LEGEND

	EXISTING	PROPOSED
BUILDINGS		
CONTOURS	45	45
CURB and GUTTER		
CONDUITS		
GAS		
SANITARY SEWER		
STEAM		
STORM DRAIN		
WATER		

BALTIMORE CITY GRID NORTH

W 3250 S 3900

W 3250 S 4200

W 3000 S 4200

LOMBARD STREET

LEMMON STREET (20' R/W)

PRATT STREET (66' R/W)

PENN STREET

KELLY MEMORIAL

DUNNING HALL

SCHOOL OF NURSING

EXISTING BRICK BUILDING

EXISTING BRICK BUILDING TO REMAIN

EXISTING BUILDING

EX. BRICK BLDG.

EX. BITUMINOUS CONCRETE PAVING

PROPOSED GARAGE
SEE A1-1 FOR FINISHED FLOOR ELEVATIONS

EX. BUILDING WALL SEE DEMOLITION PLAN

GRADING IN THIS AREA TO BE PHASED
1. AFTER DEMOLITION OF BUILDING, CUT EXISTING SLAB AS NEEDED FOR CASSION CONSTRUCTION.
2. FILL THIS AREA WITH COMPACTED EARTH TO ELEVATION 48'±. PROVIDE SUFFICIENT SLOPE TO DRAIN
3. AFTER COMPLETION OF CASSIONS AND OTHER SPECIFIED STRUCTURE, COMPLETE GRADING TO SUBGRADE.

UNDERCUT THIS AREA TO BE 8" MIN. BELOW SUBGRADE. BACKFILL TO SUBGRADE WITH STONE.

OFFICE FIN. FL. 43.00

FIN. FL. 50.50

FIN. FL. 47.83

FIN. FL. 46.0

MEET EXISTING

STANDARD BALTIMORE CITY CONCRETE APRON

CONNECT TO EXISTING MANHOLE

REMOVE AND TEMPORARILY REPLANT EX. SHRUBS AFFECTED BY THIS CONSTRUCTION. REPLANT WHEN DUCTBANK IS COMPLETE

PROTECT WALLS OF EXISTING RAISED PLANTERS

abandoned storm drain

NEW COMMUNICATIONS DUCTBANK (3 X 2)

PROTECT EXISTING WALL (TYP)

9' (TYP)

RESTORE DRIVEWAY PER BALTO. CITY STD. 500.01

TEST PIT ADJACENT TO EXISTING MANHOLE PRIOR TO BEGINNING CONSTRUCTION

15'R (TYP)

STANDARD BALTIMORE CITY CONCRETE APRON

NEW COMMUNICATION DUCTBANK

REPLACE SIDEWALK DISTURBED BY CONDUIT AND MANHOLE CONSTRUCTION

FOR NEW SIDEWALK AND LANDSCAPING SEE SHEET L-1

PROTECT EX. LIGHT

NEW 12" S.D. INV. EL. 39.5

NEW COMMUNICATIONS DUCTBANK (6 x 1)

NEW ELECTRIC DUCTBANK

NEW 12" S.D. INV. EL. 39.5

NEW 6" S.D. INV. EL. 41.0

EX. SAN. TO REMAIN

NEW 4" FIRE WATER AND 4" DOMESTIC WATER

STANDARD BALTIMORE CITY CONCRETE APRON

REBUILD TOP TO BE FLUSH WITH FINAL GRADE

CONNECT TO EX. INLET

BEGIN CURB AND SIDEWALK FOR PAVING PATTERNS SEE SHEET L-1

ex. 10" san
ex. 8" san
ex. 8" steam
ex. 10" san
ex. gas
ex. 8" water
ex. electric 2 ducts
ex. 4" steam
ex. 3" steam
ex. elect. conduit
ex. c&p conduit
ex. 6" water
ex. telephone 6 ducts
ex. electric 2 ducts
ex. 16' X 8' storm drain
ex. 10" san
ex. telephone conduits 5-6", 2-2"
ex. 12" san
ex. conduits 12-5"
ex. 12" sd
ex. 12" water
ex. 8" gas
ex. 6" ducts
ex. 15" san
ex. 6" gas
ex. ductbanks
ex. conduits 4-6", 2-2"
ex. ductbank
10" water
8" gas
30" water
10" san
sign (typ)
parking meter (typ)
handbox (typ)
street light (typ)
handbox
N 87°09'11" E 196.00'
S 87°10'20" W 196.00'
N 02°46'30" W 174.00'
S 02°46'30" E 174.00'

FOR DETAILS OF COMMUNICATIONS DUCTBANK AND MANHOLE SEE ELECTRICAL PLANS

FOR PAVING, PAVER PATTERNS AND STREET TREE LOCATIONS, SEE SHEET L-1.

NOTES

1. SITE IS LOCATED IN:
   WARD - 4
   SECTION - 9
   BLOCK - 663
   LOT - 20
2. SITE AREA = 0.81 ACRES
3. ALL WORK IN PUBLIC RIGHT-OF-WAY SHALL COMFORM TO BALTIMORE CITY STANDARDS.

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

WHITING-TURNER
CONTRACTING COMPANY
DESMAN ASSOCIATES
ARCHITECTS ENGINEERS

PENN STREET PARKING FACILITY
UNIVERSITY OF MARYLAND AT BALTIMORE

NO.	DATE	BY
REVISIONS		

SITE PLAN

LPJ INC.
CONSULTING ENGINEERS
* STRUCTURAL
* CIVIL
16 West 25th Street
Baltimore, Maryland 21218
(410) 366-7800

DRAWING NO. C-2

SCALE:	1" = 20'
DATE:	6-23-93
PROJECT NO.	1-93015

DESIGN	DRAWN	CH'KD.
	LC	

LEMMON ST

PRATT STREET

SAIL CLOTH FACTORY

PENN STREET

CHAIN LINK FENCE SCREEN TYP. ALL LEMMON ST. BAYS RE:

PC SPANDREL W/CHAIN LINK SECURITY SCREEN RE:

ROLLING DOOR

8" PC WALL

9 SPACES

VAN

ELEV #3

ELEV #2

ELEV #1

8" CMU 2 HR

ELEVATOR LOBBY EL. 46.00'

6" PC WALL

UP STAIR #1

RAILING

EL. 46.00'

SIAMESE CONNECTION

RAMP UP

ROLLING DOOR

6" CURB MAINTAIN PARALLEL TO SLAB

LOUVER

8 SPACES

GENERATOR RM. 43.00'

8" CMU 2 HR

TRANSFORMER RM. 45.20'

CIP WALL

3 SPACES

GYP. BD. WALL RE: A28

ELEC.

STEAM PIPE AREA

PHONE

COL.

MECH. AREA

FILL BELOW

RE: M-3 FOR FLOOR DRAINS THIS AREA

WATER/FIRE SERVICE RM.

MAINTENANCE EL. 49.25'

FD

MOP SINK

REST ROOM

STOR/SHLF

MANAGER'S OFFICE EL. 48.50'

RETAINING WALL @ GRADE. PC LIGHT WALL & CMU ABOVE. RE A16 & A25 FOR ELEVATIONS & DETAILS.

NOTE: ALL CMU WALLS TO BE 2 HR. RATED

LIMIT OF LEVEL ABOVE

OFFICE AREA 11,857 GSF F.F. = 43.00

FOR PLAN OF OFFICE AREA SEE DWG. A-1A

FOR PLAN OF LANDSCAPE SEE DWG. L1

PRECAST SHEAR WALL

MECH. PIT

SIAMESE CONNECTION

NOTES:

- FOR CORNER GUARD, PIPE GUARD RAILING & MISC. METAL DETAILS RE: A-26 & A-27
- FOR STRIPING & SIGNAGE DETAILS RE: SG-1 & SG-2
- FOR EQUIPMENT LAYOUT DETAILS RE: EQ-1
- FOR ENTRANCE & ROLLING GRILLE DETAILS OF THE PRATT ST. PORTAL RE: A-29

ARROWS SHOWN THUS ARE FOR INDICATION ONLY & SHOULD NOT BE PAINTED ON SLABS.

N

1 A-1 GRADE LEVEL PLAN
RELATIVE ELEVATION = 146.00

WHITING-TURNER
CONTRACTING COMPANY
DESMAN ASSOCIATES
ARCHITECTS ENGINEERS

PENN STREET PARKING FACILITY

UNIVERSITY OF MARYLAND AT BALTIMORE

NO.	DATE	BY
REVISIONS		

GRADE LEVEL PLAN

DRAWING NO. A-1

SCALE: 1/8"=1'-0"
DATE: JUNE, 1993
PROJECT NO. J-343
DESIGN K.T. | DRAWN J.B. | CH'KD. S.

8078 J-343 A-1

NOTES:

- FOR CORNER GUARD, PIPE GUARD RAILING & MISC. METAL DETAILS RE: A-26 & A-27
- FOR STRIPING & SIGNAGE DETAILS RE: SG-1 & SG-2
- FOR EQUIPMENT LAYOUT DETAILS RE: EQ-1
- FOR CORNER GUARDS RE: 11/A-27
- FOR PIPE GUARDS RE: 11/A-27

1 LEVEL 2 PLAN
A-2

WHITING-TURNER
CONTRACTING COMPANY
DESMAN ASSOCIATES
ARCHITECTS ENGINEERS

PENN STREET PARKING FACILITY

UNIVERSITY OF MARYLAND AT BALTIMORE

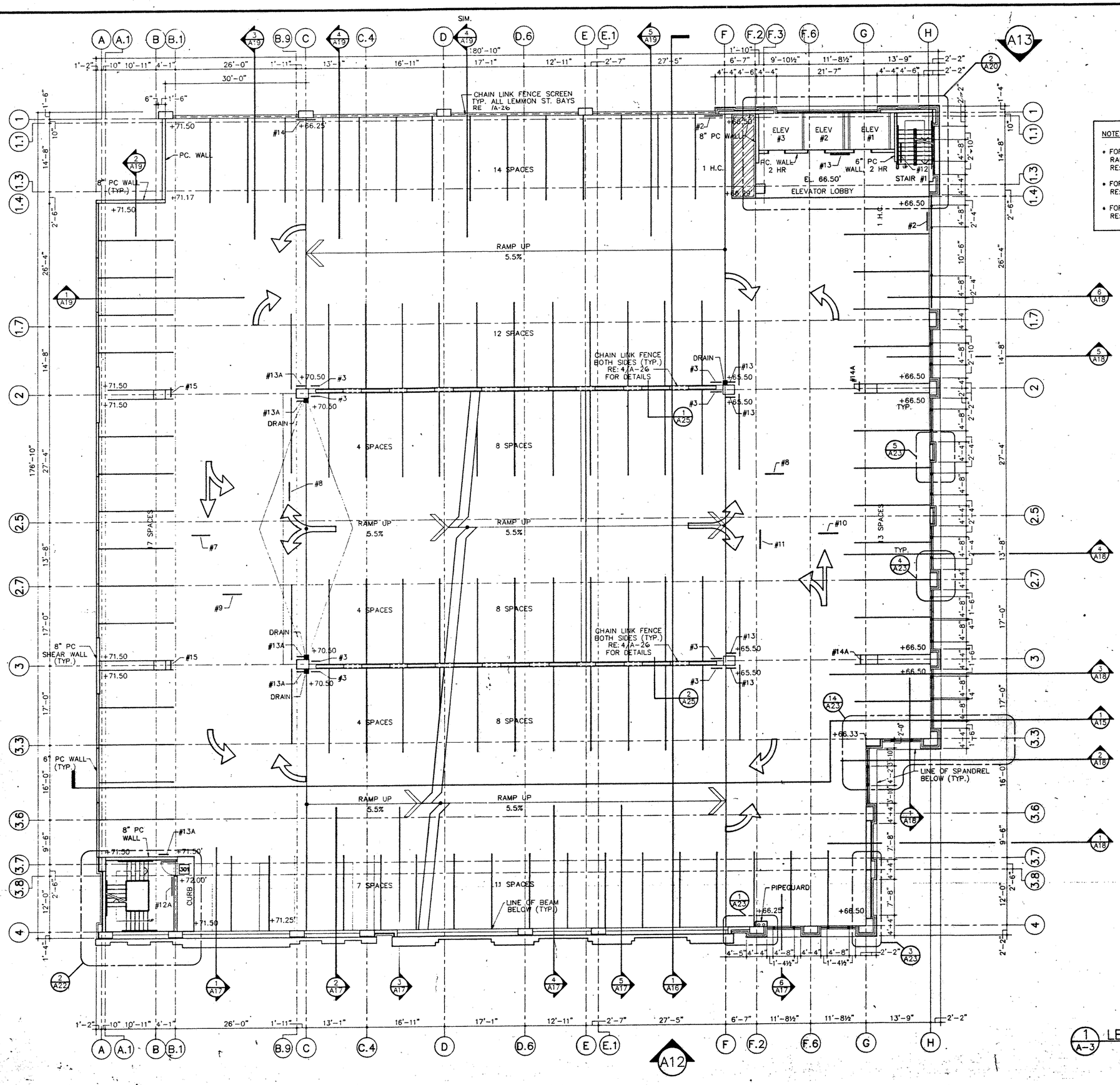
NO.	DATE	BY
REVISIONS		

LEVEL 2 PLAN

DRAWING NO. A-2

SCALE:	1/8"=1'-0"
DATE:	JUNE 1993
PROJECT NO.	J-343

DESIGN	DRAWN	CH'KD.
S.S.	I.B.	S.S.



WHITING-TURNER
CONTRACTING COMPANY
DESMAN ASSOCIATES
ARCHITECTS ENGINEERS

PENN STREET PARKING FACILITY

UNIVERSITY OF MARYLAND AT BALTIMORE

NO.	DATE	BY
REVISIONS		

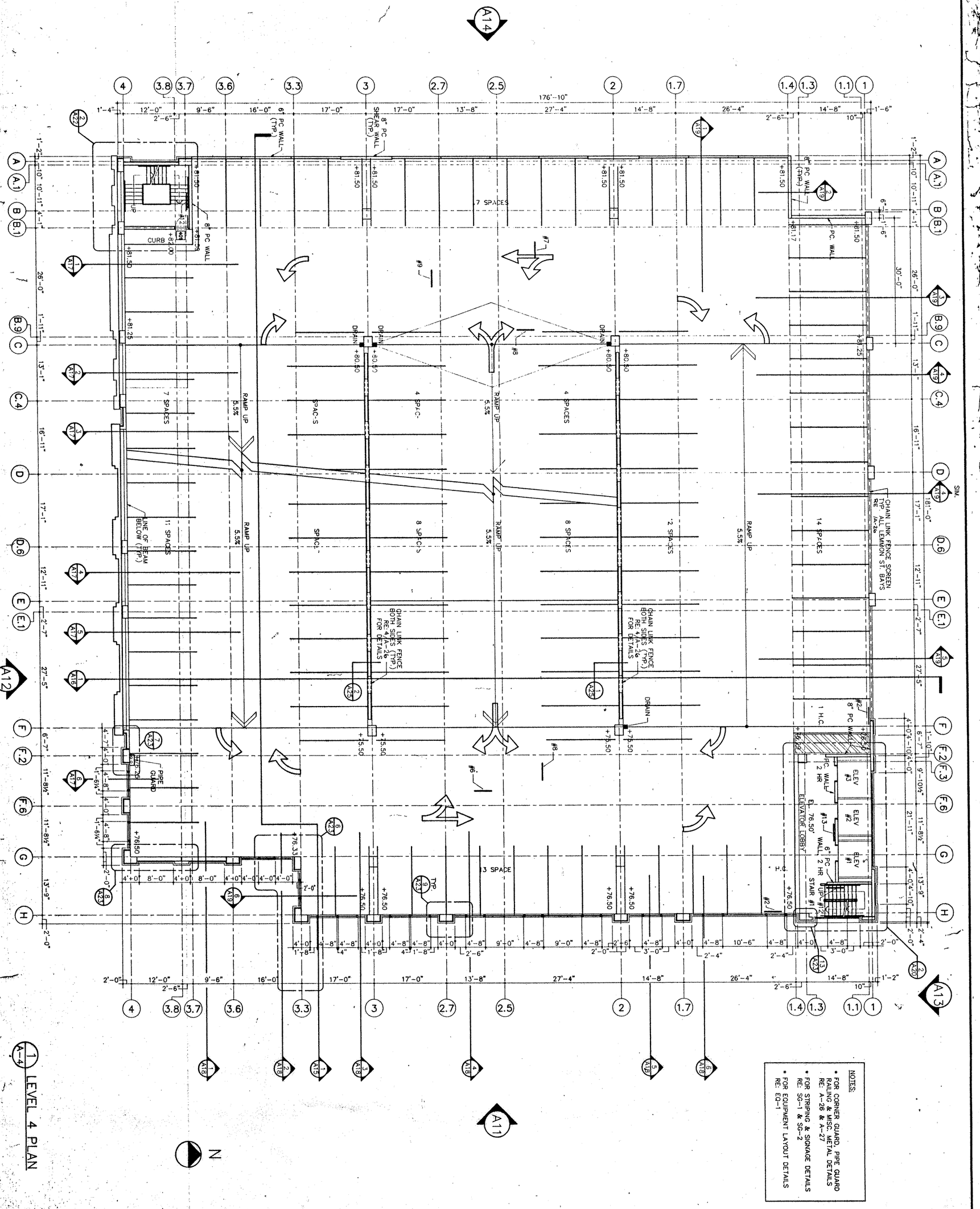
LEVEL 3 PLAN

DRAWING NO. **A-3**

SCALE:	1/8"=1'-0"
DATE:	JUNE 1993
PROJECT NO.:	J-343

DESIGN	DRAWN	CHKD.
S.S.	I.B.	S.S.

43-3



NOTES:

- FOR CORNER GUARD, PIPE GUARD RAILING & MISC. METAL DETAILS RE: A-26 & A-27
- FOR STRIPING & SIGNAGE DETAILS RE: SG-1 & SG-2
- FOR EQUIPMENT LAYOUT DETAILS RE: EQ-1

DRAWING NO.	A-4
	LEVEL 4 PLAN
SCALE:	1/8"=1'-0"
DATE:	JUNE 1993
PROJECT NO.	J-343
DESIGN	DRAWN / CHKD
S.S.	I.B. / S.S.

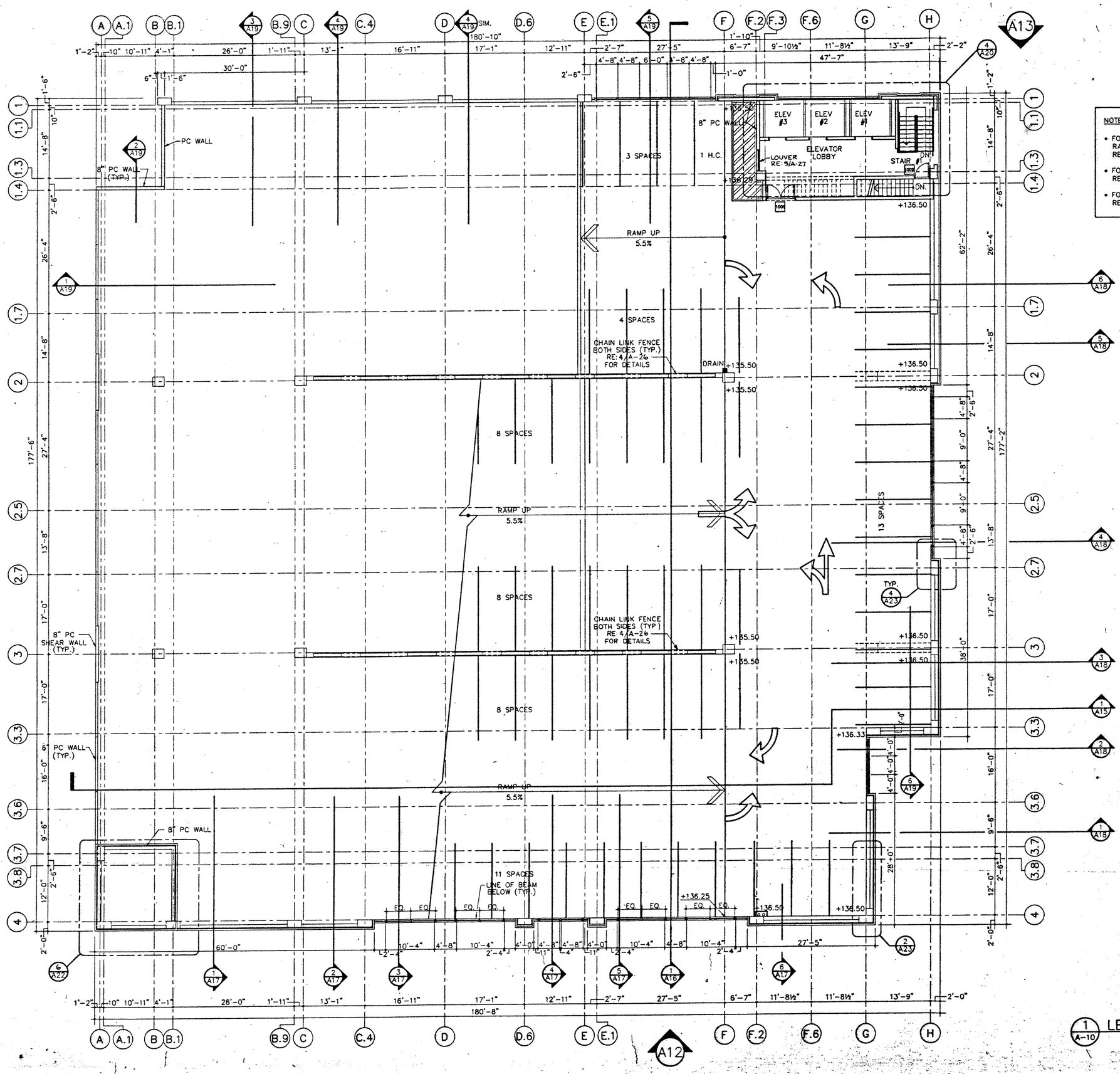
NO.	DATE	BY
	REVISIONS	

PENN STREET PARKING FACILITY

UNIVERSITY OF MARYLAND AT BALTIMORE

WHITING-TURNER
CONTRACTING COMPANY

DESMAN ASSOCIATES
ARCHITECTS ENGINEERS



WHITING-TURNER
CONTRACTING COMPANY
DESMAN ASSOCIATES
ARCHITECTS ENGINEERS

PENN STREET PARKING FACILITY

UNIVERSITY OF MARYLAND AT BALTIMORE

NO.	DATE	BY
REVISIONS		

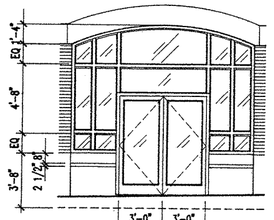
LEVEL 10 PLAN

DRAWING NO. A-10

SCALE: 1/8"=1'-0"
DATE: JUNE 1993
PROJECT NO. J-343

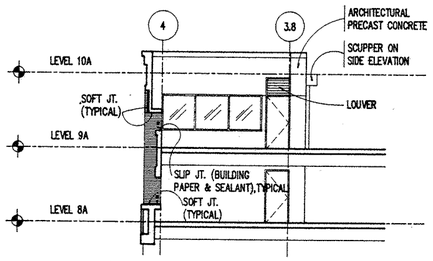
DESIGN	DRAWN	CHKD.
S.S.	I.B.	S.S.

J343-3



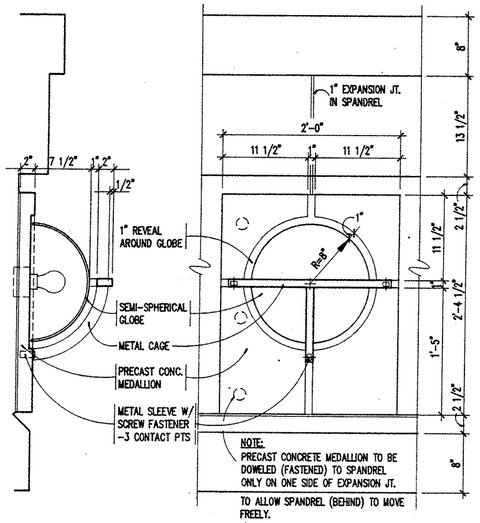
WINDOW "F" ELEVATION (8/A11)

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



PARTIAL ELEVATION OF WALL @ GRID B.1 (3/A11)

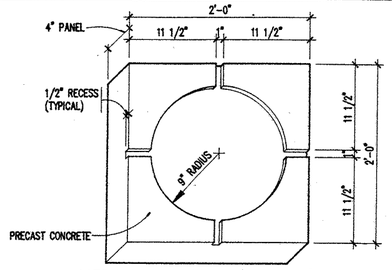
SCALE: 1/8" = 1'-0"



EXTERIOR LIGHT (TYPICAL) (4/A11)

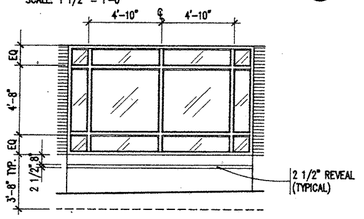
SCALE: 1 1/2" = 1'-0" SEE ELECTRICAL DWGS.

*SIM. - P.C. WITHOUT LIGHT FIXTURE & METAL CAGE



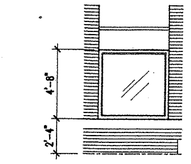
MEDALLION DETAIL (TYPICAL) (5/A11)

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



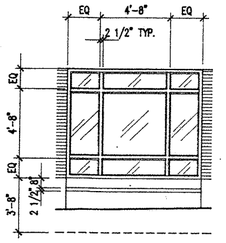
WINDOW "E" ELEVATION (9/A11)

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



WINDOW "C" ELEVATION (6/A11)

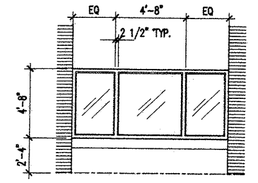
SCALE: 1/4" = 1'-0"



WINDOW "D" ELEVATION (10/A11)

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

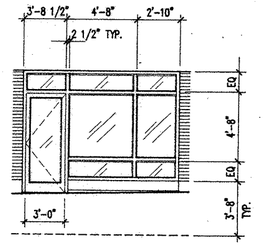
*FOR TYPICAL HEAD, SILL & JAMB DETAILS OF WINDOWS SEE DWG A14



WINDOW "B" ELEVATION (7/A11)

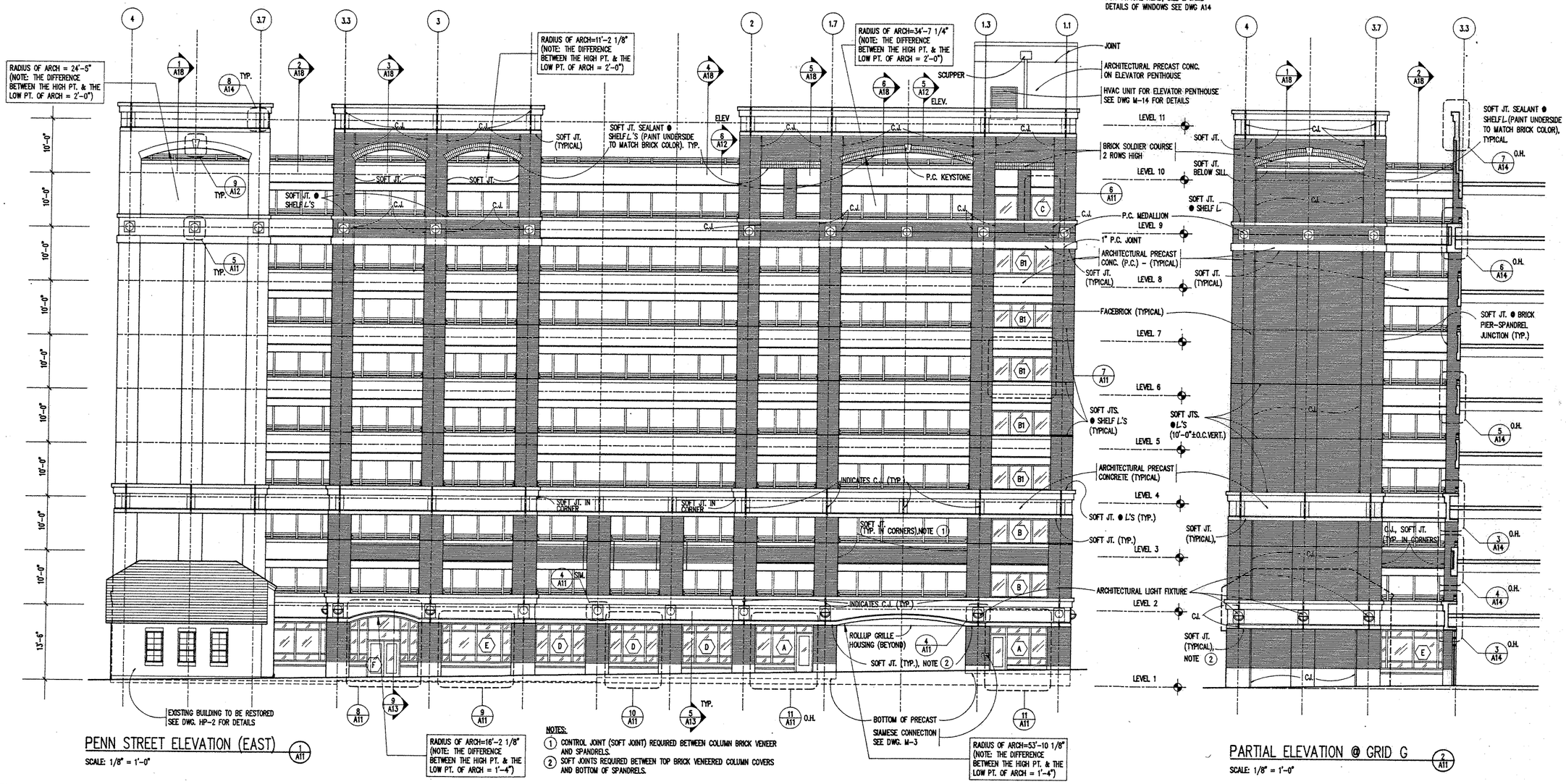
SCALE: 1/4" = 1'-0"

*NOTE: 'B1' IS 4" WIDER THAN TYPICAL 'B'



WINDOW "A" ELEVATION (11/A11)

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



PENN STREET ELEVATION (EAST) (1/A11)

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

NOTES:
1. CONTROL JOINT (SOFT JOINT) REQUIRED BETWEEN COLUMN BRICK VENEER AND SPANDRELS.
2. SOFT JOINTS REQUIRED BETWEEN TOP BRICK VENEERED COLUMN COVERS AND BOTTOM OF SPANDRELS.

PARTIAL ELEVATION @ GRID G (2/A11)

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

WHITING-TURNER
CONTRACTING COMPANY

DESMAN BWJ INC.
ASSOCIATES ARCHITECTS

BURDETTE, KOEHLER, MURPHY & ASSOCIATES, INC. M.E.P. ENGINEERS

BWJ
Inc. ARCHITECTS
370 North Market Street Rockville, Maryland 20850
(301) 762-2000 FAX 762-2080

PENN STREET PARKING FACILITY
UNIVERSITY OF MARYLAND AT BALTIMORE

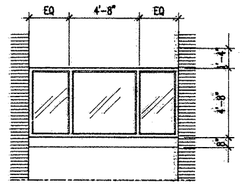
NO.	DATE	BY
3	2/9/94	
2	12/1/93	
1	7/16/93	

REVISIONS

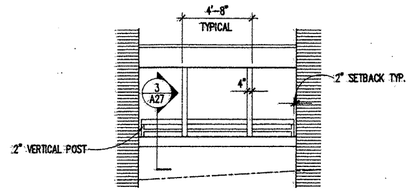
PENN STREET ELEVATION

DRAWING NO. A11

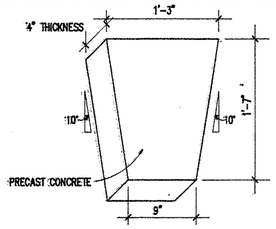
SCALE: AS SHOWN
DATE: JULY 1, 1993
PROJECT NO. 93001
DESIGN | DRAWN | CH'KD.



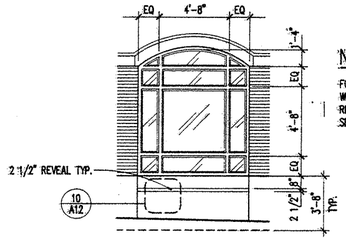
WINDOW "H" ELEVATION (7/A12)
SCALE: 1/4" = 1'-0"



TYPICAL RAILING DETAIL (8/A12)
SCALE: 1/4" = 1'-0"

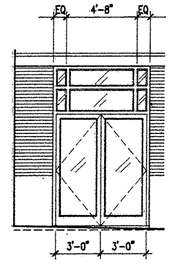


KEYSTONE DETAIL (TYPICAL) (9/A12)
SCALE: 1 1/2" = 1'-0"

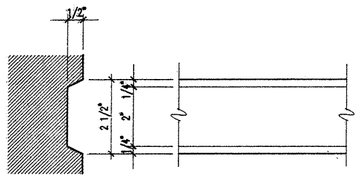


WINDOW "G" ELEVATION (3/A12)
SCALE: 1/4" = 1'-0"

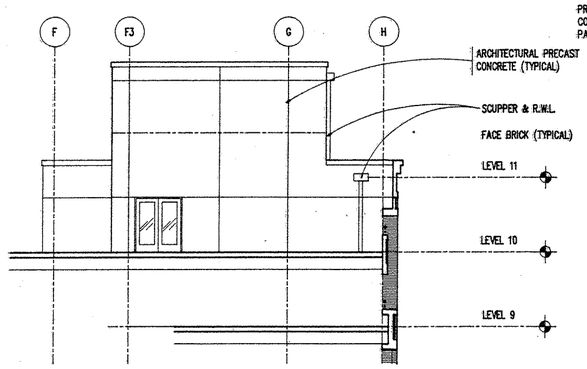
NOTE:
FOR OVERALL DIMENSIONS OF WINDOW AND DOOR OPENINGS REFER TO PLANS AND WALL SECTIONS (V.I.F.)



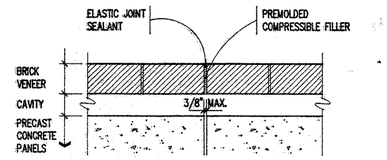
WINDOW "J" ELEVATION (4/A12)
SCALE: 1/4" = 1'-0"



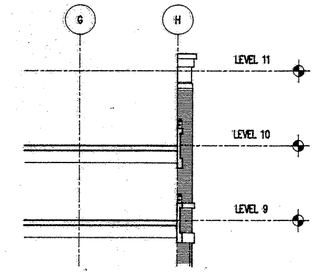
TYPICAL REVEAL DETAIL (10/A12)
SCALE: 6" = 1'-0"



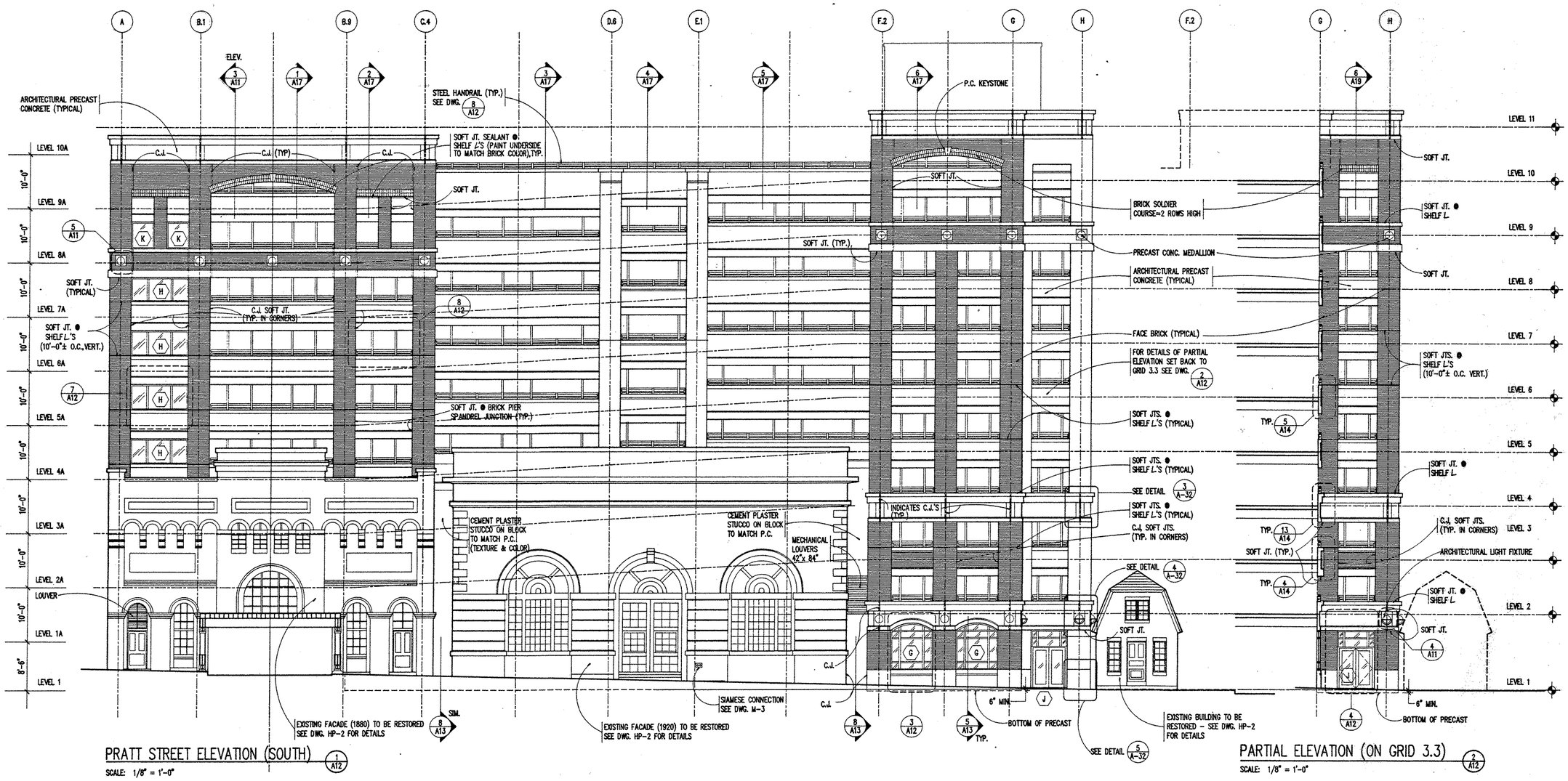
PARTIAL ELEVATION (ON GRID 1.3) (5/A12)
SCALE: 1/8" = 1'-0"



CONTROL JOINT DETAIL (11/A12)
SCALE: 1 1/2" = 1'-0"



PARTIAL ELEVATION (ON GRID 2) (6/A12)
SCALE: 1/8" = 1'-0"



PRATT STREET ELEVATION (SOUTH) (1/A12)
SCALE: 1/8" = 1'-0"

PARTIAL ELEVATION (ON GRID 3.3) (2/A12)
SCALE: 1/8" = 1'-0"

WHITING-TURNER
CONTRACTING COMPANY
DESMAN BWJ, INC.
ASSOCIATES ARCHITECTS
BURDETTE, KOEHLER, MURPHY
& ASSOCIATES, INC. M.E.P. ENGINEERS
BWJ Inc. Architects

PENN STREET PARKING FACILITY
UNIVERSITY OF MARYLAND AT BALTIMORE

NO.	DATE	BY
4	2/10/94	
3	2/28/93	
2	12/1/93	
1	7/16/93	

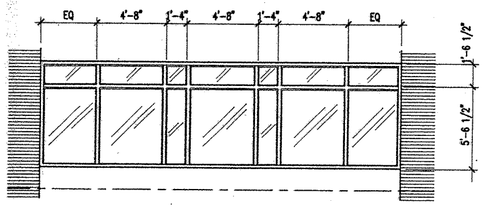
REVISIONS

PRATT STREET ELEVATION

DRAWING NO. A12

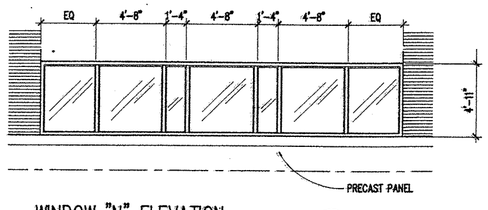
SCALE:	AS SHOWN
DATE:	JULY 1, 1993
PROJECT NO.	93001

DESIGN	DRAWN	CHKD.



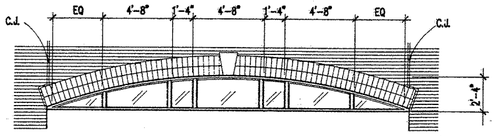
WINDOW "M" ELEVATION (3/A13)

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



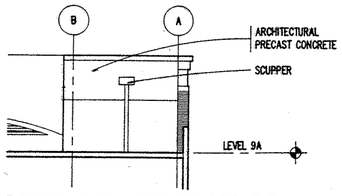
WINDOW "N" ELEVATION (4/A13)

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



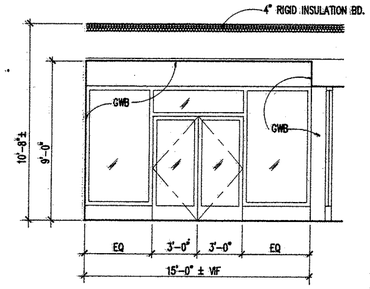
WINDOW "O" ELEVATION (10/A13)

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



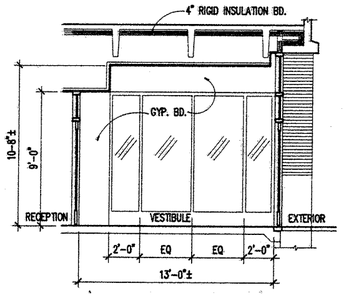
PARTIAL ELEVATION ON GRID 3.8 (7/A13)

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



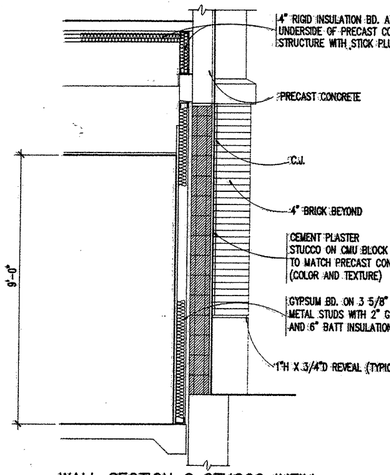
ENTRANCE VESTIBULE (12/A13)

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



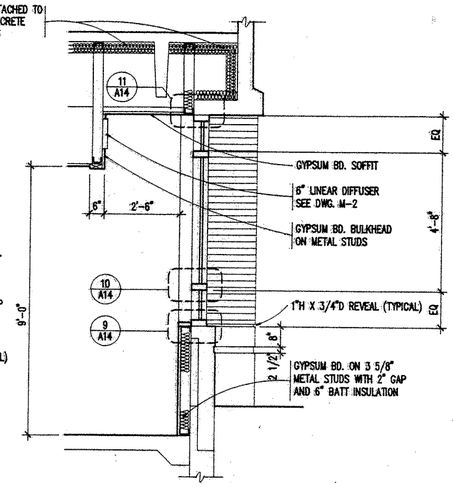
ENTRANCE VESTIBULE (11/A13)

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



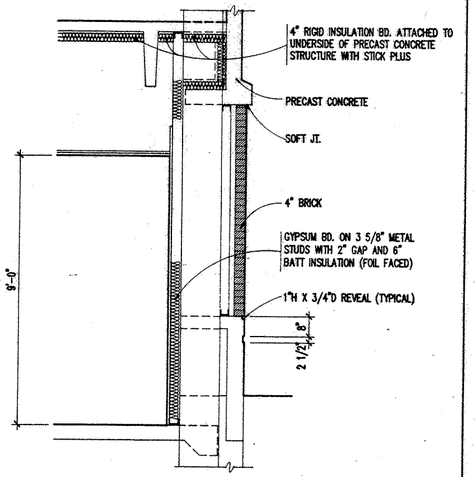
WALL SECTION @ STUCCO INFILL (8/A13)

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



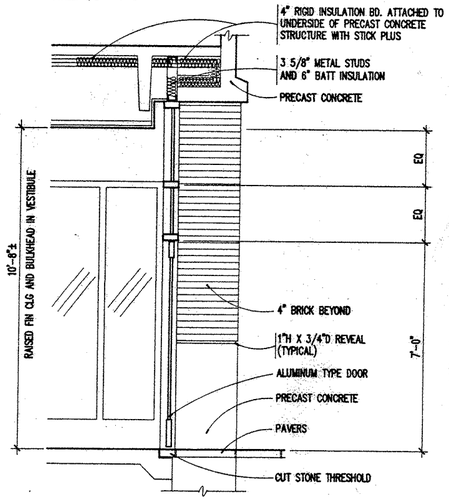
WALL SECTION @ OFFICE WINDOWS (5/A13)

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



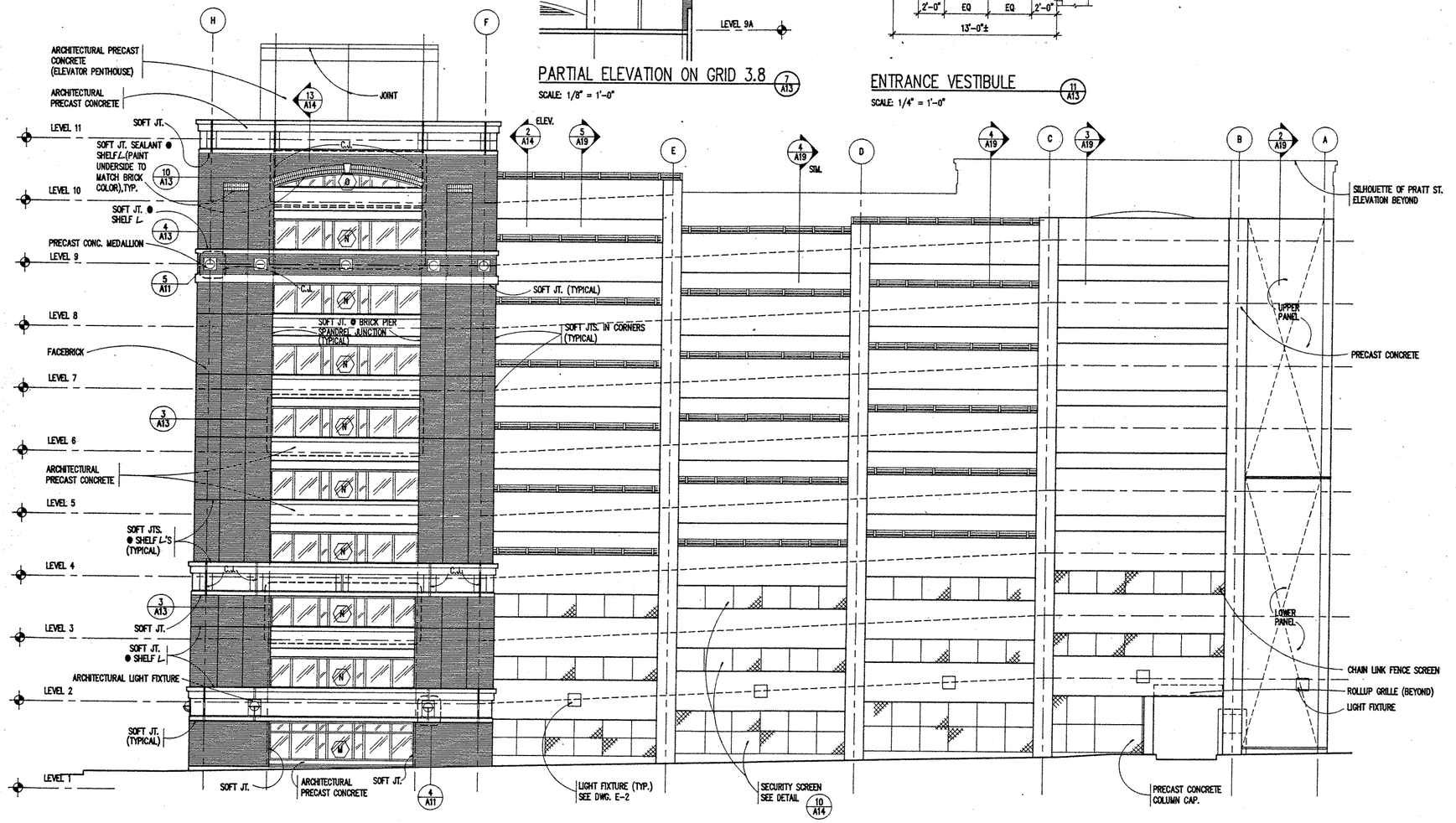
WALL SECTION @ OFFICE PIERS (6/A13)

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



SECTION THRU VESTIBULE (9/A13)

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



LEMMON STREET ELEVATION (NORTH) (1/A13)

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

WHITTING-TURNER CONTRACTING COMPANY
DESMAN BWJ INC. ASSOCIATES ARCHITECTS
BURDETTE, KOEHLER, MURPHY & ASSOCIATES, INC. M.E.P. ENGINEERS
BWJ
Inc. Architects
2370 York Road, Suite B-1, Jamison 21030
410-667-3766, FAX 410-667-3881

PENN STREET PARKING FACILITY

UNIVERSITY OF MARYLAND AT BALTIMORE

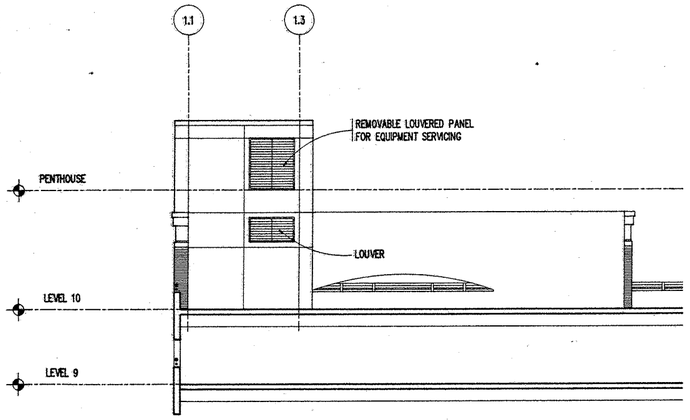
NO.	DATE	BY
4	2/10/94	
3	12/29/93	
2	12/1/93	
1	7/16/93	

REVISIONS

LEMMON STREET ELEVATION

DRAWING NO. A13

SCALE: AS SHOWN
DATE: JULY 1, 1993
PROJECT NO. 93001
DESIGN | DRAWN | CHK'D.



