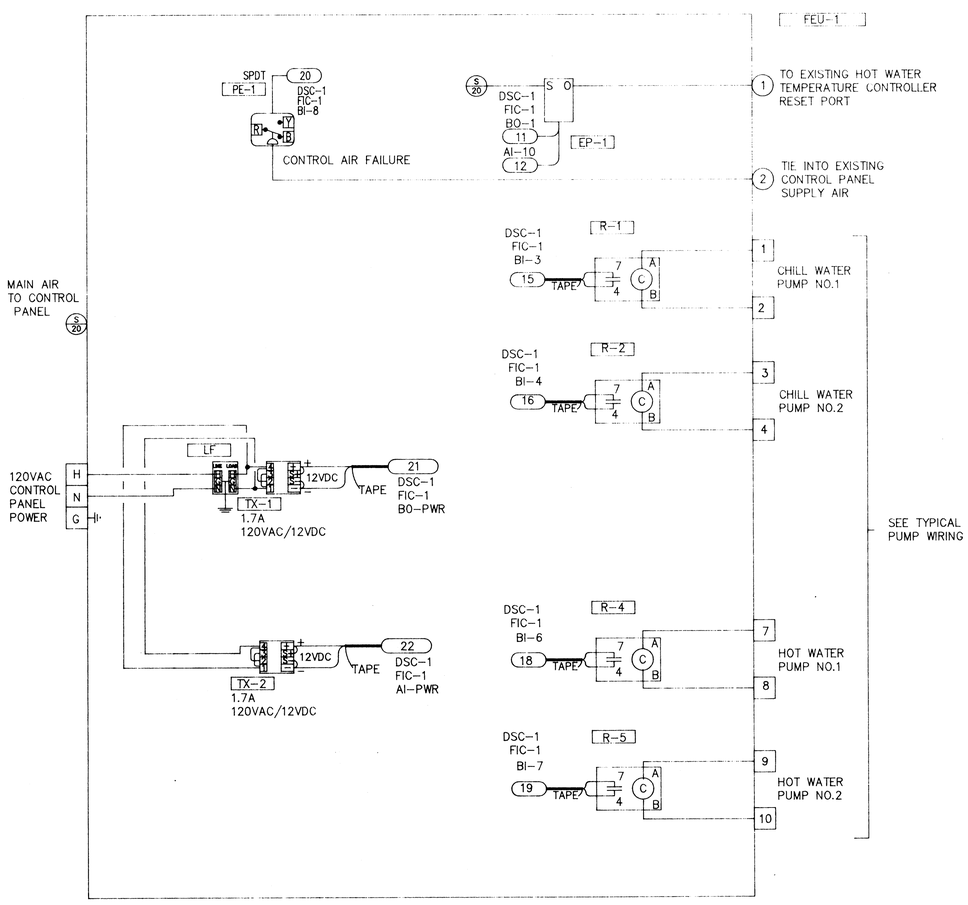
OSA TEMPERATURE SENSOR



OSA HUMIDITY SENSOR

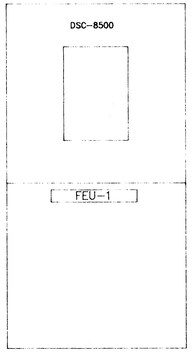
NOTE: STATUS CABLES TERMINATE IN CHILLER STARTER PANEL RELAY 2K5 TERMINALS 33 AND 34

CHILLER NO.1 AND NO.2 STATUS INPUTS



FIELD EQUIPMENT UNIT NO. 1

LOCATED IN NEW CHILLER AND HEATING MECHANICAL ROOM 273
DSC-1 FIC-1



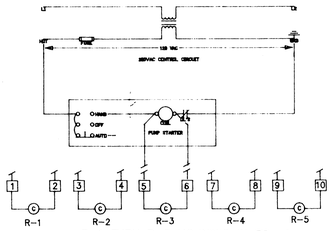
DIGITAL SYSTEM CONTROLLER AND FIELD EQUIPMENT UNIT

DSC-1 POINT SCHEDULE

ANALOG INPUTS	BINARY OUTPUTS
AI-1 CHILLER #1 SUPPLY TEMP.	BO-1A
AI-2 CHILLER #2 SUPPLY TEMP.	BO-1B HOT WTR SUPPLY TEMP ADJUST
AI-3 COMMON CHW RETURN TEMP.	BO-2A
AI-4 COND. WTR. SUPPLY TEMP.	BO-2B SPARE
AI-5 COND. WTR. RETURN TEMP.	BO-3A
AI-6 HOT WTR. SUPPLY TEMP.	BO-3B SPARE
AI-7 HOT WTR. RETURN TEMP.	BO-4A
AI-8 OUTSIDE AIR TEMP.	BO-4B SPARE
AI-9 OUTSIDE AIR HUMIDITY	BO-5A
AI-10 RESET CONTROLLER POSN	BO-5B SPARE
AI-11 SPARE	BO-6A
AI-12 SPARE	BO-6B SPARE
AI-13 SPARE	BO-7A
AI-14 SPARE	BO-7B SPARE
AI-15 SPARE	BO-8A
	BO-8B SPARE

BINARY INPUTS

BI-1 CHILLER # 1 STATUS
BI-2 CHILLER # 2 STATUS
BI-3 CHILL WTR. PUMP # 1 STATUS
BI-4 CHILL WTR. PUMP # 2 STATUS
BI-5 CONDENING WTR PUMP STATUS
BI-6 HOT WTR. PUMP # 1 STATUS
BI-7 HOT WTR. PUMP # 2 STATUS
BI-8 CONTROL AIR FAILURE



R-1 THRU R-5 MOUNTED IN FEU-1

TYPICAL PUMP STATUS WIRING

ALL PUMP MOTOR STARTERS LOCATED IN MECHANICAL ROOM 273

Device Tag | Qty | Code Number | Description

Device Tag	Qty	Code Number	Description
DSC-1 FIC-1	1	CEK-101-2	INTERFACE UNIT PCB
	1	CEP-104-0	PROGRAMMABLE COMM. MODULE
	1	ECP-105-1	ELECTRONIC CONTROL PANEL
	1	ENC-1000-11	ENCLOSURE 20"x30"
	1	ENC-1000-117	DOOR W/WINDOW F/20x30 ENC
	1	BP-9106-1A	BATTERY LEVEL REGULATOR
	1	TRS-101-2	T/R SLAVE
HT-1	1	JC 830 HUMIDITY	TRANSMITTER (OEN FACE)
TE-1 THRU TE-7	7	TE-6000-4	ELEMENT W/BODY & FTG (FOR WELL)
	7	WX-1000-5	BRASS WELL .259 ID
TE-8	1	TE-6000-4	DA TEMP ELEMENT/CONDUIT W/TE-6000-2

Panel Devices

Device Tag	Qty	Code Number	Description
EP-1	1	EPT-100-1	E.P. TRANSDUCER
FEU-1	1	ENC-1000-11	ENCLOSURE 20"x30"
	1	ENC-1000-111	DOOR FOR 20"x30" ENC
PE-1	1	P100C-7	AIRFLOW PRESSURE CONTROLLER
R-1 THRU R-5	5	PDR-105-20	RELAY 4 PDT 10A 24VAC
	5	PDS-101-4	SOCKET 11 PIN DIN
TX-1 & TX-2	2	PDP-114-5	TRANSFORMER POWER SUPPLY
	2	PDT-114-6	TRANSFORMER 120
LF	1	PDL-114-8	LINE FILTER 480 VOLT
FEU	1	FEU-102	REMOTE MTD FIELD EQ. UNIT

SEQUENCE OF OPERATION

BINARY OUTPUTS

RESETING OF THE TEMPERATURE SETPOINT FOR THE EXISTING PNEUMATIC CONTROLLERS WILL BE ACCOMPLISHED BY THE DIGITAL SYSTEM CONTROLLER. THE OUTPUT OF THE ELECTRIC/PRESSURE TRANSDUCER WILL BE PIPED INTO THE RESET PORT OF THE PNEUMATIC CONTROLLER. DEPENDING UPON THE ACTION OF THE EXISTING PNEUMATIC CONTROLLER THE AIR PRESSURE FROM THE TRANSDUCER WILL BE VARIED TO ACCOMPLISH THE RESET FUNCTION. SEE POINT SCHEDULE (BINARY OUTPUTS) FOR TEMPERATURES TO BE RESET.