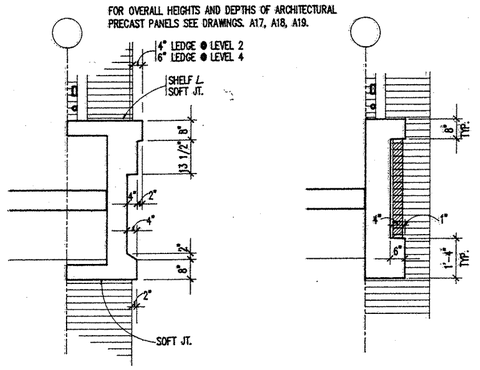
PARTIAL ELEVATION @ WEST SIDE OF ELEVATOR (2/A14)

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

INFORMATION PURPOSES ONLY

NOTE:

FOR OVERALL HEIGHTS AND DEPTHS OF ARCHITECTURAL PRECAST PANELS SEE DRAWINGS. A17, A18, A19.



PRECAST PROFILE DETAIL (3/A14)

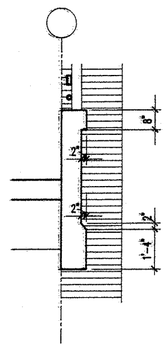
SCALE: 1/2" = 1'-0"

● LEVELS 2 & 4

PRECAST PROFILE DETAIL (4/A14)

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

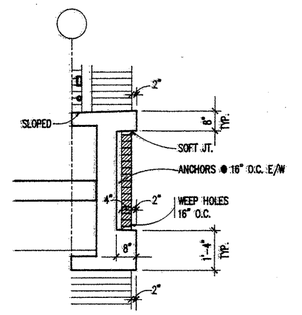
● LEVELS 3



PRECAST PROFILE DETAIL (5/A14)

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

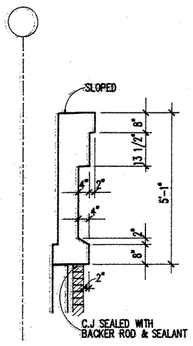
● LEVELS 5,6,7,8,10&4A,5A,6A,7A,9A



PRECAST PROFILE DETAIL (6/A14)

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

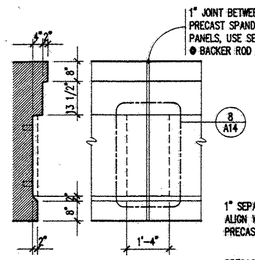
● LEVELS 8A & 9



PRECAST PROFILE DETAIL (7/A14)

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

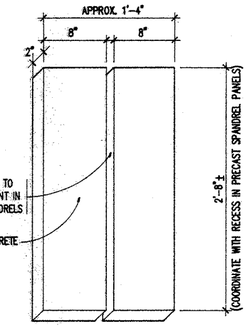
● LEVELS 11 & 10A



PRECAST PROFILE DETAIL (13/A14)

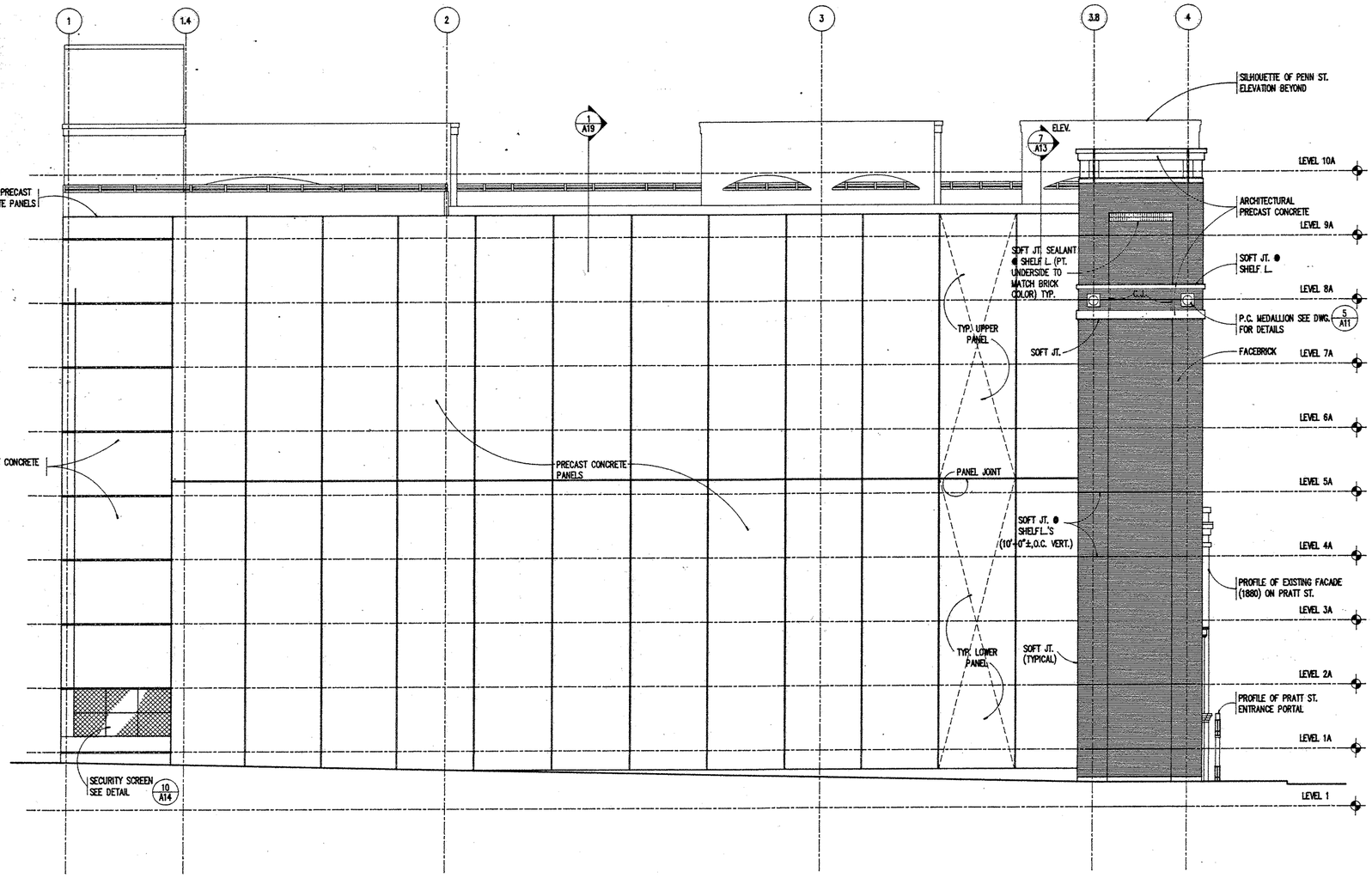
SCALE: 1/2" = 1'-0"

● LEVELS 2,4,10A & 11



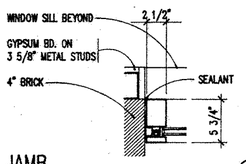
PRECAST SPANDREL DETAIL (9/A14)

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



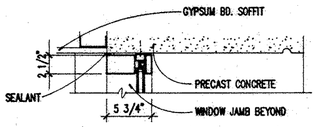
SAIL CLOTH FACTORY ELEVATION (WEST) (1/A14)

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



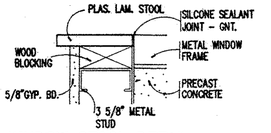
JAMB (12/A14)

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



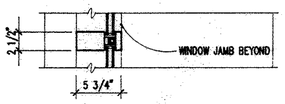
HEAD (11/A14)

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



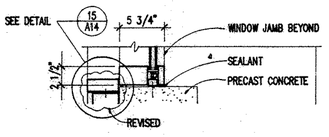
WINDOW STOOL DETAIL (15/A14)

SCALE: NONE



INTERMEDIATE MULLION (10/A14)

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



SILL (9/A14)

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

WHITTING-TURNER CONTRACTING COMPANY

DESMAN BWJ INC. ASSOCIATES ARCHITECTS

BURDETTE, KOBLER, MURPHY & ASSOCIATES, INC. & ARCHITECTS

BWJ Inc. Architects
220 North Howard Street Baltimore, Maryland 21201
410-547-2700 FAX 410-332-2888

PENN STREET PARKING FACILITY
UNIVERSITY OF MARYLAND AT BALTIMORE

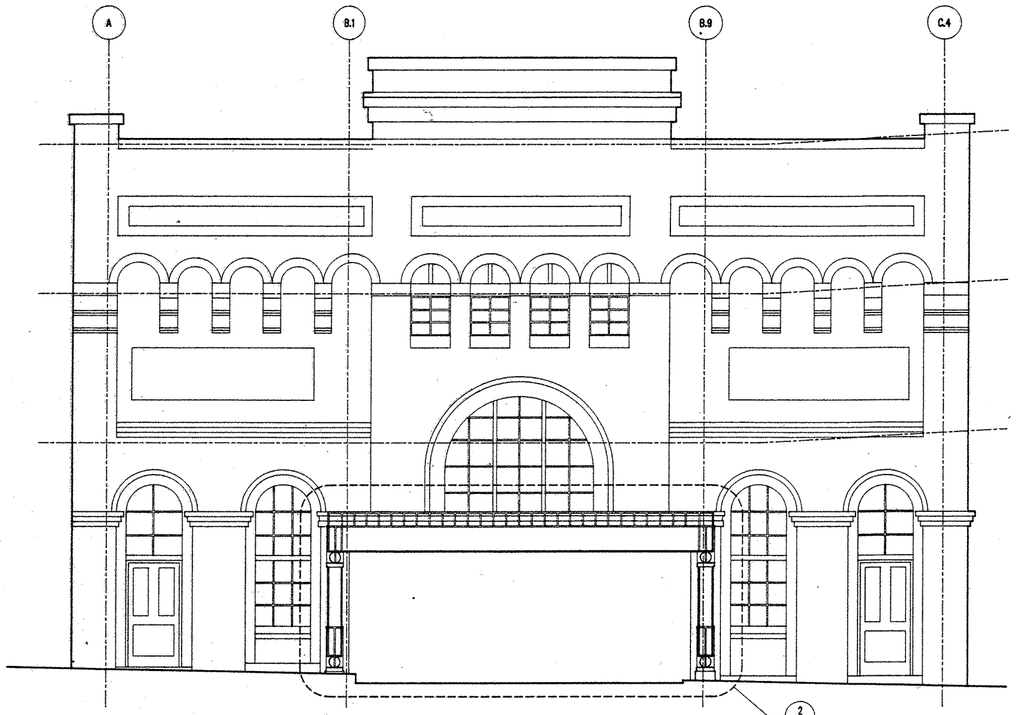
NO.	DATE	BY
4	2/10/94	
3	12/1/93	
2	7/16/93	
1		

REVISIONS

SAIL CLOTH FACTORY ELEVATION

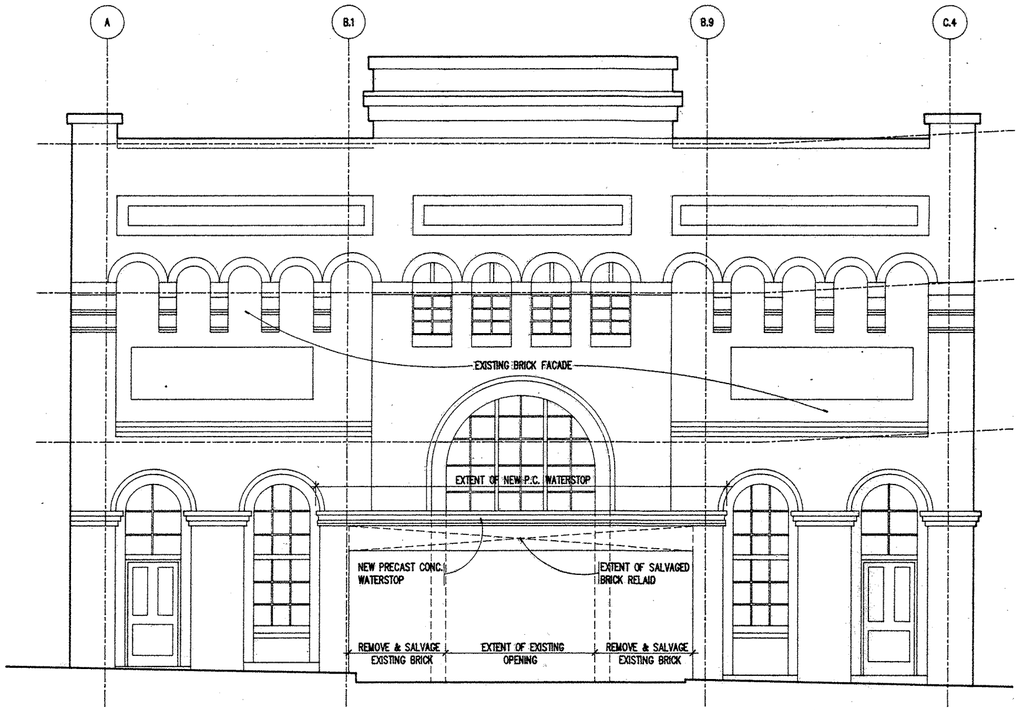
DRAWING NO. A14

SCALE:	AS SHOWN
DATE:	JULY 1, 1993
PROJECT NO.	93001
DESIGN	DRAWN / CHKD.



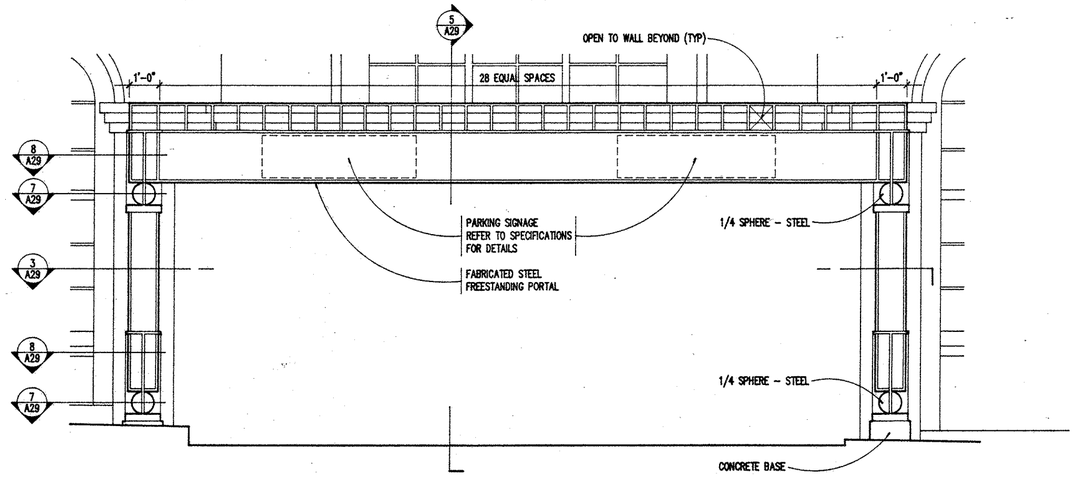
PARTIAL ELEVATION (WITH PORTAL) 1/A29

1/4" = 1'-0"



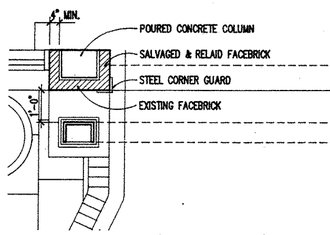
PARTIAL ELEVATION (WITHOUT PORTAL) 4/A29

1/4" = 1'-0"



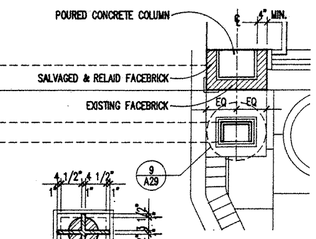
DETAIL ELEVATION OF PORTAL 2/A29

1/2" = 1'-0"



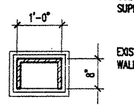
DETAIL PLAN OF PORTAL 3/A29

1/2" = 1'-0"



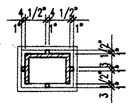
DETAIL PLAN 7/A29

3/4" = 1'-0"



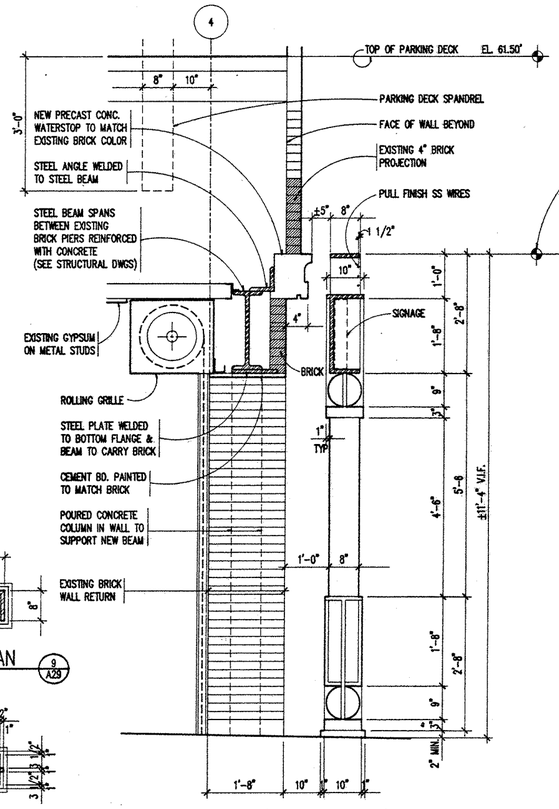
DETAIL PLAN 9/A29

3/4" = 1'-0"



DETAIL PLAN 8/A29

3/4" = 1'-0"

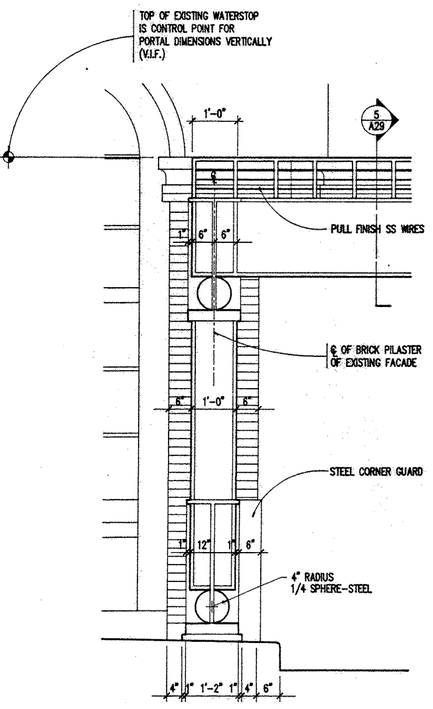


PRATT ST. PORTAL (WALL SECTION) 5/A29

3/4" = 1'-0"

NOTE

ALL STEEL SECTIONS ARE 1" THICK UNLESS OTHERWISE NOTED.



PRATT ST. PORTAL (PARTIAL ELEVATION DETAIL) 6/A29

3/4" = 1'-0"

WHITING-TURNER
CONTRACTING COMPANY

DESMAN BWJ INC.
ASSOCIATES ARCHITECTS

BURDETTE, KOEHLER, MURPHY & ASSOCIATES, INC. M.E.P. ENGINEERS

BWJ
Inc. Architects
1701 Reisterstown Road, Pikesville, Maryland 21208
410-421-2700 FAX 410-415-3999

PENN STREET PARKING FACILITY
UNIVERSITY OF MARYLAND AT BALTIMORE

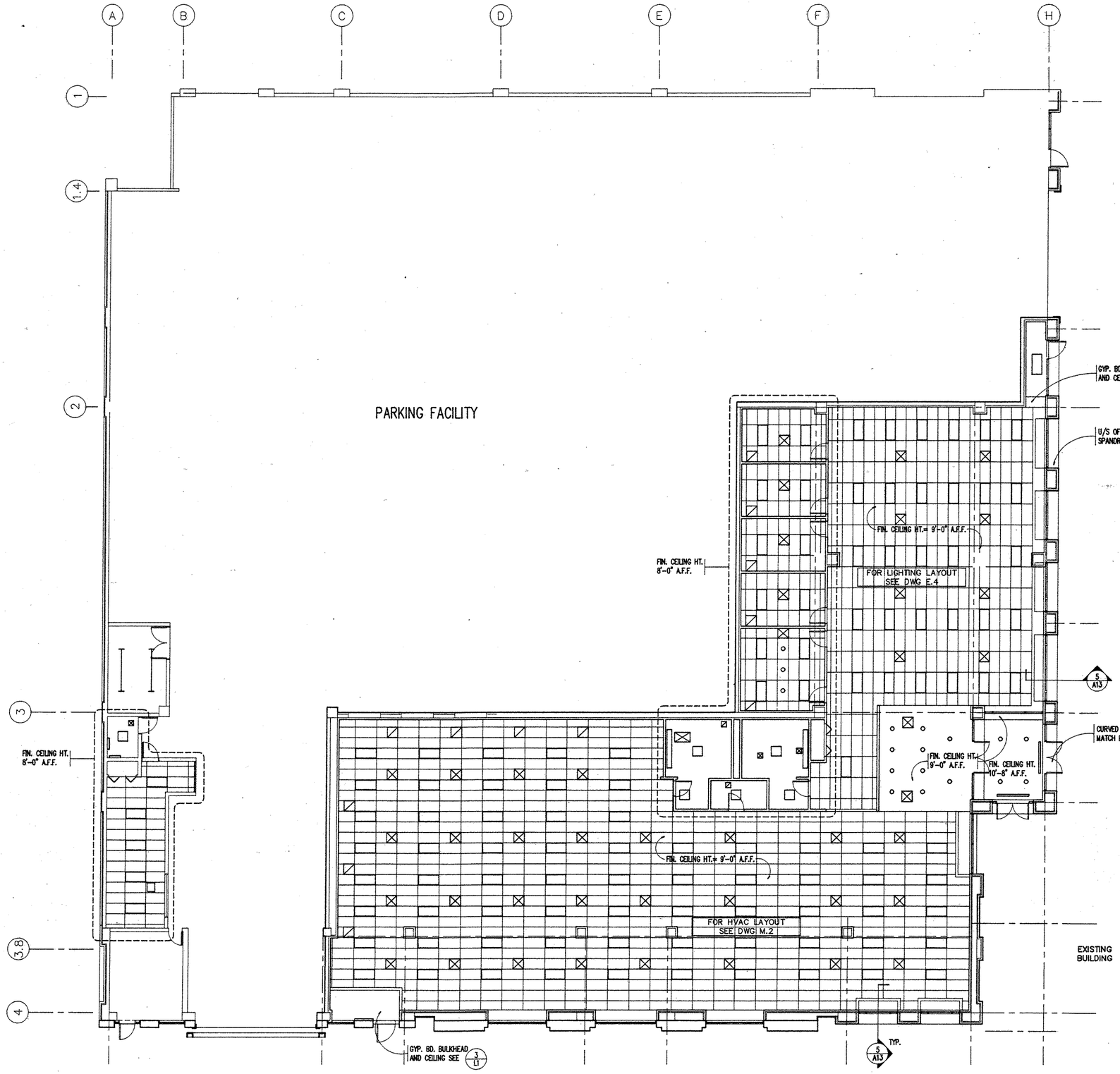
NO.	DATE	BY
REVISIONS		

PRATT ST. PORTAL ELEVATIONS & DETAILS

DRAWING NO.

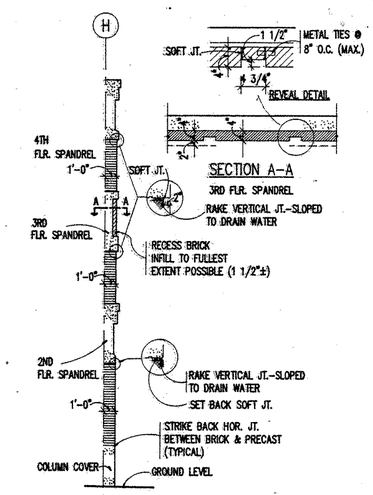
A29

SCALE:	AS SHOWN
DATE:	JULY 1, 1993
PROJECT NO.	93001
DESIGN / DRAWN / CH'KD.	

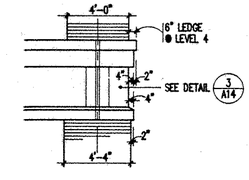


REFLECTED CEILING PLAN – OFFICE FLOOR LEVEL 1/A32

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

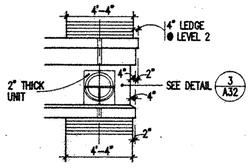


BRICK MASONRY CLAD PIERS @ 2.3 & 2.5 ℄'S 2/A32



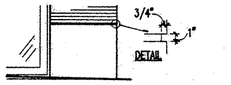
PARTIAL ELEVATION 3/A32

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



PARTIAL ELEVATION 4/A32

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



PARTIAL ELEVATION 5/A32

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

LEGEND :

- SUPPLY DIFFUSER
- RETURN GRILLE

WHITTING-TURNER CONTRACTING COMPANY

DESMAN BWJ INC. ASSOCIATES ARCHITECTS

BURDETTE, KOEHLER, MURPHY & ASSOCIATES, INC. M.E.P. ENGINEERS

PENN STREET PARKING FACILITY

UNIVERSITY OF MARYLAND AT BALTIMORE

NO.	DATE	BY
2	9/16/93	
1	7/16/93	

REVISIONS

OFFICE REFLECTED CEILING PLAN

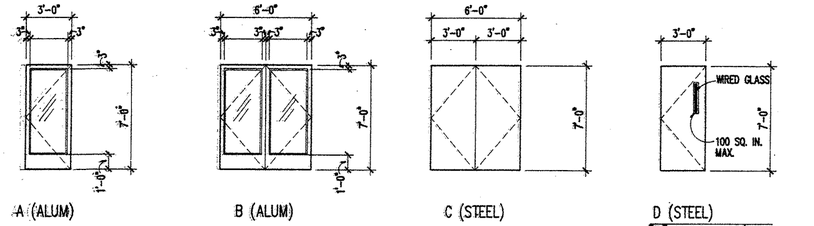
DRAWING NO. A32

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

DATE: JULY 1, 1993

PROJECT NO. 93001

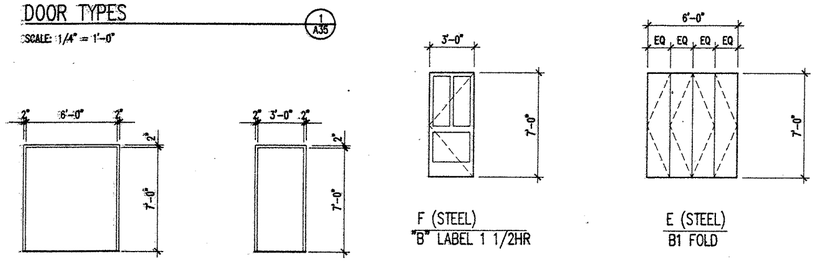
DESIGN	DRAWN	CHK'D.



A (ALUM) B (ALUM) C (STEEL) D (STEEL) "B" LABEL 1 1/2HR

DOOR TYPES

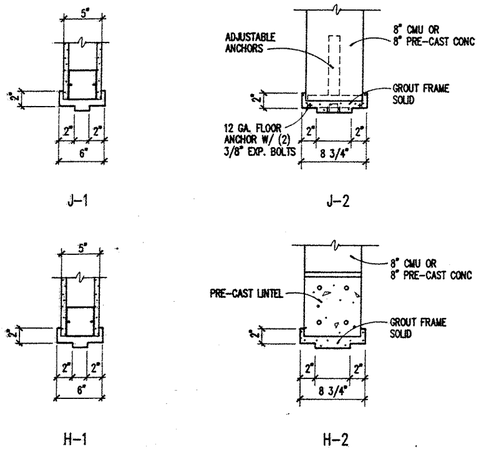
SCALE: 1/4" = 1'-0" (1/A35)



F-4 F-5 F (STEEL) "B" LABEL 1 1/2HR E (STEEL) B1 FOLD

FRAME TYPES

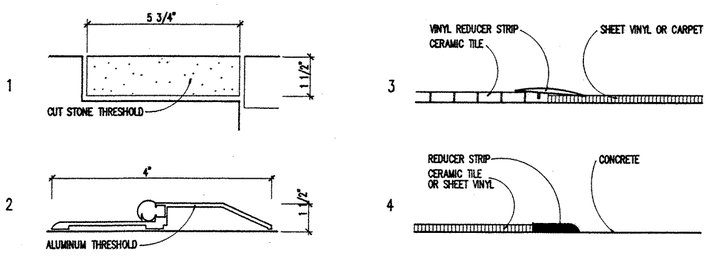
SCALE: 1/4" = 1'-0" (2/A35)



J-1 J-2 H-1 H-2

DOOR JAMB AND HEAD DETAILS

SCALE: 1 1/2" = 1'-0" (3/A35)



THRESHOLDS/ TRANSITION STEPS

NOT TO SCALE (4/A35)

DOOR SCHEDULE

MK	LOCATION		SIZE		DOOR			FRAME								REMARKS	MK
OPENING #	FROM SPACE	INTO SPACE	DOOR WIDTH	DOOR HEIGHT	TYPE	MATERIAL	LOUVER	WALL WIDTH	TYPE	JAMB	HEAD	THRESHOLD	MATERIAL	FIRE RATING	HARDWARE		OPENING #
																DOORS 102 & 105 TO HAVE PANIC HARDWARE	
101	ST#1	EXT.	3'-4"	7'-0"	A	AL	–		F-1	*	*	1	AL	–	1	*KAWNEER 1600 SERIES	101
102	OFF.	EXT.	3'-4"	7'-0"	A	AL	–		F-1	*	*	2	AL	–	1	*KAWNEER 1600 SERIES	102
103	VEST.	EXT.	6'-0"	7'-0"	B	AL	–		F-2	*	*	1	AL	–	1	*KAWNEER 1600 SERIES, CARDKEY OPERATED	103
104	VEST.	EXT.	6'-0"	7'-0"	B	AL	–		F-2	*	*	1	AL	–	1	*KAWNEER 1600 SERIES, CARDKEY OPERATED	104
105	OFF.	EXT.	3'-4"	7'-6"±	F	HM	–		–	*	*	2	HM	–	2	*IN EXIST. 1880 FACADE OPENING–MATCH EXIST.	105
106	EXT.	ST#2	3'-4"	7'-6"±	F	HM	–		–	*	*	1	HM	–	2	*IN EXIST. 1880 FACADE OPENING–MATCH EXIST.	106
107	P.G.	TRANS.	6'-0"	7'-0"	C	HM	–		F-4	J-2	H-2	–	HM	1 1/2HR	3		107
108	P.G.	TRANS.	3'-0"	7'-0"	D	HM	–		F-5	J-2	H-2	–	HM	1 1/2HR	4		108
109	P.G.	GEN.	6'-0"	7'-0"	C	HM	–		F-4	J-2	H-2	–	HM	1 1/2HR	3		109
110	P.G.	GEN.	3'-0"	7'-0"	D	HM	–		F-5	J-2	H-2	–	HM	1 1/2HR	4		110
111	MECH.	P.G.	3'-0"	7'-0"	D	HM	–		F-5	J-2	H-2	–	HM	1 1/2HR	4		111
112	EL.	MECH. CORR.	3'-0"	7'-0"	D	HM	–		F-5	J-2	H-2	–	HM	–	4		112
113	PH.	MECH. CORR.	3'-0"	7'-0"	D	HM	–		F-5	J-2	H-2	–	HM	–	4		113
114	MECH.	MECH. CORR.	3'-0"	7'-0"	D	HM	–		F-5	J-2	H-2	–	HM	–	4		114
115	WATER	MECH.	3'-0"	7'-0"	D	HM	–		F-5	J-2	H-2	–	HM	–	4		115
116	P.G.	ST#2	3'-0"	7'-0"	D	HM	–		F-5	J-2	H-2	2	HM	1 1/2HR	2		116
117	P.G.	MAN. OFF.	3'-0"	7'-0"	D	HM	–		F-5	J-2	H-2	4	HM	1 1/2HR	5		117
118	R.R.	P.G.	3'-0"	7'-0"	D	HM	–		F-5	J-2	H-2	4	HM	–	4		118
119	P.G.	MAIN	6'-0"	7'-0"	C	HM	–		F-4	J-2	H-2	–	HM	1 1/2HR	3		119
120	O.O.	P.O.	3'-0"	7'-0"	D	WD	–		F-5	J-1	H-1	–	HM	–	5		120
121	O.O.	P.O.	3'-0"	7'-0"	D	WD	–		F-5	J-1	H-1	–	HM	–	5*		121
122	O.O.	P.O.	3'-0"	7'-0"	D	WD	–		F-5	J-1	H-1	–	HM	–	5		122
123	O.O.	P.O.	3'-0"	7'-0"	D	WD	–		F-5	J-1	H-1	–	HM	–	5		123
124	O.O.	CONF.	3'-0"	7'-0"	D	WD	–		F-5	J-1	H-1	–	HM	–	9		124
125	O.O.	CONF.	3'-0"	7'-0"	D	WD	–		F-5	J-1	H-1	–	HM	–	9		125
126	O.O.	CL.	6'-0"	7'-0"	E	WD	–		F-4	J-1	H-1	–	HM	–	10		126
127	O.O.	R.R.	3'-0"	7'-0"	D	WD	–		F-4	J-1	H-1	3*	HM	–	11	1" UNDERCUT,*TO BE INSTALLED W/ CARPET	127
128	O.O.	JAN.	3'-0"	7'-0"	D	WD	–		F-5	J-1	H-1	3*	HM	–	4	1" UNDERCUT,*TO BE INSTALLED W/ CARPET	128
129	O.O.	R.R.	3'-0"	7'-0"	D	WD	–		F-5	J-1	H-1	3*	HM	–	11	1" UNDERCUT,*TO BE INSTALLED W/ CARPET	129
130	REC.	VEST.	6'-0"	7'-0"	B	AL	–		F-1	*	*	3**	AL	–	2	*KAWEER 1600 SERIES, **INSTALLED W/ CARPET	130
–																	–
–																	–
201	MECH.	P.G.	6'-0"	7'-0"	C	HM			F-4	J-2	H-2	2	HM	1 1/2HR	3		201
202	P.G.	ST#2	3'-0"	7'-0"	D	HM			F-5	J-2	H-2	2	HM	1 1/2HR	7		202
301	P.G.	ST#2	3'-0"	7'-0"	D	HM			F-5	J-2	H-2	2	HM	1 1/2HR	7		301
401	P.G.	ST#2	3'-0"	7'-0"	D	HM			F-5	J-2	H-2	2	HM	1 1/2HR	7		401
501	P.G.	ST#2	3'-0"	7'-0"	D	HM			F-5	J-2	H-2	2	HM	1 1/2HR	7		501
601	P.G.	ST#2	3'-0"	7'-0"	D	HM			F-5	J-2	H-2	2	HM	1 1/2HR	7		601
701	P.G.	ST#2	3'-0"	7'-0"	D	HM			F-5	J-2	H-2	2	HM	1 1/2HR	7		701
801	P.G.	ST#2	3'-0"	7'-0"	D	HM			F-5	J-2	H-2	2	HM	1 1/2HR	7		801
901	P.G.	ST#2	3'-0"	7'-0"	D	HM			F-5	J-2	H-2	2	HM	1 1/2HR	7		901
1001	P.G.	ST#1	6'-0"	7'-0"	C	HM			F-4	J-2	H-2	2	AL	–	8		1001
1002	ST#3	ST#1	3'-0"	7'-0"	D	HM			F-5	J-2	H-2		HM	1 1/2HR	6		1002
1101	M.P.	ST#3	3'-0"	7'-0"	D	HM			F-5	J-2	H-2		HM	1 1/2HR	6		1101

WHITTING–TURNER CONTRACTING COMPANY
DESMAN BWJ INC. ASSOCIATES ARCHITECTS
BURDETTE, KOEHLER, MURPHY & ASSOCIATES, INC. M.E.P. ENGINEERS
BWJ Inc. Associates
210 Barn Swallow Trail • Hallowell, Kennebec 04347
207-622-3764/FAX 622-3369

PENN STREET PARKING FACILITY
UNIVERSITY OF MARYLAND AT BALTIMORE

NO.	DATE	BY
REVISIONS		
3	3/9/94	DOORS
2	3/8/94	HOWE
1	7/16/93	

DOOR SCHEDULE

DRAWING NO. A35

SCALE: AS SHOWN
DATE: JULY 1, 1993
PROJECT NO. 93001
DESIGN | DRAWN | CHKD.

FINISH SCHEDULE

RM NO.	ROOM DESCRIPTION	FLOOR							BASE							WALL							CEILING					
		CONCRETE	VINYL TILE	QUARRY TILE	CARPET	CARPET TILE	see NOTE	EXIST. FINISH	VINYL - 4"	QUARRY TILE	NO BASE	-	see NOTE	EXIST. FINISH		GYPSUM PAINTED	VINYL WALL COVER	GYPSUM PRIMED	CERAMIC TILE WAINSCOT	see NOTE	EXIST. FINISH		ACOUSTIC PANEL	NO CEILING	GYPSUM PAINTED	see NOTE	EXIST. FINISH	CEILING HEIGHT
		1	2	3	4	5	6	7	1	2	3	4	5	6		1	2	3	4	5	6		1	2	3	4	5	
101	VESTIBULE			3						2																		10'+
102	RECEPTION				4				1							1				•					3			VAR
103	SECRETARY				4				1							1							1					8'-0"
104	OFFICE				4				1							1							1					8'-0"
105	OFFICE				4				1							1							1					8'-0"
106	OFFICE				4				1							1							1					8'-0"
107	OFFICE				4				1							1							1					8'-0"
108	OFFICE				4				1							1							1					8'-0"
109	OFFICE				4				1							1							1					8'-0"
110	CONFERENCE RM.				4				1							1				•			1					8'-0"
111	OFFICE				4				1							1							1					8'-0"
112	OFFICE				4				1							1							1					8'-0"
113	OFFICE				4				1							1							1					8'-0"
114	OFFICE				4				1							1							1					8'-0"
115	OFFICE				4				1							1							1					8'-0"
116	OFFICE				4				1							1							1					8'-0"
117	OFFICE				4				1							1							1					8'-0"
118	OFFICE				4				1							1							1					8'-0"
119	OFFICE				4				1							1							1					8'-0"
120	OFFICE				4				1							1							1					8'-0"
121	OFFICE				4				1							1							1					8'-0"
122	OFFICE				4				1							1							1					8'-0"
123	MAINTENANCE		2						1							1							1					8'-0"
124	MEN'S TOILET																											
125	JANITOR'S																											

• SEE FLOOR PLAN – ACCENT WALL

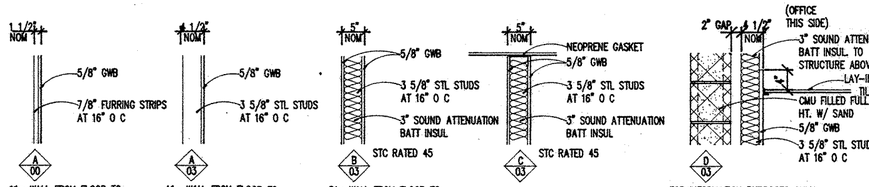
FINISH SCHEDULE

RM NO.	ROOM DESCRIPTION	FLOOR							BASE							WALL							CEILING					
		CONCRETE	VINYL TILE	QUARRY TILE	CARPET	CARPET TILE	see NOTE	EXIST. FINISH	VINYL - 4"	QUARRY TILE	NO BASE	-	see NOTE	EXIST. FINISH		GYPSUM PAINTED	VINYL WALL COVER	GYPSUM PRIMED	CERAMIC TILE WAINSCOT	see NOTE	EXIST. FINISH		ACOUSTIC PANEL	NO CEILING	GYPSUM PAINTED	see NOTE	EXIST. FINISH	CEILING HEIGHT
		1	2	3	4	5	6	7	1	2	3	4	5	6		1	2	3	4	5	6		1	2	3	4	5	
126	WOMEN'S TOILET																											
127	SECRETARY				4				1							1							1					
128	TELEPHONE & COMM.				4				1							1							1					8'-0"
129	OFFICE				4				1							1							1					8'-0"
130	OFFICE				4				1							1							1					8'-0"
131	OFFICE				4				1							1							1					8'-0"
132	OFFICE				4				1							1							1					8'-0"
133	CONFERENCE RM.				4				1							1				•			1					8'-0"
134	OFFICE				4				1							1							1					
135	OFFICE				4				1							1							1					
136	OFFICE				4				1							1							1					
137	OFFICE				4				1							1							1					
138	OFFICE				4				1							1							1					
139	OFFICE				4				1							1							1					
140	OFFICE				4				1							1							1					
141	OFFICE				4				1							1							1					
142	OFFICE AREA				4				1							1							1					
143	OFFICE AREA				4				1							1							1					
144	OFFICE AREA				4				1							1							1					
145	CORRIDOR				4				1							1							1					
146	REPRO & KITCHEN		2						1							1							1					8'-0"
147	CORRIDOR				4				1							1							1					
148	CORRIDOR				4				1							1							1					VAR
149	CORRIDOR				4				1							1							1					VAR

• SEE FLOOR PLAN – ACCENT WALL

DOOR SCHEDULE

MK	LOCATION		SIZE		DOOR			FRAME								REMARKS	MK
OPENING #	FROM SPACE	INTO SPACE	DOOR WIDTH	DOOR HEIGHT	TYPE	MATERIAL	LOUVER	TYPE	JAMB	HEAD	THRESHOLD	MATERIAL	FIRE RATING	HARDWARE			OPENING #
101	EXT	101														SHELL STOREFRONT – CARD OPERATED	101
101A	101	102														SHELL STOREFRONT	101A
102	102	145	3'-6"	7'-0"	B	AL						AL		3		MATCH SHELL STOREFRONT	102
103	145	103	3'-0"	7'-0"	A	WD		F-1	J-1	H-1		HM		1			103
104	147	104	3'-0"	7'-0"	A	WD		F-1	J-1	H-1		HM		1			104
104A	103	104	3'-0"	7'-0"	A	WD		F-1	J-1	H-1		HM		1			104A
105	147	105	3'-0"	7'-0"	A	WD		F-1	J-1	H-1		HM		1			105
106	147	106	3'-0"	7'-0"	A	WD		F-1	J-1	H-1		HM		1			106
107	143	107	3'-0"	7'-0"	A	WD		F-1	J-1	H-1		HM		1			107
108	143	108	3'-0"	7'-0"	A	WD		F-1	J-1	H-1		HM		1			108
109	143	109	3'-0"	7'-0"	A	WD		F-3	J-1	H-1		HM		1			109
110	144	110	3'-0"	7'-0"	A	WD		F-1	J-1	H-1		HM		2			110
110A	144	110	3'-0"	7'-0"	A	WD		F-1	J-1	H-1		HM		2		–	110A
111	144	111	3'-0"	7'-0"	A	WD		F-1	J-1	H-1		HM		1		–	111
112	144	112	3'-0"	7'-0"	A	WD		F-1	J-1	H-1		HM		1			112
113	144	113	3'-0"	7'-0"	A	WD		F-1	J-1	H-1		HM		1			113
114	144	114	3'-0"	7'-0"	A	WD		F-1	J-1	H-1		HM		1		–	114
115	144	115	3'-0"	7'-0"	A	WD		F-1	J-1	H-1		HM		1		–	115
116	144	116	3'-0"	7'-0"	A	WD		F-2	J-1	H-1		HM		1		–	116
117	144	117	3'-0"	7'-0"	A	WD		F-1	J-1	H-1		HM		1		–	117
118	144	118	3'-0"	7'-0"	A	WD		F-1	J-1	H-1		HM		1		–	118
119	144	119	3'-0"	7'-0"	A	WD		F-1	J-1	H-1		HM		1			119
120	144	120	3'-0"	7'-0"	A	WD		F-1	J-1	H-1		HM		1		–	120
121	144	121	3'-0"	7'-0"	A	WD		F-1	J-1	H-1		HM		1			121
122	144	122	3'-0"	7'-0"	A	WD		F-1	J-1	H-1		HM		1		–	122
123	144	123	3'-0"	7'-0"	A	WD		F-1	J-1	H-1		HM		1		–	123
124																	124
125																	125
126																	126
127	127	102	3'-6"	7'-0"	B	AL						AL		3		MATCH SHELL STOREFRONT	127
128	127	128	3'-0"	7'-0"	A	WD		F-1	J-1	H-1		HM		1			128
129	127	129	3'-0"	7'-0"	A	WD		F-1	J-1	H-1		HM		1			129
130	142	130	3'-0"	7'-0"	A	WD		F-1	J-1	H-1		HM		1			130
131	142	131	3'-0"	7'-0"	A	WD		F-1	J-1	H-1		HM		1			131
132	142	132	3'-0"	7'-0"	A	WD		F-1	J-1	H-1		HM		1			132
133	142	133	3'-0"	7'-0"	A	WD		F-1	J-1	H-1		HM		2			133
134	142	134	3'-0"	7'-0"	A	WD		F-1	J-1	H-1		HM		1			134
135	142	135	3'-0"	7'-0"	A	WD		F-1	J-1	H-1		HM		1			135
136	142	136	3'-0"	7'-0"	A	WD		F-1	J-1	H-1		HM	–	1			136
137	142	137	3'-0"	7'-0"	A	WD		F-1	J-1	H-1		HM	–	1			137
138	142	138	3'-0"	7'-0"	A	WD		F-1	J-1	H-1		HM	–	1			138
139	142	139	3'-0"	7'-0"	A	WD		F-1	J-1	H-1		HM		1			139
140	142	140	3'-0"	7'-0"	A	WD		F-1	J-1	H-1		HM		1			140
141	127	141	3'-0"	7'-0"	A	WD		F-1	J-1	H-1		HM	–	1			141

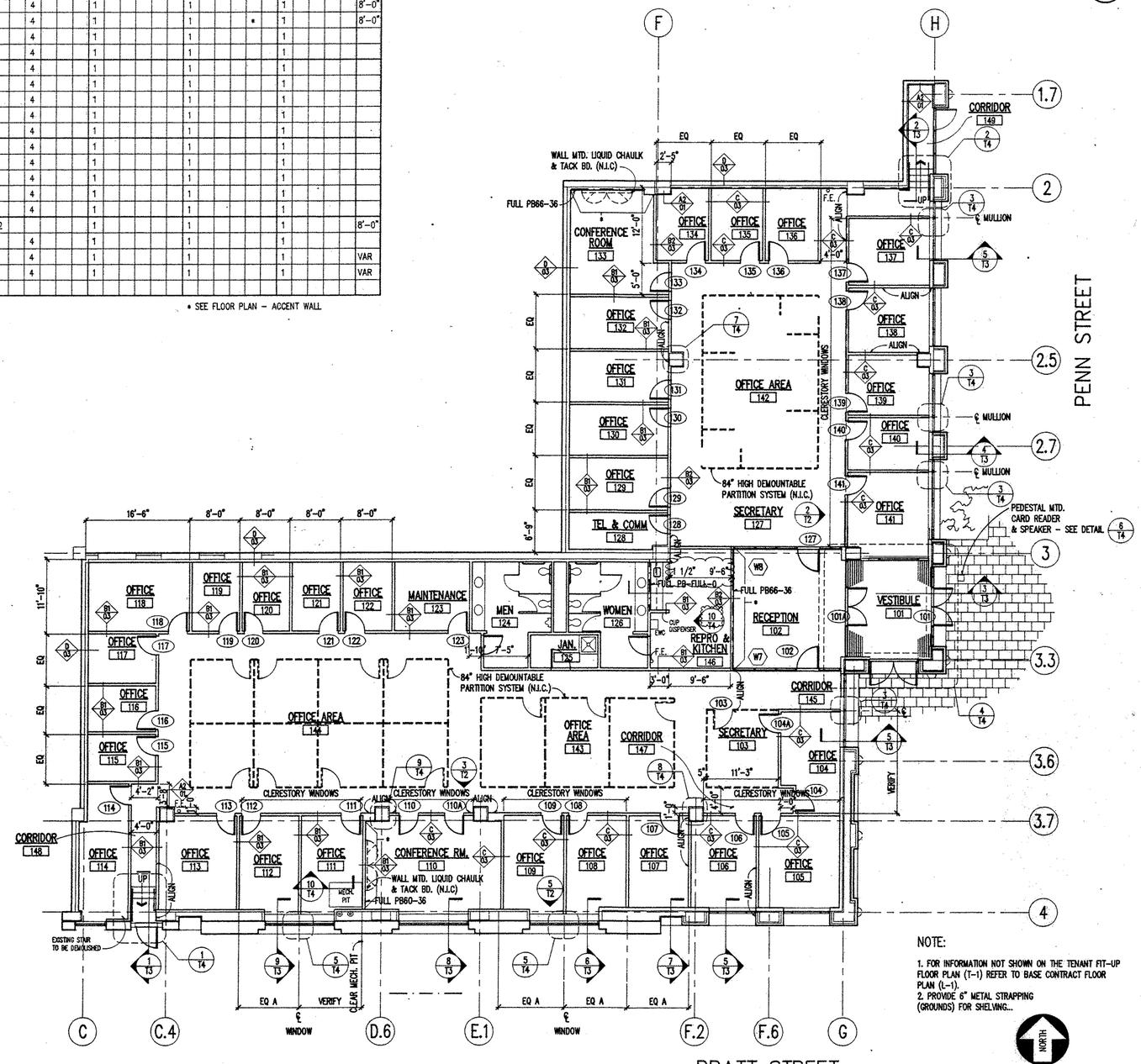


MTL. STUD PARTITION TYPES

SCALE: 1" = 1'-0"

3 / 5A-01

SCALE: 1" = 1'-0"



OFFICE FLOOR PLAN

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

1 / T1

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

WHITTING-TURNER CONTRACTING COMPANY
DESMAN BWJ INC. ASSOCIATES ARCHITECTS
BURDETTE, KOEHLER, MURPHY & ASSOCIATES, INC. M.E.P. ENGINEERS
BWJ Inc. ARCHITECTS

PENN STREET PARKING FACILITY

UNIVERSITY OF MARYLAND AT BALTIMORE

NO.	DATE	BY
REVISIONS		

OFFICE FLOOR PLAN & SCHEDULES

DRAWING NO. T-1

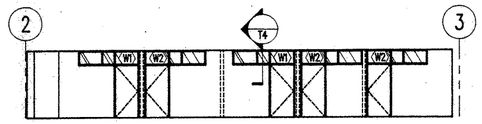
SCALE: 1/8" = 1'-0"

DATE: 04/21/94

PROJECT NO. 94016

DESIGN | DRAWN | CHKD.

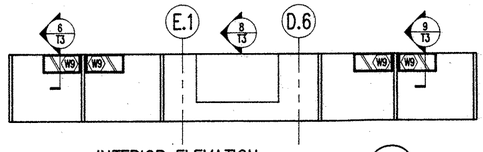
22-APR-94 1"=8' FP8



INTERIOR ELEVATION

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

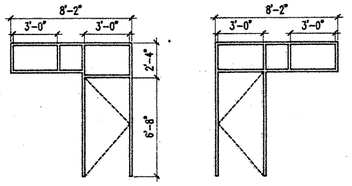
2 / T-2



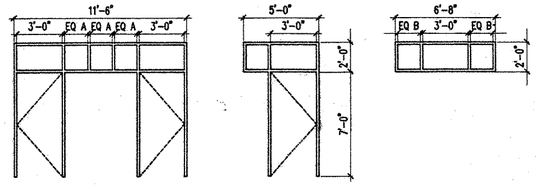
INTERIOR ELEVATION

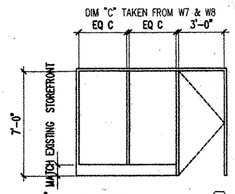
SCALE :1/8" = 1'-0"

4 / T-2

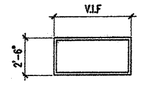


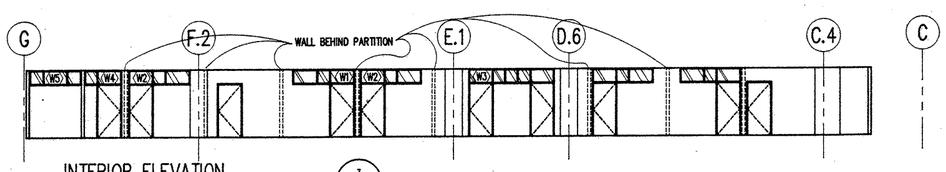
HOLLOW METAL





HOLLOW METAL

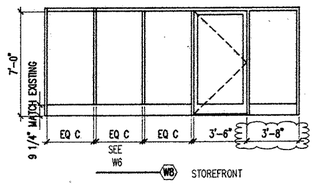




INTERIOR ELEVATION

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

3 / T-2



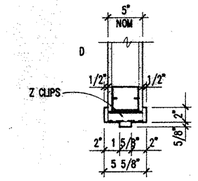
STOREFRONT

STOREFRONT

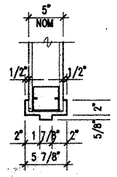
WINDOWS

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

5 / T-2



J-1



H-1

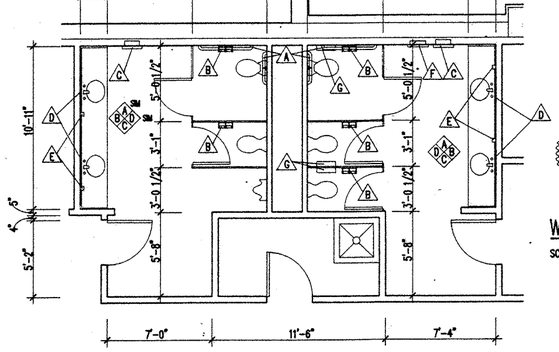
JAMB TYPES

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

HEAD TYPES

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

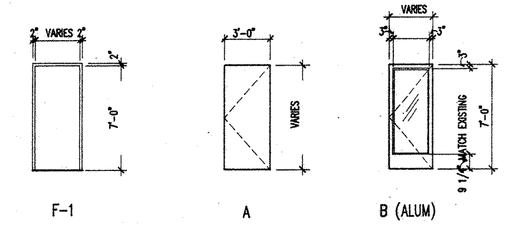
SCALE: 1 1/2"=1'-0"



BATH ROOMS

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

6 / T-2



F-1

A

B (ALUM)

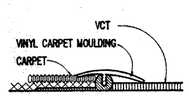
FRAME TYPES

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

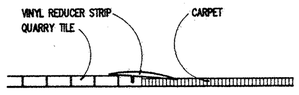
DOOR TYPES

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

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



1

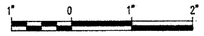


2

NOTE:
USE TRANSITION 'C' AT
ALL CARPET/VCT TRANSITIONS

THRESHOLDS/ TRANSITION STEPS

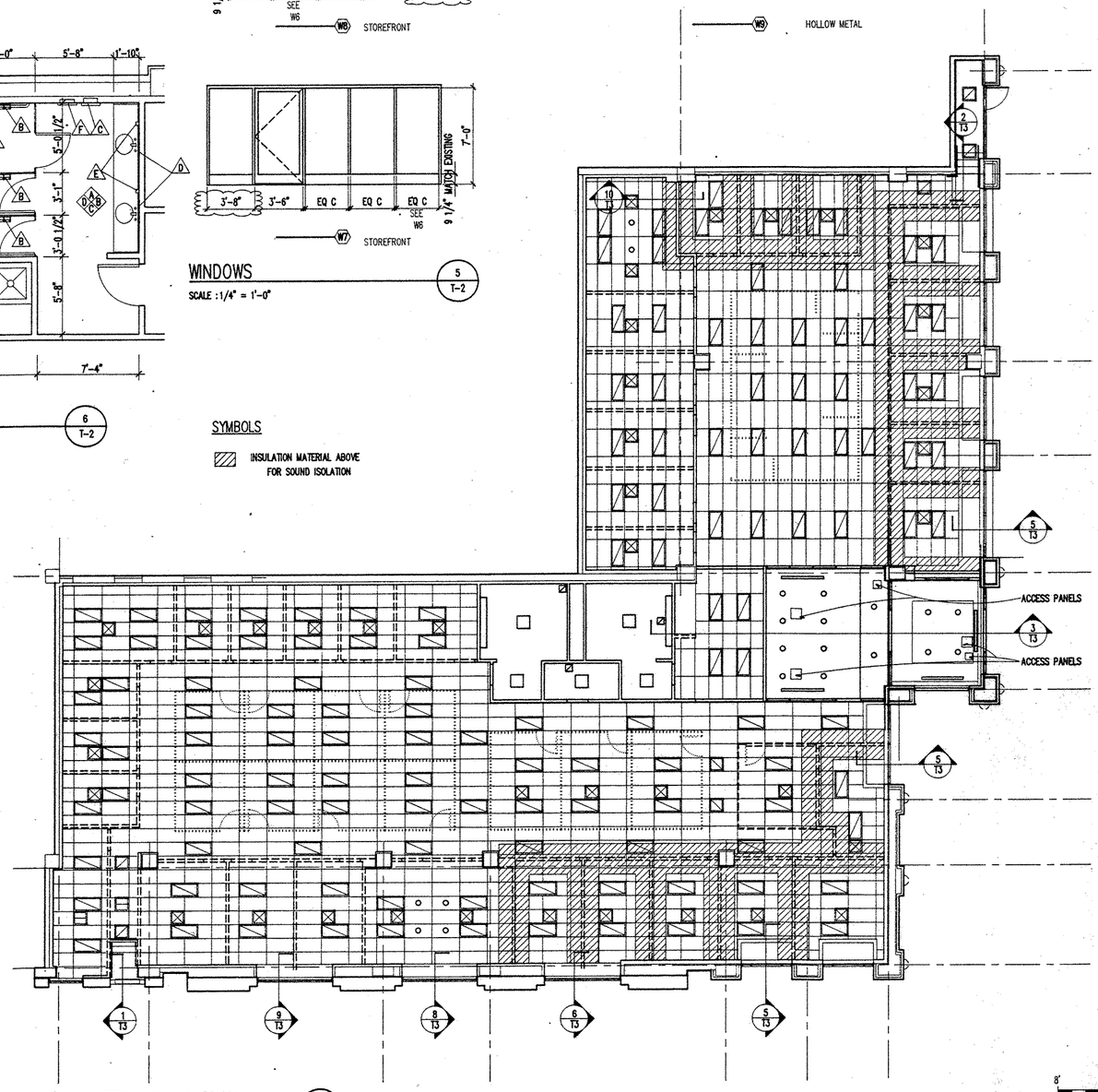
SCALE: 1" = 1"



SCALE: FULL SCALE

SYMBOLS

INSULATION MATERIAL ABOVE FOR SOUND ISOLATION



REFLECTED CEILING PLAN

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

1 / T-2

8' 0 8' 16'

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

940241-2

25-APR-94 1"=8'

WHITTING-TURNER
CONTRACTING COMPANY

DESMAN BWJ INC.
ASSOCIATES ARCHITECTS

BURDETTE, KORHLER, MURPHY
& ASSOCIATES, INC. M.E.P. ENGINEERS

BWJ
Inc. Architects
270 Duke Ellington Street Technical, Baltimore 21230
410-467-3700 FAX 410-385-2884

PENN STREET PARKING FACILITY

UNIVERSITY OF MARYLAND AT BALTIMORE

NO.	DATE	BY
REVISIONS		

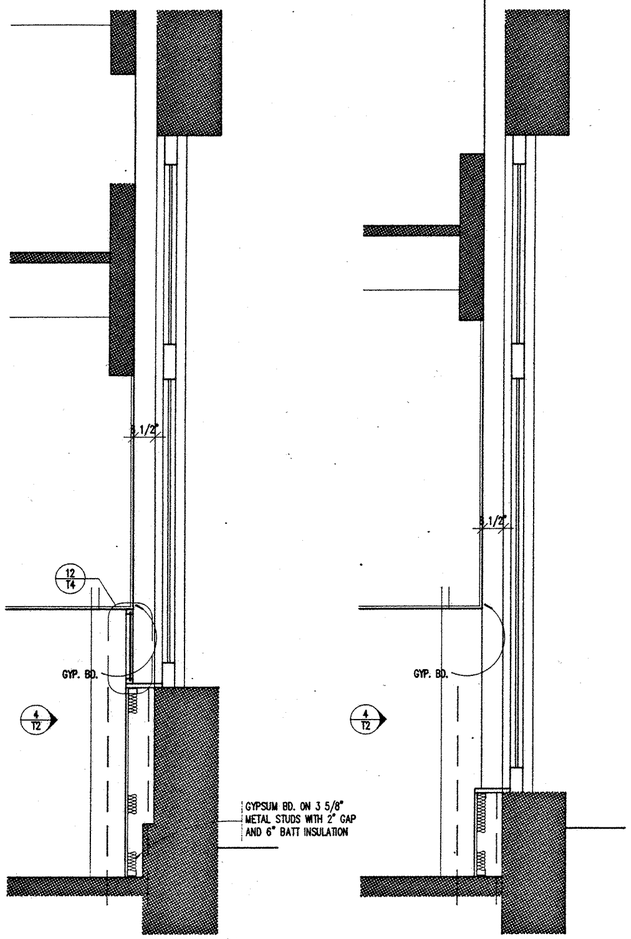
OFFICE REFLECTED CEILING PLAN

DRAWING NO.

T-2

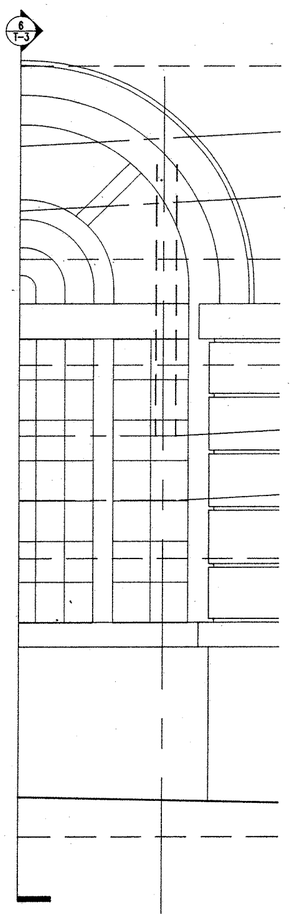
SCALE:	1/8" = 1'-0"
DATE:	04/21/94
PROJECT NO.	94016

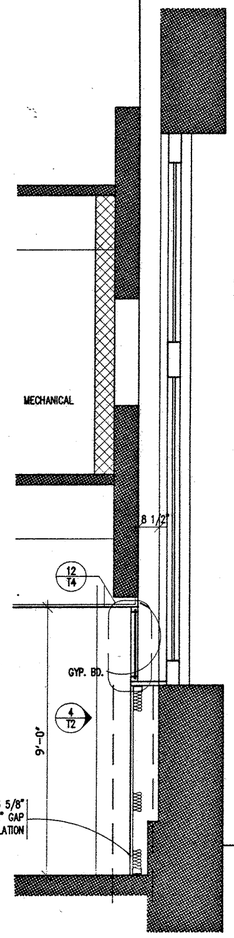
DESIGN	DRAWN	CH'KD.



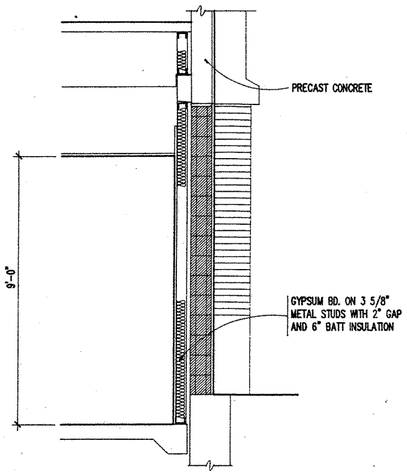
SECTION THRU TALL WINDOW 9/T-3
SCALE : 1/2" = 1'-0"

SECTION THRU TALL WINDOW 8/T-3
SCALE : 1/2" = 1'-0"

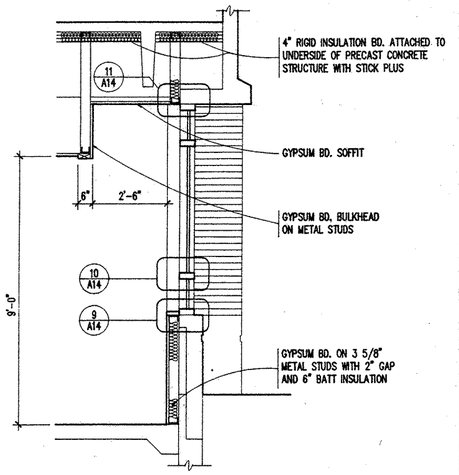




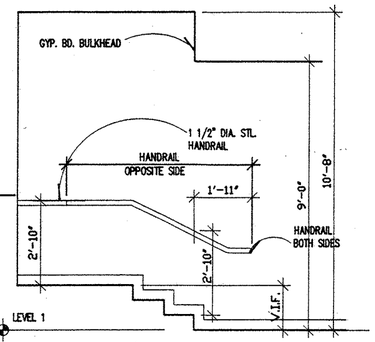
SECTION THRU TALL WINDOW 6/T-3
SCALE : 1/2" = 1'-0"



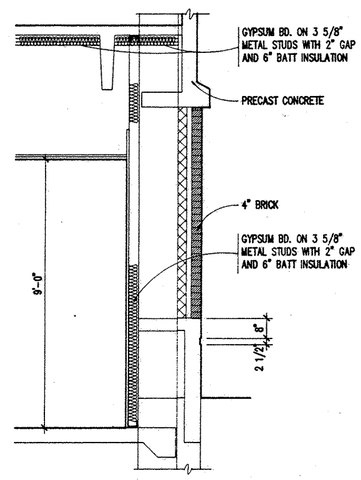
WALL SECTION @ STUCCO INFILL 7/T-3
SCALE : 1/2" = 1'-0"



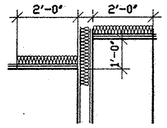
WALL SECTION @ WINDOWS 5/T-3
SCALE : 1/2" = 1'-0"



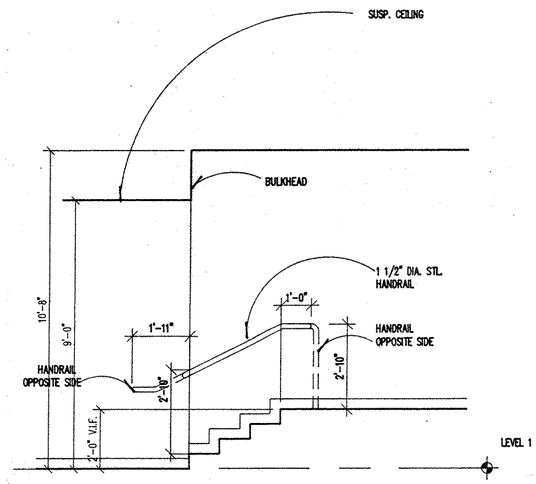
SECTION @ STAIR 1/T-3
SCALE : 1/2" = 1'-0"



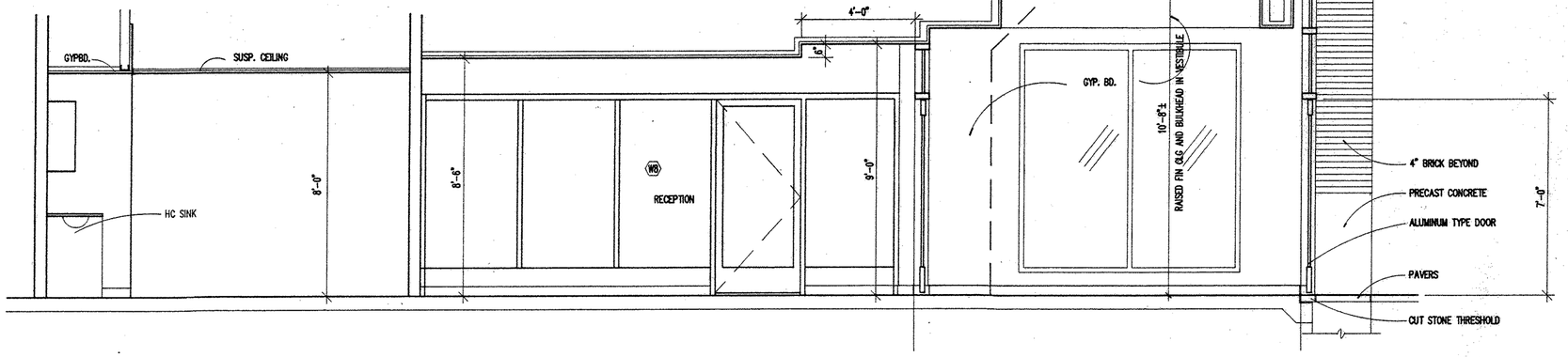
WALL SECTION @ PIERS 4/T-3
SCALE : 1/2" = 1'-0"



SECTION @ CLG. HT. CHANGE 10/T-3
SCALE : 1/2" = 1'-0"



SECTION @ STAIR 2/T-3
SCALE : 1/2" = 1'-0"



SECTION THRU VESTIBULE 3/T-3
SCALE : 1/2" = 1'-0"

940241-3

25-APR-94 1"=2'

WHITING-TURNER
CONTRACTING COMPANY

DESMAN BWJ INC.
ASSOCIATES ARCHITECTS

BURDETTE, KOELER, MURPHY
& ASSOCIATES, INC. M.E.P. ENGINEERS

BWJ
Inc. Architects
270 Park Avenue Tower Fulton, Maryland 20759
(410) 792-0450 FAX (410) 792-0395

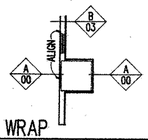
PENN STREET PARKING FACILITY
UNIVERSITY OF MARYLAND AT BALTIMORE

NO.	DATE	BY
REVISIONS		

TENANT SECTIONS & DETAILS

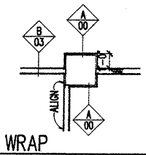
DRAWING NO. T-3

SCALE:	1/2" = 1'-0"
DATE:	04/21/94
PROJECT NO.	94026
DESIGN	DRAWN	CH'KD.



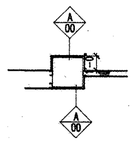
COLUMN WRAP — 7 / T-4

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



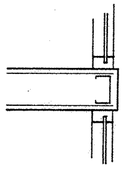
COLUMN WRAP — 8 / T-4

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



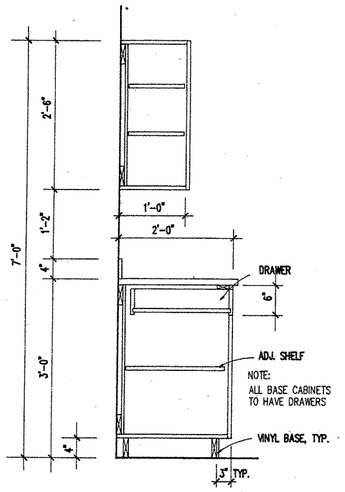
COLUMN WRAP — 9 / T-4

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



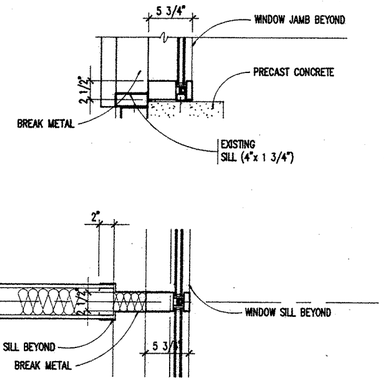
WINDOW @ HISTORIC WINDOW — 5 / T-4

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



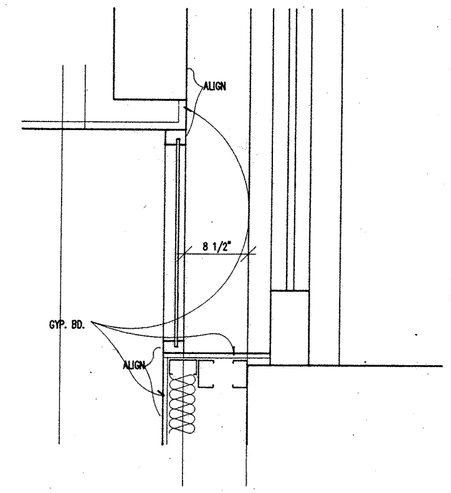
CABINET SECTION — 11 / T-4

SCALE :1" = 1'-0"



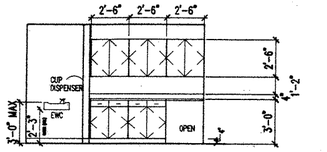
WALL @ MULLION — 3 / T-4

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



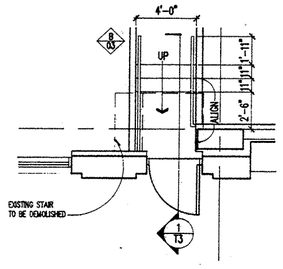
WINDOW @ HISTORIC WINDOW — 12 / T-4

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



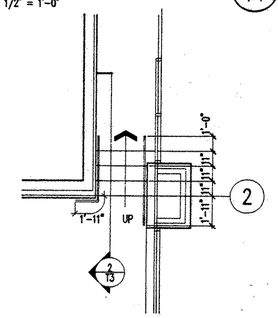
KITCHEN ELEVATION — 10 / T-4

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



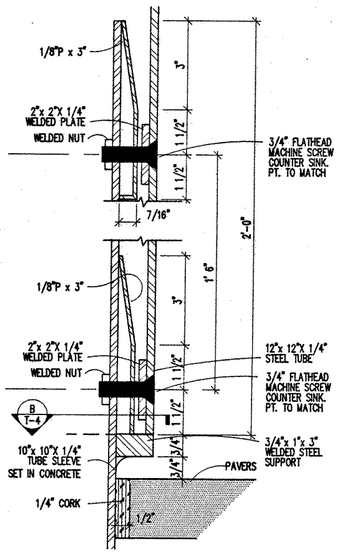
STAIR — 1 / T-4

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



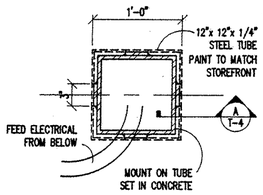
STAIR — 2 / T-4

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



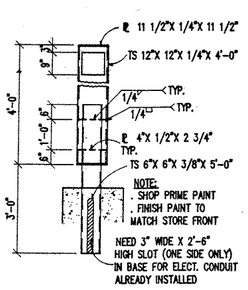
INTERCOM PEDISTAL BASE SEC. — A / T-4

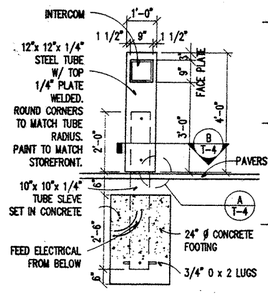
SCALE :6" = 1'-0"



INTERCOM PEDISTAL BASE PLAN — B / T-4

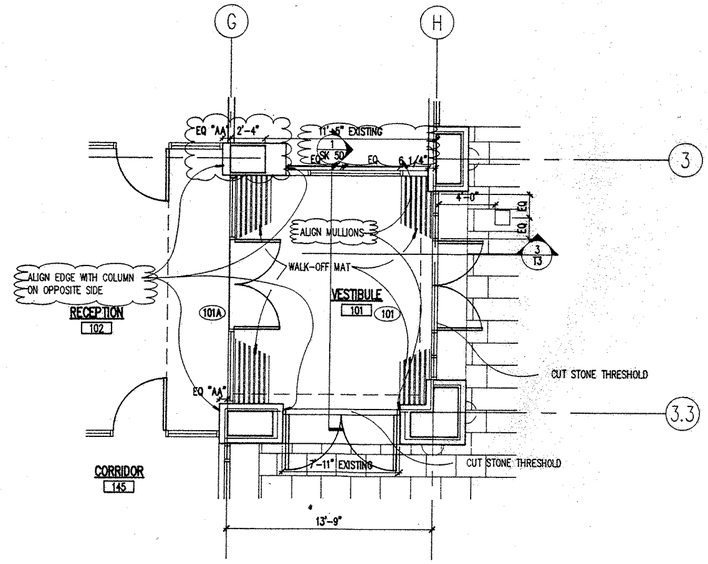
SCALE :1 1/2" = 1'-0"





INTERCOM PEDISTAL — 6 / T-4

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



VESTIBULE — 4 / T-4

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

WHITING-TURNER
CONTRACTING COMPANY

DESMAN BWJ INC.
ASSOCIATES ARCHITECTS

RUDDETTE, KOEHLER, MURPHY
& ASSOCIATES, INC. M.E.P. ENGINEERS

BWJ
Inc. ARCHITECTS
225 Reinekers Boulevard, Suite 325, Lanham 20706
410-451-2900/FAX 410-242-2899

PENN STREET PARKING FACILITY

UNIVERSITY OF MARYLAND AT BALTIMORE

NO.	DATE	BY
REVISIONS		

TENANT PLAN & MISC. DETAILS

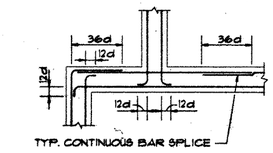
DRAWING NO.

T-4

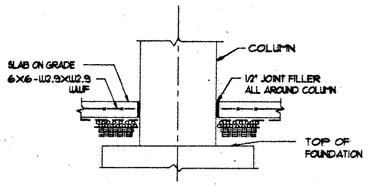
SCALE:	1/4" = 1'-0"
DATE:	04/21/94
PROJECT NO.	94016
DESIGN	DRAWN / CH'KD.

94024T-4

25-APR-94 1"=4'

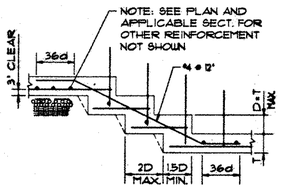


BAR SPLICES IN WALL (DOUBLE LAYER) (1 S-1)

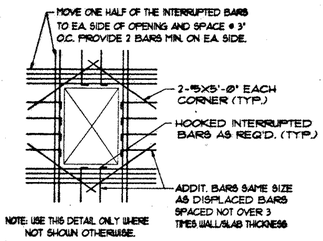


TYP COLUMN/SLAB SECTION (2 S-1)

NOTE: THIS DETAIL IS ONLY APPLIED WHERE THERE ARE COLUMN ISOLATION JOINTS AS SHOWN ON 6/S-6.

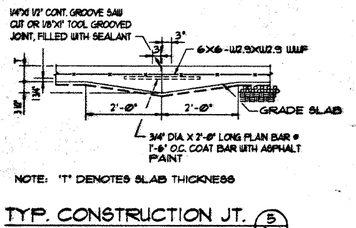


TYP. STEPPED WALL FOOTING DETAIL (3 S-1)



NOTE: USE THIS DETAIL ONLY WHERE NOT SHOWN OTHERWISE.

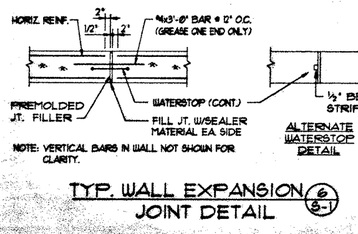
TYP. WALL/SLAB OPENING DETAIL (4 S-1)



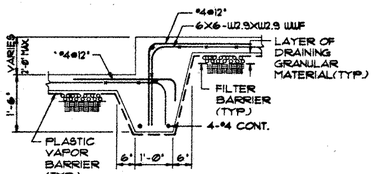
NOTE: 'T' DENOTES SLAB THICKNESS

TYP. CONSTRUCTION JT. DETAIL (5 S-1)

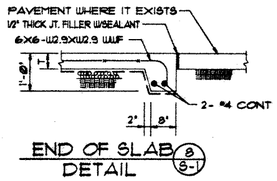
NOTE: THIS JOINT TO BE USED ONLY WHEN POURING CEASES FOR MORE THAN 30 MINUTES AND TO BE LOCATED ONLY WHERE A CONTROL JOINT WOULD OCCUR.



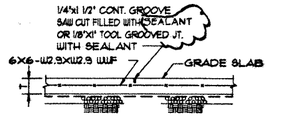
TYP. WALL EXPANSION JOINT DETAIL (6 S-1)



TYP. SLAB DEPRESSION SECTION (7 S-1)

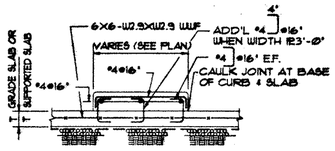


END OF SLAB DETAIL (8 S-1)



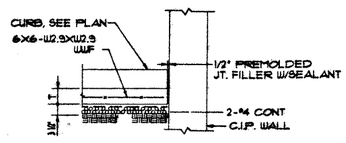
TYP. CONTROL JT. DETAIL (9 S-1)

NOTES: 1. NOT TO EXCEED 25'-0" IN EACH DIRECTION OR AS SHOWN ON PLANS.
2. EXTEND JT. TO CURB IF APPLICABLE.

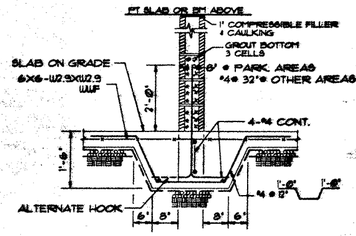


NOTE: USE ONLY WHERE NOT SHOWN OTHERWISE.

TYP. CURB REINFORCEMENT (10 S-1)

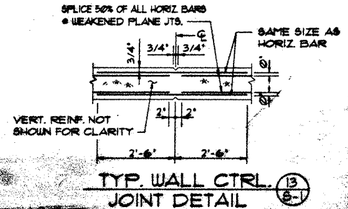


TYP. WALL/SLAB SECTION (11 S-1)

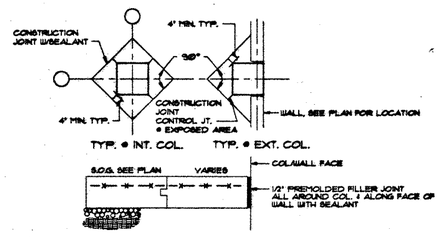


TYP. FOUND. OF INTERIOR NON-BEARING WALL (12 S-1)

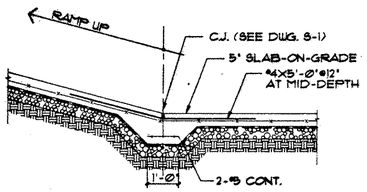
NOTE: REINFORCEMENT IN WALL ON ELEVATED FLOOR IS SIMILAR



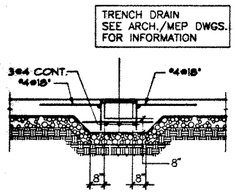
TYP. WALL CTRL. JOINT DETAIL (13 S-1)



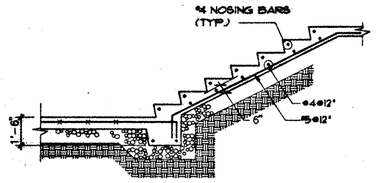
TYP. CONSTR. JT. AT COL. WALL (14 S-1)



SECTION AT RAMP (15 S-1)



TRENCH DRAIN SECTION (16 S-1)



TYP. STAIR ON GRADE SECTION (17 S-1)

DESIGN LOADS

A. DEAD LOADS
- STRUCTURE + CURB (IF APPLICABLE SEE PLAN)
- P.C. & MASONRY WALLS (SEE ARCH. DWGS.)

B. LIVE LOADS
- PARKING AREAS 50 PSF OR 2000 LB CONCENTRATED LOAD ACTING ON 20 SQ IN AREA
- STAIRS & ELEVATOR LOBBY 100 PSF
- OFFICE AREAS 100 PSF
- STORAGE AREAS 125 PSF
- MECHANICAL ROOMS 150 PSF
- SNOW 20 PSF+DRIFTS
- ROOF LEVEL FULL LIVE LOAD PLUS FULL SNOW LOAD

C. LATERAL LOADS
- WIND LOADS PER ASCE 7-88,90 MPH, EXPOSURE B
- SEISMIC LOADS
EFFECTIVE PEAK VELOCITY-RELATED ACCELERATION < 0.05

NOTES:

1. Precast spandrel walls shall be designed for a minimum horizontal impact load of 10,000 pounds applied at a height of 1'-6" above the floor at any point along the structure.
2. Double-Tee flanges shall be designed for a minimum concentrated vertical load of 2,000 pounds acting on an area of 20 square inches.
3. All calculations and drawings shall be stamped and signed by a Professional Engineer registered in the state of Maryland.

GENERAL STRUCTURAL NOTES

A. GENERAL NOTES:

The following notes shall apply unless otherwise shown or noted on the plans:
1. All design and construction shall be in accordance with:
   a. ACI-318-89 Code
   b. BOCA-1990 as amended
   c. AISC (9th Edition)
2. The Contractor shall verify all dimensions in the field prior to commencing work. The Architect shall be notified of any discrepancies which may exist.
3. All inspection shall be made as specified below:
   a. All concrete having a strength in excess of 3000 psi.
   b. All prestressing.
   c. All welding.
   d. All masonry.
4. All material tests shall be made as specified. Concrete test cylinders shall be made for all concrete. Test results shall be submitted to the Owner and Architect. Tests shall be made by an approved laboratory.
5. See Drawings for elevations (Minimum head clearance between girders and finished floor shall be 7'-6").
6. Shop drawings for plumbing shall be provided before construction of concrete frame so that location of sleeves can be determined.
7. Forms for slab soffits shall be tight and leakproof. Contractor shall take special precautions at construction joints where camber due to prestressing may take place.
8. All details, sections and notes shown on drawings are intended to be typical and shall apply to similar situations elsewhere, unless otherwise shown.
9. Contractor to supply all chairs, support bars and accessories to insure proper placement of all reinforcing bars, mesh and/or cable.
10. The contractor shall notify A/E of any conflicts between contract drawing and specifications and request for direction in writing prior to fabrication and construction.

B. MATERIALS

1. Concrete
   a. Concrete strengths shall be as follows:
      1. Footings and Caissons: Stone aggregate f'c= 4000 psi @ 28 days.
      2. Foundation walls, sidewalks and concrete not specified: f'c= 4000 psi @ 28 days.
      3. Traffic bearing slab-on-grade: Stone aggregate mircosilica f'c= 5000 psi @ 28 days w/fiber mesh and epoxy coated W.W.M.
      4. Curb: Stone aggregate mircosilica f'c= 4000 psi @ 28 days w/fiber mesh and epoxy coated reinforcement.
      5. Precast walls, panels, stairs, spandrels and beams: Stone aggregate f'c= 5000 psi @ 28 days. Add microsilica as specified.
      6. Precast prestressed double tees: f'c= 5000 psi @ 28 days.
      7. Cast-in-place topping and pour stripe: Stone aggregate with microsilica f'c= 5000 psi @ 28 days.
      8. Precast Columns: Stone aggregate with mircosilica f'c= 5000 psi @ 28 days.
   b. Concrete mix designs shall be made by an approved laboratory for all concrete and shall be submitted to the Architect and Engineer for approval before use. Maximum water/cement ratio = 0.37 for 5000 psi concrete and 0.45 for 4000 psi concrete.
   c. Fine and coarse aggregates shall be stone aggregates conforming to ASTM C33-86.
   d. Cement shall be Portland Type I conforming to ASTM C150-89. All exposed concrete shall be air entrained, (5% ± 1%)
   e. All reinforcing steel shall conform to ASTM A615-89 (60,000 psi yield) and shall be used throughout the job with the exception of steel used in welded connections which shall be ASTM-A706-84. Welded wire shall conform to ASTM A185-88. All reinforcing and W.W.F. epoxy coated.
   f. 7-wire strand for prestressing shall conform to ASTM A416. Minimum ultimate tensile strength shall be 270,000 psi. Wire shall be stress relieved, clean and free from corrosion.
   g. 1/4" diameter wires for prestressing shall conform to ASTM A421. Minimum ultimate tensile strength shall be 240,000 psi. Wire shall be stress relieved clean and free from corrosion.
   h. Fiber mesh shall be 100% virgin polypropelene fibrillated fibers.
2. Steel
   a. Structural steel shall conform to ASTM-A36. Pipe to conform to ASTM-A53, Grade A or B. Light gauge structural steel shall conform to either ASTM-A245 or ASTM-A303.
   b. Welding of structural steel (ASTM-A36) shall be with E70XX electrode.
   c. All welding of reinforcing shall be done with E90XX electrodes in accordance with A.W.S. Specifications D1.4-79.

C. REINFORCED CONCRETE NOTES

1. Concrete shall not be dropped through reinforcing steel, (as in walls) so as to cause segregation of aggregates in such cases, hopper or vertical chutes or trunks shall be used. Chutes or trunks shall be of variable lengths so that the free unconfined fall of concrete shall not exceed six (6) feet and a sufficient number shall be used to insure the concrete being kept level at all times.
2. All dimensions shown for location of reinforcing are to the face of main bars and denote clear coverage. For beams and tied columns, dimensions are to main bars. Unless specifically noted, concrete coverages to reinforcing steel (not prestressing steel) shall be as follows:
   3 inches where concrete is deposited directly against earth
   2 inches for main bars of tied columns.
   1-1/2 inches for wall bars unless otherwise shown, #5 or smaller.
   2 inches for wall bars #6 or larger.
   1-1/2 inches for bars in beams (1-1/2" bott. & 2-1/2" top)
   2 inches top steel for slabs.
3. Splice in continuous reinforcement as in walls, wall footings, etc. shall meet the embedment and lap lengths required by ACI-318-89 Code and the splices in adjacent bars shall not be less than five (5) feet apart. Vertical wall bars shall be spliced at or near floor lines. Bars may be wired together at splices or laps except for top reinforcing of beams and slabs or where definitely detailed to be separated. See beam details or schedules for separation of beam or girder bars over supports. Continuous bars in spandrels, wall beams, etc. shall lap as follows: Top bars at center line span, bottom bars at center line supports.
4. All walls shall be dowelled to footings, walls, beams or slabs with bars of the same size and spacing as the wall bars, except where specifically indicated otherwise, with 36 diameter embedment minimum.
5. See Architectural and Mechanical drawings for size and location of wall and floor openings, wall offsets, provisions for future equipment, stair details, pipe, vent, duct and other openings and details not shown on Structural drawings. See Electrical drawings for attachment or mounting of light fixtures, light standards, and other supports and openings for electrical equipment.
6. All reinforcing steel details shall be in accordance with the Manual of Standard Practice for Detailing Reinforcing Concrete Structures, ACI 315-80(88) and 315R-80(88).
7. The precast concrete wall suppliers shall submit all design & fabrication details with calculations signed and sealed by a licensed professional engineer in the State of Maryland to the Architect for review.
8. All exposed steel plates and angles for exterior wall connections shall be galvanized steel.
9. Minimum lap splice for epoxy coated shall be 50 bar dia.

D. MASONRY NOTES

1. All concrete masonry units shall conform to ASTM C90-59, Grade A with an ultimate compressive strength f'm=1200 psi, and shall be stored under cover on the job.
2. Grout shall be fluid consistency. Grout mix shall be on part Portland Cement to three parts sand for grout spaces less than 4" in any direction, and for grout spaces more than 4" in any direction, the grout mix may contain an additional two parts of pea gravel. Grout shall have a minimum strength of 3000 psi @ 28 days. All cells grouted where required.
3. Mortar shall be freshly prepared and uniformly mixed in a loose volume ratio of one part Portland Cement, 4 parts sand and at least 1/2 part lime putty or hydrated lime, but not more than 1/2 part.
4. All lintels to be 2 angles 5"x3 1/2x3/8" minimum of 6" bearing, or as shown.

E. PRESTRESSED CONCRETE NOTES

1. One sample of prestress wire or strand from each reel or heat shall be tested by an approved laboratory. Results to be submitted to Architect prior to construction.
2. Records shall be kept of all jacking forces and elongations. Precast contractor shall promptly submit records to the Architect.
3. Concrete strengths at transfer of prestress force to concrete shall be at least 3500 psi or as required by design.
4. All inserts for suspended mechanical and architectural work shall be cast-in-place whenever feasible. When additional fasteners are required, only those that are anchored in drilled holes are preferred. Location of holes to be drilled in concrete shall be approved by the architect prior to drilling.
5. Shop drawings showing all details of end anchorages, connections, blockouts or holes, inserts, and other prestressing details shall be submitted to the Architect for approval before construction. All reinforcement shall be shown.
6. All pockets required for anchorage, shall be adequately reinforced as not to decrease the strength of the structure. All pockets shall be water proofed so as to eliminate water leakage through the pocket. Top of floors shall be true to indicated elevations. Variations shall not exceed 1/4" from fin. floor elev. Care must be exercised in the finishing operations to obtain a true surface.
7. The floor slabs shall be finished as noted.
8. All connection bolts, nuts, washers and "T" flange connections shall be of stainless steel type 304 ASTM A276/A666. All coil rod and coil inserts shall have yield strength of 65 KSI and shall be hot-dipped galvanized. All other hardware shall be hot-dipped galvanized. The damaged galvanizing shall be cleaned before applying 2 coats of ZRC paint.
9. Maximum permissible erection tolerance for elevation difference between untopped TT shall be 1/4".
10. Mesh in top of p.c. tees to be epoxy coated.
11. Power driven fasteners shall not be permitted.

Bearing Pads:
Use chloroprene (neoprene) pads conforming to Division II, Section 25 of AASHTO Standard Specifications for Highway Bridges.

Use random-fiber reinforced elastomeric bearing pads under beams unless noted.

Grout
1. Dry-pack grout under column plates shall be non-shrink with minimum f'c=8000 psi @ 28 days. Mix and install in accordance with Manufacturer's recommendations.
2. Dry-packing under-column base plates shall be in place at least 16 hours before erection of precast beams unless otherwise approved by the Architect/Engineer.
3. All other grout shall be proportioned one part Portland Cement to three parts clean, sharp sand. Minimum f'c=4000 psi @ 28 days.

F. PRECAST ERECTION

1. Erection Sequence and Requirements:
   A. Brace columns in N-S and E-W direction against erection loads and all lateral load during erection.
   B. Dry-pack under all column base plates.
   C. Place spandrels and/or ledger beams.
   D. Bolt the connection fully tight.
   E. Bolt the top connection fully tight.
   F. Erect tees and weld tee flange connections where required.
   G. Thread coil rods along spandrels to extend into C.I.P. topping.
   H. Place topping reinforcement and concrete topping.
   I. Grout between all members as required.
   J. Remove bracing after grout has attained required strength.
   K. All erection hardware shall be hot dip galvanized.
2. No deviations from the above sequence and requirements shall be allowed without the approval of the Architect/Engineer.

G. FOUNDATION NOTES

1. All foundation construction shall be performed as per the recommendations in the geotechnical report prepared by Schnabel Engineers and verified by the inspection and testing agency.
2. All anchor bolts, reglets, dowels, and miscellaneous items to be cast in concrete shall be secured in place in the forms before placing concrete. All anchor bolts shall be placed accurately by use of templates.
3. Minimum bearing capacity of controlled fill supporting retaining wall shall be 3000 PSF. Retaining wall backfill should consist of granular soils compacted to minimum of 95% of the maximum dry density as determined by the standard moisture density relationship test (ASTM D-698)
4. Fill on both sides of a retaining wall shall be placed simultaneously in such a manner that maximum difference in the fill levels shall not be more than 3'-0" until the lower side is at finished level.
5. All foundation walls shall be adequately braced to withstand backfilling earth, wind pressure, and construction loads until final grades on both sides of the wall are reached and all parts of the structure are installed and have reached design strengths. Horizontal spacing of vertical construction joints shall not exceed 10'-0" or as shown. Expansion joints every 4th construction joint.
6. Minimum soil bearing capacity for all footings shall be verified by the inspection and testing agency.
7. All exterior footings shall be located a minimum of 32 inches below the lowest adjacent exposed grade for frost protection.