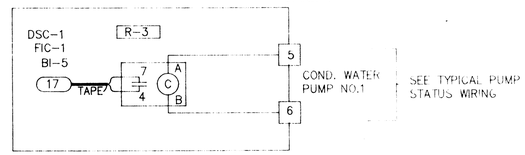
BINARY INPUTS

ALL MONITORING OF EQUIPMENT BY THE DIGITAL SYSTEM CONTROLLER WILL BE ACCOMPLISHED THRU ISOLATION RELAYS. THE ISOLATION RELAYS WILL BE WIRED PARRELLEL TO THE EQUIPMENT MOTOR STARTER HOLDING COIL. WHEN THE EQUIPMENT IS STARTED THE RELAY WILL BE ENERGIZED. THE CONTACTS OF THE RELAY WILL CLOSE THUS INDICATING AN ON STATE. WHEN THE CONTACTS ARE OPEN AN OFF STATE IS INDICATED. SEE POINT SCHEDULE (BINARY INPUTS) FOR EQUIPMENT TO BE MONITORED.

ANALOG INPUTS

ALL TEMPERATURES TO BE MONITORED WILL BE SHOWN ON THE POINT SCHEDULE (ANALOG INPUTS).

NOTE: MOUNTED IN OLD MECH ROOM FEU



REMOTE MOUNTED FIELD EQUIPMENT UNIT

DRAWING TITLE: DSC-#1 SERVES HOT WATER & CHILL WTR SYS

PROJECT: LAB SCIENCE BLDG. ARKANSAS STATE UNIV. JONESBORO, AR.

REFERENCE DRAWINGS	NO	REVISION - LOCATION	ECN	DATE	BY
		A BOM		7/21	DK
					RE

SALES MGR	PROJECT MGR	APPLICATION ENGR	DRAWN	DATE	APPROVED BY	DATE
NRM		RGR	RGR 8/26/88		JOHNSON CONTROLS	

JOHNSON CONTROLS Systems & Services Division
1722 S. BROADWAY LITTLE ROCK, AR. 501-372-7370

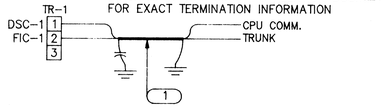
CONTRACT NUMBER 88108-0014

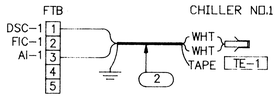
DRAWING NUMBER 1 OF 7

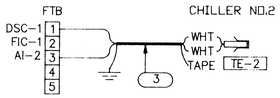
FORM NO. 17502"C" REV. 4/84 (BEMS 45-5.01 and 45-8.01)

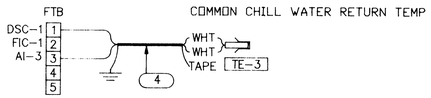
22" x 34" ORIGINAL

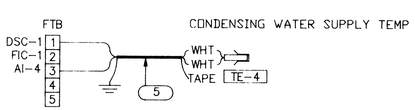
NOTE: SEE COMMUNICATION TRUNCK GROUNDING DIAGRAM IN DSC-8500 INSTALLATION BOOKLET FOR EXACT TERMINATION INFORMATION

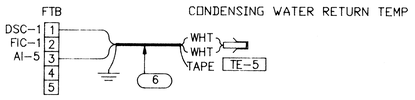


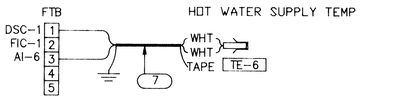


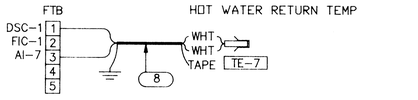


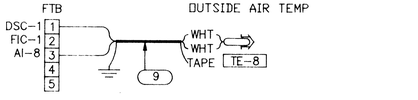


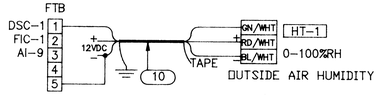


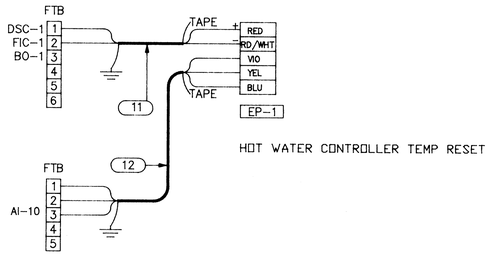


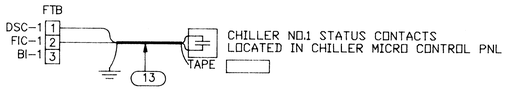


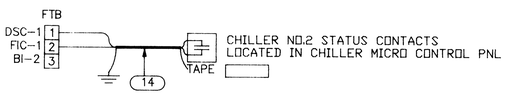


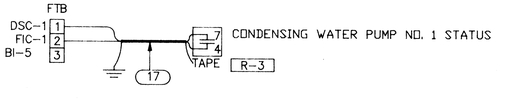


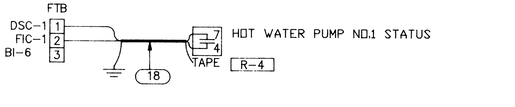


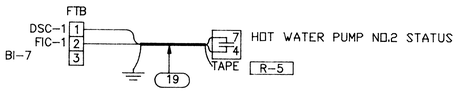


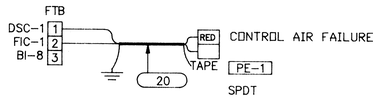


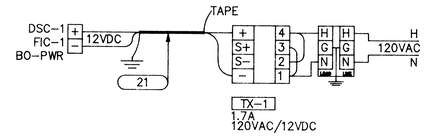




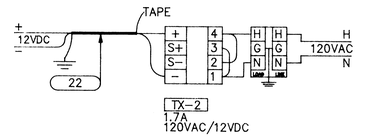








BINARY OUTPUT POWER SUPPLY



ANALOG OUTPUT POWER SUPPLY

DRAWING TITLE: DSC-#1 TERMINATION DIAGRAMS

PROJECT: LAB SCIENCE BLDG. ARKANSAS STATE UNIV. JONESBORO, AR.

REFERENCE DRAWINGS	NO.	REVISION - LOCATION	ECN	DATE	BY
		AS BUILT		7-89	RGR

SALES ENGR.	PROJECT MGR.	APPLICATION ENGR	DRAWN	APPROVED
NRM		RGR	BY RGR DATE 7/26/88	BY DATE

JOHNSON CONTROLS
Systems & Services Division

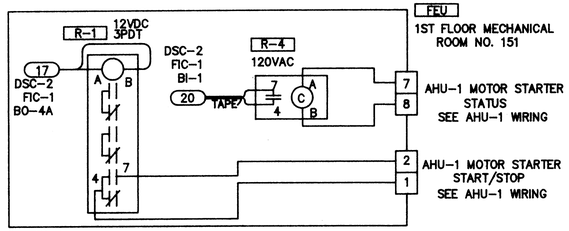
JOHNSON CONTROLS
1722 S. BROADWAY
LITTLE ROCK, AR.
501-372-7370

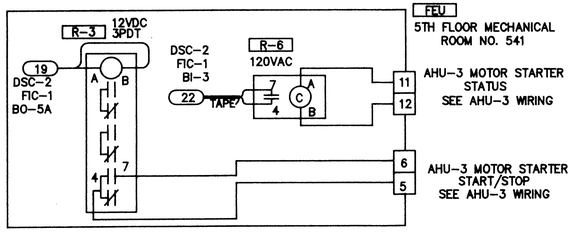
CONTRACT NUMBER 88108-0014

DRAWING NUMBER 2 OF 7

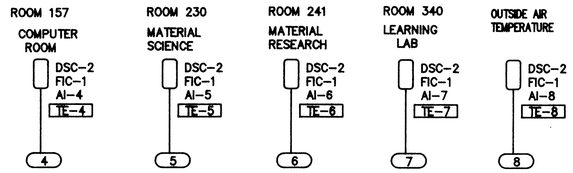
FORM NO. 1752-7CT REV. 4/84
(REFERS TO 11" and 15" SHEETS)

22" x 34" ORIGINAL

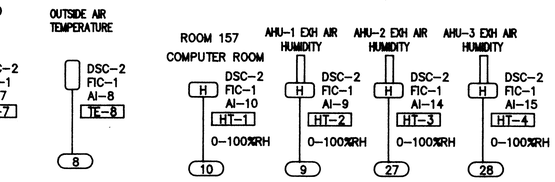




REMOTE MOUNTED FIELD EQUIPMENT UNITS

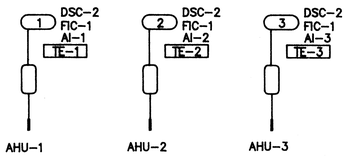


SPACE TEMPERATURE SENSORS

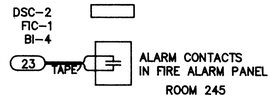


HUMIDITY SENSORS

OUTSIDE AIR TEMP SENSOR



SUPPLY AIR TEMPERATURES



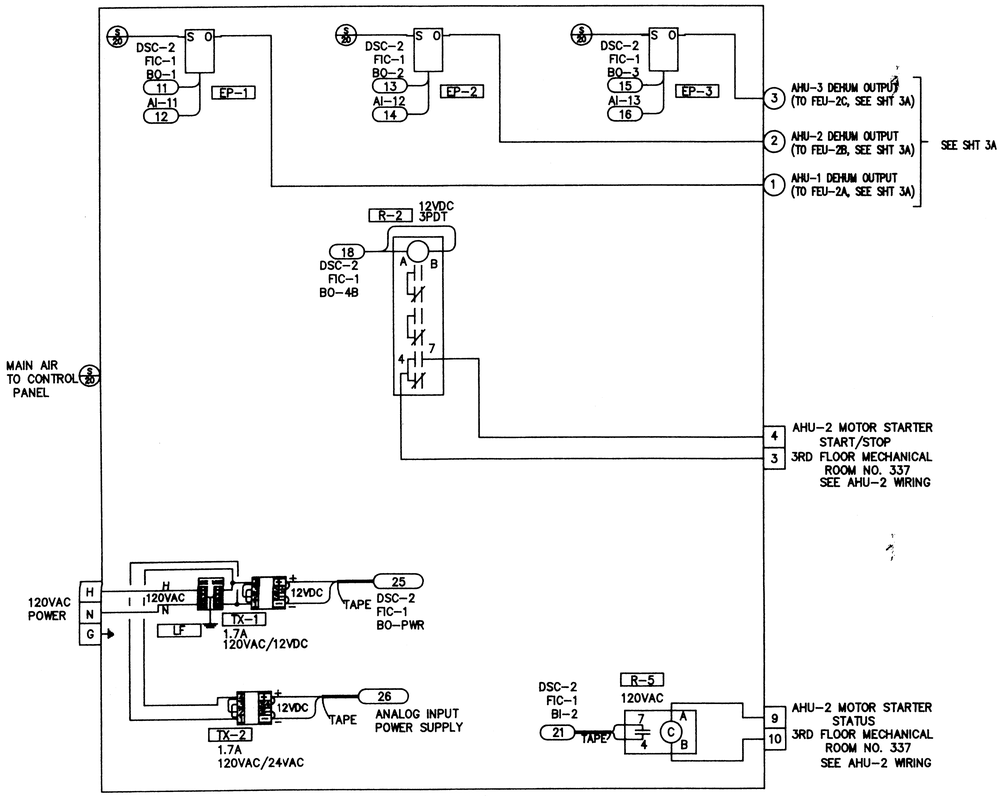
FIRE ALARM PANEL MONITORING

Field Devices

Device Tag	Qty	Code Number	Description
DSC-2 FIC-1	1	CEK-101-2	CNTRL.ELECT.KIT FOR
	1	CEB-104-0	CONFIGURABLE COMM. MODULE
	1	ECP-109-1	ELECTRONIC CONFIG. PANEL
	1	ENC-1000-11	ENCLOSURE 20"X20"
	1	ENC-1000-117	DOOR W/WINDOW F/DSC-8500
	1	GC-826-1A	BATTERY 12VDC (GLOBE)
	1	TRS-101-2	T/R SLAVE
HT-1	1	W560AFA-1	HUMIDITY TRANS., ZONE
HT-2,3,4	1	RH-5-V-D	DUCT MTD HUMIDITY TRANSMITTER
TE-1-TE-3	3	TE-6000-4	NICKEL WIRE TEMP SENSOR W/TE-6001-
TE-4-TE-7	4	TE-6000-4	NICKEL WIRE TEMP SENSOR W/TE-6001-
	4	T-4000-2144	COVER
TE-8	1	TE-6000-4	NICKEL WIRE TEMP SENSOR
	1	TE-6001-2	SUNSHIELD

Panel Devices

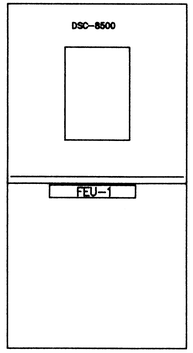
Device Tag	Qty	Code Number	Description
EP-1-EP-3	3	EPT-102-1	E-P TRANSDUCER
FEU-1	1	ENC-1000-11	ENCLOSURE 20"X20"
	1	ENC-1000-111	DOOR FOR 20"X20" ENC
R-1-R-3	3	PD-109-24	RELAY 3PDT 10AMP
	3	PD-101-35	SOCKET 11 PIN KUP
R-4-R-6	3	PD-109-20	RELAY SPDT 20 AMP
	3	PD-101-35	SOCKET 11 PIN KUP
TX-1,2	2	PD-114-5	TRANS POWER SUPPLY
	2	PD-114-6	TRANSFORMER 12V
LF	1	PD-114-8	TRANSIENT SUPPLY 450-OEM
FEU	2	FEU-102	REMOTE FIELD EQ. UNIT