WHITING-TURNER CONTRACTING COMPANY
DESMAN ASSOCIATES ARCHITECTS ENGINEERS

PENN STREET PARKING FACILITY
UNIVERSITY OF MARYLAND AT BALTIMORE

NO.	DATE	BY
	REVISIONS	

GENERAL NOTES & TYPICAL DETAILS

DRAWING NO. S-1

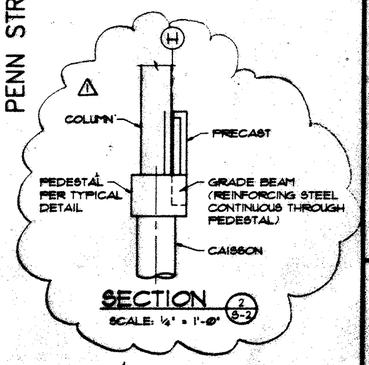
SCALE: NONE
DATE:
PROJECT NO. 4-343

DESIGN	DRAWN	CHKD.
A.P.	J.S.	A.P.

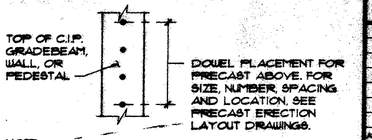
CAISSON SCHEDULE				
TYPE	DIAMETER	VERTICAL BARS SPACE UNIFORMLY	TIES	REMARKS
F1	30"	6#7	#3@14"	
F2	33"	7#8	#3@14"	
F3	36"	7#8	#3@16"	
F4	39"	7#9	#3@16"	
F5	42"	7#9	#3@18"	
F6	45"	7#10	#4@18"	
F7	48"	7#10	#4@18"	
F8	51"	9#10	#4@18"	
F9	54"	9#10	#4@18"	
F10	57"	9#11	#4@18"	
F11	60"	9#11	#4@18"	

GRADE BEAM SCHEDULE					
TYPE	W x D	TOP REINFORCEMENT	BOTTOM REINFORCEMENT	TIES	
~~GB1~~	~~20 x 24~~	~~3 #6~~	~~3 #6~~	~~#4@12"~~	NOT USED
GB2	30 x 36	6-#10	6-#9	2-#4@12"	
GB3	30 x 45	10-#11 (2 LAYERS)	6-#8	#4@18"	
GB4	24 x 54	7-#9	11-#11 (2 LAYERS)	2-#5@6"	
GB5	30 x 36	9-#10	5-#8	2-#4@12"	
GB6	24 x 48	8-#9	8-#9	2-#4@18"	
~~GB7~~	~~24 x 36~~	~~8-#11~~	~~8-#11~~	~~8-#4@6"~~	NOT USED
GB8	30 x 36	5-#8	5-#8	2-#4@12"	
GB9	30 x 45	9-#10	6-#8	2-#4@18"	
GB10	42 x 36	8-#10	8-#10	2-#5@12"	
GB11	30 x 45	6-#9	6-#9	2-#4@18"	

NOTES:
1. VERTICAL REINFORCEMENT IN CAISSONS WILL BE PROVIDED UP TO 3'D' DEPTH OR 10' WHICH EVER IS MAXIMUM. "D" = DIAMETER OF CAISSON.
2. CAISSON MARKED WITH "T" - AS TENSION CAISSON. PROVIDE FULL DEPTH VERTICAL REINFORCEMENT IN THESE CAISSONS.
3. PROVIDE 4-#8 BAR DOWELS FROM CAISSON INTO GRADE BEAM OR RETAINING WALL AS THE CASE MAY BE.
4. TOP OF CAISSON SHOWN THUS (----) ON PLAN.
5. TOP OF CONCRETE PEDESTAL SHOWN THUS [----] ON PLAN.



SECTION 2/S-2
SCALE: ½" = 1'-0"



NOTE: TEMPLATE PLACEMENT REQUIRED. COORDINATE LOCATION WITH PRECASTER. MAXIMUM TOLERANCE SPECIFIED EQUALS (±¼")

TOP OF CAST-IN-PLACE CONCRETE PRECAST ANCHOR DETAIL (TYP.)

1/S-2 FOUNDATION PLAN

SAIL CLOTH FACTORY

PENN STREET

PRATT STREET

WHITING-TURNER
CONTRACTING COMPANY
DESMAN ASSOCIATES
ARCHITECTS ENGINEERS

PENN STREET PARKING FACILITY
UNIVERSITY OF MARYLAND AT BALTIMORE

NO.	DATE	BY
	AS BUILT	5-1-95
2	9-30-93	
1	8/18/93	ISSUED
	REVISIONS	

FOUNDATION PLAN

DRAWING NO. S-2

SCALE:	1/8" = 1'-0"
DATE:	JUNE 1993
PROJECT NO.	J-343
DESIGN / DRAWN / CHKD.	

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ARCHITECTS ENGINEERS

PENN STREET PARKING FACILITY
UNIVERSITY OF MARYLAND AT BALTIMORE

NO.	DATE	BY	REVISIONS
ADDENDUM 5	6-15-93		

SECOND FLOOR PLAN

DRAWING NO. S-4

SCALE: 1/8"=1'-0"
DATE: JUNE, 1993
PROJECT NO. 4548
DESIGN | DRAWN | CHKD.
KEL | SPC | AP

SECTION 1/S4

8" CLIP CURB
8"
2-HR WALL SEE ARCH
#4 L @ 18" O.C.
#4 CONT
CLIP TOPPING
PRECAST

1 SECOND FLOOR PLAN
S-4
RELATIVE ELEVATION = 57.00

ELEVATOR LOBBY
ELEV #1
ELEV #2
ELEV #3
MB-18
UP
STAIR #1
EDGE OF 2" WASH IN TOPPING (TYP.)
CLIP CONCRETE TOPPING (TYP.)
RAMP UP
10'-0" (TYP.)
2'-0"
MIN. 2½" THICK CLIP CONCRETE TOPPING (TYP.)
LIMIT SLAB ON GRADE
MASONRY WALL ABOVE 8" THK CONC CURB TOP OF CURB 5'-1"
FLOOR PENETRATION W/6" CONCRETE CURB AROUND
MINIMUM 2½" THICK CLIP CONCRETE TOPPING W/6" CONCRETE PADS FOR MECHANICAL EQUIPMENT
OPEN TO BELOW
2-HR WALL SEE ARCH
STAIR #2
DN

1'-4" 2'-6" 12'-0" 9'-6" 16'-0" 17'-0" 17'-0" 13'-8" 27'-4" 14'-8" 26'-4" 2'-6" 10" 1'-6"
176'-10"
1 1.1 1.3 1.4 1.7 2 2.5 2.7 3 3.3 3.6 3.7 3.8 4
A A.1 B B.1 B.9 C C.4 D D.6 E E.1 F F.2 F.6 G H
1'-2" 10" 10'-11" 26'-0" 13'-1" 16'-11" 17'-1" 180'-4" 12'-11" 2'-7" 27'-5" 6'-7" 11'-8½" 13'-9" 2'-2"

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UNIVERSITY OF MARYLAND AT BALTIMORE

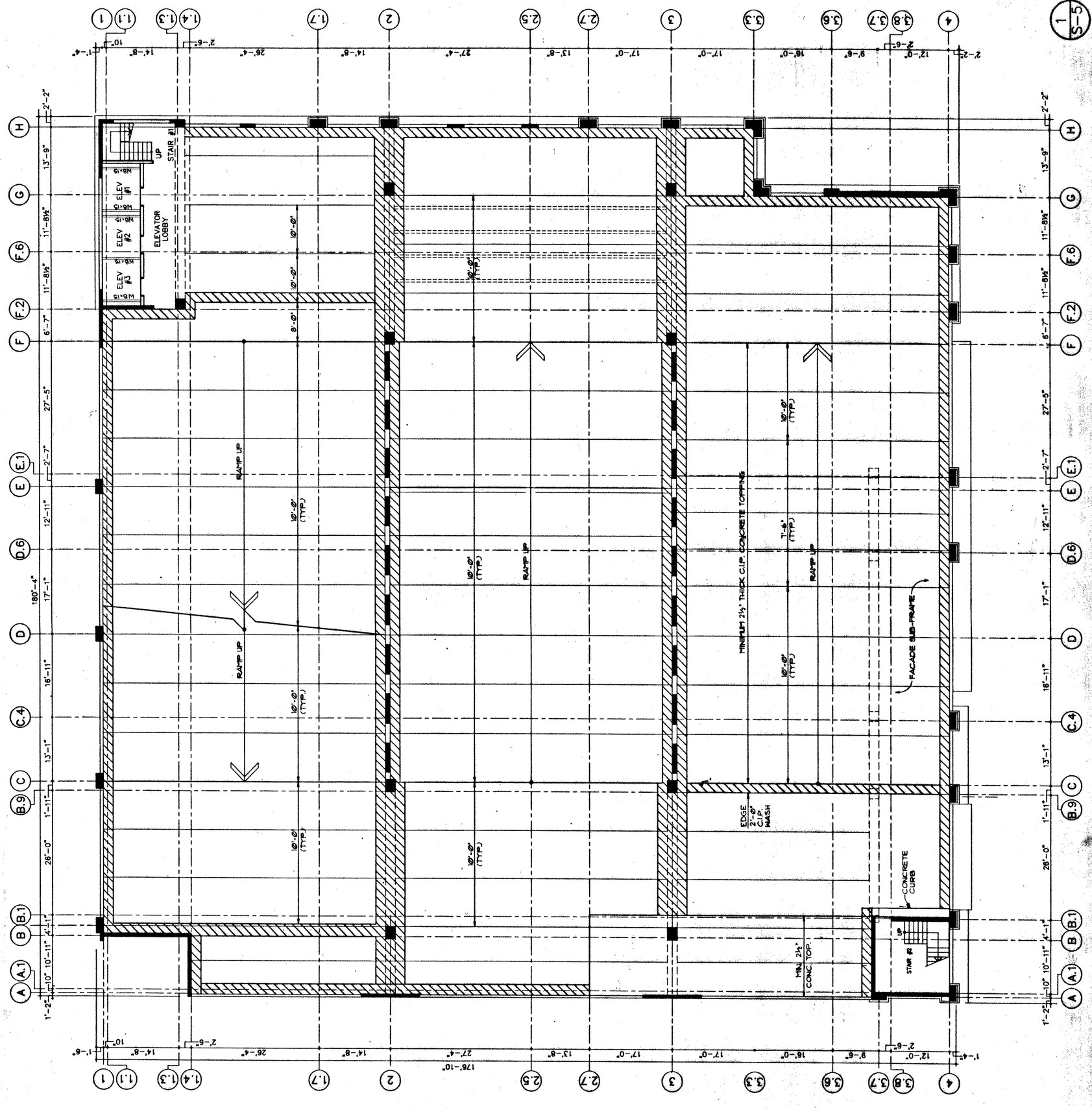
NO.	DATE	BY	REVISIONS
49 BULL	5-1-16		

THIRD FLOOR PLAN

DRAWING NO. S-5

SCALE: 1/8"=1'-0"
DATE:
PROJECT NO. J-348
DESIGN | DRAWN | CHKD.

1 S-5 THIRD LEVEL PLAN
RELATIVE ELEVATION = 66.50



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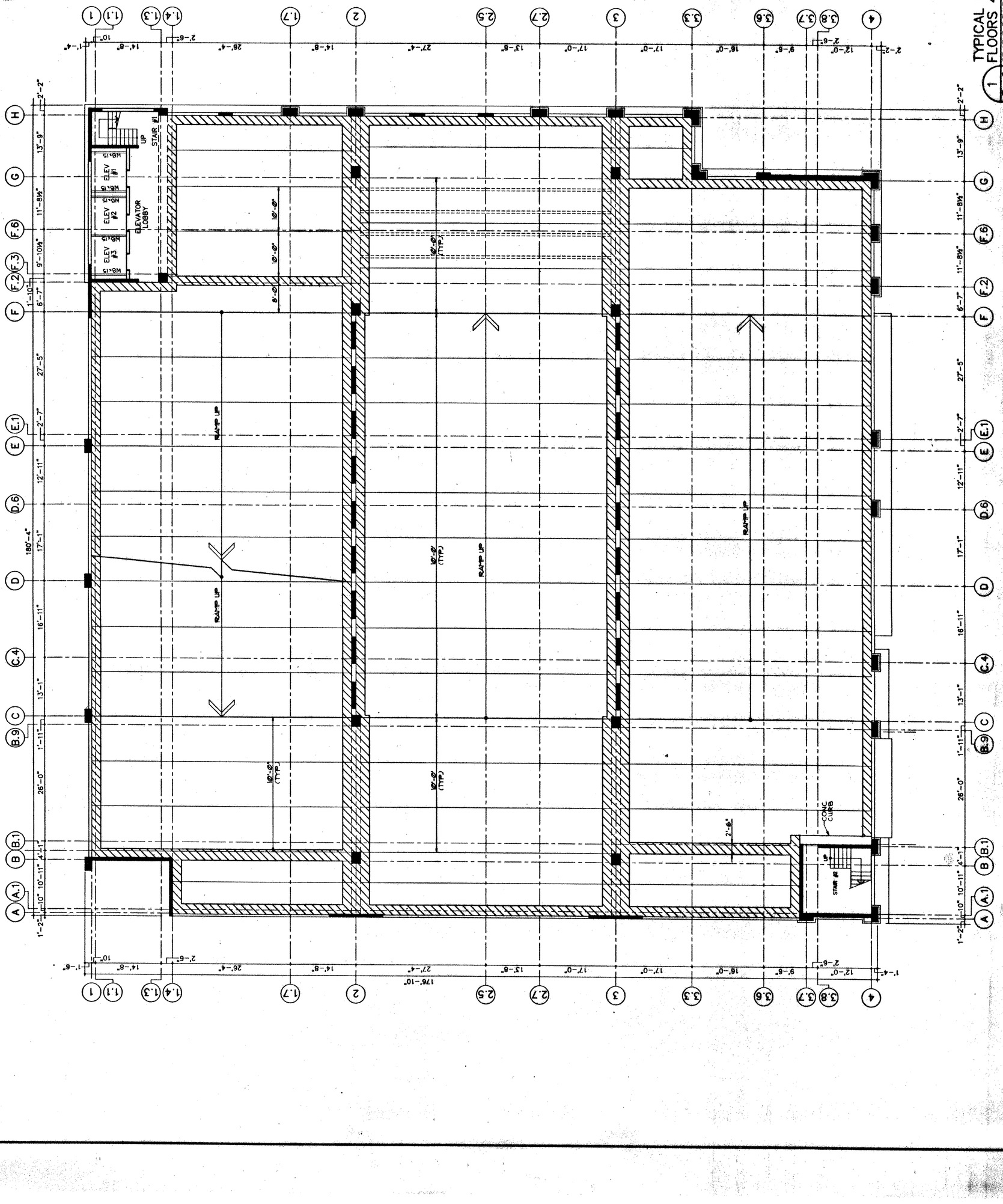
PENN STREET PARKING FACILITY
UNIVERSITY OF MARYLAND AT BALTIMORE

NO.	DATE	REVISIONS	BY
AS BUILT	5-14-95		

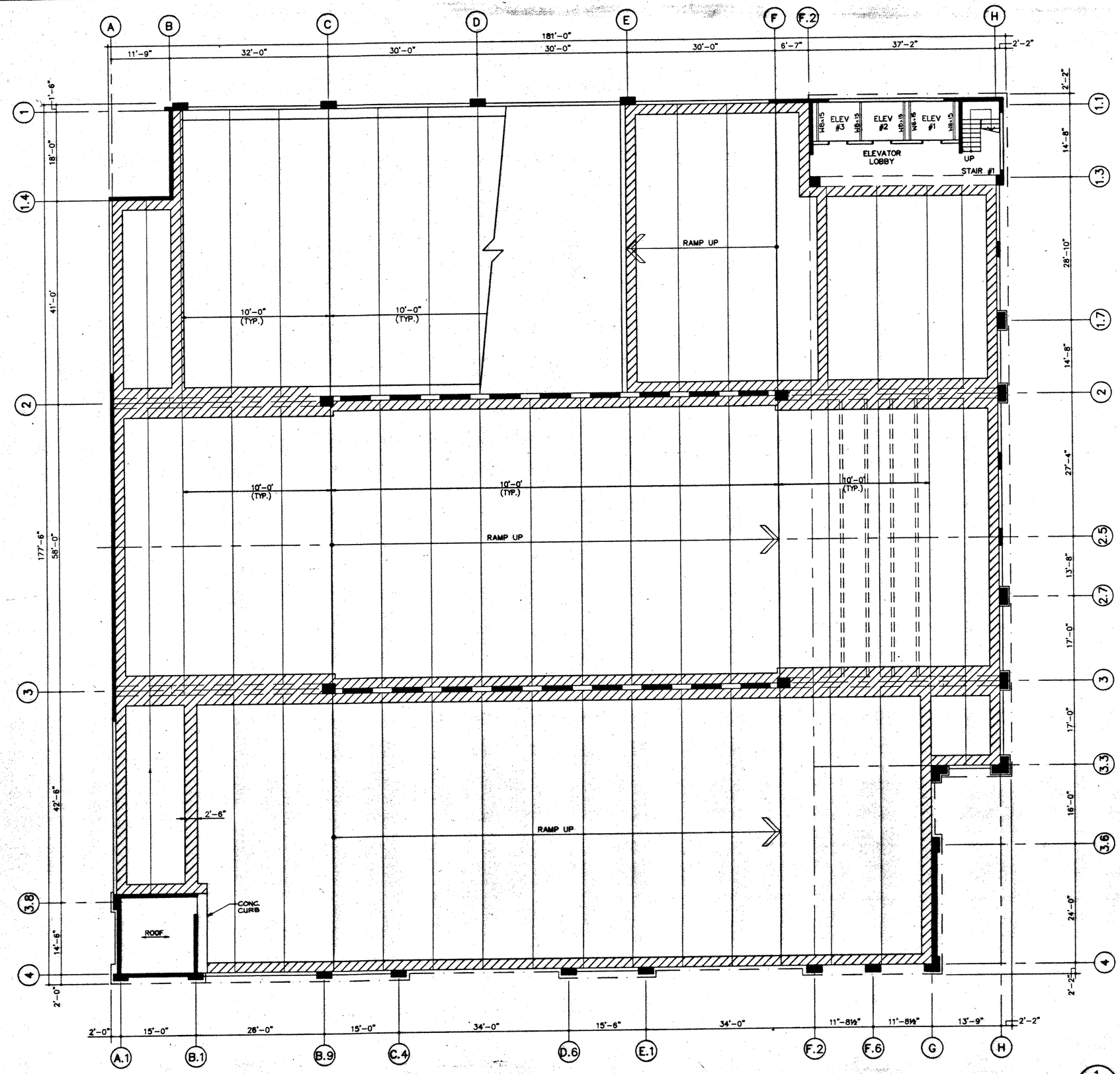
TYPICAL FLOOR PLAN FLOORS 4-9

DRAWING NO. S-6

SCALE: 1/8"=1'-0"
DATE: JUNE, 1993
PROJECT NO. J-343
DESIGN | DRAWN | CHKD.
FILE: B.P. | A.P.



TYPICAL FLOOR PLAN
FLOORS 4 THRU 9
1 S-6
RELATIVE ELEVATIONS = 76.50, 86.50, 96.50, 106.50, 116.50, & 126.50



1 S-7 ROOF LEVEL FLOOR PLAN

RELATIVE ELEVATION = 136.50

WHITING-TURNER
CONTRACTING COMPANY

DESMAN ASSOCIATES
ARCHITECTS ENGINEERS

PENN STREET PARKING FACILITY

UNIVERSITY OF MARYLAND AT BALTIMORE

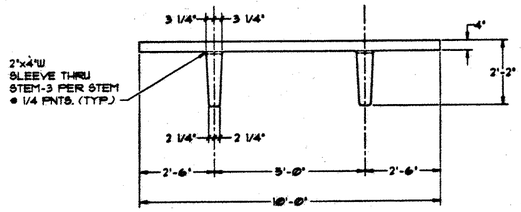
NO.	DATE	BY
AS BUILT	5-1-95	

REVISIONS

ROOF LEVEL FLOOR PLAN

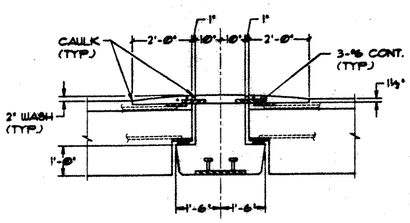
DRAWING NO. S-7

SCALE:	1/8"=1'-0"	
DATE:	JUNE, 1993	
PROJECT NO.	J-343	
DESIGN	DRAWN	CH'KD.
R.B.	B.P.	A.P.

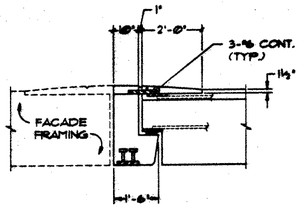


ADDITIONAL HOLES:
PROVIDE ADDITIONAL SLEEVED PENETRATIONS AS REQUIRED FOR ELECTRICAL, MECHANICAL AND PLUMBING SERVICES.

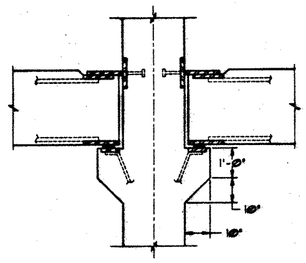
TYPICAL DOUBLE TEE



TYPICAL INVERTED TEE



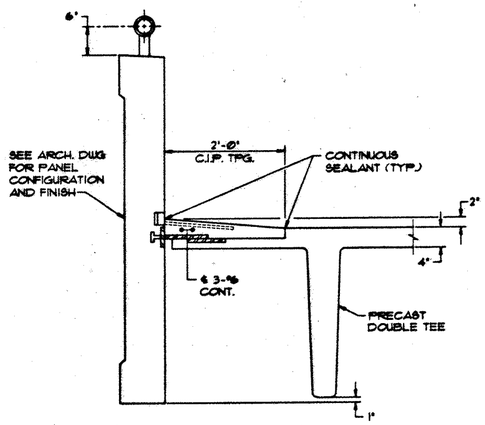
TYPICAL 'L' BEAM



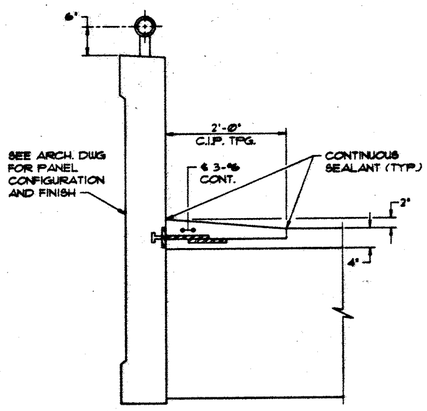
TYPICAL SECTION @ INVERTED "T" BEAM @ COLUMN

GENERAL NOTES:

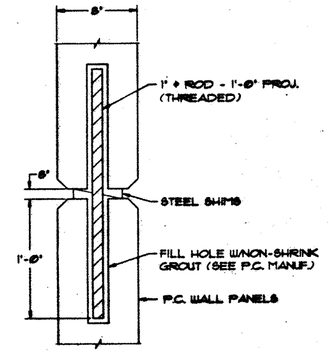
1. SHAPE OF THE PRECAST SECTION SHOWN IS FOR GENERAL CONFIGURATION ONLY. THE ACTUAL SHAPE WILL BE PER ARCHITECTURAL DETAILS.
2. FINISH OF PRECAST UNIT SHALL BE AS SHOWN ON ARCHITECTURAL DRAWINGS OR SELECTED BY SAMPLE PANELS.
3. ANY EMBED OR ANCHORS REQUIRED BY HVAC, SPRINKLER PIPES, PLUMBING, BRICK SHELF ANGLES, MASONARY ANCHORS, ETC., SHALL BE PROVIDED BY PRECAST MANUFACTURER.
4. ALL STRUCTURAL CONNECTIONS PRECAST TO PRECAST SHALL BE GALVANIZED STEEL EXCEPT SHEAR CONNECTORS SHALL BE STAINLESS STEEL.
5. ALL FOUNDATION ANCHOR BOLTS SHALL BE GALVANIZED STEEL. COLUMN BASE PLATES SHALL BE PAINTED STEEL.



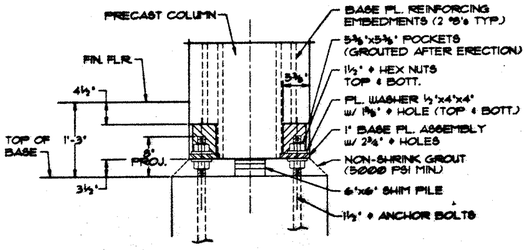
TYPICAL LOAD BEARING SPANDREL DETAIL

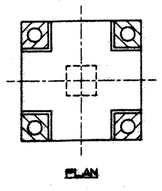


TYPICAL NON-LOAD BEARING SPANDREL DETAIL

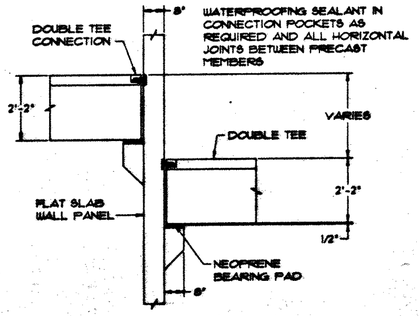


TYPICAL WALL PANEL DETAIL

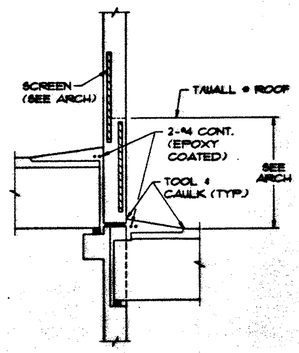




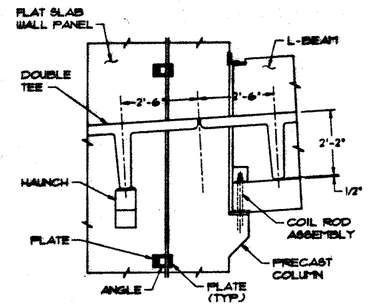
COLUMN TO BASE/FOUNDATION DETAIL



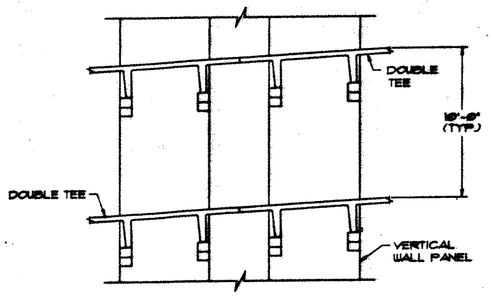
TYPICAL WALL/DOUBLE TEE DETAIL



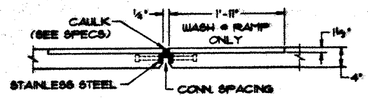
TYPICAL SECTION



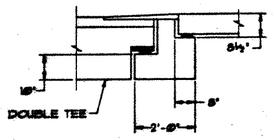
TYPICAL WALL/GIRDER DETAIL



TYPICAL WALL DETAIL



TYPICAL DOUBLE TEE CONNECTION DETAIL



TYPICAL SECTION @ STAIRS

WHITTING-TURNER
CONTRACTING COMPANY
DESMAN ASSOCIATES
ARCHITECTS ENGINEERS

PENN STREET PARKING FACILITY
UNIVERSITY OF MARYLAND AT BALTIMORE

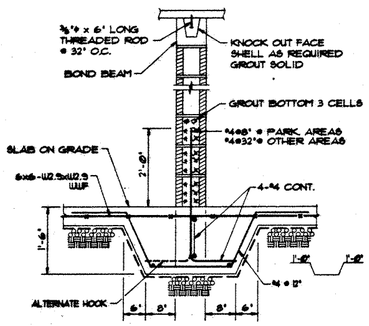
AS BUILT	5-1-95	
NO.	DATE	BY
REVISIONS		

TYPICAL PRECAST DETAILS

DRAWING NO.
S-8

SCALE:	N.T.S.
DATE:	JUNE, 1993
PROJECT NO.	J-343

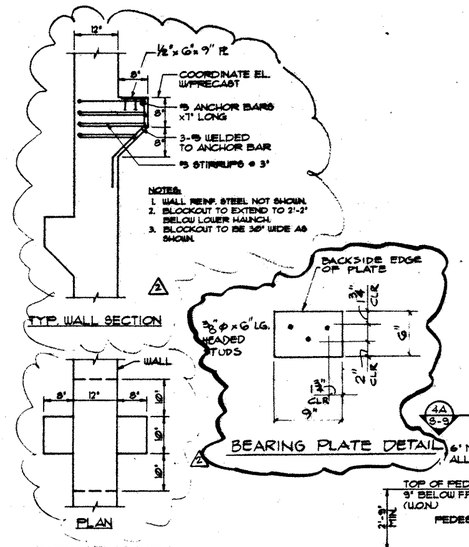
DESIGN	DRAWN	CH'KD.
R.B.	B.P.	A.P.



NOTE: REINFORCEMENT IN WALL ON ELEVATED FLOOR IS SIMILAR

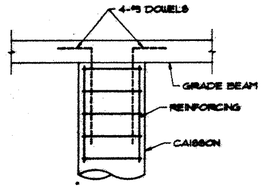
TYPICAL MASONRY INTERIOR NON-BEARING WALL

DETAIL 1 S-9



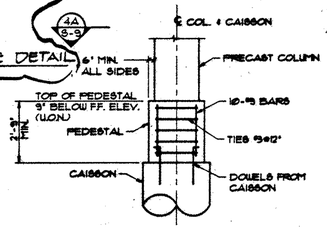
TYPICAL HAUNCH

DETAIL 2 S-9



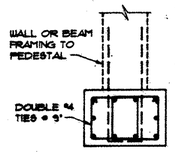
TYPICAL CAISSON AND GRADE BEAM

DETAIL 3 S-9



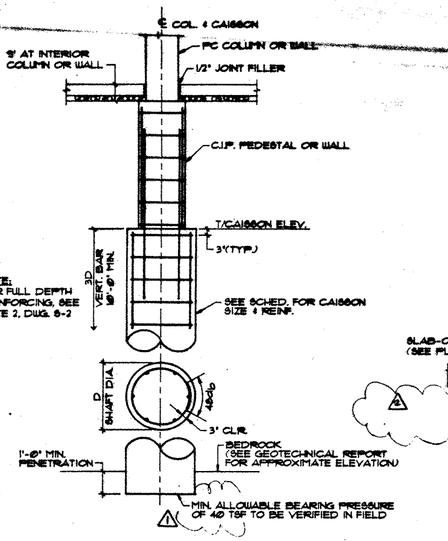
TYPICAL PEDESTAL

DETAIL 4 S-9



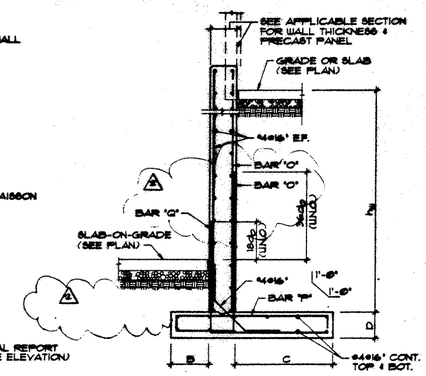
TYPICAL PEDESTAL

PLAN 4A S-9



TYPICAL CAISSON

DETAIL 5 S-9

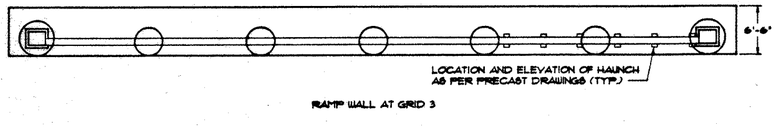


TYPICAL RETAINING WALL

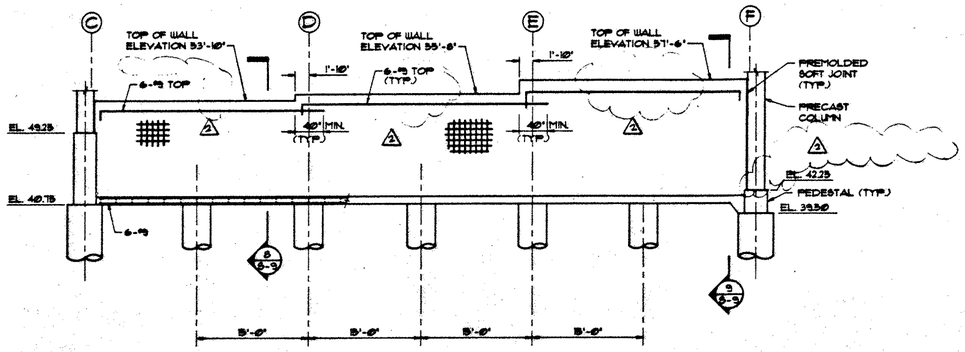
DETAIL 6 S-9

RETAINING WALL SCHEDULE

WALL HT. THIS (FT.)	B	C	D	REINFORCING BARS O	O'	P	Q	Q'	REMARKS
< 5'	6"	1'-6"	1'-0"	-	#4@16"	#4@16"	-	-	EXTEND BARS "O" & "Q" TO TOP
> 5' < 15'	1'-0"	3'-0"	1'-0"	#4@16"	#4@8"	#5@16"	#4@16"	-	
> 15'	1'-6"	4'-2"	1'-3"	#4@16"	#5@8"	#5@12"	#4@16"	-	

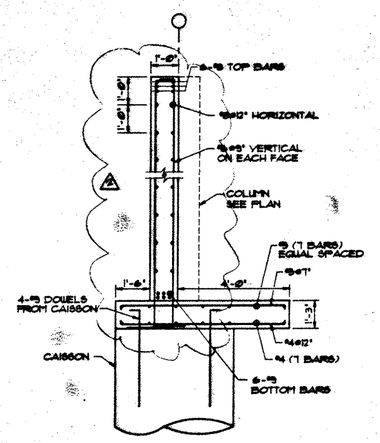


RAMP WALL AT GRID 3

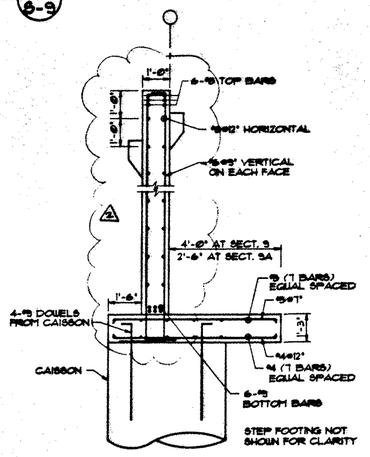


SECTION 7 S-9

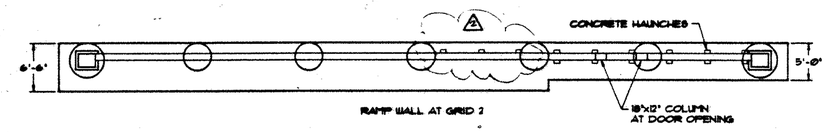
SCALE: 1/8"=1'-0"



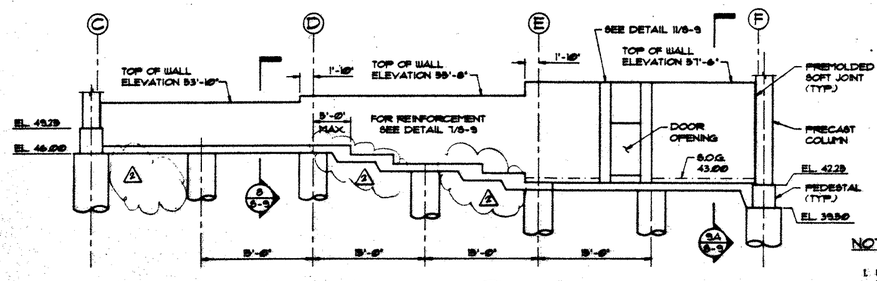
SECTION 8 S-9



SECTION 9 S-9 9A S-9



RAMP WALL AT GRID 2

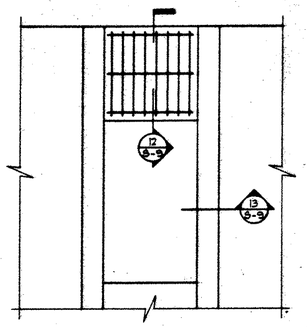


SECTION 10 S-9

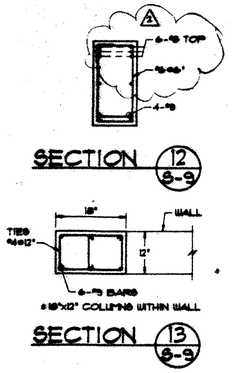
SCALE: 1/8"=1'-0"

NOTES:

1. WHERE WALL/BEAM MEETS PRECAST COLUMN PROVIDE PEDESTAL PER TYPICAL DETAIL.
2. WALL AND PEDESTAL TO BE CAST MONOLITHIC. WALL REINFORCEMENT TO BE TIED TO PEDESTAL.
3. TOP OF WALLS/BEAMS, S.O.G.S AND COLUMN PEDESTALS PER ARCHITECTURAL DETAILS.



DETAIL 11 S-9



SECTION 12 S-9

SECTION 13 S-9

WHITING-TURNER
CONTRACTING COMPANY
DESMAN ASSOCIATES
ARCHITECTS ENGINEERS

PENN STREET PARKING FACILITY
UNIVERSITY OF MARYLAND AT BALTIMORE

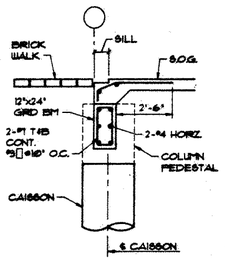
NO.	DATE	BY
AS BUILT	5-1-95	
2	9-30-93	
1	8-18-93	

REVISIONS

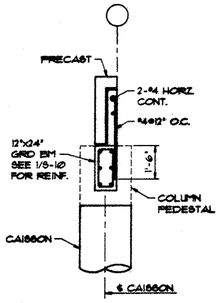
FOUNDATION SECTIONS & TYPICAL DETAILS

DRAWING NO. S-9

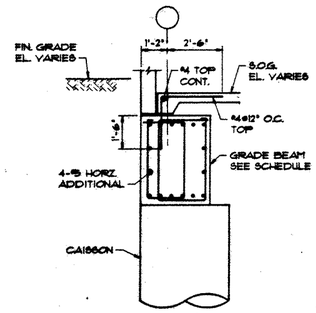
SCALE: N.T.S.
DATE: JUNE 1993
PROJECT NO. J-343
DESIGN R.B. | DRAWN B.P. | CHKD. A.P.



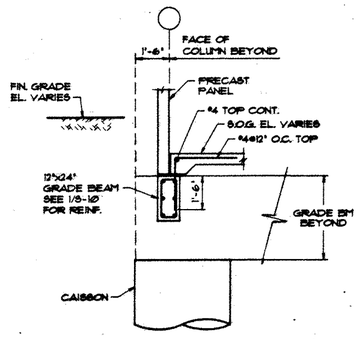
SECTION 1 (S-10)
SCALE: 3/8"=1'-0"



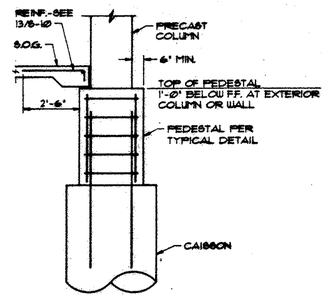
SECTION 2 (S-10)
SCALE: 3/8"=1'-0"



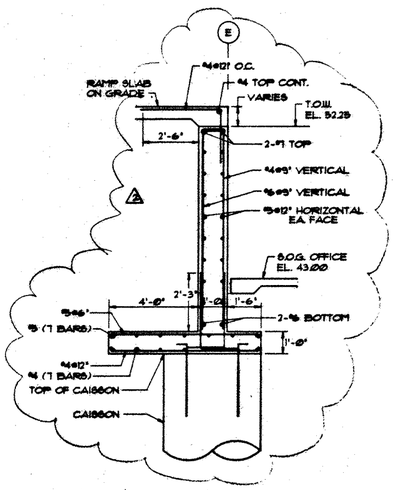
SECTION 3 (S-10)
SCALE: 3/8"=1'-0"



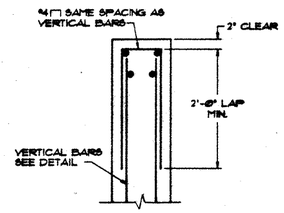
SECTION 4 (S-10)
SCALE: 3/8"=1'-0"



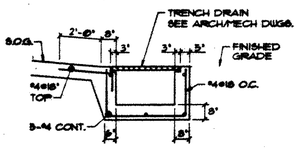
SECTION 5 (S-10)
SCALE: 3/8"=1'-0"



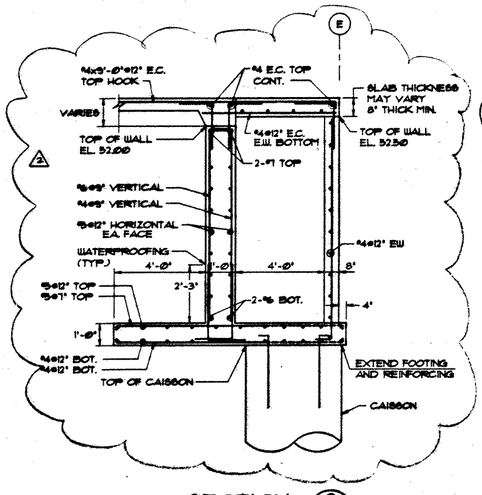
SECTION 6 (S-10)
N.T.S.



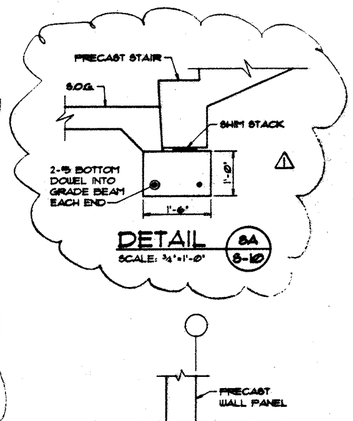
TYPICAL TOP OF WALL
SCALE: 1" = 1'-0"



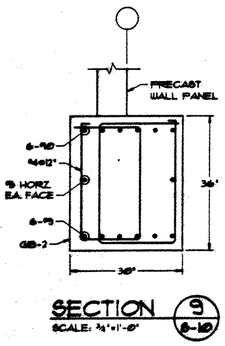
SECTION 7 (S-10)
SCALE: 3/8"=1'-0"



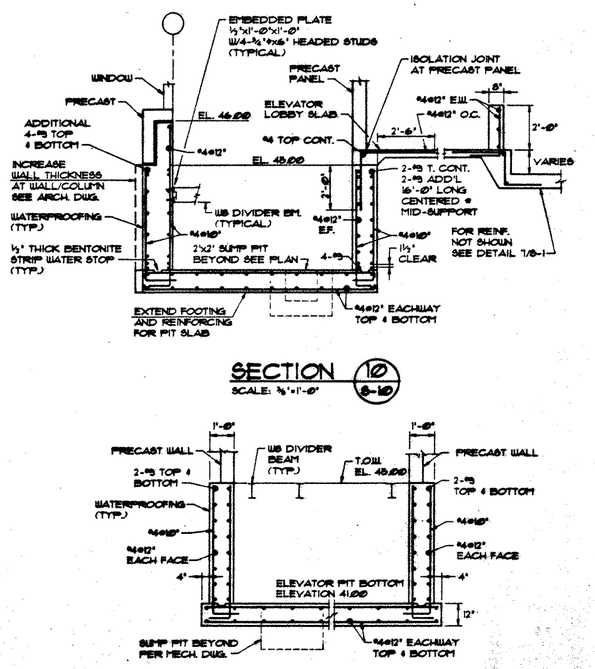
SECTION 8 (S-10)
N.T.S.



DETAIL 8A (S-10)
SCALE: 3/4"=1'-0"

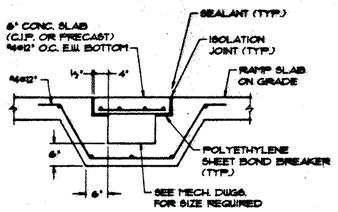


SECTION 9 (S-10)
SCALE: 3/4"=1'-0"

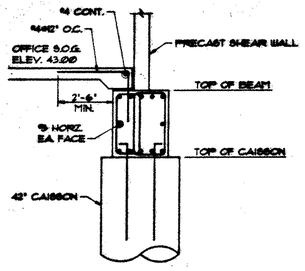


SECTION 10 (S-10)
SCALE: 3/8"=1'-0"

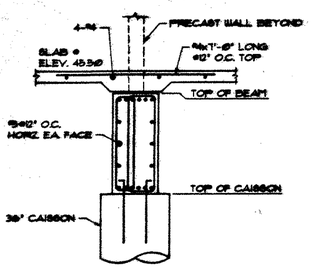
SECTION 10A (S-10)
SCALE: 3/8"=1'-0"



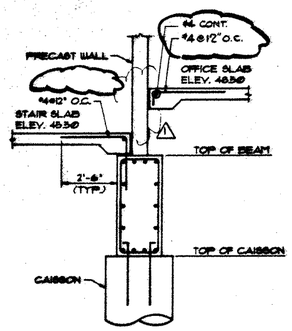
SECTION 11 (S-10)
SCALE: 3/4"=1'-0"



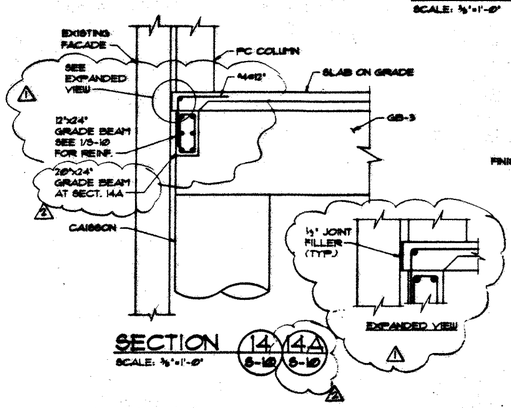
SECTION 13 (S-10)
SCALE: 3/8"=1'-0"



SECTION 13A (S-10)
SCALE: 3/8"=1'-0"



SECTION 13B (S-10)
SCALE: 3/8"=1'-0"



SECTION 14/14A (S-10)
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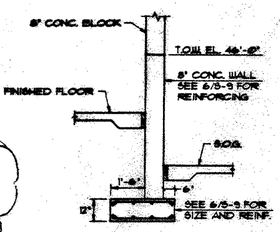


SECTION 15 (S-10)
SCALE: 3/8"=1'-0"

WHITING-TURNER
CONTRACTING COMPANY
DESMAN ASSOCIATES
ARCHITECTS ENGINEERS

PENN STREET PARKING FACILITY
UNIVERSITY OF MARYLAND AT BALTIMORE

NO.	DATE	BY
AS BUILT	5-1-95	
1	4-30-93	
2	8-18-93	

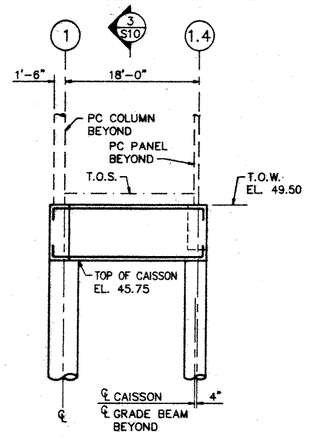
REVISIONS

FOUNDATION SECTIONS

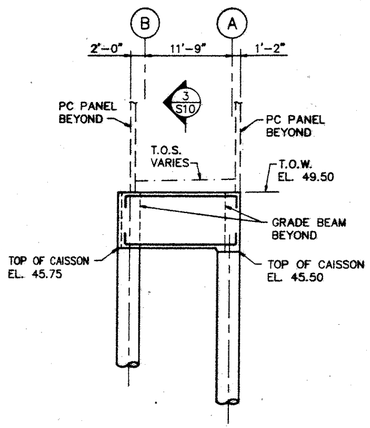
DRAWING NO.
S-10

SCALE:	AS NOTED
DATE:	
PROJECT NO.	J-343

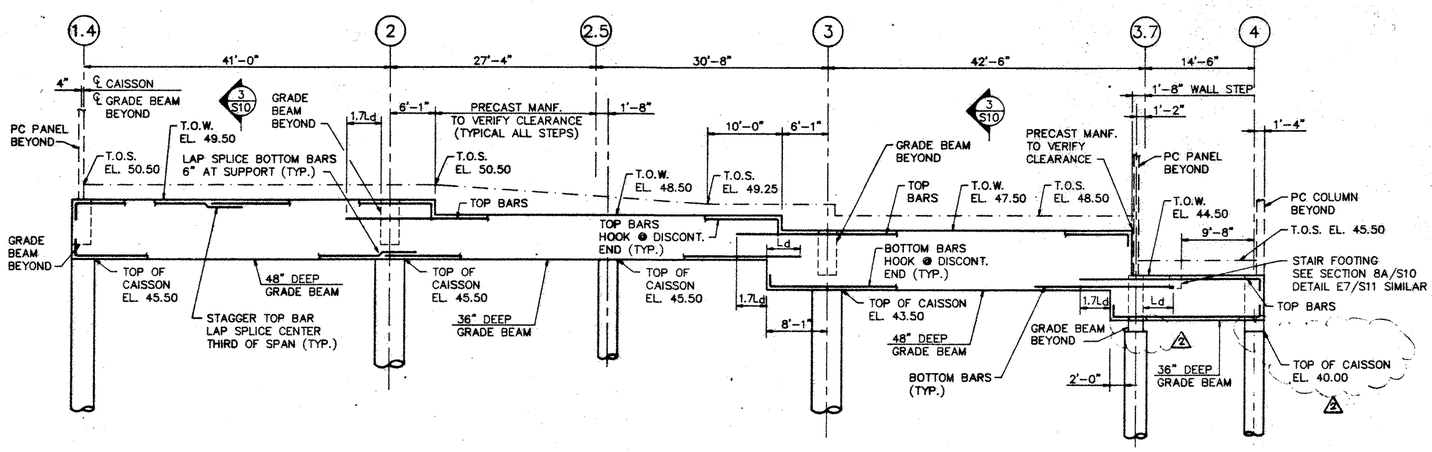
DESIGN	DRAWN	CHKD.
R.B.	B.P.	A.P.