FIELD EQUIPMENT UNIT NO.2

LOCATED IN 3RD FLOOR MECHANICAL ROOM NO. 337

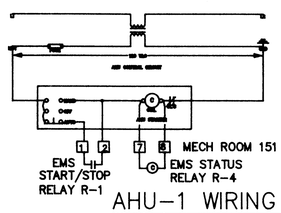
DSC-2 FIC-1



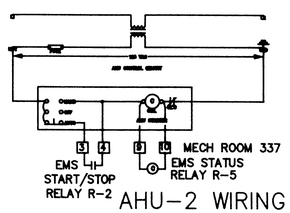
DIGITAL SYSTEM CONTROLLER AND FIELD EQUIPMENT UNIT

DSC-2 POINT SCHEDULE

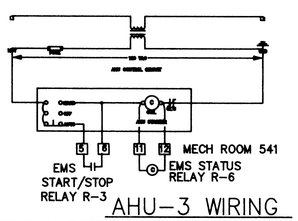
ANALOG INPUTS	BINARY OUTPUTS
AI-1 AHU-1 SUPPLY AIR TEMP	BO-1A AHU-1 REHEAT CONT
AI-2 AHU-2 SUPPLY AIR TEMP	BO-1B
AI-3 AHU-3 SUPPLY AIR TEMP	BO-2A AHU-2 REHEAT CONT
AI-4 COMPUTER RM SPACE TEMP	BO-2B
AI-5 MATERIAL SCI SPACE TEMP	BO-3A AHU-3 REHEAT CONT
AI-6 MATERIAL RES SPACE TEMP	BO-3B
AI-7 LEARNING LAB SPACE TEMP	BO-4A AHU-1 START/STOP
AI-8 OUTSIDE AIR TEMPERATURE	BO-4B AHU-2 START/STOP
AI-9 AHU-1 EXH HUMIDITY	BO-5A AHU-3 START/STOP
AI-10 COMPUTER RM SPACE HUM	BO-5B AHU-1 CHW VALVE
AI-11 AHU-1 REHEAT CONTROL POSN	BO-6A AHU-1 REHEAT VALVE
AI-12 AHU-2 REHEAT CONTROL POSN	BO-6B AHU-2 CHW VALVE
AI-13 AHU-3 REHEAT CONTROL POSN	BO-7A AHU-2 REHEAT VALVE
AI-14 AHU-2 EXH HUMIDITY	BO-7B AHU-3 CHW VALVE
AI-15 AHU-3 EXH HUMIDITY	BO-8A AHU-3 REHEAT VALVE
BINARY INPUTS	
BI-1 AHU-1 STATUS	
BI-2 AHU-2 STATUS	
BI-3 AHU-3 STATUS	
BI-4 FAP ALARM INDICATION	
BI-5 SPARE	
BI-6 SPARE	
BI-7 SPARE	
BI-8 SPARE	



AHU-1 WIRING



AHU-2 WIRING



AHU-3 WIRING

SEQUENCE OF OPERATION

BINARY OUTPUTS

THE EQUIPMENT WILL BE STARTED AND STOPPED THRU THE DIGITAL SYSTEM CONTROLLER. WHEN THE EQUIPMENT IS TO BE STARTED A SIGNAL WILL BE SENT TO A RELAY TO CLOSE ITS CONTACTS . WHEN THE EQUIPMENT IS TO BE STOPPED A SIGNAL WILL BE SENT TO THE RELAY TO OPEN ITS CONTACTS. THE CONTACTS OF THIS RELAY WILL BE WIRED INTO THE AUTOMATIC SIDE OF THE EQUIPMENT MOTOR STARTER CONTROL CIRCUIT. SEE POINT SCHEDULE (BINARY OUTPUTS) FOR EQUIPMENT TO BE STARTED AND STOPPED. ALL TIME BASED START/STOP PROGRAM SCHEDULES TO BE PROGRAMED INTO THE CENTRAL COMPUTER.

(ALSO SEE SHEET 3A)

BINARY INPUTS

ALL MONITORING OF EQUIPMENT BY THE DIGITAL SYSTEM CONTROLLER WILL BE ACCOMPLISHED THRU ISOLATION RELAYS. THE ISOLATION RELAYS WILL BE WIRED PARRELLEL TO THE EQUIPMENT MOTOR STARTER HOLDING COIL. WHEN THE EQUIPMENT IS STARTED THE RELAY WILL BE ENERGIZED. THE CONTACTS OF THE RELAY WILL CLOSE THUS INDICATING AN ON STATE. WHEN THE CONTACTS ARE OPEN AN OFF STATE IS INDICATED. SEE POINT SCHEDULE (BINARY INPUTS) FOR EQUIPMENT TO BE MONITORED.

ANALOG INPUTS

ALL TEMPERATURES TO BE MONITORED WILL BE SHOWN ON THE POINT SCHEDULE (ANALOG INPUTS).

DRAWING TITLE
DSC-#2
SERVES AHU-1,2,3
& MISC. SENSORS

PROJECT
LAB SCIENCE BLDG.
ARKANSAS STATE UNIV.
JONESBORO, AR.

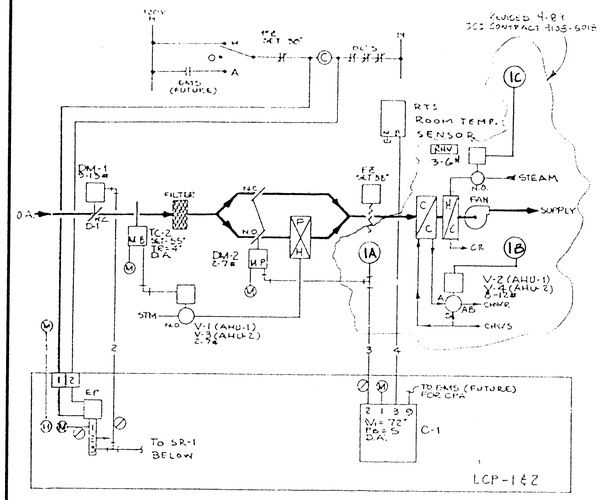
NO.	REVISION-LOCATION	ECN	DATE	BY
	AS BUILT		7-89	RGR
	REVISED 9105-5019		4-89	RGR
	REVISED		10-88	RGR

SALES ENGR	PROJECT MGR	APPL. ENGR	DRAWN	APPROVED
NRM		RGR	BY RGR DATE 09/22/88	BY DATE

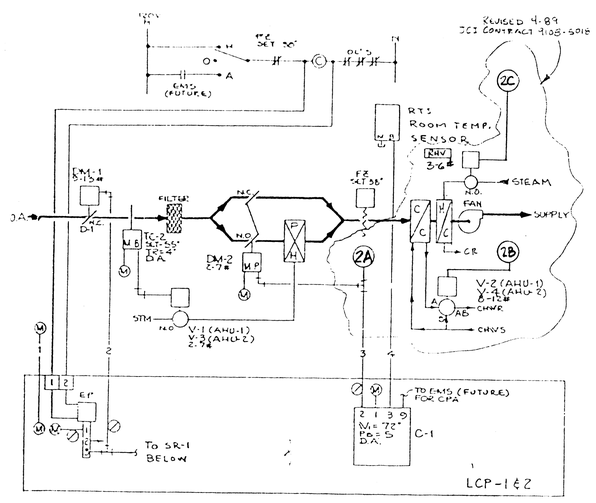
JOHNSON CONTROLS
Systems & Services Division
JOHNSON CONTROLS
1722 S. BROADWAY
LITTLE ROCK, AR.
501-372-7370