WEST ELEVATION
GRID LINE B — E3 / S11
H.S.: 1/8"=1'-0"
V.S.: 1/4"=1'-0"



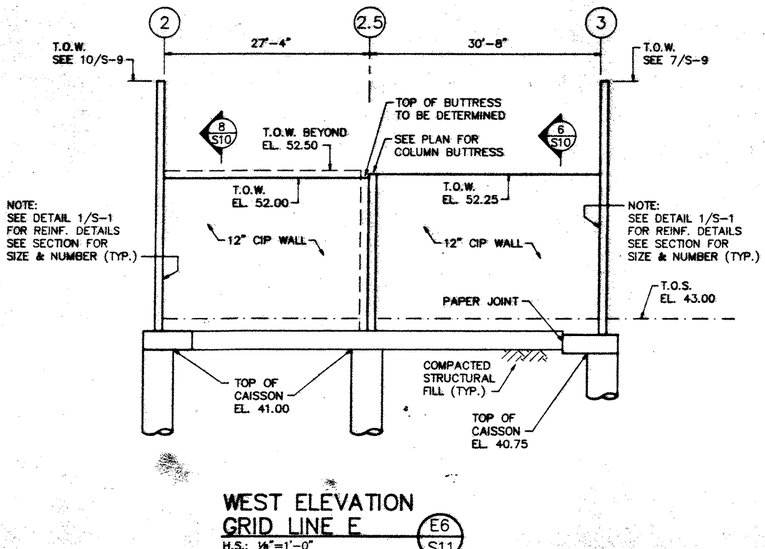
NORTH ELEVATION
GRID LINE 1.4 — E2 / S11
H.S.: 1/8"=1'-0"
V.S.: 1/4"=1'-0"



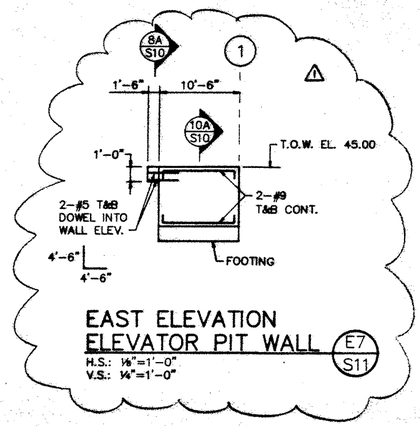
WEST ELEVATION
GRID LINE A — E1 / S11
H.S.: 1/8"=1'-0"
V.S.: 1/4"=1'-0"

EAST ELEVATION
GRID LINE H — E5 / S11
H.S.: 1/8"=1'-0"
V.S.: 1/4"=1'-0"

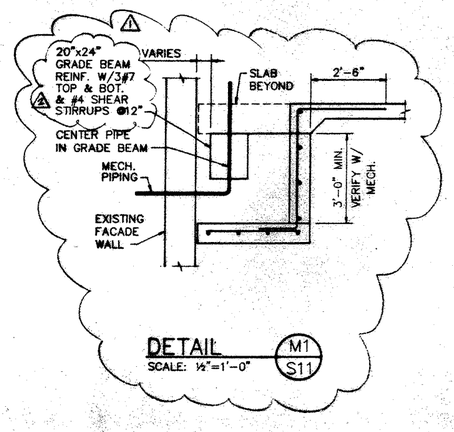
NORTH ELEVATION
GRID LINE 1 — E4 / S11
H.S.: 1/8"=1'-0"
V.S.: 1/4"=1'-0"



WEST ELEVATION
GRID LINE E — E6 / S11
H.S.: 1/8"=1'-0"
V.S.: 1/4"=1'-0"



EAST ELEVATION
ELEVATOR PIT WALL — E7 / S11
H.S.: 1/8"=1'-0"
V.S.: 1/4"=1'-0"



DETAIL — M1 / S11
SCALE: 1/2"=1'-0"

WHITING-TURNER
CONTRACTING COMPANY
DESMAN ASSOCIATES
ARCHITECTS ENGINEERS

PENN STREET PARKING FACILITY

UNIVERSITY OF MARYLAND AT BALTIMORE

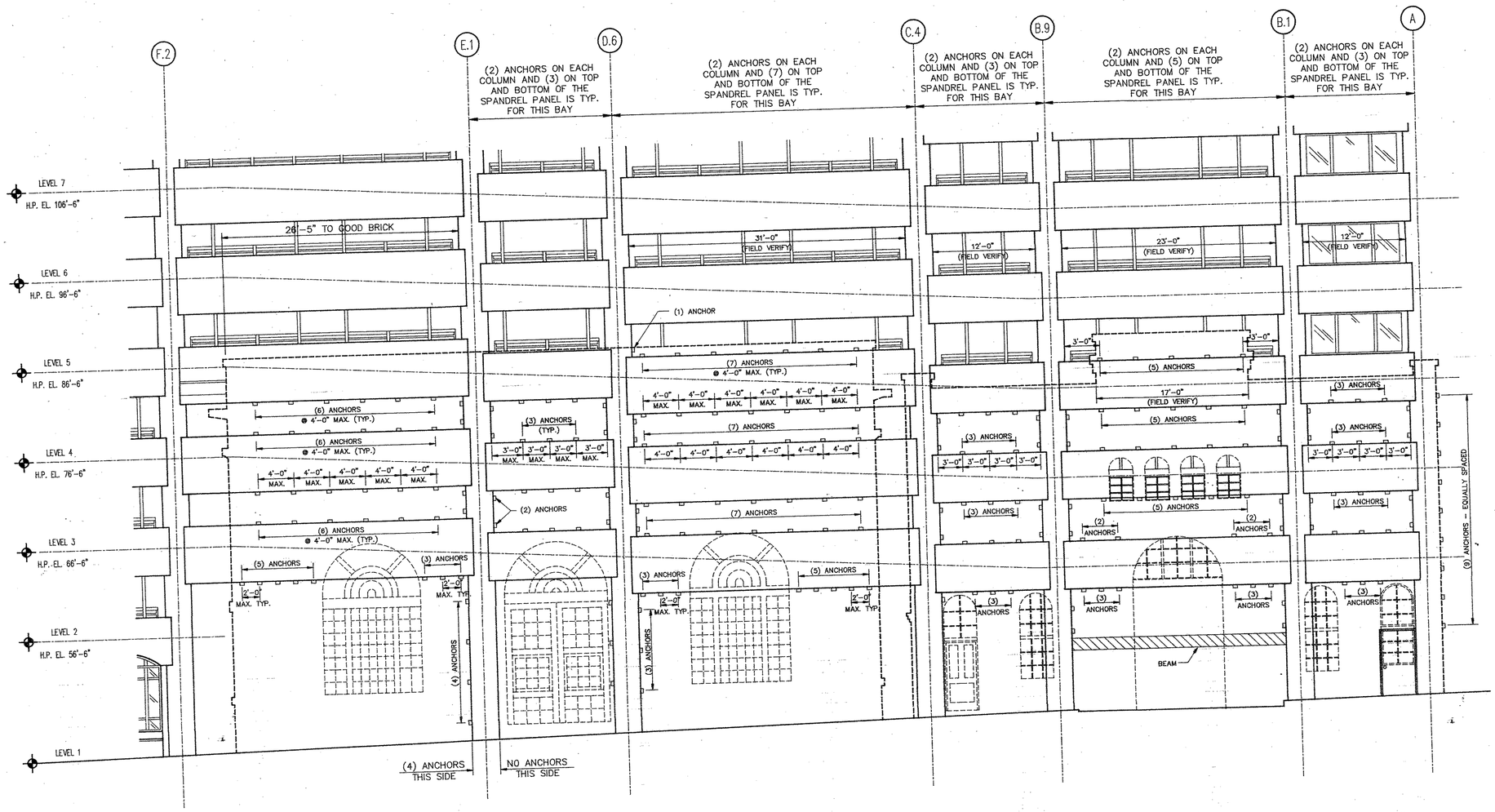
NO.	DATE	BY
AS BUILT	5-1-95	
2	9-30-93	
1	8-18-93	

REVISIONS

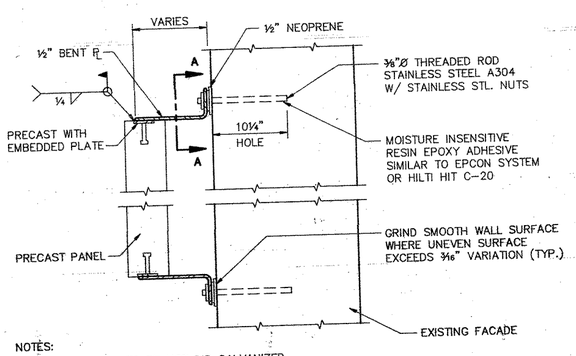
ELEVATION DETAILS

DRAWING NO.
S-11

SCALE:	AS NOTED
DATE:	JUNE 1993
PROJECT NO.	J-348
DESIGN	
DRAWN	
CHKD.	

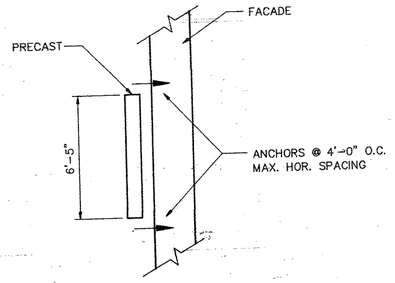


1 / S12 **PRATT STREET ELEVATION**
SCALE: 3/16" = 1'-0"



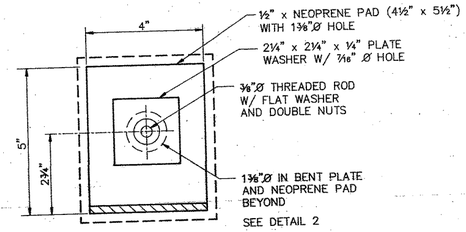
NOTES:
1. ALL A36 STEEL TO BE HOT DIP GALVANIZED.
2. ALL THREADED RODS AND NUTS TO BE STAINLESS STEEL.
3. ALL BOLTS ARE TO BE "SNUG TIGHT" AS PER A.I.S.C. RECOMMENDATIONS. DO NOT MACHINE TORQUE.
4. APPLY BACKUP NUT ONLY AFTER PRIMARY NUT IS TIGHTENED.

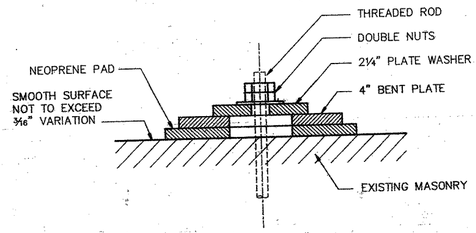
2 / S12 **DETAIL 1**
SCALE: N.T.S.



HILTI: HIT C-20 SYSTEM
ANCHOR ROD = ⅜"Ø x 12" LG.
HOLE DEPTH = 10¼"

3 / S12 **SECTION A-A**
SCALE: HALF SIZE





4 / S12 **DETAIL 2**
SCALE: N.T.S.

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CONTRACTING COMPANY
DESMAN ASSOCIATES
ARCHITECTS ENGINEERS

PENN STREET PARKING FACILITY
UNIVERSITY OF MARYLAND AT BALTIMORE

NO.	DATE	BY
AS BUILT	5-1-95	
1	12/16/93	A.P.

REVISIONS

PRATT STREET ELEVATION

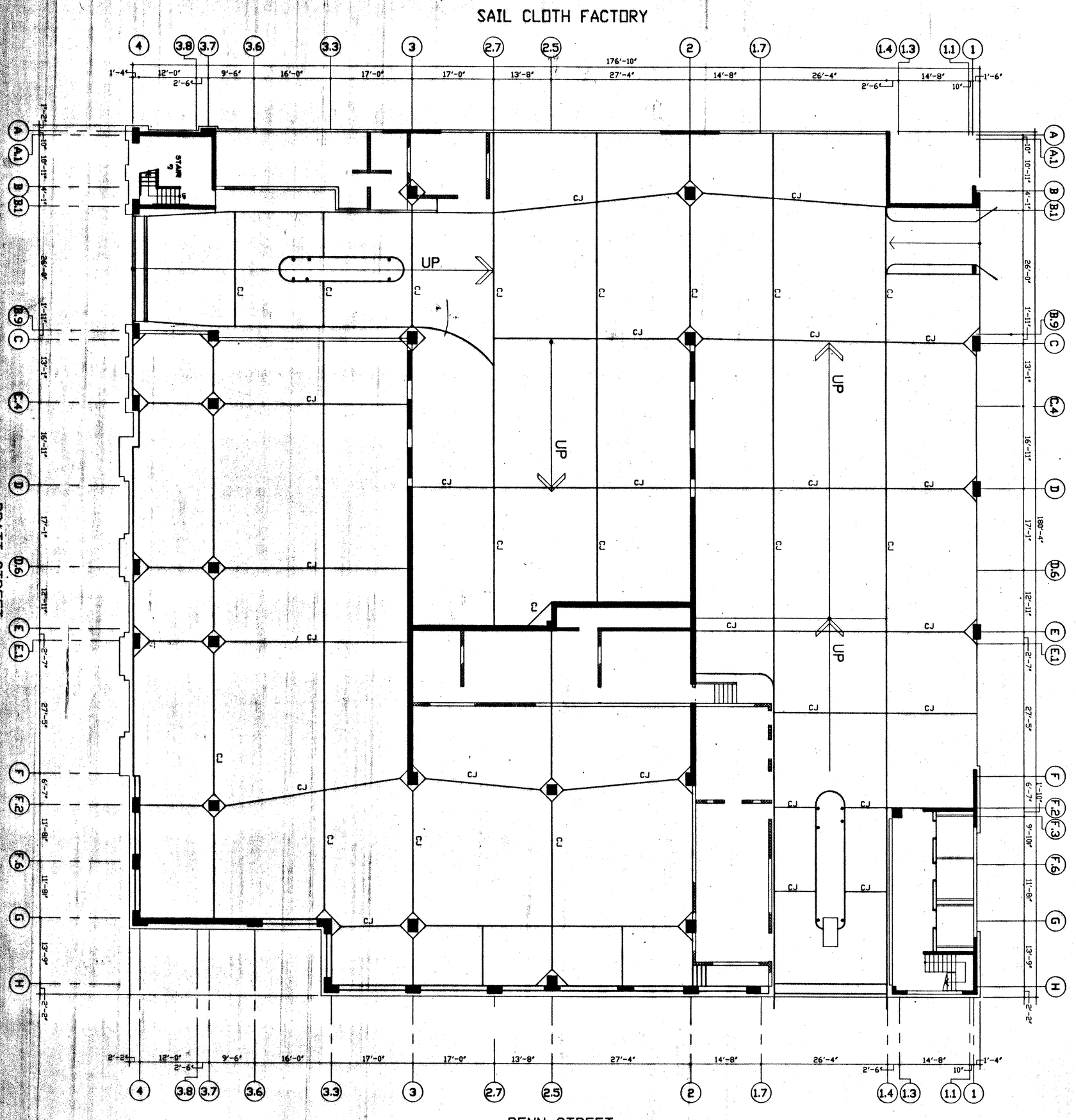
DRAWING NO. S12

SCALE:	3/16" = 1'-0"
DATE:	OCTOBER 1993
PROJECT NO.	J-343

DESIGN	DRAWN	CHKD.
A.P.	D.P.	A.P.

8078 J-343 5-12

SAIL CLOTH FACTORY



PENN STREET

PRATT STREET

PENN STREET PARKING FACILITY

UNIVERSITY OF MARYLAND AT BALTIMORE

WHITING-TURNER
CONTRACTING COMPANY

DESMAN ASSOCIATES
ARCHITECTS ENGINEERS

GRADE SLAB
SLAB JOINTS

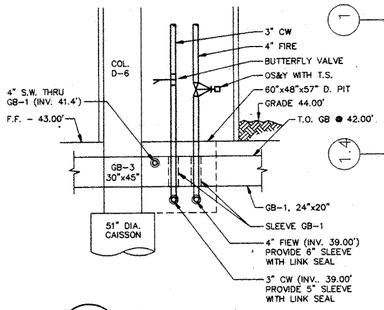
DRAWING NO. S-13

AS BUILT 5-1-95

NO.	DATE	BY	REVISIONS

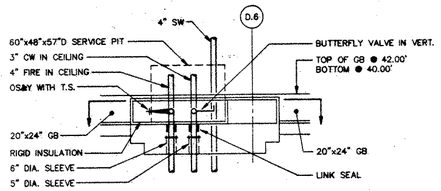
SCALE: 1/8" = 1'-0"
DATE: DECEMBER, 1993
PROJECT NO. 4-243

DESIGN	DRAWN	CHKD.
A.P.	D.P.	A.P.



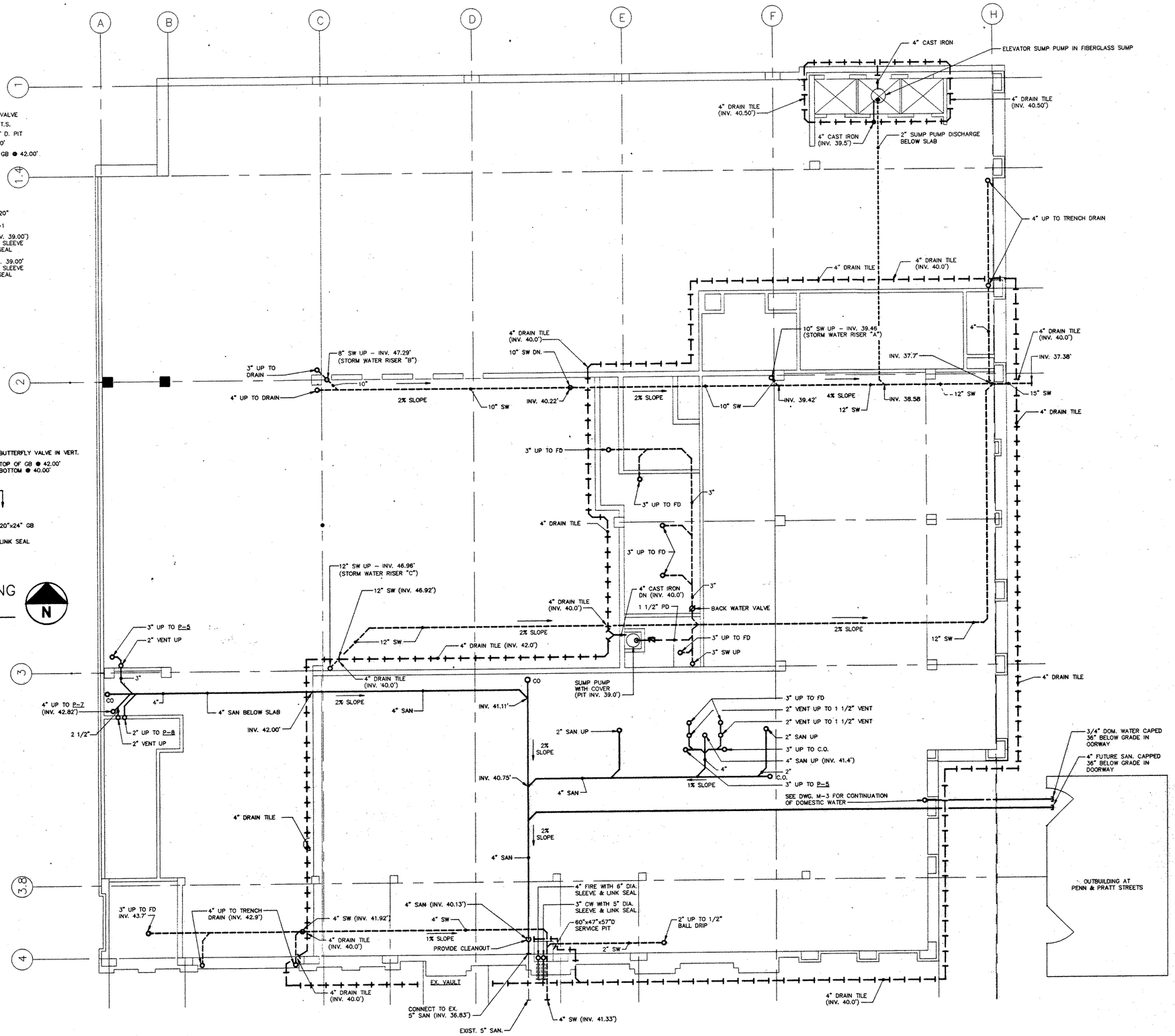
2 M-1 SECTION

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



3 M-1 PART PLAN – INCOMING WATER SERVICE

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



1 M-1 FOUNDATION FLOOR PLAN

APRIL 3, 1995 AS-BUILTS

WHITTING-TURNER
CONTRACTING COMPANY
DESMAN ASSOCIATES
ARCHITECTS ENGINEERS

BURDETTE, KOCHLER, MURPHY & ASSOCIATES, INC.
CONSULTING ENGINEERS

PENN STREET PARKING FACILITY
UNIVERSITY OF MARYLAND AT BALTIMORE

NO.	DATE	BY
2	8-26-93	
1	7-13-93	

REVISIONS

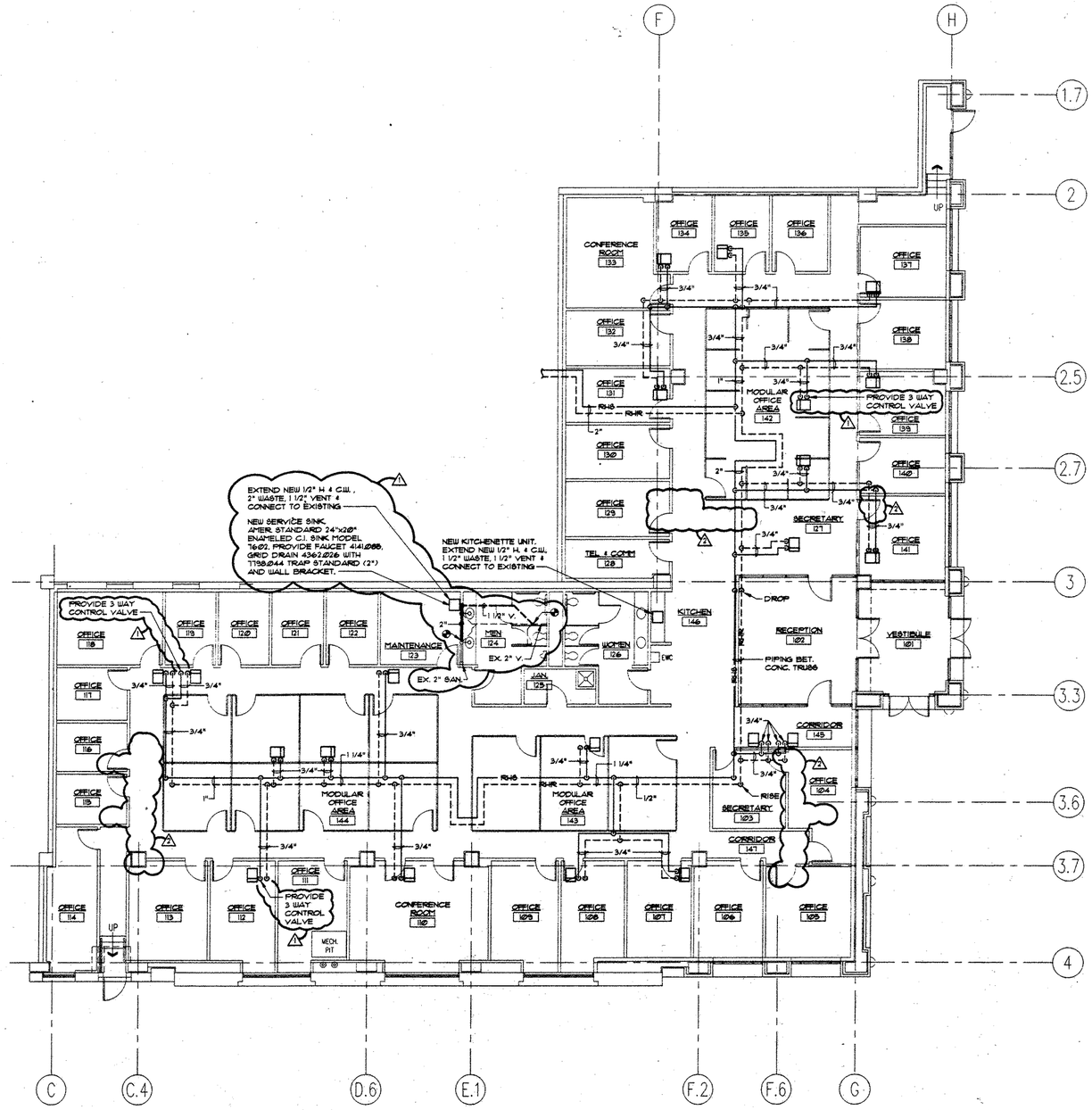
FOUNDATION FLOOR PLAN

DRAWING NO. M-1

SCALE:	1/8" = 1'-0"
DATE:	6-24-93
PROJECT NO.	J-343

DESIGN	DRAWN	CH'KD.
GEJ	DAT	MKA

BKM #924700



1/M-2 OFFICE FLOOR PLAN – PIPING

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

N

GENERAL NOTES:

1. THE MECHANICAL AND ELECTRICAL INSTALLATIONS, WHEN FINISHED, SHALL BE A COMPLETE AND COORDINATED WHOLE READY FOR SATISFACTORY SERVICE. THIS WORK SHALL INCLUDE FURNISHING AND INSTALLING THE MATERIAL, EQUIPMENT AND SYSTEMS COMPLETE AS SPECIFIED UNDER THE BASE CONTRACT AND HEREIN DESCRIBED. FAILURE TO REFER TO THE BASE SPECIFICATION SHALL, IN NO WAY, RELIEVE THE CONTRACTOR OR HIS RESPONSIBILITY.
2. EXISTING SPRINKLER MAINS SHALL BE ADJUSTED (RAISED OR RELOCATED) AS NECESSARY TO COORDINATE WITH TENANT DUCTWORK, PIPING, LIGHTING AND COMMUNICATION CABLE TRAY. SPRINKLER SHOP DRAWINGS & CALCULATIONS SHALL BE REVISED TO REFLECT NEW TENANT LAYOUT. RESUBMIT CALCULATIONS & DRAWINGS FOR MARYLAND STATE FIRE MARSHAL APPROVAL.
3. FOR OTHER MECHANICAL AND ELECTRICAL WORK, REFER TO BASE CONTRACT DRAWINGS. COORDINATE NEW TENANT WORK WITH BASE CONTRACT M/E WORK. FIELD VERIFY CLEARANCES PRIOR TO FABRICATION OF DUCTWORK OR INSTALLATION OF PIPING.
4. REFER TO SPRINKLER SHOP DRAWINGS FOR LOCATION OF MAINS. COORDINATE NEW TENANT WORK WITH NEW SPRINKLER PIPING LAYOUT.

NORTH

8' 0 8' 16'

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

APRIL 3, 1995 AS-BUILTS

WHITING-TURNER CONTRACTING COMPANY

DESMAN BWJ INC. ASSOCIATES ARCHITECTS

BWJ

PENN STREET PARKING FACILITY

UNIVERSITY OF MARYLAND AT BALTIMORE

NO.	DATE	BY
3	5/20/94	MKA
2	4/28/94	MKA

REVISIONS

OFFICE FLOOR PLAN PIPING

DRAWING NO. M-2

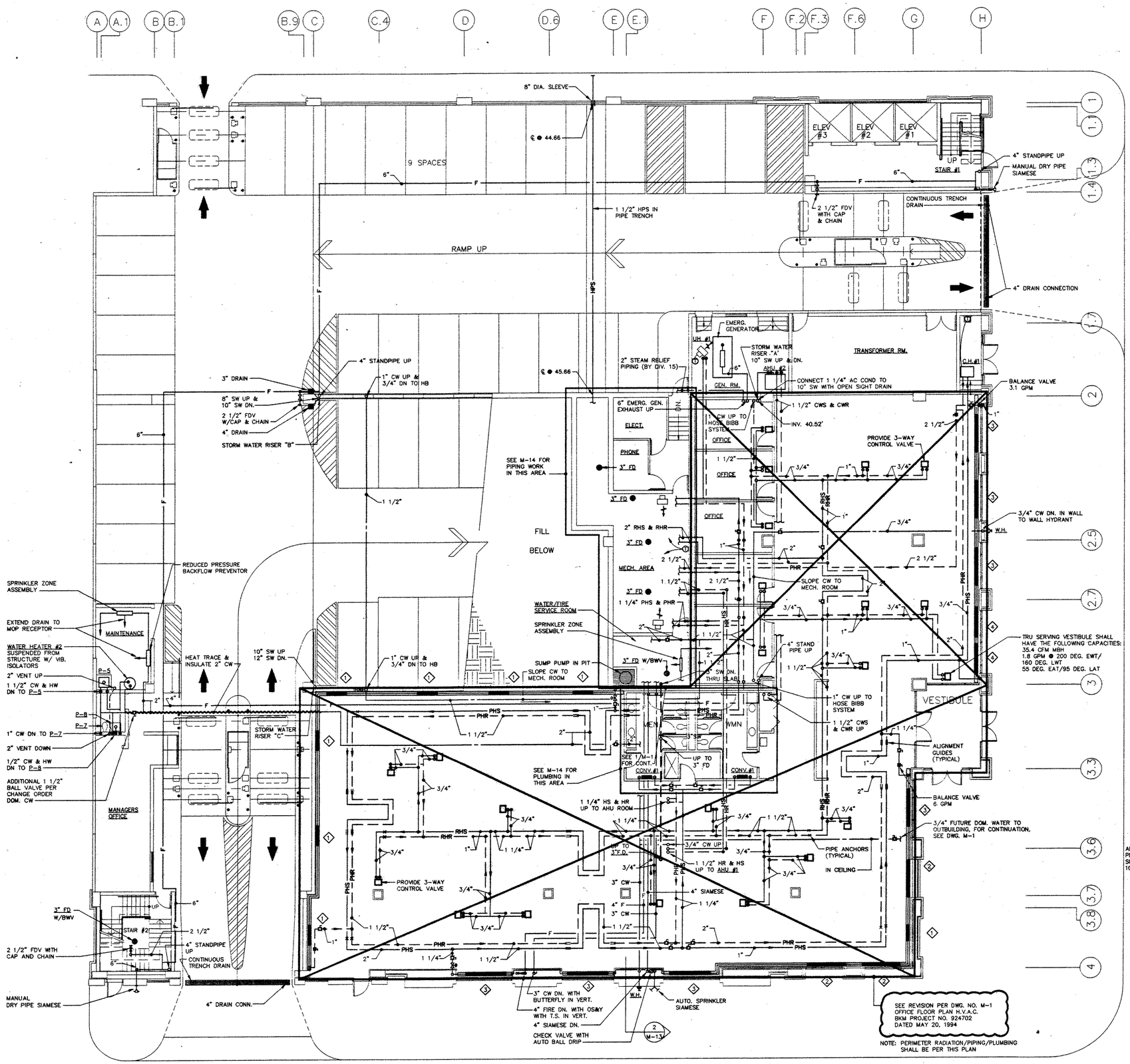
SCALE: 1/8" = 1'-0"

DATE: APRIL 21, 1994

PROJECT NO. 93001

DESIGN	DRAWN	CH'KD.
MKA	RSB	MKA

G:\PROJECTS\924702\M\924702M2 05/20/94 15:47

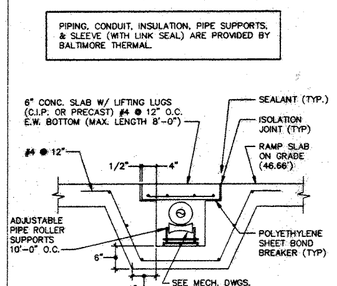


1 / M-3 GRADE FLOOR PLAN – PIPING

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

N

PIPING, CONDUIT, INSULATION, PIPE SUPPORTS, & SLEEVE (WITH LINK SEAL) ARE PROVIDED BY BALTIMORE THERMAL.



SECTION 11 / S-10

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

PROVIDE 8" DIA. SLEEVE THRU WALL AT COLUMN 1 (INV. 44.49')

APRIL 3, 1995 AS-BUILTS

WHITING-TURNER CONTRACTING COMPANY

DESMAN ASSOCIATES ARCHITECTS ENGINEERS

PENN STREET PARKING FACILITY

UNIVERSITY OF MARYLAND AT BALTIMORE

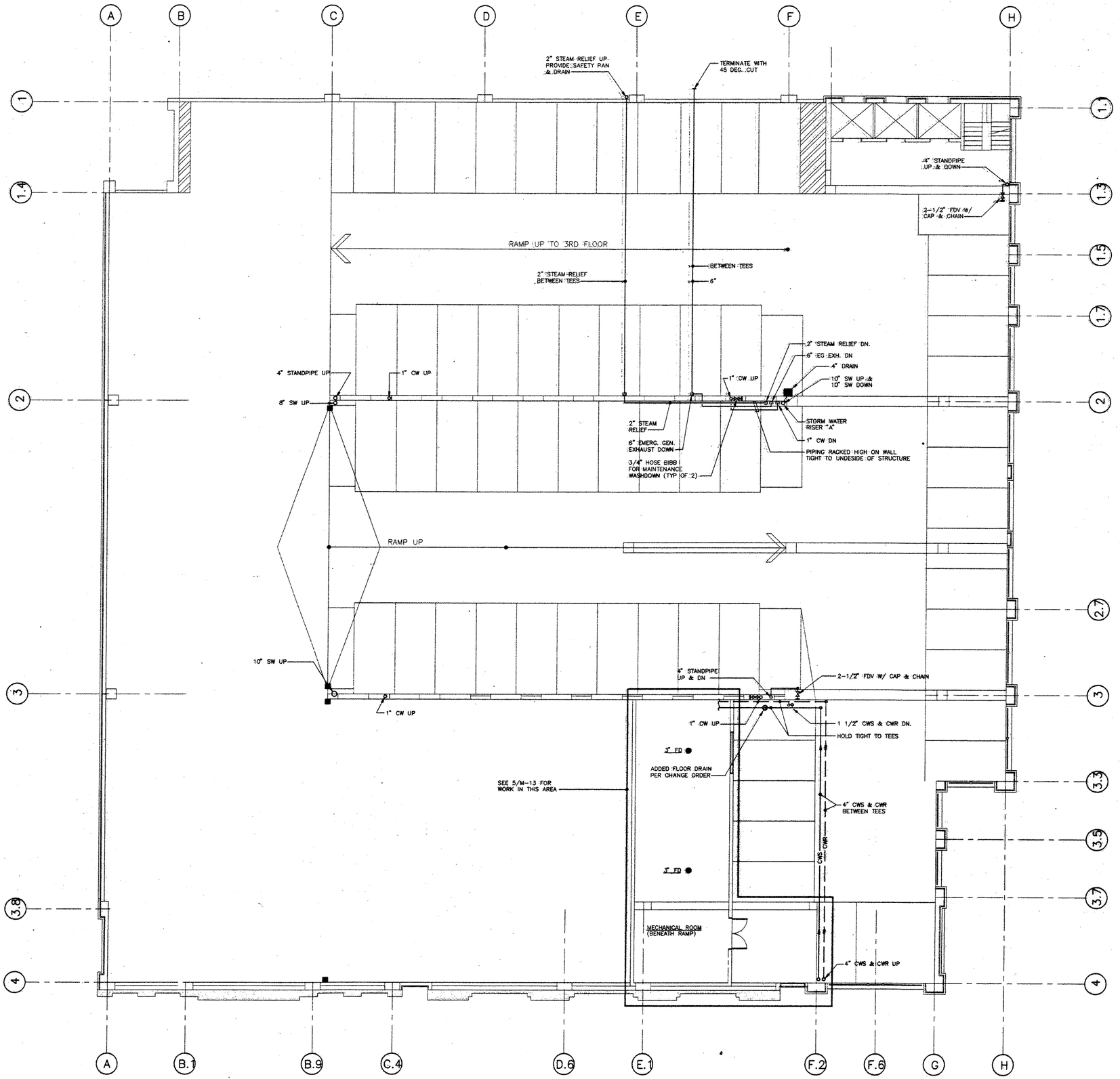
NO.	DATE	BY
2	8-26-93	
1	7-13-93	
	REVISIONS	

GRADE FLOOR PLAN PIPING

DRAWING NO. M-3

SCALE:	1/8"=1'-0"
DATE:	6-24-1993
PROJECT NO.	J-343

DESIGN	DRAWN	CH'KD.



1 / M-4 SECOND FLOOR PLAN – PIPING

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

APRIL 3, 1995 AS-BUILTS

J343-1

WHITING-TURNER
CONTRACTING COMPANY

DESMAN ASSOCIATES
ARCHITECTS ENGINEERS

BURDETTE, KOEHLER, MURPHY & ASSOCIATES, INC.
CONSULTING ENGINEERS

PENN STREET PARKING FACILITY
UNIVERSITY OF MARYLAND AT BALTIMORE

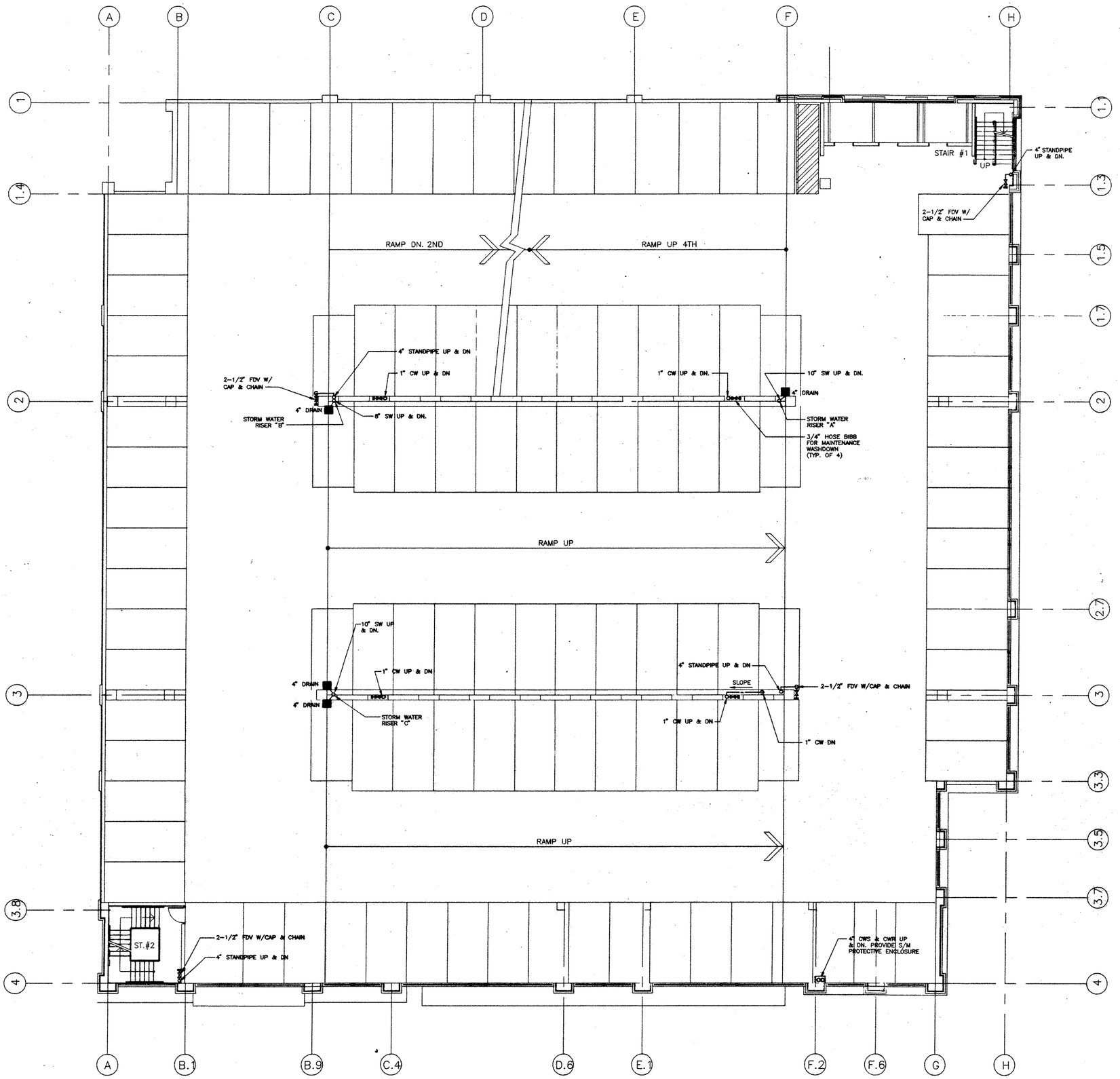
NO.	DATE	BY
REVISIONS		

SECOND FLOOR PLAN PIPING

DRAWING NO.
M-4

SCALE:	1/8"=1'-0"
DATE:	5-13-93
PROJECT NO.	J-343

DESIGN	DRAWN	CH'KD.



1 / M-5 THIRD FLOOR PLAN – PIPING

N

APRIL 3, 1995 AS-BUILTS

WHITING-TURNER
CONTRACTING COMPANY
DESMAN ASSOCIATES
ARCHITECTS ENGINEERS

BURDETTE, KOEHLER, MURPHY & ASSOCIATES, INC.
CONSULTING ENGINEERS

PENN STREET PARKING FACILITY
UNIVERSITY OF MARYLAND AT BALTIMORE

NO.	DATE	BY
REVISIONS		

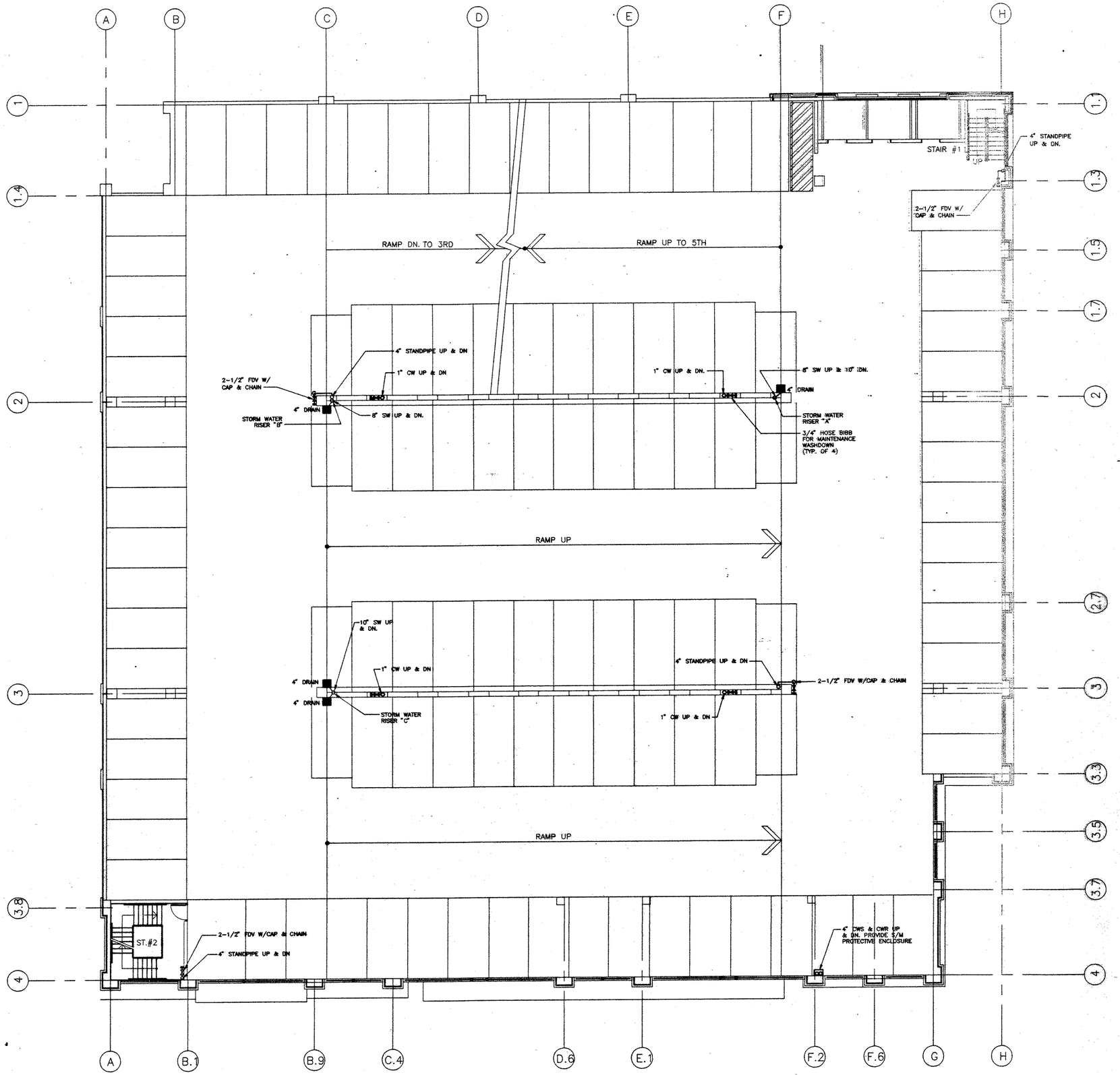
THIRD FLOOR PLAN PIPING

DRAWING NO. **M-5**

SCALE:	1/8"=1'-0"
DATE:	6-24-93
PROJECT NO.	J-343

DESIGN	DRAWN	CHKD.
GEJ	DAT	MKA

J343-1



1 / M-6 FOURTH FLOOR PLAN – PIPING

N

APRIL 3, 1995 AS-BUILTS

WHITING-TURNER
CONTRACTING COMPANY
DESMAN ASSOCIATES
ARCHITECTS ENGINEERS

BURDETTE, KOEHLER, MURPHY & ASSOCIATES, INC.
CONSULTING ENGINEERS

PENN STREET PARKING FACILITY
UNIVERSITY OF MARYLAND AT BALTIMORE

NO.	DATE	BY
REVISIONS		

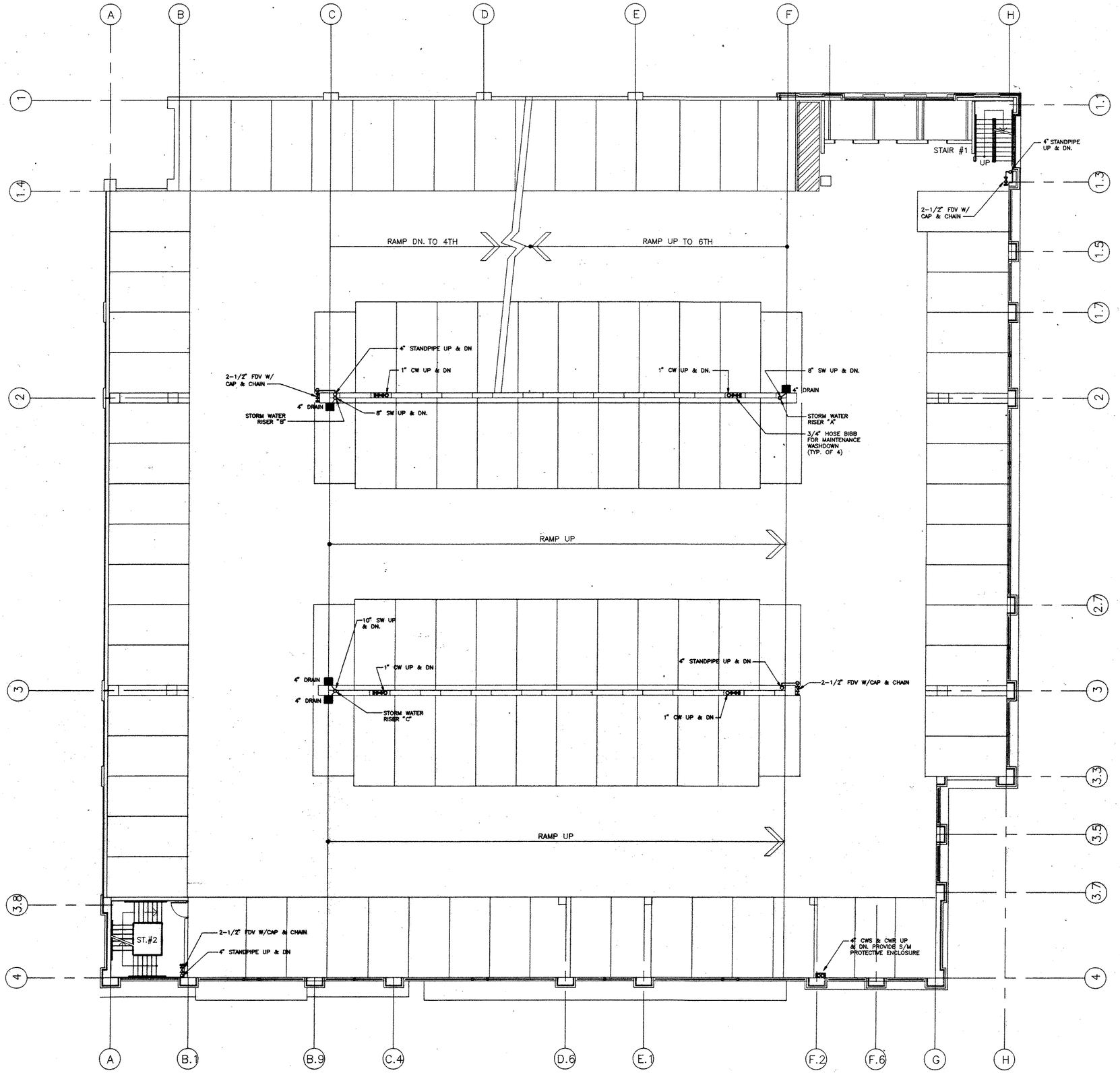
FOURTH FLOOR PLAN PIPING

DRAWING NO. **M-6**

SCALE:	1/8"=1'-0"
DATE:	6-24-93
PROJECT NO.	J-343

DESIGN	DRAWN	CHKD.
GEJ	DAT	MKA

J-343-1



1 / M-7 FIFTH FLOOR PLAN – PIPING

N

APRIL 3, 1995 AS-BUILTS

J343-1

WHITTING-TURNER
CONTRACTING COMPANY

DESMAN ASSOCIATES
ARCHITECTS ENGINEERS

BURDETTE, KOEHLER, MURPHY & ASSOCIATES, INC.
CONSULTING ENGINEERS

PENN STREET PARKING FACILITY
UNIVERSITY OF MARYLAND AT BALTIMORE

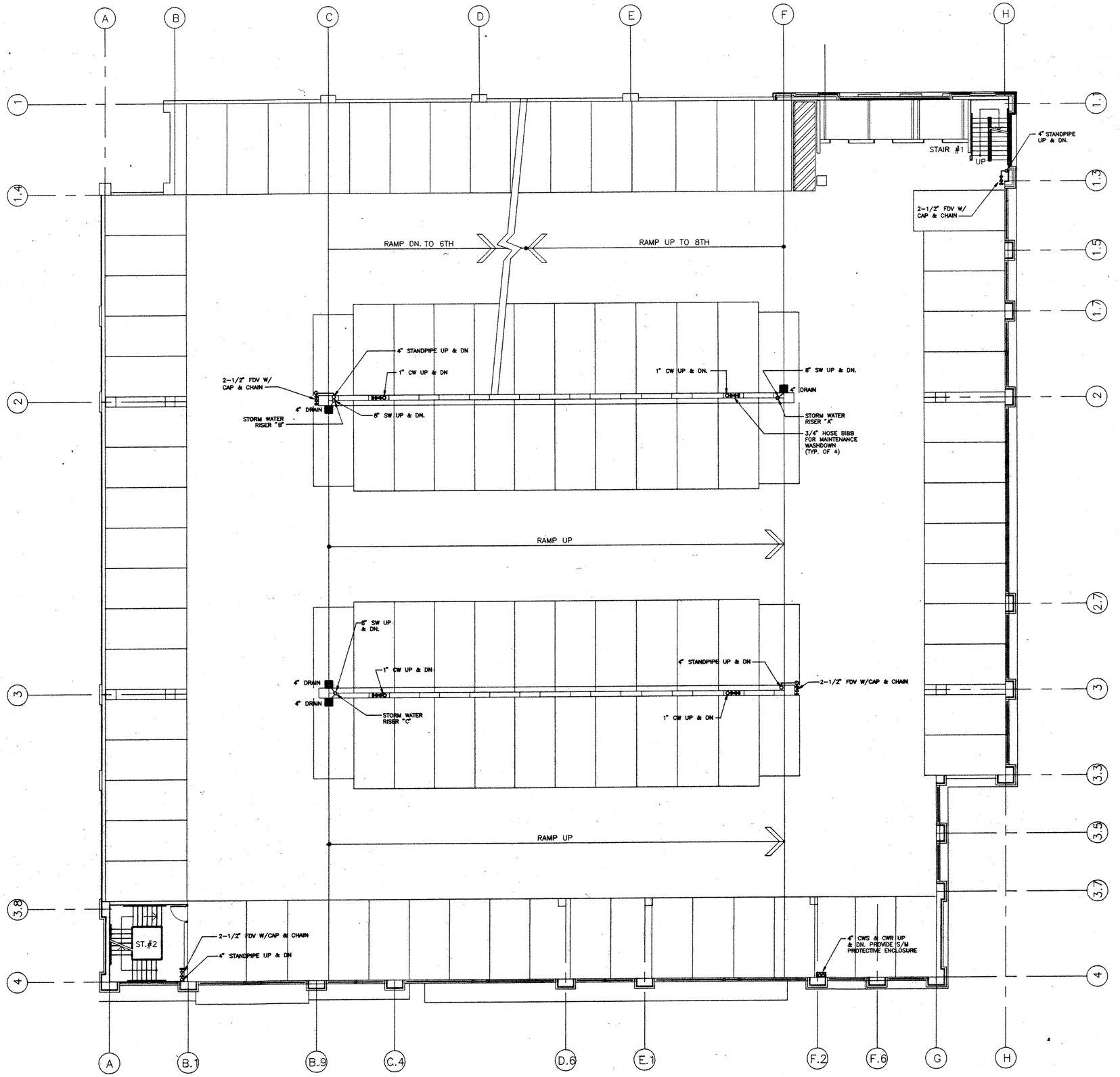
NO.	DATE	BY
REVISIONS		

FIFTH FLOOR PLAN PIPING

DRAWING NO. **M-7**

SCALE:	1/8"=1'-0"
DATE:	6-24-93
PROJECT NO.	J-343

DESIGN	DRAWN	CHKD.
GEJ	DAT	MKA



1 / M-9 SEVENTH FLOOR PLAN – PIPING

N

APRIL 3, 1995 AS-BUILTS

WHITING-TURNER
CONTRACTING COMPANY
DESMAN ASSOCIATES
ARCHITECTS ENGINEERS

DUBOISE, KOEHLER, MURPHY & ASSOCIATES, INC.
CONSULTING ENGINEERS

PENN STREET PARKING FACILITY
UNIVERSITY OF MARYLAND AT BALTIMORE

NO.	DATE	BY
REVISIONS		

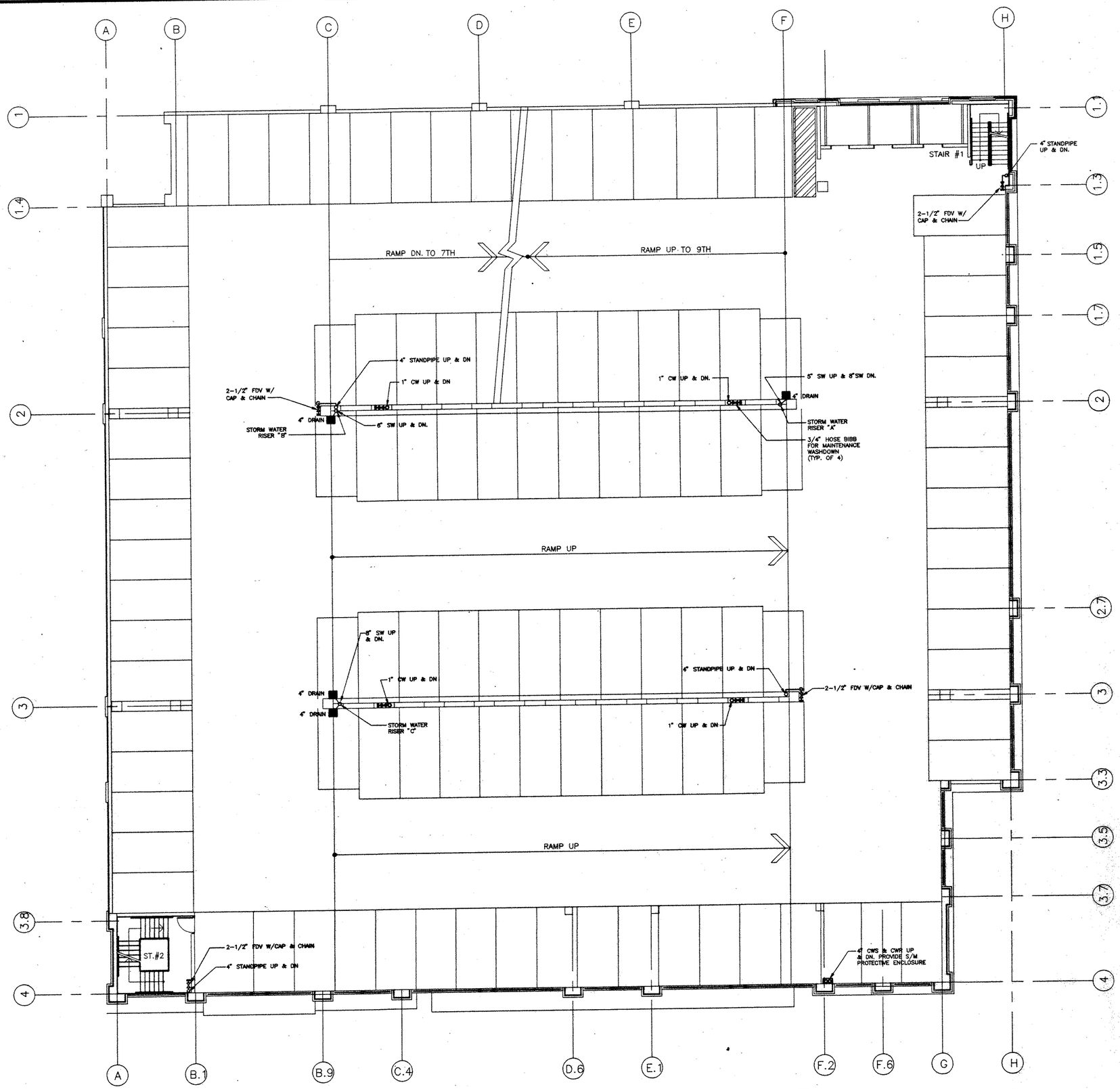
SEVENTH FLOOR PLAN PIPING

DRAWING NO.
M-9

SCALE:	1/8"=1'-0"
DATE:	6-24-93
PROJECT NO.	J-343

DESIGN	DRAWN	CH'KD.
GEJ	DAT	MKA

J-343-1



1 / M-10 EIGHTH FLOOR PLAN – PIPING

N

APRIL 3, 1995 AS-BUILTS

WHITTING-TURNER
CONTRACTING COMPANY
DESMAN ASSOCIATES
ARCHITECTS ENGINEERS

BURDETTE, KOEHLER, MURPHY & ASSOCIATES, INC.

PENN STREET PARKING FACILITY
UNIVERSITY OF MARYLAND AT BALTIMORE

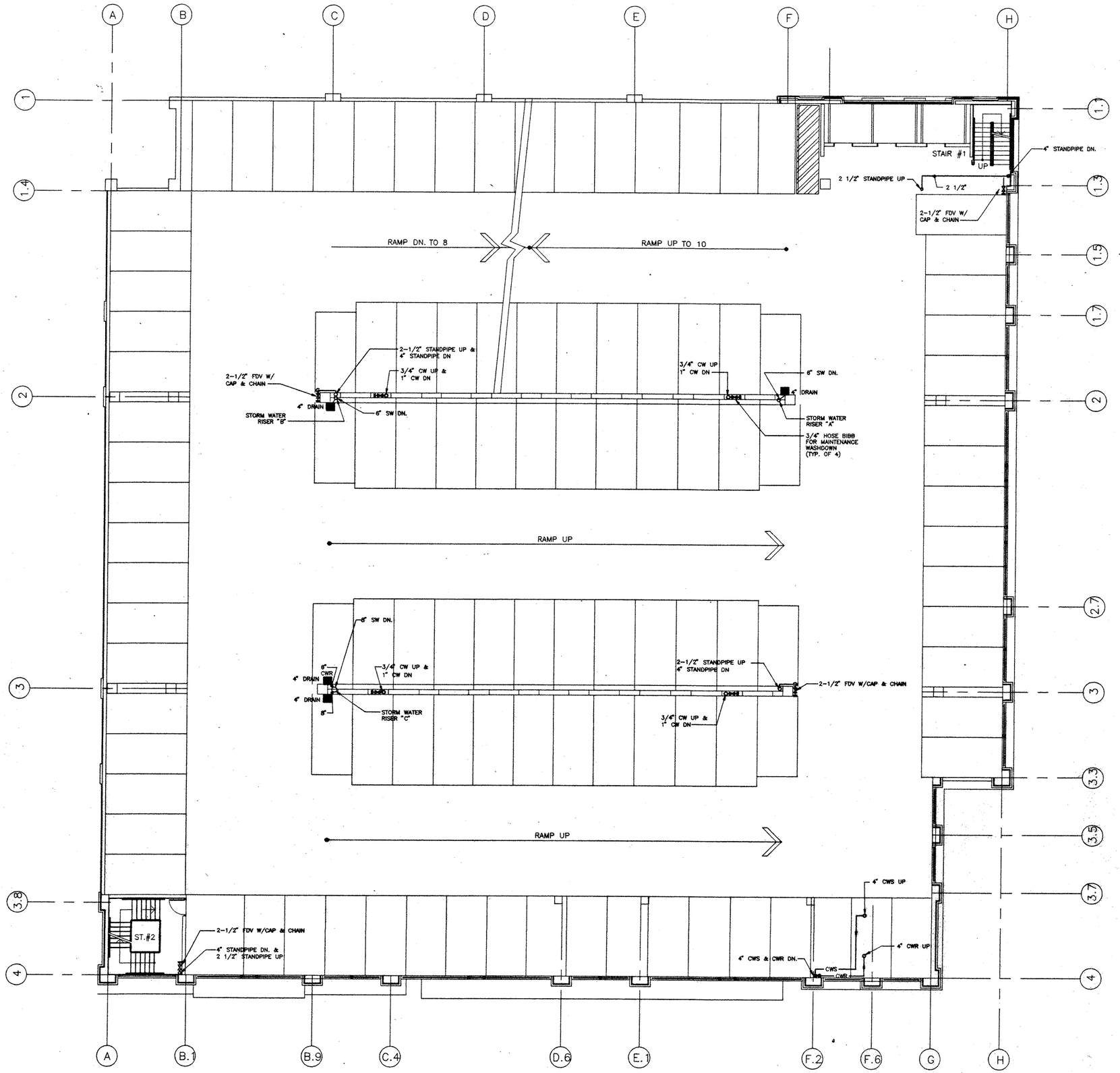
NO.	DATE	BY
REVISIONS		

EIGHTH FLOOR PLAN PIPING

DRAWING NO.
M-10

SCALE:	1/8"=1'-0"
DATE:	6-24-93
PROJECT NO.	J-343

DESIGN	DRAWN	CH'KD.
GEJ	DAT	MKA



1 / M-11 NINTH FLOOR PLAN – PIPING

N

APRIL 3, 1995 AS-BUILTS

J343-1

WHITING-TURNER
CONTRACTING COMPANY
DESMAN ASSOCIATES
ARCHITECTS ENGINEERS

BURDETTE, KOSHLER, MURPHY & ASSOCIATES, INC.

PENN STREET PARKING FACILITY
UNIVERSITY OF MARYLAND AT BALTIMORE

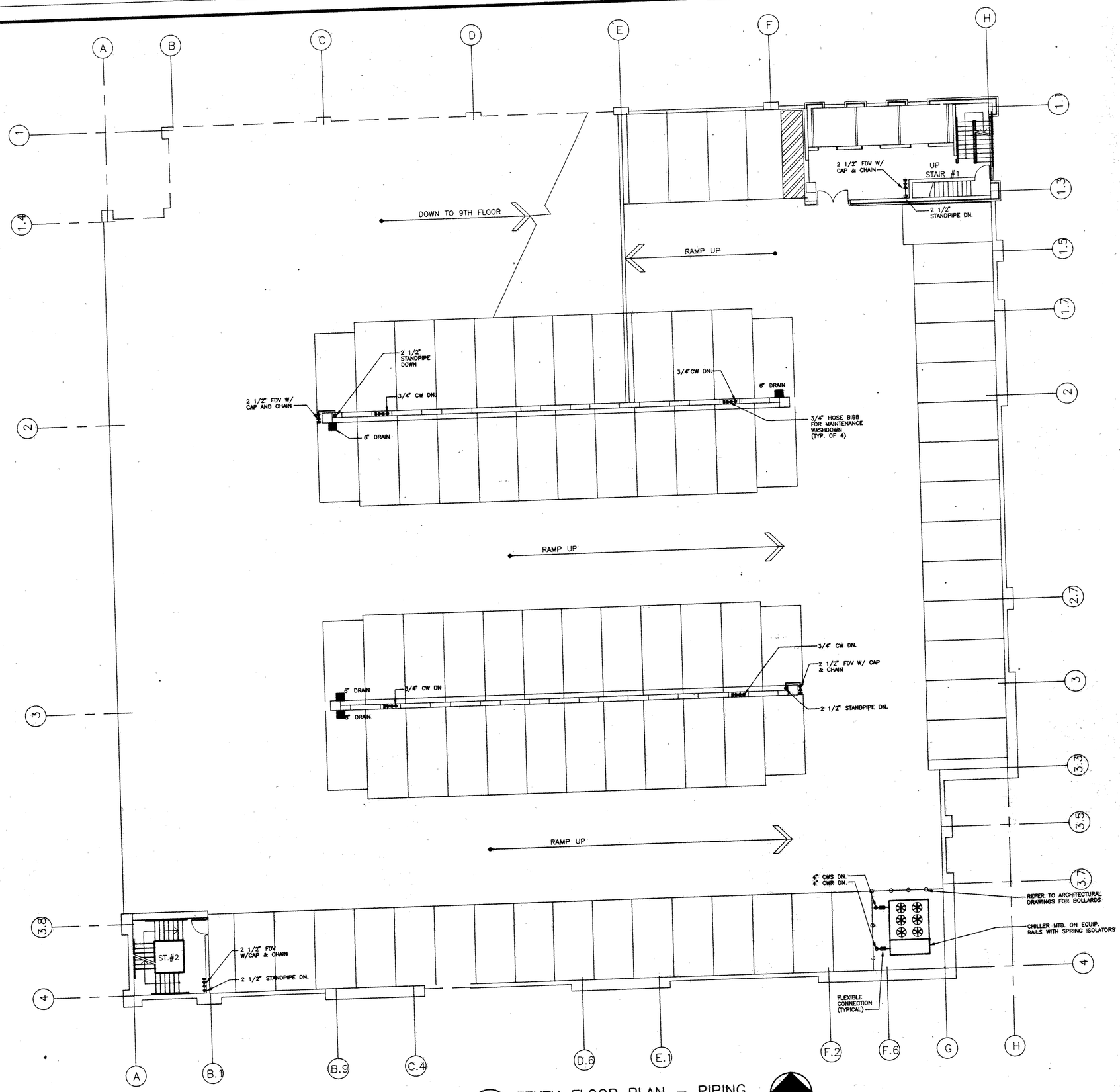
NO.	DATE	BY
REVISIONS		

NINTH FLOOR PLAN PIPING

DRAWING NO. M-11

SCALE:	1/8"=1'-0"
DATE:	6-24-93
PROJECT NO.	J-343

DESIGN	DRAWN	CHKD.
GEJ	DAT	MKA



1 / M-12 TENTH FLOOR PLAN – PIPING

APRIL 3, 1995 AS-BUILTS

WHITTING-TURNER
CONTRACTING COMPANY
DESMAN ASSOCIATES
ARCHITECTS ENGINEERS

BURDETTE, KOCHLER, MURPHY & ASSOCIATES, INC.
CONSULTING ENGINEERS

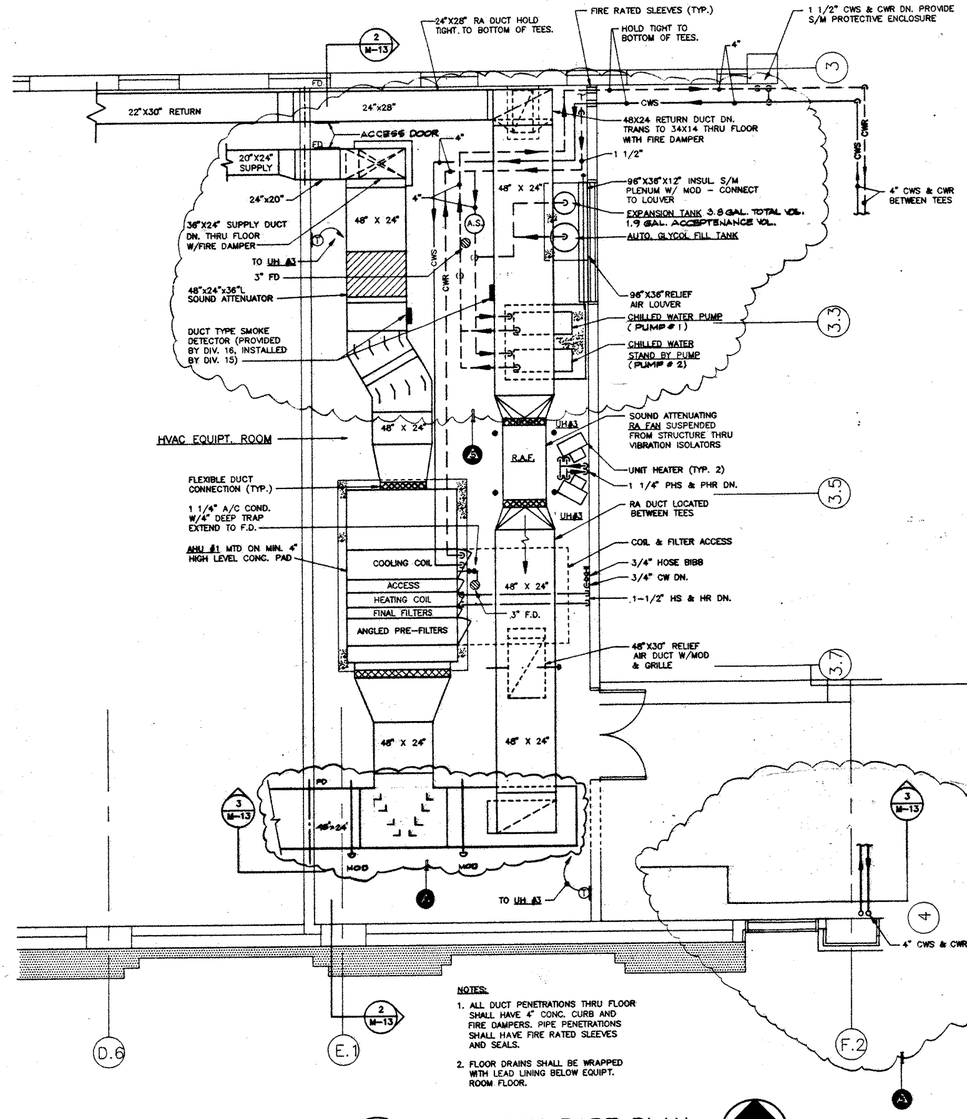
PENN STREET PARKING FACILITY
UNIVERSITY OF MARYLAND AT BALTIMORE

NO.	DATE	REVISIONS

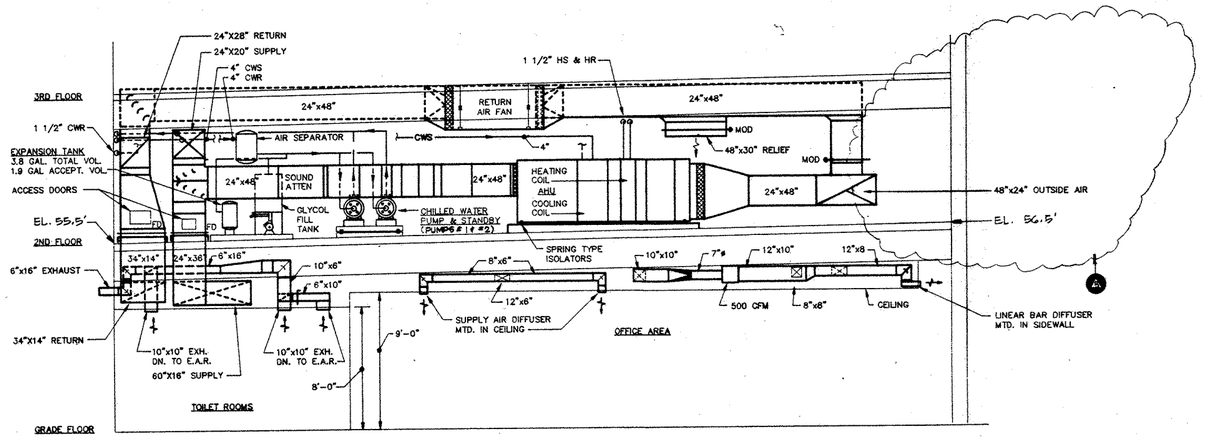
TENTH FLOOR PLAN PIPING

DRAWING NO. M-12

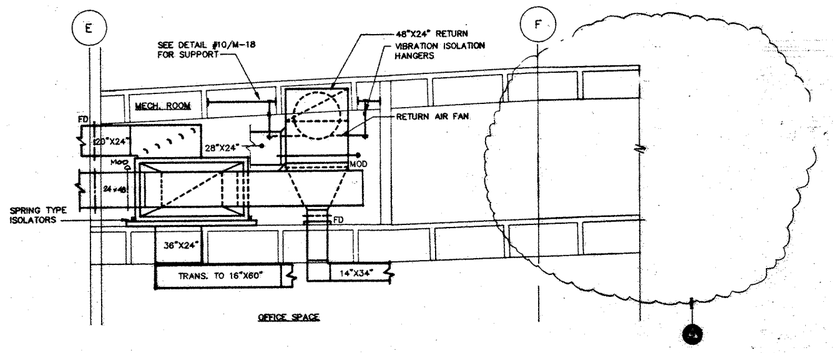
SCALE:	1/8"=1'-0"
DATE:	6-24-93
PROJECT NO.	J-3
DESIGN	GEJ
DRAWN	DAT
CH	MJ



1 / M-13 AHU ROOM PART PLAN
SCALE: 1/4" = 1'-0"



2 / M-13 AHU ROOM SECTION
SCALE: 1/4" = 1'-0"



3 / M-13 AHU ROOM SECTION
SCALE: 1/4" = 1'-0"

APRIL 3, 1995 AS-BUILTS

WHITTING-TURNER
CONTRACTING COMPANY
DESMAN ASSOCIATES
ARCHITECTS ENGINEERS

BURDETTE, KOEHLER, MURPHY & ASSOCIATES, INC.
CONSULTING ENGINEERS
300 THE QUADRANGLE, THE VILLAGE OF CROSS KEYS
BALTIMORE, MARYLAND 21210 (410) 532-8000

PENN STREET PARKING FACILITY
UNIVERSITY OF MARYLAND AT BALTIMORE

NO.	DATE	BY
2	8-26-93	

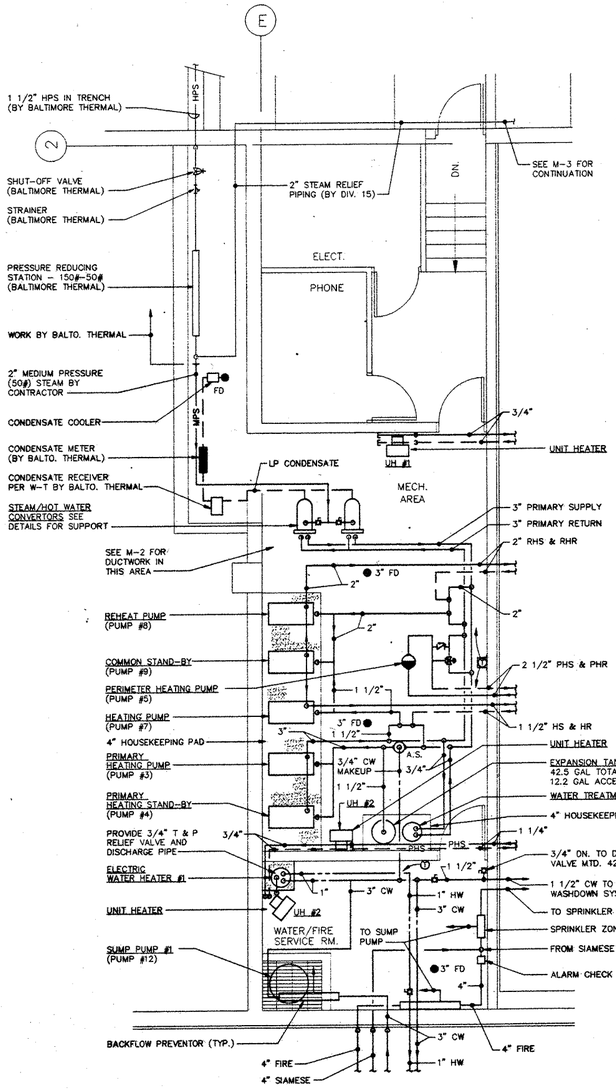
REVISIONS

MECHANICAL PART PLANS

DRAWING NO. M-13

SCALE:	1/8"=1'-0"
DATE:	6-24-93
PROJECT NO.	J-343

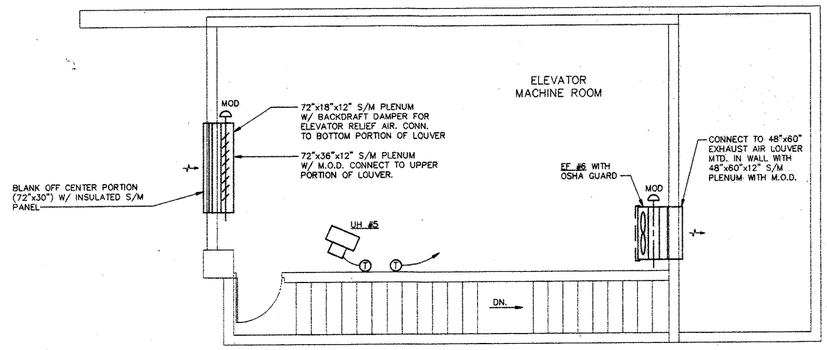
DESIGN	DRAWN	CH'KD.
GEJ	DAT	MKA



2 / M-14 MECH. ROOM PART PLAN

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

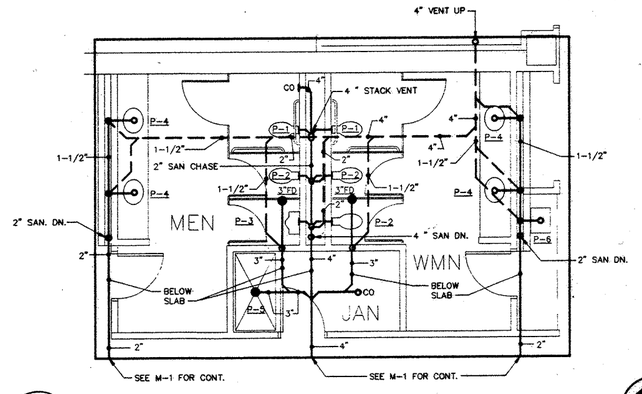
N



2 / M-14 ELEVATOR MACHINE ROOM – PART PLAN

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

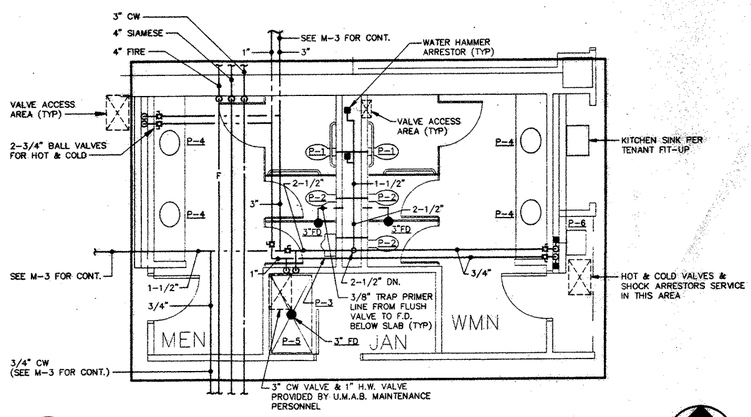
N



3 / M-14 TOILET ROOM PART PLANS – SAN & VENT

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

N



3 / M-14 TOILET ROOM PART PLANS – DOMESTIC WATER

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

N

APRIL 3, 1995 AS-BUILTS

WHITING-TURNER
CONTRACTING COMPANY
DESMAN ASSOCIATES
ARCHITECTS ENGINEERS

BURDETTE, KOEHLER, MURPHY & ASSOCIATES, INC.
CONSULTING ENGINEERS

PENN STREET PARKING FACILITY
UNIVERSITY OF MARYLAND AT BALTIMORE

NO.	DATE	BY
1	7-13-93	

REVISIONS

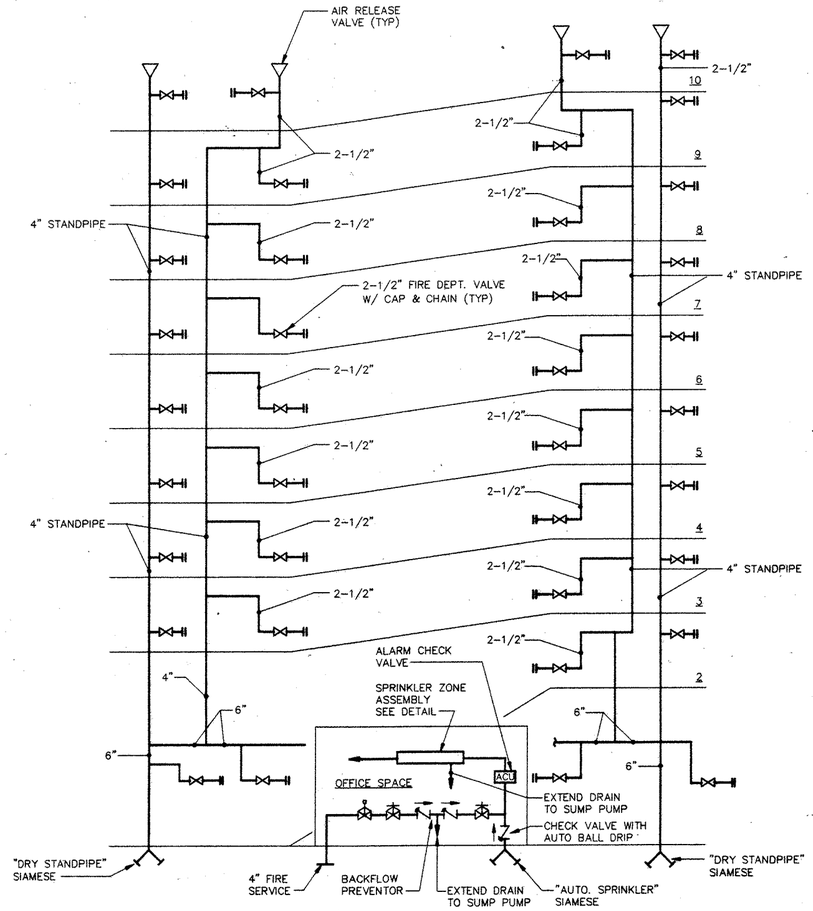
1/4 SCALE PLANS

DRAWING NO. M-14

SCALE:	1/4"=1'-0"
DATE:	6-24-93
PROJECT NO.	J-343

DESIGN	DRAWN	CH'KD.
GEJ	DAT	MKA

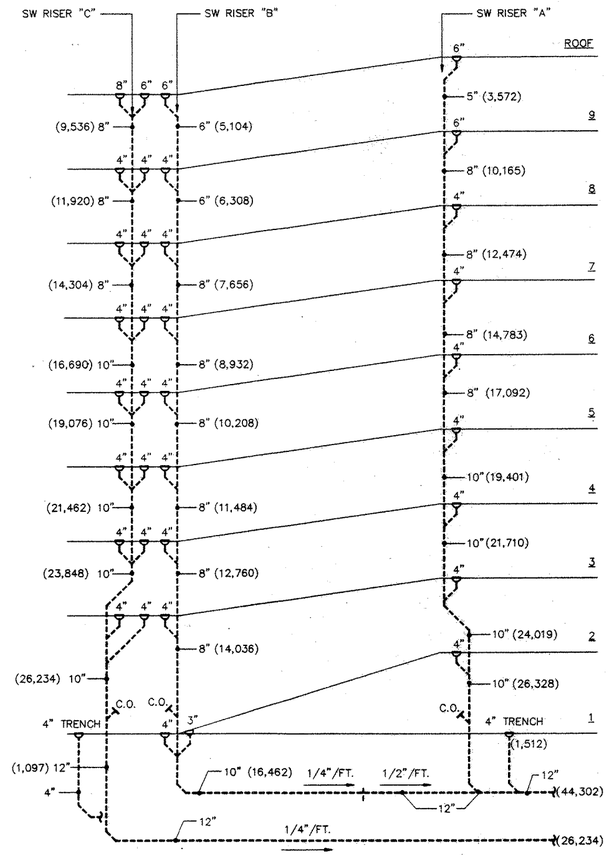
43-1



1 M-15 FIRE RISER DIAGRAM

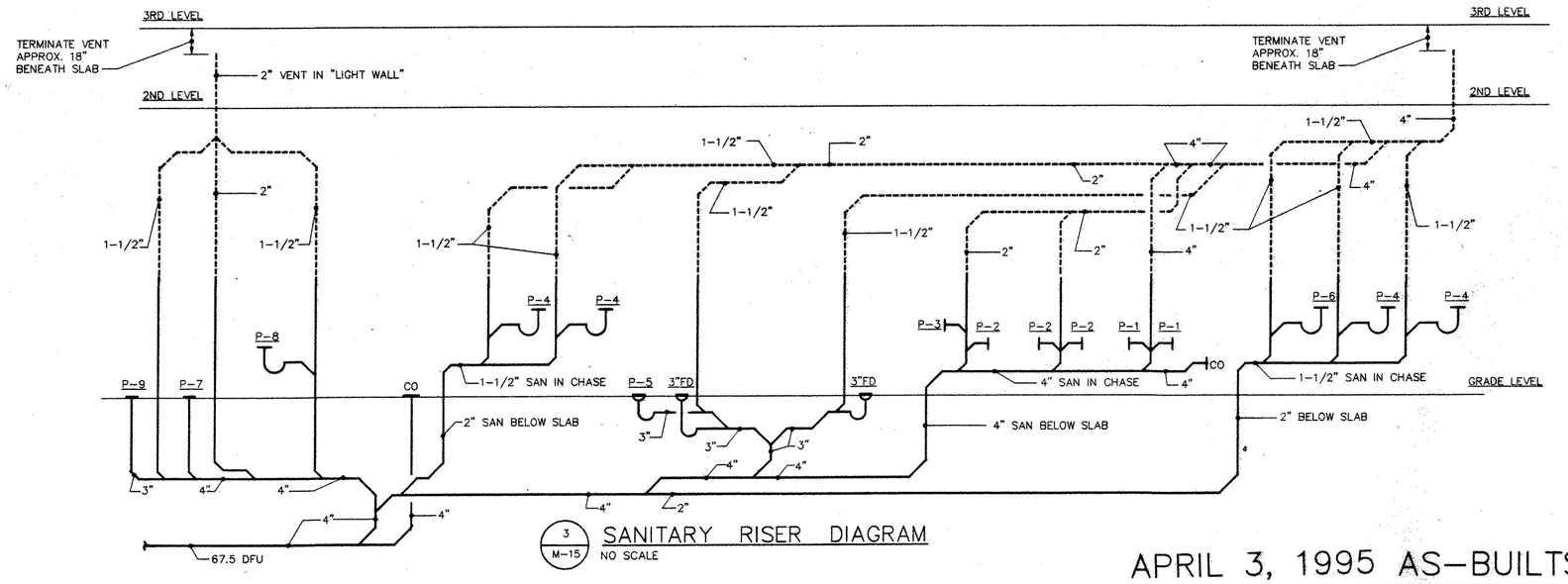
NO SCALE

NOTE: EACH DRY STANDPIPE FDV SHALL BE PROVIDED WITH A CONSPICUOUS SIGN IN ACCORDANCE WITH NFPA 14 "MANUAL STANDPIPE FOR FIRE DEPARTMENT USE ONLY".



2 M-15 STORM WATER RISER DIAGRAM

NO SCALE



3 M-15 SANITARY RISER DIAGRAM

NO SCALE

APRIL 3, 1995 AS-BUILTS

WHITING-TURNER
CONTRACTING COMPANY
DESMAN ASSOCIATES
ARCHITECTS ENGINEERS

BURDETTE, KOEHLER, MURPHY & ASSOCIATES, INC.
CONSULTING ENGINEERS

PENN STREET PARKING FACILITY
UNIVERSITY OF MARYLAND AT BALTIMORE

NO.	DATE	BY
REVISIONS		

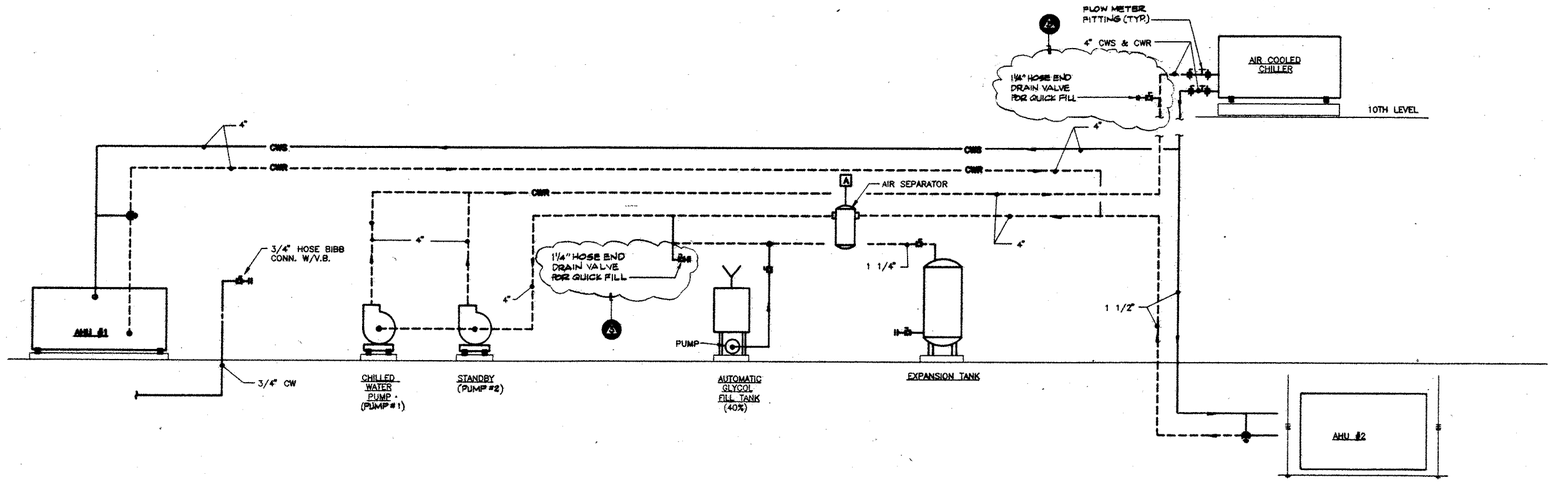
RISER DIAGRAMS

DRAWING NO. M-15

SCALE: 1/8" = 1'-0"
DATE: 5-13-93
PROJECT NO. J-343

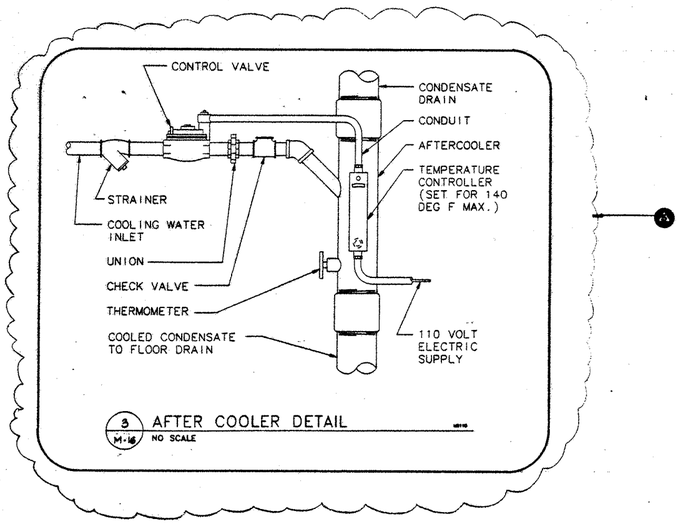
DESIGN	DRAWN	CH'KD.
GEJ	DAT	MKA

BKM #924700



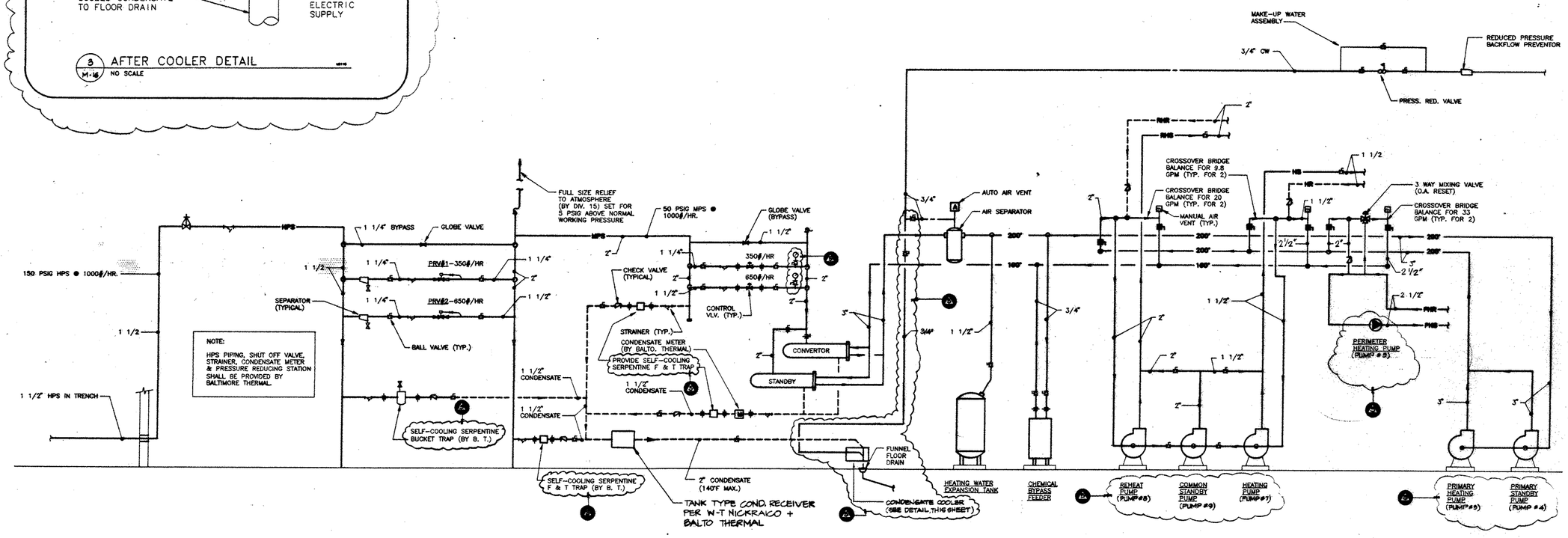
1/M-16 CHILLED WATER SYSTEM PIPING SCHEMATIC

NO SCALE



3/M-16 AFTER COOLER DETAIL

NO SCALE



2/M-16 HEATING SYSTEM PIPING SCHEMATIC

NO SCALE

APRIL 3, 1995 AS-BUILTS

WHITING-TURNER CONTRACTING COMPANY
DESMAN ASSOCIATES ARCHITECTS ENGINEERS

BURDETTE, KOEHLER, MURPHY & ASSOCIATES, INC. CONSULTING ENGINEERS

NO. | DATE | BY
REVISIONS

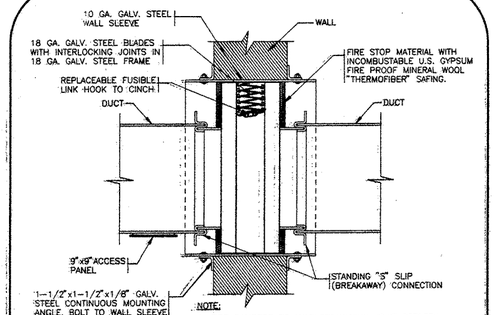
PENN STREET PARKING FACILITY
UNIVERSITY OF MARYLAND AT BALTIMORE

PIPING SCHEMATICS

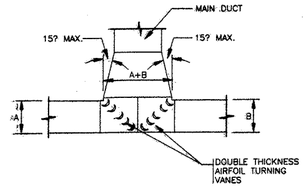
DRAWING NO. M-16

SCALE:	NONE
DATE:	6-24-93
PROJECT NO.	J-343
DESIGN	DRAWN	CHKD.