CONTRACT NUMBER 88108-0014

DRAWING NUMBER 3 OF 7



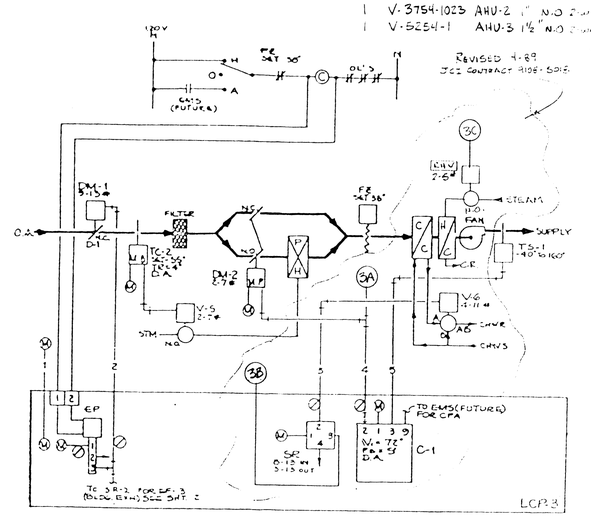
AIR HANDLING UNIT NO. 1



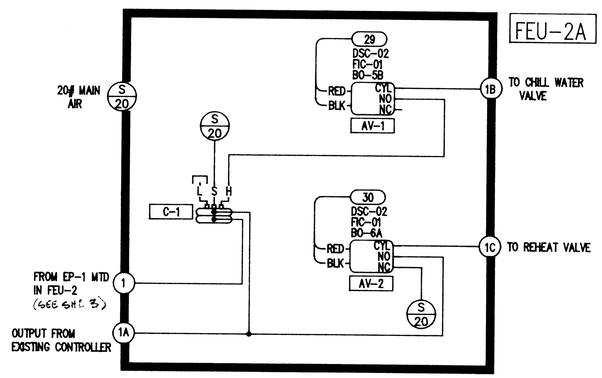
AIR HANDLING UNIT NO. 2

Panel Devices

Device Tag	Qty	Code Number	Description
AV-1–AV-6	6	V-9011-1	3-WAY SOLENOID VALVE
C-1-C-3	3	C-2220-13	*MASTER FOR RELAY DEVICE
C-1-C-3	3	C-2220-14	*SLAVE FOR RELAY DEVICE
FEU-2A,2B,2C	3	M-8100-1218	STANDARD FACE PANEL
2HV	1	V-3754-1022	AHU-1 ¾" N.O. 2 WAY
	1	V-3754-1023	AHU-2 1" N.O. 2 WAY
	1	V-5254-1	AHU-3 1½" N.O. 2 WAY

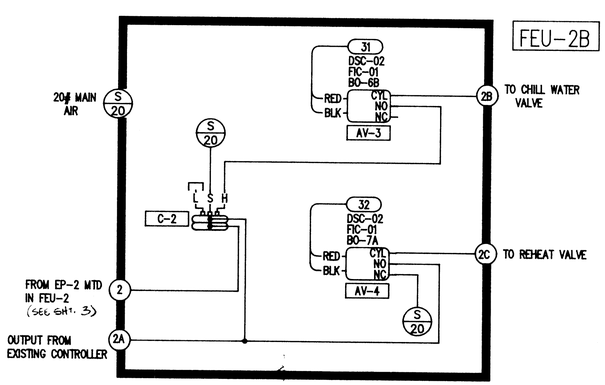


AIR HANDLING UNIT NO. 3



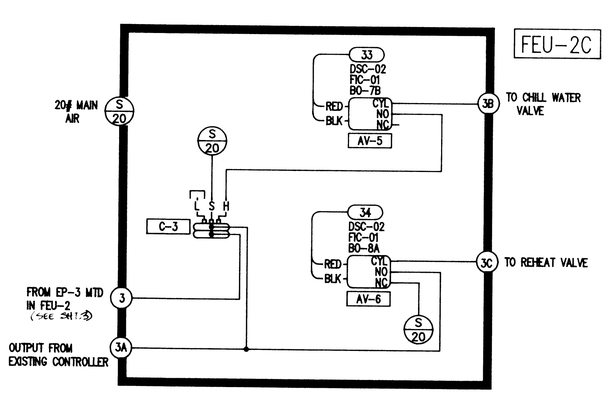
FIELD EQUIPMENT UNIT NO.2A

(TYPICAL OF 1 MTD IN MECH. RM. 151)



FIELD EQUIPMENT UNIT NO.2B

(TYPICAL OF 1 MTD IN MECH. RM. 337)



FIELD EQUIPMENT UNIT NO.2C

(TYPICAL OF 1 MTD IN MECH. RM. 541)

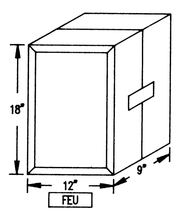
(NOTE: SEE SHEET 4 OF 7 FOR DSC TERMINATION DIAGRAMS OF EQUIPMENT SHOWN ON THIS SHEET.)

SEQUENCE OF OPERATION

AHU DEHUMIDIFICATION:

WHEN THE AHU IS RUNNING AND THE OSA TEMPERATURE IS ABOVE LOW LIMIT SETPOINT (APPROX 55 DEG) THE DEHUMIDIFICATION CONTROL LOOP MAY OPERATE IF NECESSARY. IF THE HUMIDITY IN THE AHU EXHAUST AIR STREAM RISES ABOVE HUMIDITY CONTROL SETPOINT THE CONTROLLER WILL MODULATE THE CHILL WATER VALVE TO BRING THE HUMIDITY DOWN TO SETPOINT. THE REHEAT VALVE WHICH IS CONTROLLED BY THE EXISTING PNEUMATIC CONTROLLER WILL MODULATE IF NECESSARY TO MAINTAIN DISCHARGE OR SPACE TEMPERATURE SETPOINT. IF THE HUMIDITY IN THE AHU EXHAUST AIR STREAM DROPS BELOW THE HUMIDITY CONTROL SETPOINT THE CONTROLLER OUTPUT WILL BE 0 PSI AND THE CHILL WATER AND REHEAT VALVE WILL BE UNDER NORMAL CONTROL OF THE EXISTING PNEUMATIC CONTROLLER.

WHEN THE AHU IS STOPPED OR IF THE OSA TEMPERATURE DROPS BELOW LOW LIMIT TEMPERATURE SETPOINT THE CHILL WATER AND REHEAT VALVE WILL AUTOMATICALLY CLOSED. THE EXISTING PNEUMATIC CONTROLS WILL MODULATE THE FACE AND BYPASS DAMPER AND OPEN THE PREHEAT VALVE TO MAINTAIN DISCHARGE OR SPACE TEMPERATURE SETPOINT.



TYPICAL OF FEU-2A,2B,2C

		As Built		7-89	RVG
NEW SHEET		9108-5014			
REFERENCE DRAWING	NO.	REVISION-LOCATION	ECN	DATE	BY
SALES ENGR NRM	PROJECT MGR	APPL. ENGR RGR	DRAWN BY RGR DATE 04/18/89	APPROVED BY	DATE

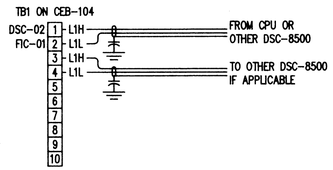
DRAWING TITLE
FEU-2A,2B,2C
SERVES AHU-1,2,3

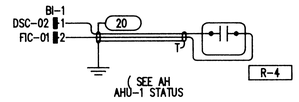
PROJECT
LAB SCIENCE BLDG.
ARKANSAS STATE UNIV.
JONESBORO, AR.

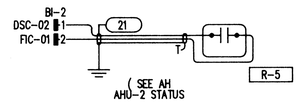
JOHNSON CONTROLS
Systems & Services Division
JOHNSON CONTROLS
1722 S. BROADWAY
LITTLE ROCK, AR.
501-372-7370

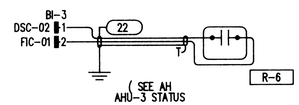
CONTRACT NUMBER
88108-0014

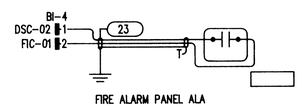
DRAWING NUMBER
3A OF 7

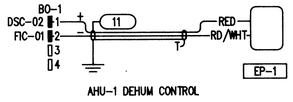


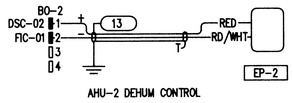


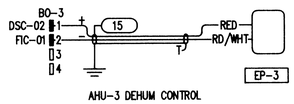


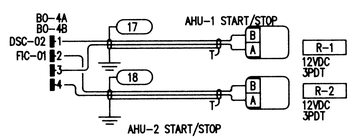


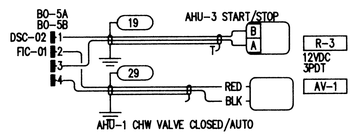


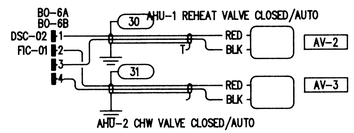


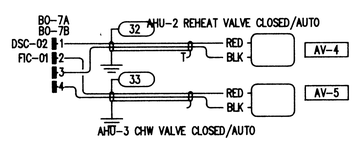


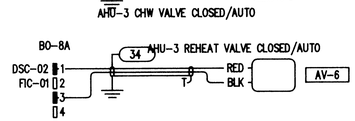


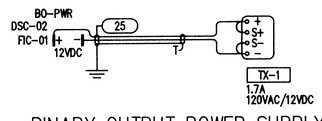




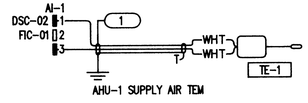


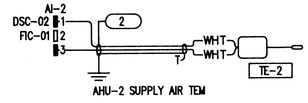


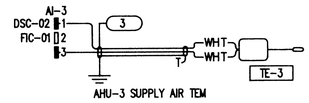


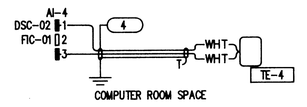


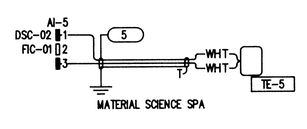
BINARY OUTPUT POWER SUPPLY

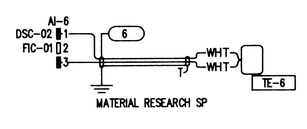


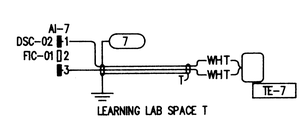


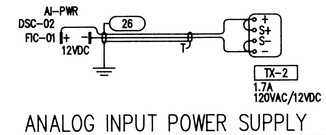




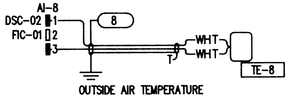


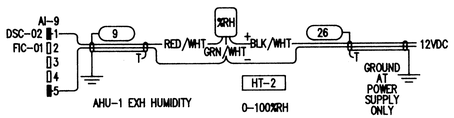


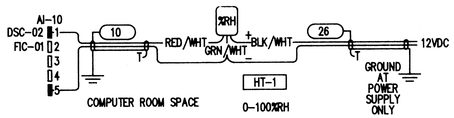


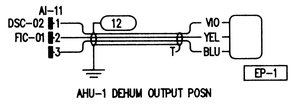


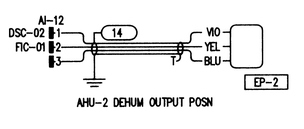
ANALOG INPUT POWER SUPPLY

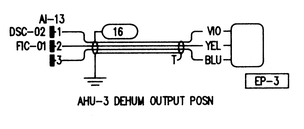


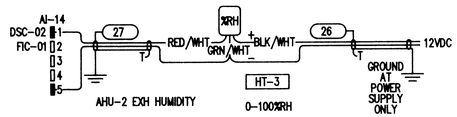


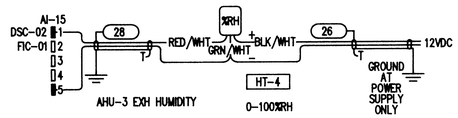












DRAWING TITLE
DSC # 2
TERMINATION
DIAGRAMS

REFERENCE DRAWING	NO.	REVISION-LOCATION	ECN	DATE	BY
		AS BUILT		7-87	RGR
		REVISED 9108-5019		4-89	RGR

SALES ENGR	PROJECT MGR	APPL. ENGR	DRAWN	APPROVED
NRM		RGR	BY RGR DATE 09/22/88	BY DATE

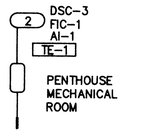
PROJECT
LAB SCIENCE BLDG.
ARKANSAS STATE UNIV.
JONESBORO, AR.

JOHNSON CONTROLS
Systems & Services Division

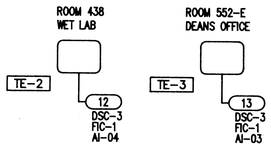
JOHNSON CONTRTOLS
1722 S. BROADWAY
LITTLE ROCK, AR.
501-372-7370

CONTRACT NUMBER
88108-0014

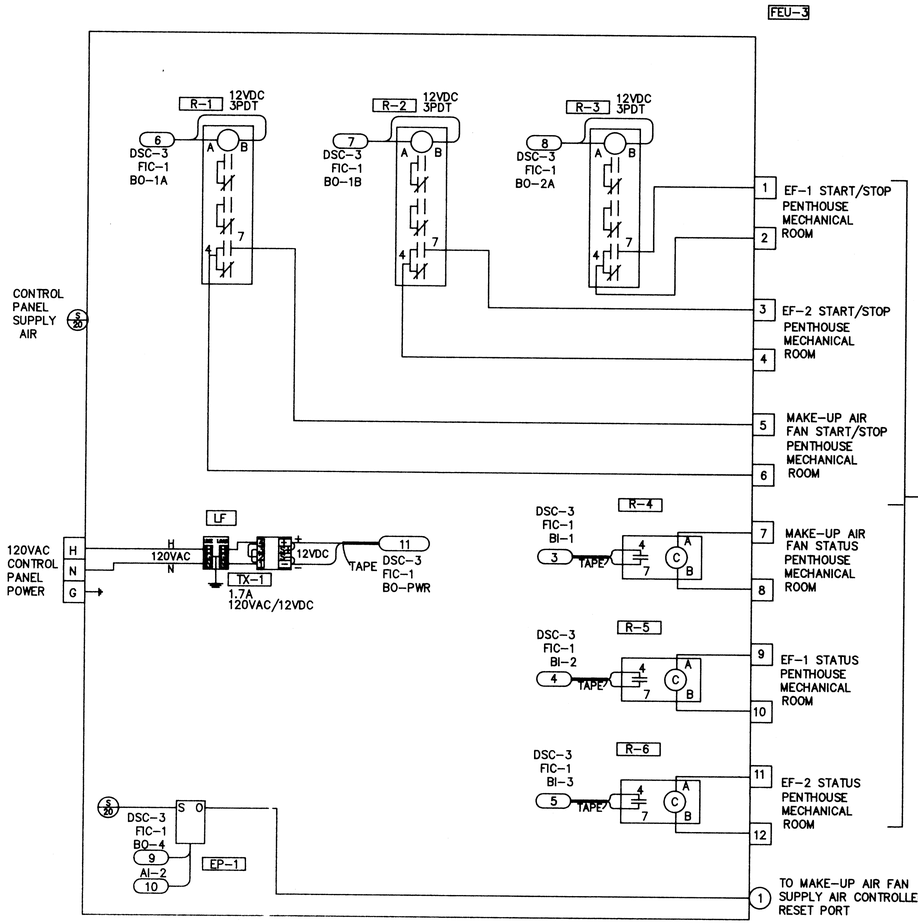
DRAWING NUMBER
4 OF 7



MAKE-UP AIR UNIT
SUPPLY AIR TEMP.