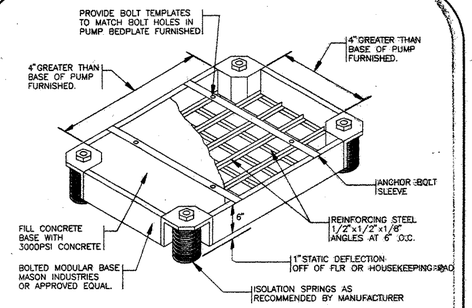
J343-1



1 M-17 HORIZONTAL DUCT FIRE DAMPER
NO SCALE

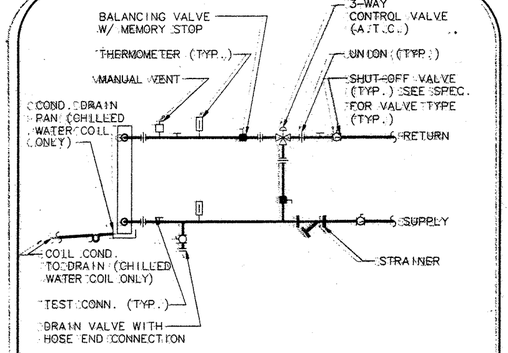


2 M-17 RECTANGULAR ELBOW DUCT TEE
NO SCALE



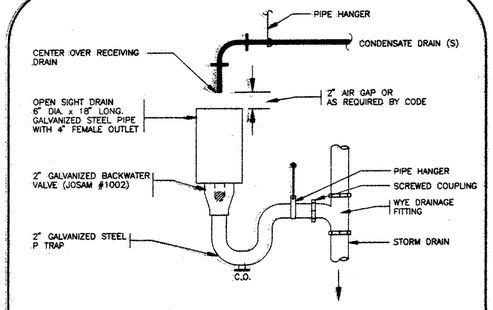
NOTES:
1. SUPPORT ONLY PUMP WEIGHT ON BASE. SUPPORT PIPING WEIGHT ON STRUCTURE WITH SPRING HANGERS.
2. SET ANCHOR BOLT TEMPLATES AND ANCHOR BOLTS WITH TEMPLATE BEFORE FILLING BASE WITH CONCRETE.

3 M-17 PUMP ISOLATION BASE DETAIL
NO SCALE

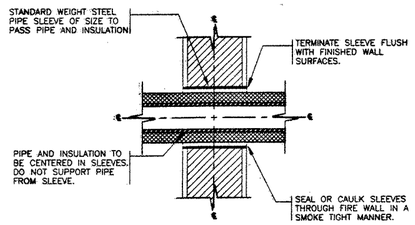


4 M-17 AHU WATER COIL CONNECTIONS
NO SCALE

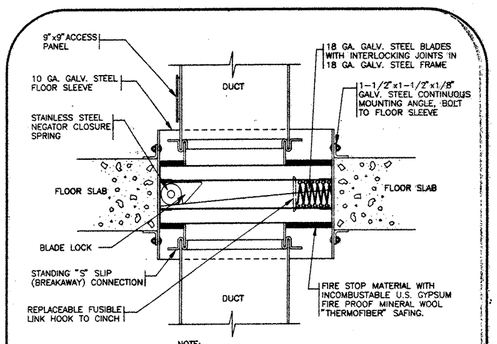
NOTE: DEPTH OF A/C CONDENSATE TRAP SHALL BE GREATER THAN THE SYSTEM TOTAL STATIC PRESSURE (IN W.C.)



5 M-17 OPEN SIGHT DRAIN DETAIL
NO SCALE

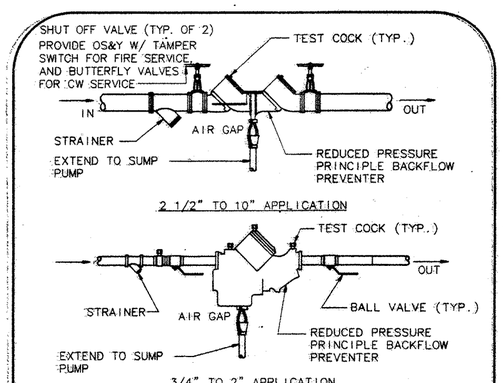


6 M-17 PIPE SLEEVE DETAIL
NO SCALE

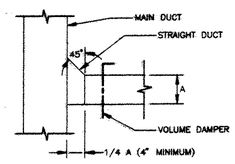


NOTE:
1. FIRE DAMPERS TO HAVE BREAKAWAY JOINT BETWEEN COLLARS AND DUCT. (COLLARS SHALL BE INTERGAL WITH FIRE DAMPERS FRAME.)
2. FIRE DAMPER SHALL BE U.L. LABLED.

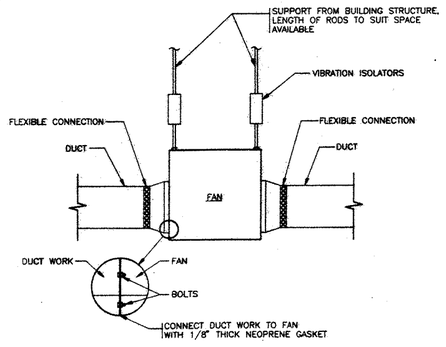
7 M-17 VERTICAL DUCT FIRE DAMPER
NO SCALE



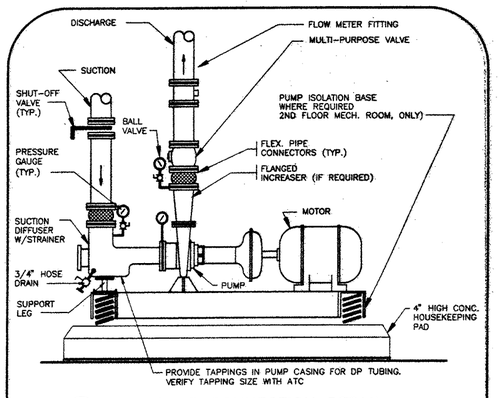
8 M-17 REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTERS
NO SCALE



9 M-17 MINOR DUCT BRANCH DETAIL
NO SCALE



10 M-17 CENTRIFUGAL IN-LINE FAN DETAIL
NO SCALE

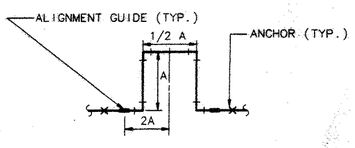


11 M-17 TYP. PUMP CONNECTION DETAIL
NO SCALE

NOTES:
1. PIPES AND VALVES SHALL BE LINE SIZE.
2. SUCTION DIFFUSER SHALL BE SIZED BY PUMP INLET SIZE.
3. PROVIDE CONCRETE INERTIA BASE WITH 95% EFFICIENT SPRING ISOLATORS.

LENGTH BETWEEN ANCHORS IN FEET	PIPE SIZES									
	3/4"	1"	11/4"	11/2"	2"	11/2"	3"	4"	6"	8"
	"A" IN INCHES									
50	36	48	48	60	60	60	60	72	84	96
100	48	60	60	72	72	66	72	84	102	120
150	60	72	78	84	90	84	90	102	120	144
200	72	78	90	96	102	96	102	120	144	168

NOTE:
WHEN LENGTH FALLS BETWEEN NUMBERS ON SCHEDULE, USE LARGER LENGTH



12 M-17 EXPANSION LOOP DETAIL
NO SCALE

APRIL 3, 1995 AS-BUILTS

WHITING-TURNER
CONTRACTING COMPANY
DEGMAN ASSOCIATES
ARCHITECTS ENGINEERS

PENN STREET PARKING FACILITY
UNIVERSITY OF MARYLAND AT BALTIMORE

NO.	DATE	BY
REVISIONS		

MECHANICAL DETAILS

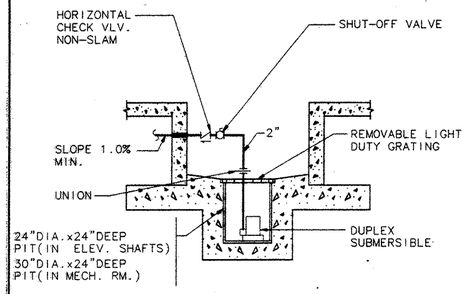
DRAWING NO.
M-17

SCALE: NONE
DATE: 6-24-93
PROJECT NO. J-343

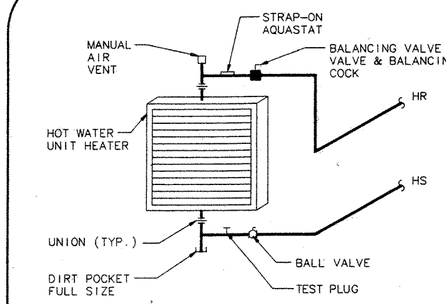
DESIGN	DRAWN	CH'KD.
GEJ	DAT	MKA

J343-1

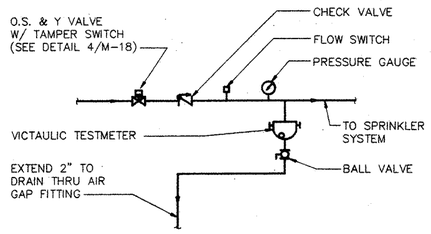
BKM #924700



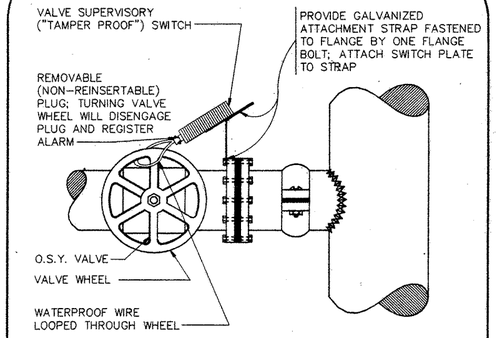
1 M-18 SUMP PUMP DETAIL
NO SCALE



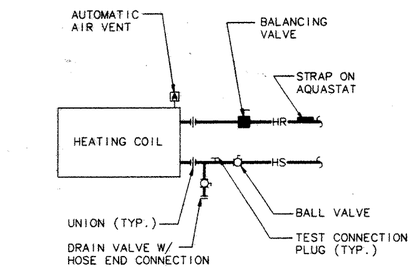
2 M-18 UNIT HEATER CONNECTION DETAIL
NO SCALE



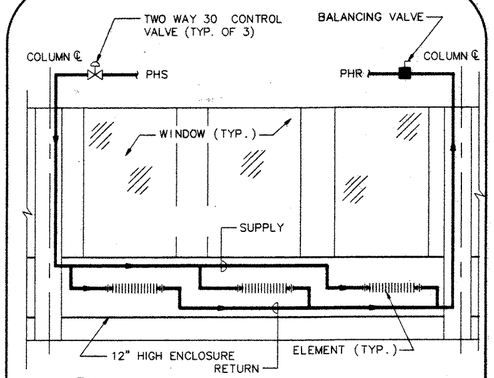
3 M-18 SPRINKLER ZONE ASSEMBLY DETAIL
NO SCALE



4 M-18 TYPICAL PLUG TYPE-SWITCH VALVE INSTALLATION
NO SCALE

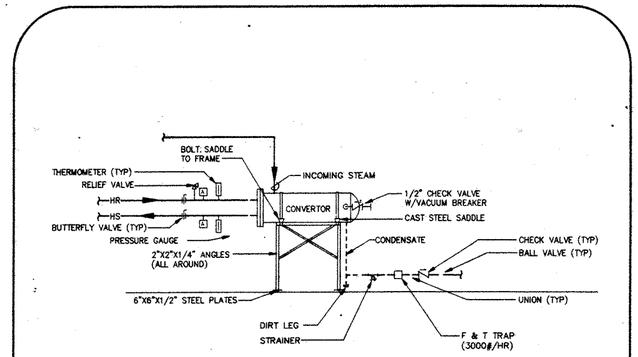


5 M-18 CABINET HEATER CONNECTION DETAIL
NO SCALE

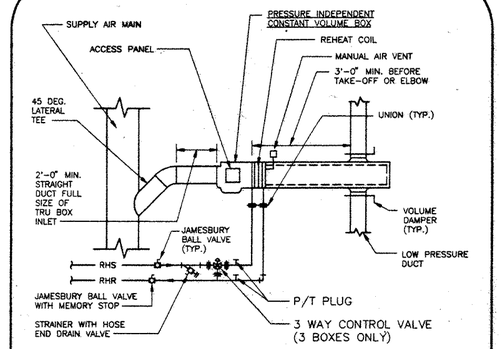


6 M-18 WALL MTD. 3-PIPE RADIATION DETAIL
NO SCALE

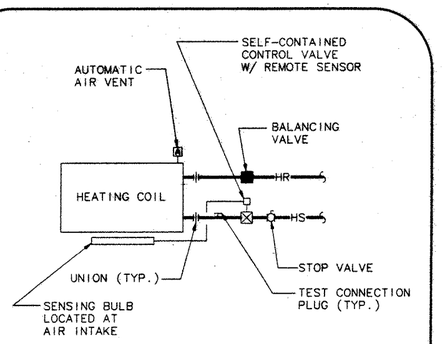
NOTE: SEE M-3 FOR NUMBER OF ELEMENTS PER ZONE.



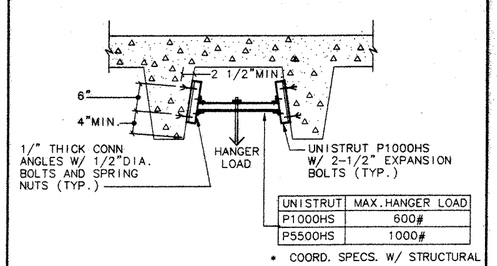
7 M-18 STEAM/HOT WATER HEAT EXCHANGER
NO SCALE



12 M-18 TERMINAL REHEAT UNIT DETAIL
NO SCALE



8 M-18 CONVECTOR PIPING CONN. DETAIL
NO SCALE

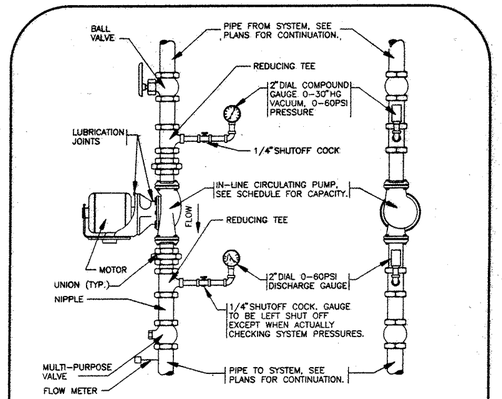


UNISTRUT	MAX. HANGER LOAD
P1000HS	600#
P5500HS	1000#

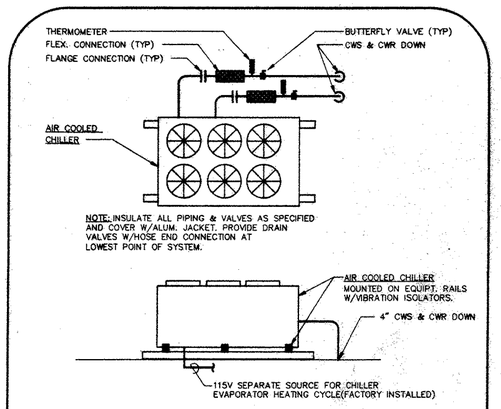
• COORD. SPECS. W/ STRUCTURAL

9 M-18 TYP."SUPPORT FROM STRUCTURE" DETAIL
NO SCALE

NOTE: FIRE PROTECTION PIPING SHALL BE SUPPORTED INDEPENDANT FROM ALL OTHER SYSTEMS. STRUCTURAL SUPPORT SHALL COMPLY W/ NFPA 13&14. REFER TO NFPA14 TABLE 2-5.1.5 (A) FOR SECTION MODULOUS REQUIRED FOR TRAPEZE MEMBER.



10 M-18 IN-LINE PUMP DETAIL
NO SCALE



11 M-18 PACKAGED AIR COLLED CHILLER
NO SCALE

APRIL 3, 1995 AS-BUILTS

J343-1

WHITING-TURNER CONTRACTING COMPANY
DESMAN ASSOCIATES ARCHITECTS ENGINEERS

BURDETTE, KOEHLER, MURPHY & ASSOCIATES, INC. CONSULTING ENGINEERS
200 ST. PAUL PLACE, SUITE 2400, BALTIMORE, MARYLAND 21202 (410) 752-3333

PENN STREET PARKING FACILITY
UNIVERSITY OF MARYLAND AT BALTIMORE

NO.	DATE	BY
REVISIONS		

MECHANCAL DETAILS

DRAWING NO. M-18

SCALE: NONE
DATE: 5-13-93
PROJECT NO. J-343

DESIGN	DRAWN	CH'KD.

AIR HANDLING UNIT SCHEDULE

AHU NO.	AREA SERVED	TOTAL S.P.	CFM	EXT. SP IN. WG	MIN. O.A. CFM	FAN HP	FAN VOLTS	FAN PHASE	FAN RPM	FAN DIA. IN.	HEATING COIL CAPACITY MBH	HEATING COIL CAPACITY AIR ENT. DEG. F.	HEATING COIL CAPACITY AIR LV DEG. F.	HEATING COIL CAPACITY WATER ENTERS DEG. F.	HEATING COIL CAPACITY WATER LEAVES DEG. F.	HEATING COIL CAPACITY GPM ● 40°F ΔT	HEATING COIL CAPACITY WATER PD. FT. WG	HEATING COIL CAPACITY AIR PD. IN.	HEATING COIL CAPACITY MAX. FV	COOLING COIL CAPACITY TYPE	COOLING COIL CAPACITY MBH TOTAL	COOLING COIL CAPACITY MBH SENS.	COOLING COIL CAPACITY AIR ENT DB/WB (DEG. F)	COOLING COIL CAPACITY AIR LEAVES DB/WB (DEG. F)	COOLING COIL CAPACITY *WATER ENTERS DEG. F.	COOLING COIL CAPACITY *WATER LEAVES DEG. F.	COOLING COIL CAPACITY GPM	COOLING COIL CAPACITY WATER PD FT. HD	COOLING COIL CAPACITY AIR PD IN. WG	COOLING COIL CAPACITY MAX. FV	REMARKS
AHU#1	GRADE LEVEL OFFICES	4.25"	12,100	2.0"	1725	15	480	3	2000	22"	196	55	70	200	160	10	.4	.07	550	HYDRONIC	467.7	318.8	77.8/64.67	51.7/51.66	44	54	93.5	17.7	1.06	550	YORK CS-SH-217AF22CD
AHU#2	TRANSFORMER ROOM	1.50"	1450	0.75"	–	3/4	208	3	1120	–	–	–	–	–	–	–	–	–	–	HYDRONIC	54.4	46.7	85/65.5	55/53.2	44	54	10.9	9.4	.58	550	YORK DBA16BYSD4R6

● BASED ON 40% GLYCOL

PUMP SCHEDULE

PUMP DES.	PUMP NAME	GPM.	HEAD PRESS. IN FEET	HP	VOLTS	PHASE	RPM	CONTROL	MFGR/MODEL	REMARKS
#1	CHILLED WATER	105	86'	7 1/2	480	3	1760	A.T.C.	TACO FM2010	END SUCTION FRAME MOUNTED
#2	CHILLED WATER STANDBY	105	86'	7 1/2	480	3	1760	A.T.C.	TACO FM2010	END SUCTION FRAME MOUNTED
#3	PRIMARY HEATING	63	24'	3/4	208	3	1760	A.T.C.	TACO FM1506	END SUCTION FRAME MOUNTED
#4	PRIMARY HEATING STANDBY	63	24'	3/4	208	3	1760	A.T.C.	TACO FM1506	END SUCTION FRAME MOUNTED
#5	PERIMETER SYSTEM	33	42'	1	208	3	1750	A.T.C.	TACO 1600 SERIES MODEL #1619	INLINE PUMP
#6	NOT USED									
#7	HEATING SYSTEM	10	32'	1/2	480	3	1760	A.T.C.	TACO FM1207	END SUCTION FRAME MOUNTED
#8	REHEAT SYSTEM	20	42'	3/4	480	3	1760	A.T.C.	TACO FM1207	END SUCTION FRAME MOUNTED
#9	COMMON STANDBY	20	42'	3/4	480	3	1760	A.T.C.	TACO FM1207	END SUCTION FRAME MOUNTED
#10	NOT USED									
#11	ELEVATOR SUMP PUMP	20	20	1/3	120	1	1750	FLOAT	PROSSER/ENPO MODEL #1650	SUBMERSIBLE SUMP PUMP
#12	WATER SERVICE ROOM SUMP PUMP	20	20'	1/3	120	1	1750	FLOAT	PROSSER/ENPO MODEL #1650	SUBMERSIBLE SUMP PUMP

SELF CONTAINED AIR TO AIR HEAT PUMP SCHEDULE

UNIT	SERVES	MODEL #	TOTAL COOLING MBH	CFM	COMPRESS. HP	COMPRESS. AMPS	EVAPORATOR HP	EVAPORATOR AMPS	COND. E.A.T.	AMPS FLA	AMPS LRA	WATTS	VOLTS/ PHASE	REVERSE CYCLE MBH 52°F	REVERSE CYCLE MBH 32°F	ELECTRIC HEAT
1	MANAGERS OFFICE	TRANE PTHB1501GC	13.9	325	1/8	.7	1/15	.5	95°F	7.9	42	1600	208/1ø	15.3	11.4	3.5 KW

PACKAGED AIR-COOLED LIQUID CHILLER SCHEDULE

UNIT NO.	NOMINAL TONS	CHILLER DATA MBH	CHILLER DATA GPM	CHILLER DATA EWT DEG F.	CHILLER DATA LWT DEG F.	CHILLER DATA PD FT	CHILLER DATA OUTDOOR AMBIENT	ELECTRICAL DATA VOLT	ELECTRICAL DATA PHASE	SIZE LxWxH	WEIGHT LBS (OPER.)	MAKE/MODEL	REMARKS
LC-1	45	525	105	54	44	14.7	95	480	3	127"x87"x55"	3820	YORK WILC530-46	40% GLYCOL

FAN SCHEDULE

FAN NO.	LOCATION	SERVE	CFM	E.S.P.	HP	VOLTS	PHASE	RPM	DIRECT-DRIVE OR V-BELT	FAN DIA.	ROOF OPG. (IN.)	METHOD OF CONTROL	MFGR/MODEL
EF #1	MAINTENANCE	MAINTENANCE	520	.5"	1/4	120	1ø	1350	V-BELT	12 1/4"	–	R.A. STAT	PENN CENTREX INLINER MODEL SX95B
EF #2	STEAM ROOM	MAIN TOILET ROOMS	550	1.0"	1/2	120	1ø	1800	V-BELT	12 1/4"	–	TIMECLOCK	PENN CENTREX INLINER MODEL SX95B
EF #3	STEAM ROOM	ELECT./TELE. ROOM	325	.875"	1/3	120	1ø	1565	V-BELT	12 1/4"	–	H.O.A./T.C.	PENN CENTREX INLINER MODEL SX95B
EF #4	STEAM ROOM	MECH./FIRE/ STEAM ROOM	880	.625"	1/2	120	1ø	1700	V-BELT	12 1/4"	–	H.O.A./T.C.	PENN CENTREX INLINER MODEL SX95B
EF #5	MAINTENANCE	MANAGERS OFFICE T.R.	75	.5"	1/20	120	1ø	1622	DIRECT DRIVE	–	–	WALL SWITCH	PENN ZEPHYR MODEL Z-7 WITH SPEED SW.
EF #6	ELEV. MACH. RM.	ELEVATOR MACHINE RM.	7400	.25"	1	208	3ø	775	V-BELT	30"	–	R.A. STAT.	PENN BREEZEWAY #B9K30
RAF #1	AHU ROOM	OFFICES (AHU-1)	9070	.5"	3	480	3ø	870	V-BELT	36"	–	A.T.C.	GREENHECK SOUNDTRAP VANE AXIAL #VPS-36H14-3C

MISC. HEATING UNIT SCHEDULE

DES.	CFM	FAN MOTOR H.P.	FAN MOTOR VOLTS	FAN MOTOR PHASE	FAN MOTOR CYCLE	BTU/H CAPACITY	WPD FT.	GPM	ENTERING WATER TEMP. DEG. F	WATER LEAVES DEG. F	ENTERING AIR TEMP. DEG. F	LEAVING AIR TEMP. DEG. F	TOTAL AMPS	MFGR/MODEL
CONV. #1	–	–	–	–	–	3160	–	.34	200	180	65	–	–	VULCAN MODEL RFG-A 36"Lx4"Dx20"H
CH #1	230	1/10	120	1	60	10,900	.09	.5	200	160	65	111	–	VULCAN MODEL RC-1200-02
UH #1	550	16 WATTS	120	1	60	21,865	.02	2.7	200	160	70	103	–	VULCAN MODEL HV-36
UH #2	450	9 WATTS	120	1	60	14,440	.003	1.8	200	160	70	96	–	VULCAN MODEL HV-24
UH #3	750	1/30	120	1	60	28,885	.03	3.5	200	160	70	103	–	VULCAN MODEL HV-48
UH #4	350	1/100	208	3	60	12,600	–	–	–	–	–	–	18.0	CHROMALOX MODEL MUH-05-2
UH #5	650	1/30	208	3	60	25,600	–	–	–	–	40	77	36	CHROMALOX MODEL MUH-07-8
WH #1	100	–	208	3	60	5120	–	–	–	–	–	–	8.5	CHROMALOX MODEL AWH-4204-2

STEAM TO WATER HEAT EXCHANGER SCHEDULE

HX NO.	SERVES	WATER SIDE MBH	WATER SIDE GPM	WATER SIDE WATER ENTERS DEG. F.	WATER SIDE WATER LEAVES DEG. F.	WATER SIDE MAX. P.D. FT.	STEAM SIDE INITIAL PRESSURE	STEAM SIDE LBS/HR	CONDENSATE SIDE TRAP CAPACITY (#/HR)	MFGR/MODEL
1	PRIMARY HEATING	1000	50	180	200	1.44	50 PSI	1000	3000	TACO 6" DIA. 2 PASS MODEL #6208
2	PRIMARY HEATING	1000	50	180	200	1.44	50 PSI	1000	3000	TACO 6" DIA. 2 PASS MODEL #6208

TERMINAL REHEAT BOX SCHEDULE

NOM CFM	INLET SIZE	OUTLET SIZE	INLET MAX. S.P.	W.P.D. FT. HD.	ΔT AIR	MBH	EWT	GPM	PIPE SIZE
0–200	4"ø	12"x8"	.45"	2'	30	0–6.5	200	0–.33	3/4"
201–300	5"ø	12"x8"	.45"	2'	30	6.5–9.7	200	.33–.49	3/4"
301–400	6"ø	12"x8"	.45"	2'	30	9.7–13.0	200	.49–.65	3/4"
401–550	7"ø	12"x10"	.45"	2'	30	13.0–17.8	200	.65–.89	3/4"
551–700	8"ø	12"x10"	.45"	2'	30	17.8–22.7	200	.89–1.14	3/4"
701–950	9"ø	14"x12"	.45"	2'	30	22.7–30.8	200	1.14–1.54	3/4"
951–1150	10"ø	14"x12"	.45"	2'	30	30.8–37.3	200	1.54–1.87	3/4"

NOTE: ENT. AIR TEMP. SHALL BE 55°F (TYP. OF ALL)

ELECTRIC WATER HEATER SCHEDULE

DESIG.	VOLT	PHASE	KW	FLA	RECOVERY RATE	TANK CAPACITY	MANUFACTURER & MODEL
WATER HEATER #1	208	3	6	16.7	31 GPH ● 80° RISE	40	A.O. SMITH MODEL DSE-40
WATER HEATER #2	120	1	1.5	–	6.9 GPH ● 90° RISE	15	A.O. SMITH MODEL ELSF-15

FIN TUBE RADIATION SCHEDULE

SYMBOL	BTU PER L.F.	GPM ● 20°F ΔT	WATER ENTERS DEG. F	WATER LEAVES DEG. F	ACTIVE LENGTH	RUNOUT SIZES	MFGR/MODEL	REMARKS
1	1000	.4	200	180	4'-0"	3/4"	VULCAN DURA-VANE STYLE DV3	1" C-4 1/4"-33/.2"FIN
2	1000	.8	200	180	7'-8"	3/4"	VULCAN DURA-VANE STYLE DV3	1" C-4 1/4"-33/.2"FIN
3	1000	.8	200	180	8'-0"	3/4"	VULCAN DURA-VANE STYLE DV3	1" C-4 1/4"-33/.2"FIN
4	550	.33	200	180	6'-0"	3/4"	VULCAN DURA-VANE STYLE DV3	3/4" C-2 3/4"x3"-33/.016"FIN

NOTE: ENCLOSURE SHALL BE 12" HIGH, SUITABLE FOR 3 PIPE ARRANGEMENT (SEE DWGS. FOR DETAIL)

AIR DEVICE SCHEDULE

TYPE	SIZE	CFM RANGE	INLET/ NECK SIZE	MAX. NC	MFGR/MODEL
S.A.D.	24"X24"	0 – 175	6"x6"	25	TITUS #PAS
S.A.D.	24"X24"	176 – 250	8"x8"	25	TITUS #PAS
S.A.D.	24"X24"	251 –350	10"x10"	30	TITUS #PAS
L.B.D.	36"X4"	0 – 150	(1)	10	TITUS #CT-581
L.B.D.	48"X4"	151 – 200	(1)	10	TITUS #CT-581
L.B.D.	72"X4"	201 – 300	(1)	10	TITUS #CT-581
L.B.D.	84"X4"	301 –350	(1)	10	TITUS #CT-581
L.B.D.	72"X3"	410	(1)	10	TITUS #CT-580
S.A.R.	12"X8"	0 – 230	12x6"	10	TITUS #271-FS
S.A.R.	12"X8"	231 – 400	12"x8"	20	TITUS #271-FS
R.A.R.	24"X24"	0 – 1600	22"x22"	15	TITUS #PAR
L.B.R.	48"X6"	880	(1)	25	TITUS #CT-580
E.A.G.	8"X8"	0 – 125	8"x6"	30	TITUS #4FL
E.A.G.	10"X10"	126 –240	10"x10"	30	TITUS #4FL

NOTE: (1) SEE FLOOR PLANS FOR ACTUAL DUCT SIZES.

PLUMBING FIXTURE SCHEDULE

P #	DESCRIPTION	CW	HW/TW	DOMESTIC FU CW	DOMESTIC FU HW	DOMESTIC FU TOT	SAN	VENT	TRAP	SANITARY FU PUBLIC	SANITARY FU NON	REMARKS
P-1	WALL HUNG WATER CLOSET (HDCP.)	1"	–	10	–	10	4"	2"	INT.	6	4	
P-2	WALL HUNG WATER CLOSET	1"	–	10	–	10	4"	2"	INT.	6	4	
P-3	URINAL	3/4"	–	5	–	5	2"	1 1/2"	INT	4	4	
P-4	COUNTERTOP LAVATORY	1/2"	1/2"	1.5	1.5	2	1 1/2"	1 1/2"	P	1	1	
P-5	MOP SINK	3/4"	3/4"	2.25	2.25	3	3"	1 1/2"	P	2	2	
P-6	ELECTRIC WATER COOLER HANDICAPPED ACCESSIBLE	1/2"	–	1	–	1	1 1/2"	1 1/2"	P	1	1	
P-7	FLOOR MOUNTED WATER CLOSET (HDCP.)	1"	–	10	–	10	4"	2"	INT.	6	4	
P-8	WALL HUNG LAVATORY (HDCP.)	1/2"	1/2"	1.5	1.5	2	1 1/2"	1 1/2"	P	1	1	

MECHANICAL LEGEND

SHW	COLD WATER (CW)
SHW	HOT WATER (HW)
SHW	PRIMARY SUPPLY — PRIM.SUP.
SHR	PRIMARY RETURN — PRIM.RET.
SHW	HEATING WATER SUPPLY — HS
SHR	HEATING WATER RETURN — HR
SHW	REHEAT WATER SUPPLY — RHS
SHR	REHEAT WATER RETURN — RHR
SHW	PERIMETER HEATING SUPPLY — PHS
SHR	PERIMETER HEATING RETURN — PHR
	CHILLED WATER SUPPLY — CWS
	CHILLED WATER RETURN — CWR
	MEDIUM PRESSURE STEAM — MPS 50#
	MEDIUM PRESSURE RETURN — MPR 50#
	HIGH PRESSURE STEAM — HPS 150#
	HIGH PRESSURE RETURN — HPR 150#
SHW	PUMPED DISCHARGE — PD
SHW	AIR CONDITIONING DRAIN — A/C COND.
SHW	SANITARY PIPING
SHW	STORM WATER PIPING — SW
SHW	VENT PIPING
SHW	FIRE LINE — F
SHW	CHECK VALVE
SHW	BALL VALVE
SHW	BUTTERFLY VALVE
SHW	BALANCING VALVE
SHW	INLINE CIRCULATING PUMP
SHW	UNION
SHW	FLOOR DRAIN — F.D.
SHW	PIPE GUIDE OR SLEEVE
SHW	PIPE ANCHOR
SHW	PIPING ELBOW DOWN
SHW	PIPING ELBOW UP
SHW	AIR FLOW DIRECTION INDICATOR — CO
SHW	SUPPLY AIR DUCT UP (DASHED LINES FOR DOWN)
SHW	RETURN & EXHAUST AIR DUCT UP (DASHED LINES FOR DOWN)
SHW	OUTSIDE AIR DUCT UP (DASHED LINES FOR DOWN)
SHW	DUCTWORK WITH SOUND LINING
SHW	FLEXIBLE DUCT AND EQUIPMENT CONNECTOR
SHW	DOUBLE THICKNESS TURNING VANES
SHW	DUCT TRANSITION ROUND TO RECTANGULAR
SHW	DUCT TRANSITION
SHW	SUPPLY AIR DUCT UP (DASHED LINES FOR DOWN)
SHW	RETURN & EXHAUST AIR DUCT UP (DASHED LINES FOR DOWN)
SHW	OUTSIDE AIR DUCT UP (DASHED LINES FOR DOWN)
SHW	BALANCING DAMPER
SHW	MOTOR OPERATED DAMPER — MOD
SHW	FIRE DAMPER W/ ACCESS PANEL — FD
SHW	BACKDRAFT DAMPER — BDD
SHW	THERMOSTAT
	REVERSE ACTING THERMOSTAT — TR

APRIL 3, 1995 AS-BUILTS

WHITING-TURNER CONTRACTING COMPANY
DESMAN ASSOCIATES ARCHITECTS ENGINEERS

BURDETTE, KOEHLER, MURPHY & ASSOCIATES, INC. CONSULTING ENGINEERS

PENN STREET PARKING FACILITY
UNIVERSITY OF MARYLAND AT BALTIMORE

NO.	DATE	BY
REVISIONS		

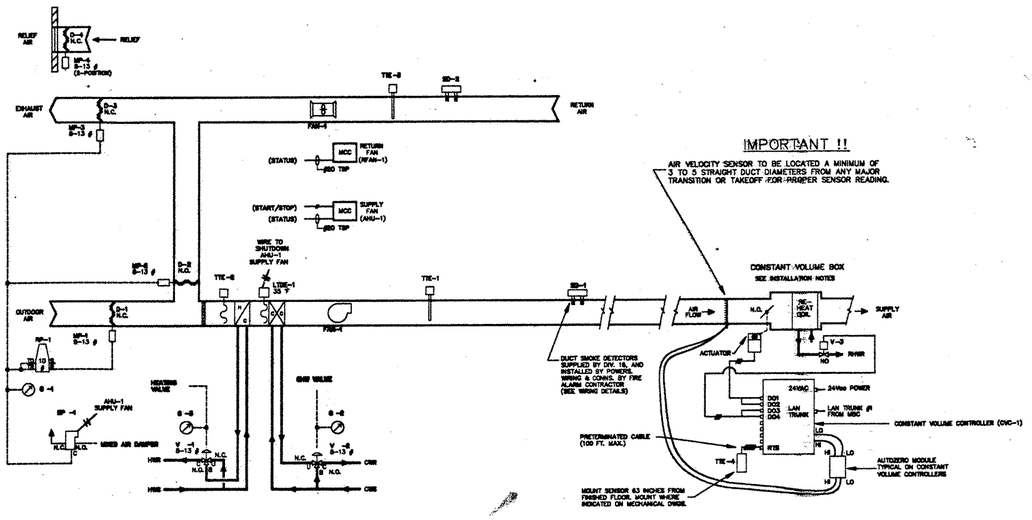
SCHEDULES & LEGEND

DRAWING NO. M-19

SCALE: NONE
DATE: 6-24-1993
PROJECT NO. J-343

DESIGN	DRAWN	CH'KD.
CEJ	DAT	MKA

BMS #924700



SEQUENCE OF OPERATION

OPERATIONAL MODES

DURING "UNOCCUPIED" HOURS THE CENTRAL CONTROL SYSTEM WILL INDEX THE AIR HANDLER TO SHUTDOWN MODE. DURING THE "UNOCCUPIED" HOURS, WHEN THE SPACE TEMPERATURE FALLS BELOW NIGHT SETPOINT THE CENTRAL CONTROL SYSTEM WILL INDEX THE AIR HANDLER TO NITE SETBACK MODE. DURING THE PRE-OCCUPANCY PERIOD, WHEN THE SPACE TEMPERATURE IS BELOW THE OCCUPIED SETPOINT, THE CENTRAL CONTROL SYSTEM WILL INDEX THE AIR HANDLER TO WARMUP MODE. DURING "OCCUPIED" HOURS, THE CENTRAL CONTROL SYSTEM WILL INDEX THE AIR HANDLER TO THE NORMAL MODE.

THE AIR HANDLER WILL BE INDEXED TO THE MODES DEFINED IN THE TABLE BELOW BY A SINGLE SOFTWARE POINT. THIS SOFTWARE POINT AND ALL INDIVIDUAL EQUIPMENT POINTS WILL BE OPERATOR COMMANDABLE.

NOTE: THE RETURN FAN RFAN-1 WILL ENERGIZE SIMULTANEOUSLY WITH THE AHU-1 SUPPLY FAN VIA AUXILIARY CONTACT INTERLOCK.

FAN STATUS TO BE MONITORED BY THE MCC PANEL

AIR HANDLER EQUIPMENT	UNOCCUPIED	OCCUPIED	SETBACK	WARMUP
SUPPLY FAN	OFF	ON	ON	ON
RETURN FAN	OFF	ON	ON	ON
CW COIL VALVE	CLOSED	CONTROLLED	CLOSED	CLOSED
PREHEAT VALVE	OPEN	CONTROLLED	CONTROLLED	CONTROLLED
MIXING DAMPERS	NORMAL	CONTROLLED	NORMAL	NORMAL

TEMPERATURE CONTROL

THE PREHEAT COIL TEMPERATURE SENSOR (TTE-2) WILL MODULATE PREHEAT VALVE (V-1) TO MAINTAIN THE PREHEAT COIL DISCHARGE SETPOINT (ADJUSTABLE), DURING SETBACK MODE ONLY.

THE SUPPLY AIR TEMPERATURE SENSOR (TTE-1) WILL MODULATE COOLING VALVE (V-2) TO MAINTAIN THE SUPPLY AIR TEMPERATURE SETPOINT (ADJUSTABLE).

THE MIXED AIR TEMPERATURE SENSOR (TTE-2) WILL MODULATE THE OUTDOOR, RETURN AND EXHAUST DAMPERS TO MAINTAIN THE MIXED AIR TEMPERATURE SETPOINT (ADJUSTABLE). START-UP, TO PREVENT INTEGRAL WIND-UP FROM THE SUPPLY AIR CONTROL LOOP, THE OUTDOOR AIR DAMPERS WILL BE PLACED AT MINIMUM POSITION FOR 120 SECONDS, AND THEN RELEASED FOR NORMAL CONTROL.

ECONOMIZER CONTROL

THE OUTDOOR AIR DRYBULB TEMPERATURE SENSOR IS USED TO DETERMINE THE AVAILABILITY OF FREE COOLING IN THE OUTDOOR AIR. WHEN THE OUTDOOR AIR TEMPERATURE IS ABOVE 65°F, THE OUTDOOR AIR DAMPER WILL BE POSITIONED TO ITS MINIMUM VENTILATION POSITION. WHEN THE OUTDOOR AIR TEMPERATURE DROPS BELOW 65°F, THE DAMPERS WILL BE ALLOWED TO MODULATE.

RELIEF DAMPER (D-4) SHALL FULLY-OPEN WHENEVER EXHAUST AIR DAMPER (D-3) BEGINS TO MODULATE OPEN.

CONSTANT AIR VOLUME BOXES

MORNING WARM-UP
WHEN INDEXED FROM THE "UNOCCUPIED" MODE TO THE "OCCUPIED" MODE VIA THE CENTRAL CONTROL SYSTEM, THE REHEAT VALVE (V-3) WILL BE POSITIONED TO PROVIDE FULL HEAT AND THE TERMINAL DAMPER WILL REMAIN AT ITS UNOCCUPIED VOLUME SETTING UNTIL THE SPACE TEMPERATURE REACHES THE "OCCUPIED" HEATING SETPOINT.

OCCUPIED
THE TERMINAL DAMPER WILL BE POSITIONED TO ITS OCCUPIED VOLUME SETTING AND THE REHEAT VALVE (V-3) WILL MODULATE TO MAINTAIN THE HEATING OR COOLING SETPOINT, DEPENDING UPON THE CONTROLLER'S MODE OF OPERATION (HEAT OR COOL). THE CENTRAL CONTROL SYSTEM WILL INDEX THE CONTROLLER TO ITS DESIRED MODE OF OPERATION.

UNOCCUPIED
THE TERMINAL DAMPER WILL BE POSITIONED TO ITS UNOCCUPIED VOLUME SETTING. THE CONTROLLER WILL OPERATE AS PREVIOUSLY DESCRIBED IN ORDER TO MAINTAIN THE NIGHT HEATING OR COOLING SETPOINT. UPON A SIGNAL FROM THE CENTRAL CONTROL SYSTEM, THE CONTROLLER WILL RESET TO THE "OCCUPIED" MODE FOR A PREDETERMINED TIME PERIOD.

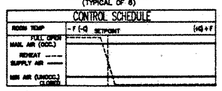
SAFETIES

WHEN SMOKE IS SENSED AT SMOKE-DETECTORS SD-1 OR SD-2, RELAY MODULES (BY FIRE ALARM) WILL DE-ENERGIZE, AHU-1 SUPPLY FAN AND RETURN FAN RFAN-1 AND THE MIXING DAMPERS WILL RETURN TO THEIR NORMAL POSITION.

WHEN THE TEMPERATURE ON THE FACE OF THE COOLING COIL FALLS BELOW THE SETPOINT OF LOW TEMPERATURE DETECTOR LTDE-1 (35°F), AHU-1 SUPPLY FAN WILL DE-ENERGIZE AND THE MIXING DAMPERS WILL RETURN TO THEIR NORMAL POSITION.

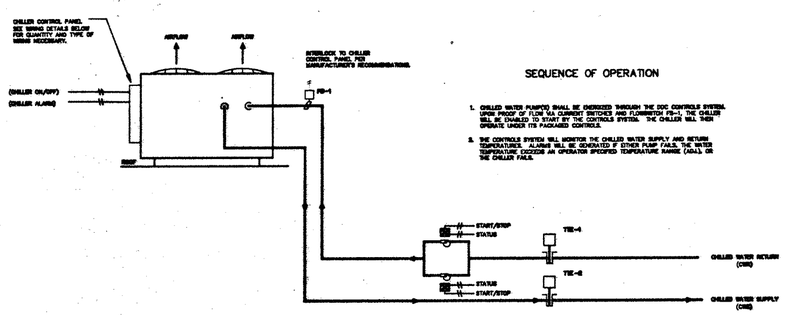
CONSTANT VOLUME W/REHEAT APPLICATION #33
(TYPICAL OF 8)

CONTROL SCHEDULE



TERMINAL BOX CONTROLLER INSTALLATION NOTES:
1) AIR VELOCITY SENSOR AND DAMPER TO BE PROVIDED BY BOX MANUFACTURER.
2) AIR VELOCITY SENSOR TO BE LOCATED A MINIMUM OF 3 TO 5 STRAIGHT DUCT DIAMETERS FROM ANY MAJOR TRANSITION OR TAKEOFF FOR PROPER SENSOR READING.
3) TERMINAL BOX CONTROLLER AND DAMPER ACTUATOR TO BE FACTORY INSTALLED.
4) REHEAT COIL VALVE TO BE FIELD INSTALLED BY MECHANICAL CONTRACTOR.

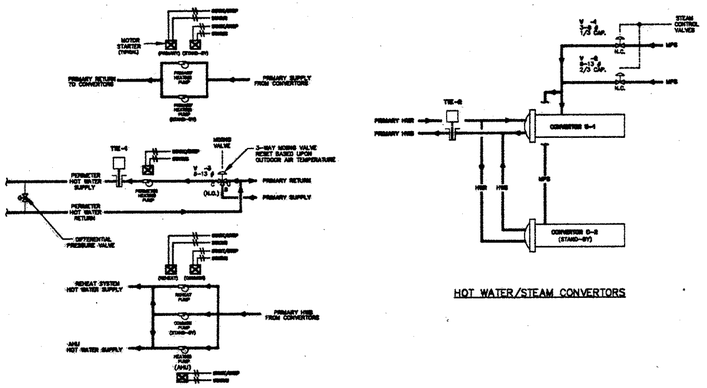
AIR HANDLING UNIT #1



SEQUENCE OF OPERATION

1. CHILLED WATER PUMP(S) SHALL BE ENERGIZED THROUGH THE DDC CONTROLS SYSTEM. UPON PROOF OF FLOW VIA CURRENT SWITCHES AND FLOWSWITCH FS-1, THE CHILLER WILL BE ENABLED TO START BY THE CONTROLS SYSTEM. THE CHILLER WILL THEN OPERATE UNDER ITS PACKAGED CONTROLS.
2. THE CONTROLS SYSTEM WILL MONITOR THE CHILLED WATER SUPPLY AND RETURN TEMPERATURES. ALARMS WILL BE GENERATED IF EITHER PUMP FAILS, THE WATER TEMPERATURE EXCEEDS AN OPERATOR SPECIFIED TEMPERATURE RANGE (ADJ.) OR THE CHILLER FAILS.

AIR COOLED CHILLER



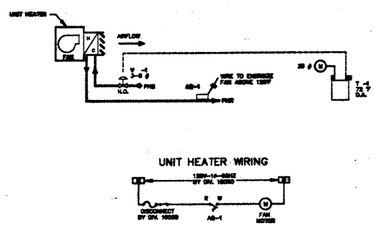
SYSTEM PUMPS

HOT WATER/STEAM CONVERTORS

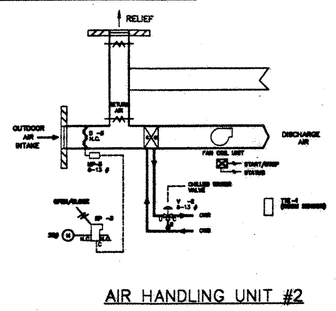
SEQUENCE OF OPERATION

1. HOT WATER PRIMARY HEATING PUMP(S) WILL BE ENERGIZED BY THE CONTROLS SYSTEM. LEAD/LAG OPERATION SHALL BE PERFORMED. CONVERTOR HOT WATER SUPPLY TEMPERATURE SENSOR (TTE-3) SHALL MODULATE STEAM CONTROL VALVES (V-1 AND V-2) TO OPEN IN SEQUENCE TO ENABLE STEAM TO FLOW TO THE CONVERTORS (1/3-2/3 CAPACITY CONTROL), WHEN THE CONVERTOR HOT WATER SUPPLY TEMPERATURE IS SATISFIED, THE STEAM VALVES WILL CLOSE. ALARMS SHALL BE GENERATED IF EITHER PUMP FAILS.
2. THE AIR HANDLING UNIT AND REHEAT HEATING WATER PUMPS SHALL BE ENERGIZED BY THE CONTROLS SYSTEM. ALARMS SHALL BE GENERATED IF EITHER PUMP FAILS. THE COMMON STAND-BY PUMP HAS MANUAL ISOLATION VALVES.
3. THE PERIMETER HEATING WATER PUMP SHALL BE ENERGIZED BY THE CONTROLS SYSTEM. THE HEATING WATER SUPPLY TEMPERATURE (TTE-1) SHALL BE RESET BY MODULATING THE MIXING VALVE (V-3) BASED ON OUTDOOR AIR TEMPERATURE. ALARMS SHALL BE GENERATED IF THE PUMP FAILS OR THE HEATING WATER SUPPLY TEMPERATURE EXCEEDS AN OPERATOR SPECIFIED (ADJ.) TEMPERATURE RANGE. INDIVIDUAL ZONE CONTROL VALVES (TYPICAL OF 3), SHALL BE 2-WAY OPEN CLOSE TYPE, CONTROLLABLE FROM DDC/COMS.