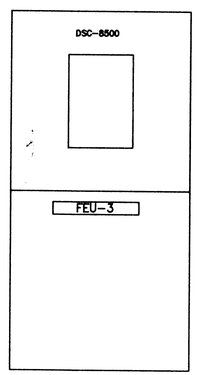


SPACE TEMPERATURE SENSORS



FIELD EQUIPMENT UNIT NO. 3

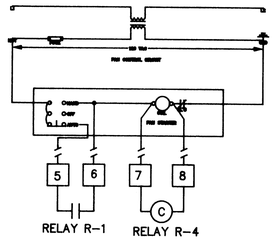
LOCATED IN
PENTHOUSE MECHANICAL
ROOM



DIGITAL SYSTEM CONTROLLER AND
FIELD EQUIPMENT UNIT NO. 3

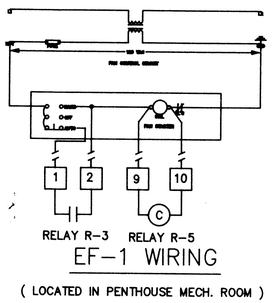
DSC-3 POINT SCHEDULE

ANALOG INPUTS	BINARY OUTPUTS
AI-1 MAKE-UP FAN SA TEMP	BO-1A MAKE-UP AIR FAN START/STOP
AI-2 MIA FAN RESET POSITION	BO-1B EF-1 START/STOP
AI-3 DEANS OFF SPACE TEMP	BO-2A EF-2 START/STOP
AI-4 WET LAB SPACE TEMP	BO-2A
AI-5 SPARE	BO-3A SPARE
AI-6 SPARE	BO-3B
AI-7 SPARE	BO-4A MIA FAN SA RESET
AI-8 SPARE	BO-4B
AI-9 SPARE	BO-5A SPARE
AI-10 SPARE	BO-5B
AI-11 SPARE	BO-6A SPARE
AI-12 SPARE	BO-6B
AI-13 SPARE	BO-7A SPARE
AI-14 SPARE	BO-7B
AI-15 SPARE	BO-8A SPARE
	BO-8B
BINARY INPUTS	
BI-1 MAKE-UP AIR FAN STATUS	
BI-2 EF-1 STATUS	
BI-3 EF-2 STATUS	
BI-4 SPARE	
BI-5 SPARE	
BI-6 SPARE	
BI-7 SPARE	
BI-8 SPARE	



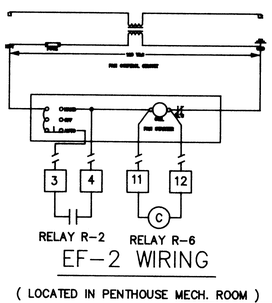
MAKE-UP AIR FAN WIRING

(LOCATED IN PENTHOUSE MECH. ROOM)



EF-1 WIRING

(LOCATED IN PENTHOUSE MECH. ROOM)



EF-2 WIRING

(LOCATED IN PENTHOUSE MECH. ROOM)

Field Devices

Device Tag	Qty	Code Number	Description
DSC-3 FIC-1	1	CEK-101-2	CNTRL.ELECT.KIT FOR
	1	CEB-104-0	CONFIGURABLE COMM. MODULE
	1	ECP-109-1	ELECTRONIC CONFIG. PANEL
	1	ENC-1000-11	ENCLOSURE 20"X20"
	1	ENC-1000-117	DOOR W/WINDOW F/DSC-8500
	1	GC-826-1A	BATTERY 12VDC (GLOBE)
	1	TRS-101-2	T/R SLAVE
TE-1	1	TE-6000-4	ELECTRONIC TEMP ELEMENT, W/TE-6001-
TE-2,3	2	TE-6000-4	ELECTRONIC TEMP ELEMENT W/TE-6001-4
	2	T-4000-2144	COVER

Panel Devices

Device Tag	Qty	Code Number	Description
FEU-3	1	ENC-1000-11	ENCLOSURE 20"X20"
	1	ENC-1000-111	DOOR FOR 20"X20" ENC
R-1-R-3	3	PD-109-24	RELAY 3PDT 10AMP
	3	PD-101-35	SOCKET 11 PIN KUP
R-4-R-6	3	PD-109-20	RELAY 3 PDT 10A 120VAC
	3	PD-101-35	SOCKET 11 PIN KUP
TX-1	1	PD-114-5	TRANS POWER SUPPLY
	1	PD-114-6	TRANSFORMER 12V
LF	1	PD-114-8	LINE FILTER
EP-1	1	EPT-102-1	E-P TRANSDUCER
LF	1	PD-114-8	TRANSIENT SUPPLY 450-OEM

SEQUENCE OF OPERATION

BINARY OUTPUTS

RESETING OF THE TEMPERATURE SETPOINT FOR THE EXISTING PNEUMATIC CONTROLLERS WILL BE ACCOMPLISHED BY THE DIGITAL SYSTEM CONTROLLER. THE OUTPUT OF THE ELECTRIC/PRESSURE TRANDUCER WILL BE PIPED INTO THE RESET PORT OF THE PNEUMATIC CONTROLLER. DEPENDING UPON THE ACTION OF THE EXISTING PNEUMATIC CONTROLLER THE AIR PRESSURE FROM THE TRANDUCER WILL BE VARIED TO ACCOMPLISH THE RESET FUNCTION. SEE POINT SCHEDULE (BINARY OUTPUTS) FOR TEMPERATURES TO BE RESET.

THE EQUIPMENT WILL BE STARTED AND STOPPED THRU THE DIGITAL SYSTEM CONTROLLER. WHEN THE EQUIPMENT IS TO BE STARTED A SIGNAL WILL BE SENT TO A RELAY TO CLOSE ITS CONTACTS . WHEN THE EQUIPMENT IS TO BE STOPPED A SIGNAL WILL BE SENT TO THE RELAY TO OPEN ITS CONTACTS. THE CONTACTS OF THIS RELAY WILL BE WIRED INTO THE AUTOMATIC SIDE OF THE EQUIPMENT MOTOR STARTER CONTROL CIRCUIT. SEE POINT SCHEDULE (BINARY OUTPUTS) FOR EQUIPMENT TO BE STARTED AND STOPPED. ALL TIME BASED START/STOP PROGRAM SCHEDULES TO BE PROGRAMED INTO THE CENTRAL COMPUTER.

BINARY INPUTS

ALL MONITORING OF EQUIPMENT BY THE DIGITAL SYSTEM CONTROLLER WILL BE ACCOMPLISHED THRU ISOLATION RELAYS. THE ISOLATION RELAYS WILL BE WIRED PARRELLEL TO THE EQUIPMENT MOTOR STARTER HOLDING COIL. WHEN THE EQUIPMENT IS STARTED THE RELAY WILL BE ENERGIZED. THE CONTACTS OF THE RELAY WILL CLOSE THUS INDICATING AN ON STATE. WHEN THE CONTACTS ARE OPEN AN OFF STATE IS INDICATED. SEE POINT SCHEDULE (BINARY INPUTS) FOR EQUIPMENT TO BE MONITORED.

ANALOG INPUTS

ALL TEMPERATURES TO BE MONITORED WILL BE SHOWN ON THE POINT SCHEDULE (ANALOG INPUTS).

DRAWING TITLE
DSC-#3
SERVES EF-1,2 &
MAKE-UP AIR FAN

		AS BUILT		7-89	RGR
ADDED 2 AI POINTS		REVISED 9108-5019		4/89	RGR
		REVISED		10/88	RGR
REFERENCE DRAWING	NO.	REVISION-LOCATION	ECN	DATE	BY

SALES ENGR	PROJECT MGR	APPL. ENGR	DRAWN	APPROVED
NRM		RGR	BY RGR DATE 10/03/88	BY DATE

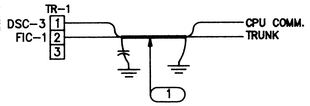
PROJECT
LAB SCIENCE BLDG.
ARKANSAS STATE UNIV.
JONESBORO, AR.

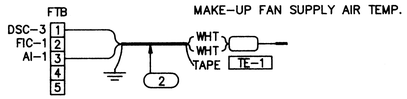
JOHNSON CONTROLS
Systems & Services Division

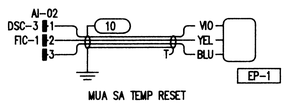
JOHNSON CONTROLS
1722 S. BROADWAY
LITTLE ROCK, AR.
501-372-7370

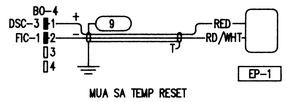
CONTRACT NUMBER
88108-0014

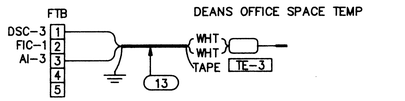
DRAWING NUMBER
5 OF 7

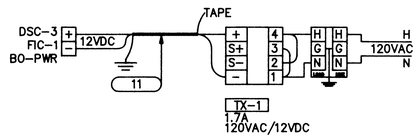




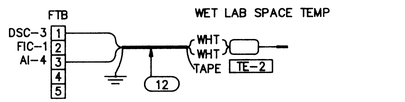


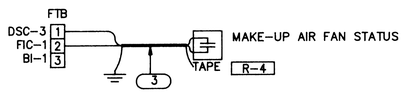


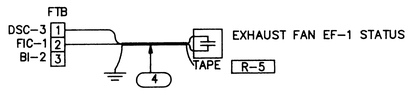


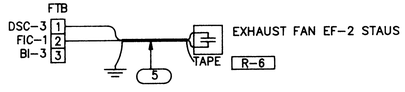


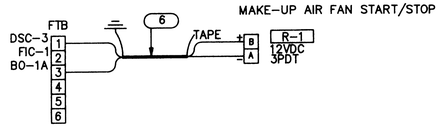
BINARY OUTPUT POWER SUPPLY

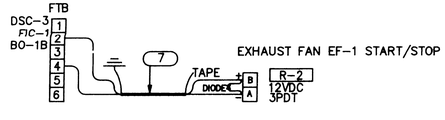


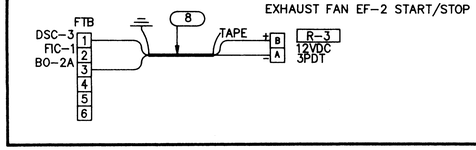




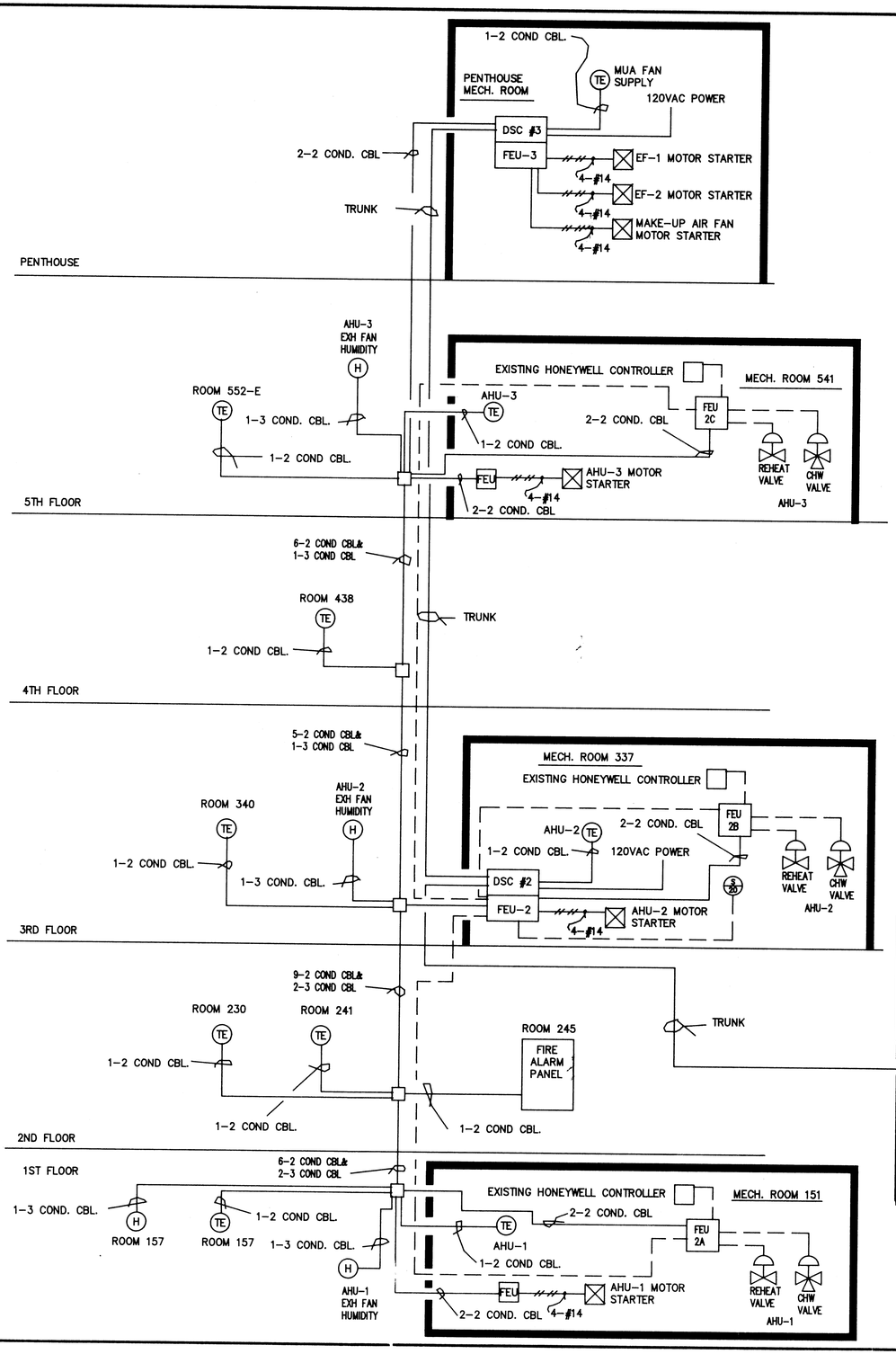








DRAWING TITLE: DSC-#3 TERMINATION DIAGRAMS		AG BUMP		7-87	RGR
	ADDED 2 AI POINTS	REVISED 110% SIGN		7-87	RGR
	REFERENCE DRAWING NO.	REVISION-LOCATION	ECN	DATE	BY
	SALES ENGR NRM / PROJECT MGR / APPL. ENGR RGR	DRAWN BY RGR DATE 10/03/88		APPROVED BY DATE	
PROJECT: LAB SCIENCE BLDG. ARKANSAS STATE UNIV. JONESBORO, AR.	JOHNSON CONTROLS Systems & Services Division	JOHNSON CONTROLS 1722 S. BROADWAY LITTLE ROCK, AR. 501-372-7370	CONTRACT NUMBER 88108-0014		
			DRAWING NUMBER 6 OF 7		



NOTE: COMMUNICATION TRUNCK MUST BE RUN IN SEPERATE DEDICATED CONDUIT.

— — INDICATES PNEUMATIC TUBING

DRAWING TITLE
DSC-8500
RISER
DIAGRAM

PROJECT
LAB SCIENCE BLDG.
ARKANSAS STATE UNIV.
JONESBORO, AR.

		AS BUILT		7-89 EVR
ADD REHEAT COILS		REVISED 1108-5019		10-88 RGR
		REVISED		4-89 RGR
REFERENCE DRAWING	NO.	REVISION-LOCATION	ECN	DATE BY

SALES ENGR	PROJECT MGR	APPL. ENGR	DRAWN	APPROVED
NRM		RGR	BY RGR DATE 10/17/88	BY DATE

JOHNSON CONTROLS
Systems & Services Division

JOHNSON CONTROLS
1722 S. BROADWAY
LITTLE ROCK, AR.
501-372-7370

CONTRACT NUMBER
88108-0014

DRAWING NUMBER
7 OF 7