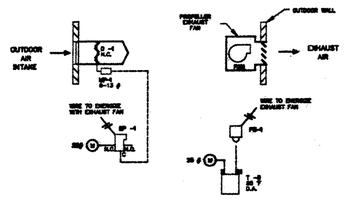
HOT WATER HEATING SYSTEM



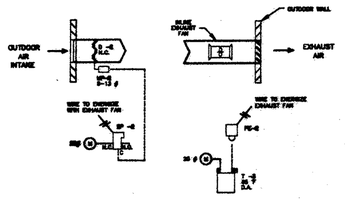
UNIT HEATERS & CABINET HEATERS



AIR HANDLING UNIT #2
(SERVES ELECTRICAL SWITCHGEAR ROOM)



WALL PROPELLER EXHAUST FANS



INLINE EXHAUST FAN

DRAWING DELETED

SEQUENCE OF OPERATION

UNIT HEATERS

ON A FALL IN SPACE TEMPERATURE BELOW THE SETPOINT OF ROOM THERMOSTAT (T-1), THE HEATER'S FAN WILL ENERGIZE.

ON A RISE IN SPACE TEMPERATURE ABOVE THE SETPOINT OF ROOM THERMOSTAT (T-1), THE HEATER'S FAN WILL DE-ENERGIZE.

ON A FALL IN HOT WATER SUPPLY TEMPERATURE BELOW THE SETPOINT OF AQUASTAT (AQ-1), THE HEATER'S FAN WILL DE-ENERGIZE.

EF #3 & #4

ON A RISE IN SPACE TEMPERATURE ABOVE THE SETPOINT OF ROOM THERMOSTAT (T-2), THE EXHAUST FAN WILL ENERGIZE AND THE OUTDOOR AIR INTAKE DAMPER SHALL OPEN. ON A FALL IN SPACE TEMPERATURE, THE REVERSE SHALL OCCUR.

EF #2

FAN SHALL RUN CONTINUOUSLY DURING OCCUPIED HOURS AND SHALL BE DE-ENERGIZED DURING UNOCCUPIED HOURS.

EF #3 & #4

DURING OCCUPIED HOURS, FANS SHALL RUN CONTINUOUSLY.

DURING UNOCCUPIED HOURS, FANS SHALL BE CONTROLLED BY ROOM THERMOSTAT:
ON A RISE IN SPACE TEMP ABOVE SETPOINT, FAN SHALL BE ENERGIZED.
ON A DROP IN SPACE TEMP, THE REVERSE SHALL OCCUR.

EF #5

FAN SHALL BE ENERGIZED BY LOCAL SWITCH.

AIR HANDLING UNIT #2

WHEN CHILLED WATER IS AVAILABLE, OA DAMPER & RELIEF DAMPER SHALL BE CLOSED. UNIT SHALL BE 100% RECIRCULATING, USING 55°F L.A.T.

WHEN CHILLED WATER IS NOT AVAILABLE, RETURN AIR DAMPER, OA DAMPER AND RELIEF AIR DAMPER SHALL MODULATE TO PROVIDE 55°F L.A.T.

APRIL 3, 1995 AS-BUILTS

WHITING-TURNER
CONTRACTING COMPANY
DISSMAN ASSOCIATES
ARCHITECTS ENGINEERS

BURDETTE, KOEHLER, MURPHY & ASSOCIATES, INC.
CONSULTING ENGINEERS
BALTIMORE, MARYLAND 21201

PENN STREET PARKING FACILITY
UNIVERSITY OF MARYLAND AT BALTIMORE

NO.	DATE	BY
5	3-24-95	

REVISIONS

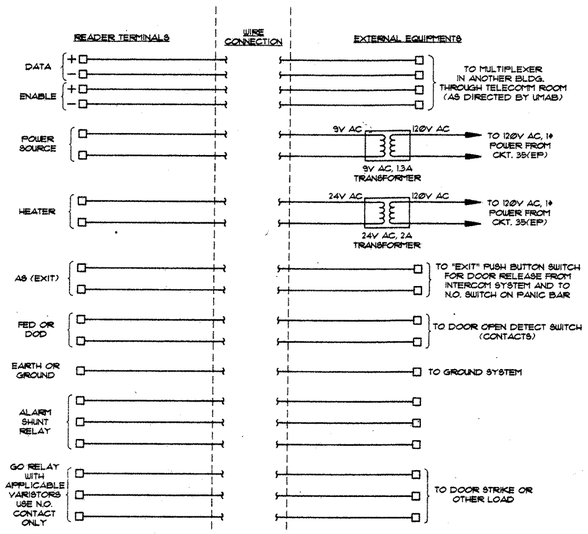
AUTOMATIC TEMPERATURE CONTROLS

DRAWING NO.
M-20

SCALE: NONE
DATE: 6-24-93
PROJECT NO. J-343

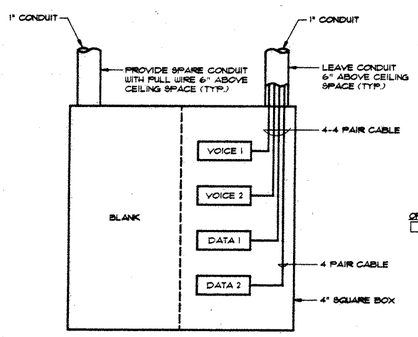
DESIGN	DRAWN	CH'KD.
GEJ	DAT	MKA

BKM #924700



1 / E-1 EXTERNAL WIRING DIAGRAM – SECURITY SYSTEM

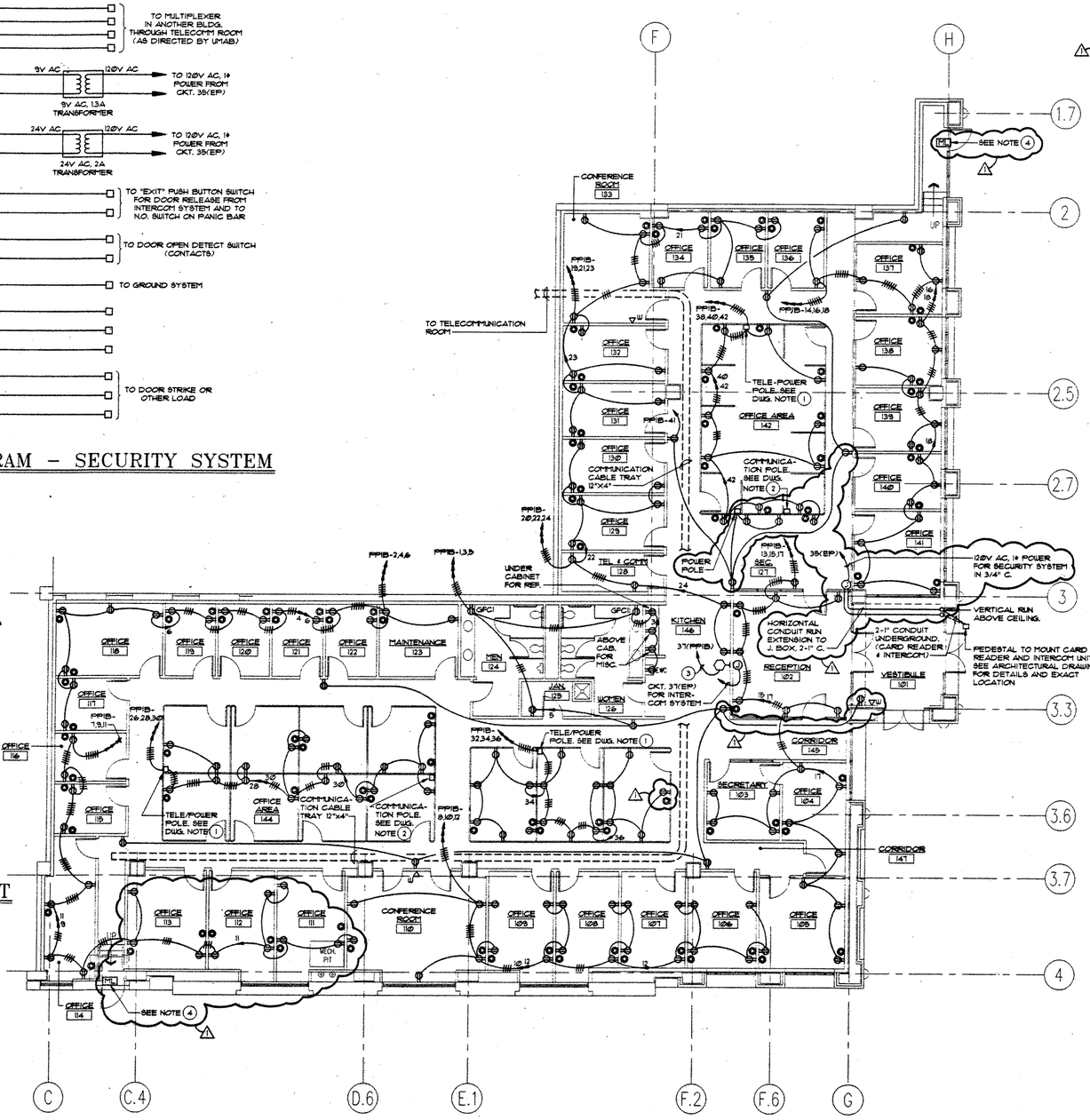
NO SCALE



2 / E-1 TYP. COMMUNICATION OUTLET

NO SCALE

NOTE: THE ABOVE DETAIL IS MEANT FOR PERMANENT OFFICE AREAS AND NOT FOR MODULAR OFFICE AREAS. PRE-WIRED MODULAR FURNITURES ARE PROVIDED BY THE USER. CONTRACTOR SHALL FIELD VERIFY THE OUTLET LOCATION AND LEAVE SUFFICIENT CABLE LENGTH AT THE TELE-POWER AND COMMUNICATION POLES ACCORDINGLY.



3 / E-1 OFFICE FLOOR PLAN – POWER

SCALE: 1/8" = 1'-0" — GROUND FLOOR

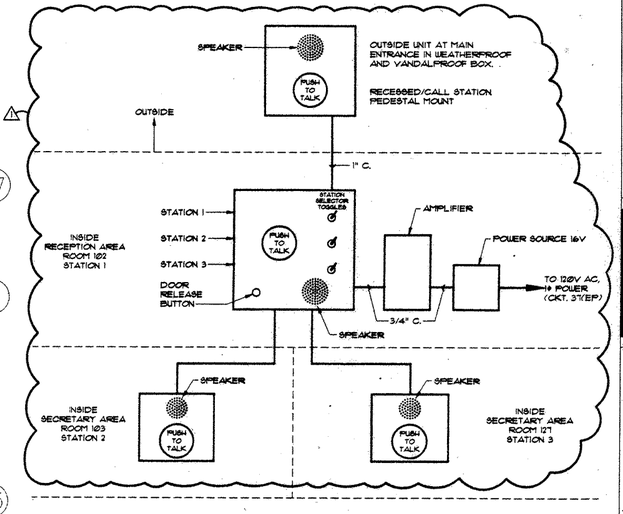
N

GENERAL NOTES:

1. FOR FIRE ALARM COMPONENTS SEE BASE DWG. E-3 DATED 6-24-93.
2. FOR CABINET HEATER (CH 9), SEE BASE DWG. E-3 DATED 6-24-93.
3. MOUNTING HEIGHT OF RECEPTACLES ON THE EXTERIOR WALLS TO COORDINATE WITH THE PERIMETER HEATING UNITS AS SHOWN ON MECHANICAL DRAWING.
4. FOR ELECTRICAL LEGEND/ABBREVIATION, SEE BASE DWG. E-1 DATED 11-24-93.
5. ACTUAL LOCATION OF TELE-POWER & COMMUNICATION POLES SHALL BE FIELD DETERMINED TO SUIT THE BEST CONDITION BASED ON THE USER PROVIDED MODULAR FURNITURE LAYOUT. THE MODULAR POSITIONS WILL BE SUPPLIED PREWIRED AND THE INTENT OF THIS DRAWING IS TO DIVIDE ALL 3 POWER CIRCUITS EVENLY IN THIS AREA.
6. COMMUNICATION CABLE TRAY LAYOUT IS SHOWN APPROXIMATE AND THE INTENT IS TO STAY ABOVE THE CORRIDOR FOR EASE OF ACCESSIBILITY. THE ABOVE CEILING SPACE IS VERY CROWDED WITH DUCTS, PIPES, VENTS, LIGHTS ETC. CONTRACTOR HAS TO COORDINATE CLOSELY FOR THE FINAL ROUTING OF THE TRAY. REFER TO MECHANICAL DRAWING FOR SECTIONAL DETAILS AT DUCT CROSSING ETC.
7. REFER TO THE SPECIFICATION SECTIONS UNDER BASE CONTRACT.
8. FOR PANELBOARD "FPIB" SCHEDULE, SEE DRAWING E-2.
9. PROVIDE SEPARATE NEUTRALS TO RECEPTACLE CIRCUITS AS SHOWN. ⚠1

DRAWING NOTES (APPLY TO THIS DWG. ONLY):

1. PROVIDE AND INSTALL TELE-POWER POLES AS SHOWN. TELE-POWER POLE SHALL BE WIREMOLD TYPE AHTP-4 OR EQUAL.
2. PROVIDE AND INSTALL COMMUNICATION POLES AS SHOWN. COMMUNICATION POLE SHALL BE WIREMOLD TYPE ALTC-4 OR EQUAL.
3. 2#10 & 1#12(G) IN 3/4" CONDUIT.
4. PROVIDE MAGNETIC LOCKS (ML) AT TOP OF THE DOOR TO BE RELEASED AND CONTROLLED BY FIRE ALARM CONTROL SYSTEM THROUGH PULL STATION OPERATION. ALSO PROVIDE A DIRECT BYPASS POWER TO OPERATE THIS MAGNETIC LOCK THROUGH A PUSH BUTTON LOCATED AT NEAREST PULL STATION AS A BACK UP IF FA CONTROL SYSTEM FAILS. ⚠1

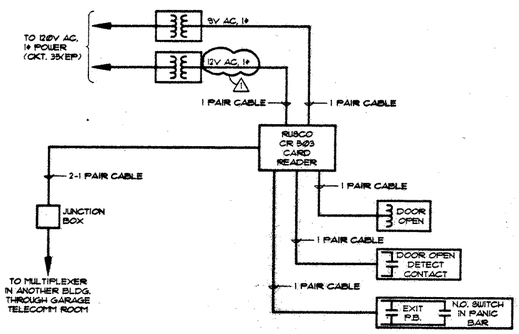


4 / E-1 INTERCOM SYSTEM SCHEMATIC

NO SCALE

INTERCOM NOTES:

1. A. THE SYSTEM SHALL CONSIST OF ONE MASTER STATION (NO.1) WITH CONTROL TOGGLE SWITCHES TO BE USED AS SELECTOR SWITCHES AMONG STATIONS 1, 2 AND 3 TO ANSWER CALL FROM EXTERIOR UNIT.
   B. AMPLIFIER
   C. POWER SOURCE UNIT.
   D. TWO REMOTE STATIONS NO. 2 AND 3.
   E. EXTERIOR UNIT PEDESTAL MOUNT.
2. THE INSTALLATION SHALL COMPLY WITH ADA CODE REQUIREMENTS.
3. THE WIRING SHALL MEET THE MANUFACTURER'S REQUIREMENTS & RECOMMENDATIONS, INCLUDING VOLTAGE DROPS CONSIDERATION.
4. THE SYSTEM SHALL MATCH THE UMAB STANDARDS OR BE APPROVED BY UMAB.
5. THE EXACT LOCATION OF THE DESK TOP UNITS IN THE RESPECTIVE ROOMS SHALL BE FIELD DETERMINED BASED ON FURNITURE LAYOUT.
6. THE SYSTEM SHALL BE MANUFACTURED BY HOUSING DEVICES INC. OR EXECUTONE OR EQUAL.



5 / E-1 SECURITY ONE-LINE DIAGRAM

NO SCALE

SECURITY NOTES:

1. USE CABLES AS RECOMMENDED BY THE MANUFACTURER.
2. INSTALLATION AND GROUNDING SHALL BE MADE AS RECOMMENDED BY THE MANUFACTURER.
3. CARD READER SYSTEM SHALL MATCH THE UMAB STANDARDS TO INTERFACE THEIR CAMPUS SYSTEM AND SHALL BE RUSCO CARD READER SERIES CR-5403.
4. CARD READER SHALL BE MOUNTED FLUSH IN THE PEDESTAL MEETING ALL ADA REQUIREMENTS. SEE ARCHITECTURAL DRAWING FOR PEDESTAL DETAILS.
5. CARD READER ENCLOSURE SHALL BE WEATHERPROOF AND VANDALPROOF.
6. THE FOLLOWING OPTIONS SHOULD BE INCLUDED WITH THE CARD READER:
   a) (ASI) ALARM SHUNT FEATURE
   b) (TPS) TAMPER ALARM SWITCH
   c) (ROS) READER OVERRIDE FEATURE
   d) (FED) FORCED ENTRY DETECTION
   e) (DMS) DEGRADED MODE FEATURE
   f) WEATHERIZED KIT INCLUDING HEATER

⚠1

NORTH

8' 0 8' 16'

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

APRIL 3, 1995 AS-BUILTS

WHITING-TURNER CONTRACTING COMPANY

DESMAN BWJ INC. ASSOCIATES ARCHITECTS

BWJ

PENN STREET PARKING FACILITY
UNIVERSITY OF MARYLAND AT BALTIMORE

NO.	DATE	BY
⚠1	4/21/94	RJP

REVISIONS

OFFICE FLOOR PLAN POWER

DRAWING NO. E-1

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

DATE: APRIL 21, 1994

PROJECT NO. 93001

DESIGN	DRAWN	CH'KD.
RP	RSB	RP

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BKM #924702

ELECTRICAL ABBREVIATIONS

A	AMPERE
AC	ALTERNATING CURRENT
AF	AMPERE FRAME
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AHU	AIR HANDLING UNIT
AIC	AMPERE INTERRUPTING CAPACITY
AL	ALUMINUM
ANSI	AMERICAN NAT'L STANDARDS INSTIT.
ASYM	ASYMMETRICAL
AT	AMPERE TRIP
ATC	AUTOMATIC TEMPERATURE CONTROL
ATS	AUTOMATIC TRANSFER SWITCH
AWG	AMERICAN WIRE GAUGE
BATT	BATTERY
BJ	BONDING JUMPER
BLDG	BUILDING
C	CONDUIT
CB	CIRCUIT BREAKER
CKT	CIRCUIT
CLG	CEILING
CT	CURRENT TRANSFORMER
CTR	CENTER
CU	COPPER
DB	DIRECT BURIAL
DIA	DIAMETER
DN	DOWN
DT	DOUBLE THROW
DWG	DRAWING
ECB	ENCLOSED CIRCUIT BREAKER
EF	EXHAUST FAN
ELEC	ELECTRIC/ELECTRICAL
EMER	EMERGENCY
EMT	ELECTRICAL METALLIC TUBING
EQUIP	EQUIPMENT
ETR	EXISTING TO REMAIN
EWC	ELECTRIC WATER COOLER
EX	EXISTING
F	FUSED OR FUSIBLE
FA	FIRE ALARM
FAAP	FIRE ALARM ANNUNCIATOR PANEL
FACP	FIRE ALARM CONTROL PANEL
FCU	FAN COIL UNIT
FDR	FEEDER
FLA	FULL LOAD AMPERES
FSS	FUSED SAFETY SWITCH
FVNR	FULL VOLTAGE NON-REVERSING
G	GROUND
GEN	GENERATOR
GFI	GROUND FAULT INTERRUPTER
GW	GROUND WIRE
HOA	HAND-OFF-AUTOMATIC
HP	HORSEPOWER
HZ	HERTZ
JB	JUNCTION BOX
KCMIL	THOUSAND CIRCULAR MILS
KVA	KILOVOLT-AMPERE
KW	KILOWATT
LTG	LIGHTING
MCB	MAIN CIRCUIT BREAKER
MCCB	MOLDED CASE CIRCUIT BREAKER
MCP	MOTOR CIRCUIT PROTECTOR
MDP	MAIN DISTRIBUTION PANEL
MECH	MECHANICAL
MH	MANHOLE
MLO	MAIN LUGS ONLY
MTD	MOUNTED
MTG HGT	MOUNTING HEIGHT
NEC	NATIONAL ELECTRICAL CODE
NEMA	NATIONAL ELECTRICAL MANUF. ASSOC.
NF	NON-FUSED
NFSS	NON-FUSED SAFETY SWITCH
NIC	NOT IN CONTRACT
NTS	NOT TO SCALE
Ø OR PH	PHASE
P	POLE
PB	PUSHBUTTON
PNL	PANEL
PVC	POLYVINYL CHLORIDE
RGS	RIGID GALVANIZED STEEL
RM	ROOM
S	SWITCH
SCHED	SCHEDULE
SD	SMOKE DAMPER
SEC	SECONDARY
SFA	SPRINKLER FLOW ALARM
SS	SAFETY SWITCH
ST	SINGLE THROW
SYM	SYMMETRICAL
TEL	TELEPHONE
TTB	TELEPHONE TERMINAL BOARD
TYP	TYPICAL
UG	UNDERGROUND
UH	UNIT HEATER
UON	UNLESS OTHERWISE NOTED
V	VOLT
VPS	VALVE POSITION (TAMPER) SWITCH
W	WIRE
WP	WEATHERPROOF
XFMR	TRANSFORMER

ELECTRICAL LEGEND

- DRAWING NOTE (APPLIES TO THIS DRAWING ONLY)
- DETAIL, SECTION OR ELEVATION NUMBER / DRAWING NUMBER / DRAWING TAKEN FROM
- REVISION NUMBER – CLOUDED AREA ON DRAWING CONTAINS REVISION
- UPPER CASE – FIXTURE TYPE (TYPICAL FOR ALL LIGHTING FIXTURES) – SEE LIGHTING FIXTURE SCHEDULE
- LIGHTING FIXTURE
- LOWER CASE – INDICATES CONTROLLING SWITCH(ES) (TYPICAL FOR ALL LIGHTING FIXTURES)
- LIGHTING FIXTURE (EMERGENCY CIRCUIT)
- INDICATES TWO SWITCHED LEVELS OF ILLUMINATION PROVIDED BY THIS FIXTURE
- CONNECT TWO OUTBOARD LAMPS TO ONE SWITCH
- CONNECT REMAINING LAMP(S) TO SECOND SWITCH (DARKENED AREA INDICATES CONNECTION TO EMERGENCY LIGHTING CIRCUIT)
- LIGHTING FIXTURE, WALL MOUNTED – SEE LIGHTING FIXTURE SCHEDULE
- FLUORESCENT STRIP FIXTURE
- FLUORESCENT LIGHTING FIXTURE SURFACE/STEM MOUNTING
- RECESSED LINEAR FLUORESCENT FIXTURE WITH PARABOLIC LOUVER
- 25' HIGH POLE TOP FIXTURE
- 12' HIGH POST TOP FIXTURE
- EXIT LIGHT – DARKENED SECTION INDICATES FACE WITH DIRECTIONAL ARROWS AS INDICATED – SEE LIGHTING FIXTURE SCHEDULE
- S_C SINGLE POLE TOGGLE SWITCH – SUBSCRIPT INDICATES FIXTURES CONTROLLED BY THE SWITCH (TYPICAL FOR ALL LIGHTING SWITCHES)
- S_3^3 THREE WAY TOGGLE SWITCH
- S_D DIMMER SWITCH
- S_P SINGLE POLE TOGGLE SWITCH WITH PILOT LIGHT
- S_K SINGLE POLE KEY SWITCH
- RACEWAY
- HOMERUN TO PANELBOARD – ARROWS INDICATE NUMBER OF CIRCUITS; SLASHES INDICATE CIRCUIT CONDUCTORS; NO SLASH INDICATES TWO CIRCUIT CONDUCTORS
- CONDUIT TURNING UP
- CONDUIT TURNING DOWN
- JUNCTION BOX, WALL, CEILING OR FLUSH-FLOOR MOUNTED
- DUPLEX RECEPTACLE – 2P,3W,20A,125V,NEMA 5-20R IN RECESSED OUTLET BOX
- WP / GFI / IG DUPLEX RECEPTACLE – 2P,3W,20A,125V,NEMA 5-20R IN RECESSED OUTLET BOX: WP – WEATHERPROOF, GFI – GROUND FAULT INTERRUPTER, IG – ISOLATED GROUND
- TELEPHONE OUTLET: W – 48"A.F.F. , P=PAY PHONE
- COMMUNICATION VOICE & DATA OUTLET
- SPEAKER, CEILING OR WALL MOUNTED (CB=CALL BUTTON)
- PANELBOARD, RECESSED OR SURFACE MOUNTED
- ELECTRIC MOTOR – INSIDE NUMERAL INDICATES HORSEPOWER, F – FRACTIONAL
- S_M MOTOR SWITCH WITH THERMAL OVERLOAD
- S_{HOA} MOTOR SWITCH WITH THERMAL OVRLOAD AND HAND-OFF-AUTO SWITCH
- COMBINATION MAGNETIC MOTOR STARTER WITH MCP
- MAGNETIC MOTOR CONTROLLER/STARTER
- FUSED DISCONNECT SWITCH – UPPER NUMERAL INDICATES SWITCH SIZE; LOWER NUMERAL INDICATES FUSE SIZE
- NONFUSED DISCONNECT SWITCH – NUMERAL INDICATES SIZE
- F FIRE ALARM MANUAL STATION
- FIRE ALARM MANUAL STATION WITH AUDIO/VISUAL DEVICE
- FIRE ALARM AUDIO/VISUAL DEVICE
- S SMOKE DETECTOR, CEILING MOUNTED
- S^D SMOKE DETECTOR: D-DUCT, E-ELEVATOR RECALL
- $Ø^E_{ST}$ HEAT DETECTOR: E-ELEVATOR RECALL, ST-SHUNT TRIP
- FIRE ALARM VISUAL DEVICE ONLY
- SFA SPRINKLER FLOW SWITCH
- VPS SPRINKLER VALVE POSITION (TAMPER) SWITCH
- PC PHOTOCELL
- TC TIME CLOCK
- PERT BLUE LIGHT EMERGENCY TELEPHONE OUTLET
- 90A FUSE-NUMERAL INDICATED FUSE AMP RATING
- 100A LOW VOLTAGE MOLDED CASE CIRCUIT BREAKER, RATING AS INDICATED
- DRAW-OUT CIRCUIT BREAKER
- AUTOMATIC TRANSFER SWITCH
- NORMALLY OPEN CONTACT
- NORMALLY CLOSED CONTACT
- ELECTRIC MOTOR-NUMERAL INDICATES HORSEPOWER
- PIECE OF EQUIPMENT WITH FACTORY INSTALLED MOTOR CONTROLLER
- TRANSFORMER-SIZE AS NOTED
- POTENTIAL TRANSFORMER
- THREE PHASE WYE CONNECTION WITH GROUNDED NEUTRAL
- THREE PHASE DELTA CONNECTION
- A AM AMMETER, AMMETER SWITCH
- V VS VOLTMETER, VOLTMETER SWITCH
- WATTHOUR METER
- C MAGNETIC CONTACTOR
- DUPLEX RECEPTACLE SAME AS , EXCEPT CONNECTED TO EMERGENCY CIRCUIT
- FEEDER NUMBER, SEE FEEDER SCHEDULE
- SPECIAL RECEPTACLE-TYPE AS NOTED

LIGHTING FIXTURE SCHEDULE

SYMBOL	TYPE	MANUFACTURER	CATALOG #	LAMPS NO	LAMPS TYPE	LAMPS WATTS	VOLTS	MOUNTING	LENSE TYPE	REMARKS
	A	LITHONIA	ALC 196 WITH WIRE GUARD	1	F96T12CW	75	277	SURFACE	–	CLG. MTD. UNDER SLAB BETWEEN T'S. NOTE-1.
	B	KIM	PGL/100 HPS277/1 PB1/QS	2	HPS WITH T-4 MINI-CAN QUARTZ STANDBY	100	277	PENDANT	STANDARD ACRYLIC	SEE MOUNTING DETAIL ON DRAWING E-19
	C	KIM	PGL/100HPS277/ PB1	1	HPS	100	277	PENDANT	STANDARD ACRYLIC	SEE MOUNTING DETAIL ON DRAWING E-19
	D	LITHONIA	KKS400SR3	1	LU400 HPS	400	277	SQUARE POST TOP 25' HIGH	TYPE-III DISTRIBUTION	FIXTURE MOUNTING HEIGHT 25'-0"AFF
	E	LITHONIA	C148-277-CW20-PAF	1	F48T12CW	38	277	SURFACE/ PENDANT	–	PENDANT IN UTILITY ROOMS FLUSH WITH BOTTOM OF T'S. PROVIDE WIREGUARD FOR CRAWL SPACE.
	F	LITHONIA	2PM3GB432-24-277-SSB	4	F32T8	32	277	RECESSED	24CELL/3" DEEP PARA-BOLIC LOU-VER	2'X4' FLUORESCENT FIXTURE
	G	LITHONIA	2PM3GB2U32-12-277-SSB	2	F32T8U	32	277	RECESSED	12CELL/3" DEEP PARA-BOLIC LOUVER	2'X2' FLUORESCENT FIXTURE
	H	LITHONIA	9RLG81RSC-277-ES-PBLS-11	1	F40T12CW	40	277	RECESSED	RECESSED LI-NEAR W/PA-RABOLIC LOUVER	9"WIDE FLUORESCENT FIXTURE (REST-ROOMS ONLY)
	K	LITHONIA	CS240A-277-ES	2	F40T12CW ES	34	277	SURFACE OR STEM MOUNTING	ACRYLIC PRISMATIC	SAIR WELL/ELEVATOR LOBBY
	L	LITHONIA	AF13QT7AR	QUAD TUBE	F13DTT/ 41K(2)	13	277	RECESSED DOWNLIGHTS	CLEAR REFLECTOR	7" FLUORESCENT QUAD TUBE DOWN-LIGHTS
	M	HUBBELL	PVL-0100S-118	1	HPS	100	277	WALL	CLEAR	LEMMON ST. SIDE
	N	POULSEN LIGHTING	SATT-MIN-405-100HP-120	1	HPS	100	120	POST TOP	CLEAR REDIRECTING	12 FT. POLE TYPE DRA-12
	P	LITHONIA	LESW-1 OR 2-G-277	1 OR 2	LED	8.5 OR 13.8	277	CEILING	WHITE FACE GREEN LET.	EXIT SIGNS
	Q	BEGA	3076S	1	E-17 HPS	70	277	WALL	WHITE	PENN ST. SIDE AND AROUND ELEVATOR TOWER
	R	KIM	PGL/150HPS277/ PB1/QS	2	HPS WITH T-4 MINI-CAN QUARTZ STANDBY	150	277	PENDANT	STANDARD ACRYLIC	SEE MOUNTING DETAIL ON DRAWING E-19
	S	KIM	PGL/150HPS277/ PB1	1	HPS	150	277	PENDANT	STANDARD ACRYLIC	SEE MOUNTING DETAIL ON DRAWING E-19

NOTE:

1. PROVIDE HARD RUBBER WASHER 1" THICK AT EACH FIXING POINT BETWEEN FIXTURE AND SLAB TO KEEP THE FIXTURE OFF FROM THE SLAB AND MAINTAIN A GAP ALLOWING AIR-PASSAGE BETWEEN FIXTURE & SLAB.

GENERAL NOTES:

1. MAJOR PART OF THE BRANCH CIRCUIT HOMERUNS ROUTED TO THE SAME VICINITY CAN BE GROUPED TOGETHER TO MINIMIZE THE NUMBER OF CONDUITS USED. HOWEVER THIS HAS TO MEET THE NEC REQUIREMENTS REGARDING DERATING OF CONDUCTOR AMPACITIES.
2. THE TERMINATIONS OF DUCTBANKS AS SHOWN ON DRAWING E-2 ARE SHOWN APPROXIMATE AND CONTRACTOR SHALL ADJUST AS NECESSARY TO SUIT FIELD CONDITIONS. THE MAIN ELECTRICAL ROOM DUCTBANK TERMINATION POINT SHALL BE COORDINATED WITH APPROVED SHOP DRAWINGS.

APRIL 3, 1995 AS-BUILTS

WHITING-TURNER
CONTRACTING COMPANY

DESMAN ASSOCIATES
ARCHITECTS ENGINEERS

BURDETTE, KOEHLER, MURPHY & ASSOCIATES, INC.
CONSULTING ENGINEERS

PENN STREET PARKING FACILITY
UNIVERSITY OF MARYLAND AT BALTIMORE

NO.	DATE	BY
	11-24-93	R.P.

REVISIONS

LEGEND AND LTG FIXTURE SCHEDULE

DRAWING NO. E-1

SCALE: 1/8"=1'-0"
DATE: 6-24-1993
PROJECT NO. J-343

DESIGN	DRAWN	CH'KD.
R.P.	J.P.	R.N.S.

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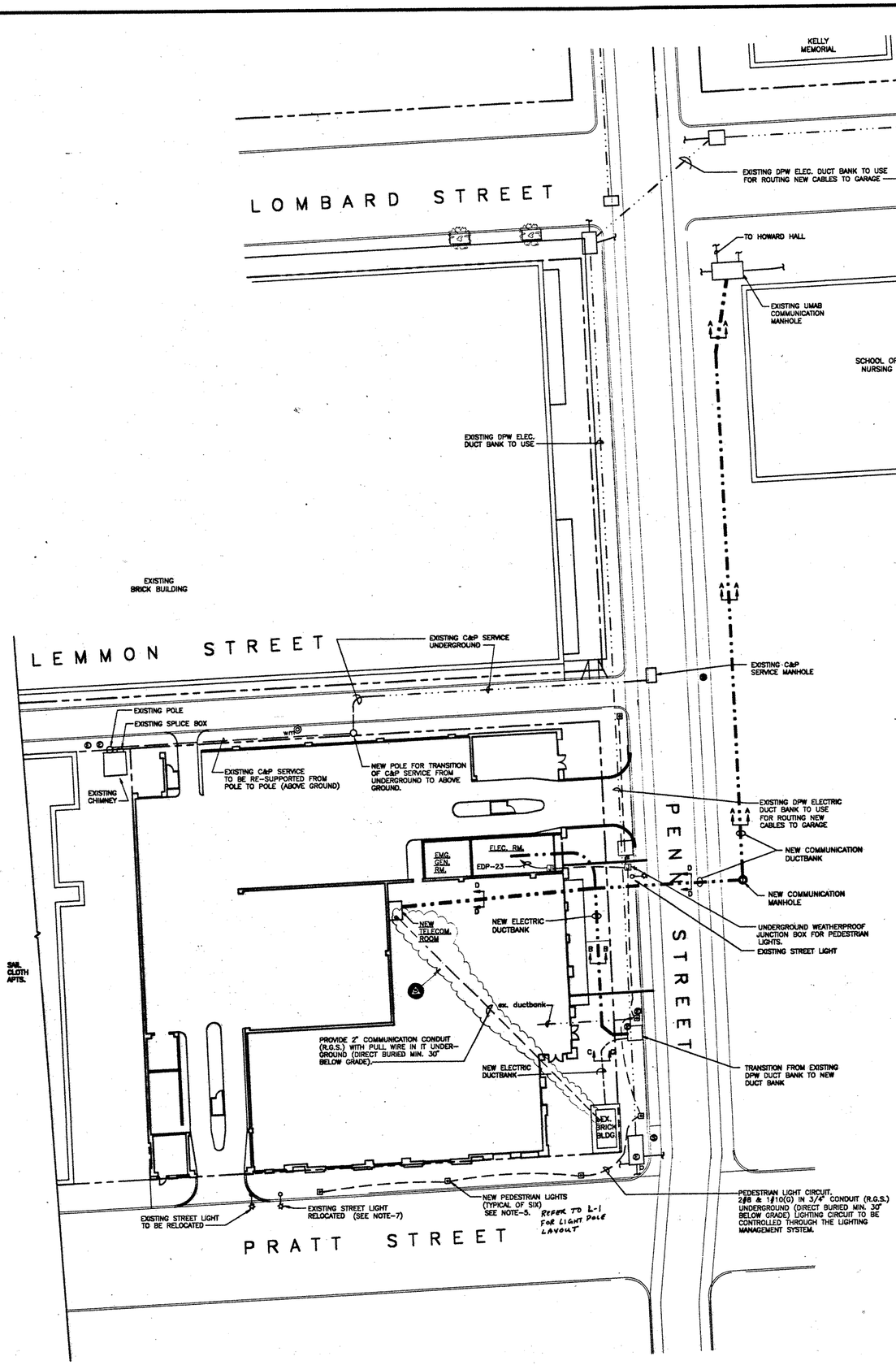
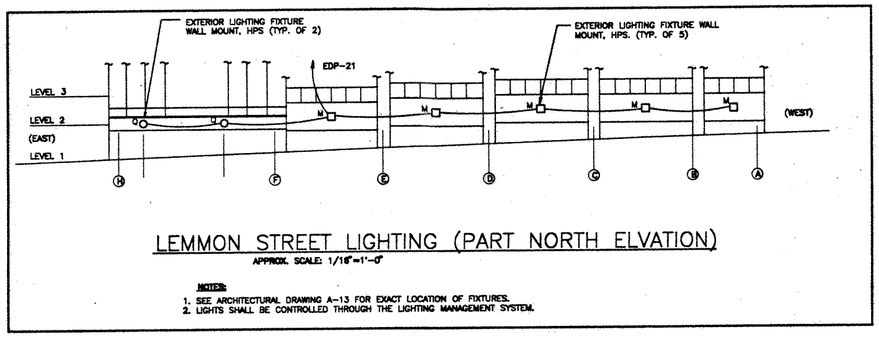
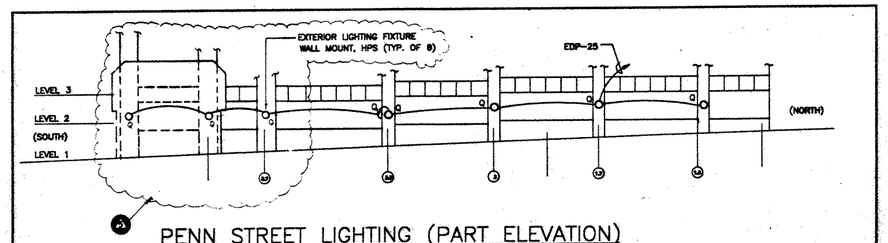


SITE PLAN
SCALE: 1"=20'-0"



LEMMON STREET LIGHTING (PART NORTH ELVATION)
APPROX. SCALE: 1/16"=1'-0"

NOTES:
1. SEE ARCHITECTURAL DRAWING A-13 FOR EXACT LOCATION OF FIXTURES.
2. LIGHTS SHALL BE CONTROLLED THROUGH THE LIGHTING MANAGEMENT SYSTEM.



PENN STREET LIGHTING (PART ELEVATION)
NO SCALE

NOTES:
1. SEE ARCHITECTURAL DRAWINGS A-11 AND A-12 FOR LOCATION DETAILS.
2. LIGHTS SHALL BE CONTROLLED THROUGH THE LIGHTING MANAGEMENT SYSTEM.

NOTES:

1. SEE CIVIL & STRUCTURAL DRAWINGS FOR CONCRETE ENCASED DUCTBANK DETAILS AND ELEVATIONS AND EXACT ROUTING.
2. SEE DRAWING E-19 FOR DUCTBANK SECTIONS AND CONDUIT SIZES.
3. SEE COMMUNICATION MANHOLE DETAILS ON DRAWING E-19.
4. EXACT LOCATION OF DUCTBANK TERMINATION AND STUB-UPS IN ELEC. ROOM OR TELECOM. ROOM SHALL BE DETERMINED BASED ON APPROVED EQUIPMENT LAYOUT PER FINAL SHOP DRAWING SUBMITTAL.
5. SEE LANDSCAPE PLAN L-1 FOR EXACT LOCATION OF PEDESTRIAN LIGHTS IN COORDINATION WITH TREES AND EXISTING MANHOLES.
6. SEE DRAWING E-3 FOR OTHER UNDERGROUND CONDUITS TO BE BURIED BEFORE THE SLAB IS POURED.
7. SEE LANDSCAPE PLAN L-1 FOR EXACT LOCATION OF STREET LIGHT POLE.

LEGEND

- EXISTING DUCT BANK TO RE-USE
- NEW DUCT BANK (CONCRETE ENCASED)
- NEW PEDESTRIAN LIGHTS
- EXISTING STREET LIGHTS
- EXTERIOR LIGHTING FIXTURE WALL MOUNTED
- NEW DUCT BANK (CONCRETE ENCASED)
- UNDERGROUND CONDUIT (DIRECT BURIED)

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.

APRIL 3, 1995 AS-BUILTS

WHITING-TURNER
CONTRACTING COMPANY
DESMAN ASSOCIATES
ARCHITECTS ENGINEERS

BURDETTE, KOEHLER, MURPHY & ASSOCIATES, INC.
CONSULTING ENGINEERS

PENN STREET PARKING FACILITY
UNIVERSITY OF MARYLAND AT BALTIMORE

NO.	DATE	BY
5	3-26-95	

REVISIONS

ELECTRICAL SITE PLAN

DRAWING NO.
E-2

SCALE:	1" = 20'
DATE:	6-24-1993
PROJECT NO.	1-93015

DESIGN	DRAWN	CHKD.
RP	IP	RNS

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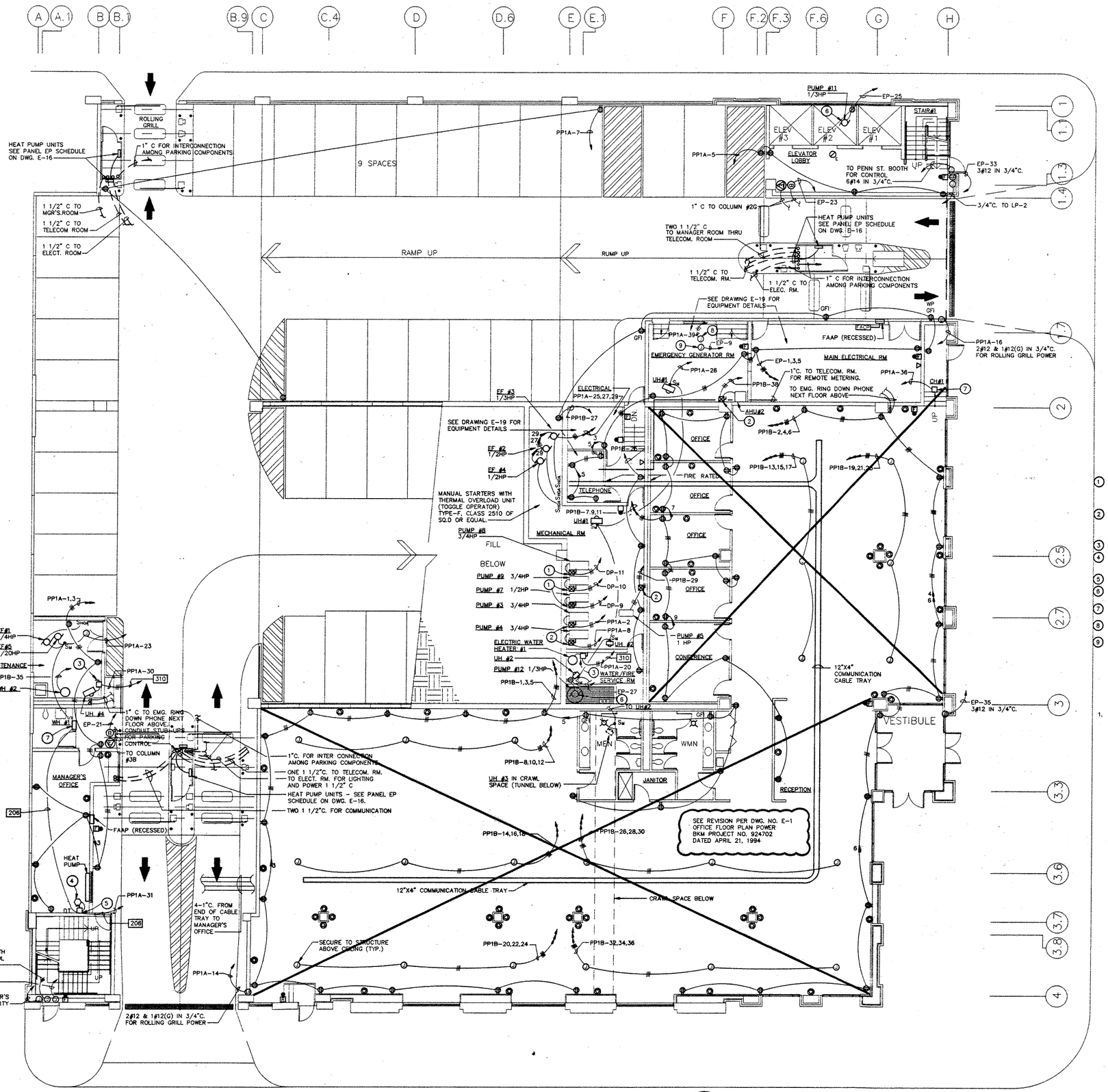

GRADE FLOOR PLAN – POWER

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

N

APRIL 3, 1995 AS-BUILTS

DRAWING NOTES:

1. NEMA SIZE 1, 480V, 3P, COMBINATION MAGNETIC MOTOR STARTER WITH 3A MCP ADJ 8-28A IN NEMA 1 ENCLOSURE. PROVIDE AUXILIARY CONTACTS FOR ATC CONNECTION.
2. NEMA SIZE 1, 208V, 3P, COMBINATION MAGNETIC MOTOR STARTER WITH 7A MCP ADJ 18-70A IN NEMA 1 ENCLOSURE. PROVIDE AUXILIARY CONTACTS FOR ATC CONNECTION.
3. 30A, 3P. DISCONNECT SWITCH IN NEMA 1 ENCLOSURE.
4. SPECIAL FACTORY SUPPLIED RECEPTACLE FOR TWHP AT MANAGER'S OFFICE. 2P, 3W, 20AMP, 250VAC, NEMA 6-20R.
5. 30A, 2P. DISCONNECT SWITCH IN NEMA 1 ENCLOSURE.
6. STARTER AND CONNECTION CORD WITH PLUG TO BE SUPPLIED WITH THE UNIT.
7. MAKE CONNECTION TO DISCONNECT SWITCH FURNISHED WITH UNIT.
8. PROVIDE POWER FOR E-G JACKET WATER HEATER. FEEDER SIZE 2#10 & 1#12(G) IN 3/4"C.
9. PROVIDE POWER FOR E-G BATTERY CHARGER. FEEDER SIZE 2#12 & 1#12(G) IN 3/4"C.

GENERAL NOTES:

1. THE MECHANICAL SYSTEM EQUIPMENT ARE SHOWN APPROXIMATE. REFER TO CORRESPONDING MECHANICAL DRAWINGS FOR EXACT LOCATION.

GRAPHIC SCALE:

0 4 8 16 24

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

WHITING-TURNER
CONTRACTING COMPANY

DESMAN ASSOCIATES
ARCHITECTS ENGINEERS

BURDETTE, KOEHLER, MURPHY & ASSOCIATES, INC.
CONSULTING ENGINEERS

PENN STREET PARKING FACILITY

UNIVERSITY OF MARYLAND AT BALTIMORE

NO.	DATE	BY

REVISIONS

GRADE FLOOR PLAN POWER

DRAWING NO.
E-3

SCALE:	1/8"=1'-0"
DATE:	6-24-1993
PROJECT NO.	J-343

DESIGN	DRAWN	CHKD.
R.P.	I.P.	R.N.S.

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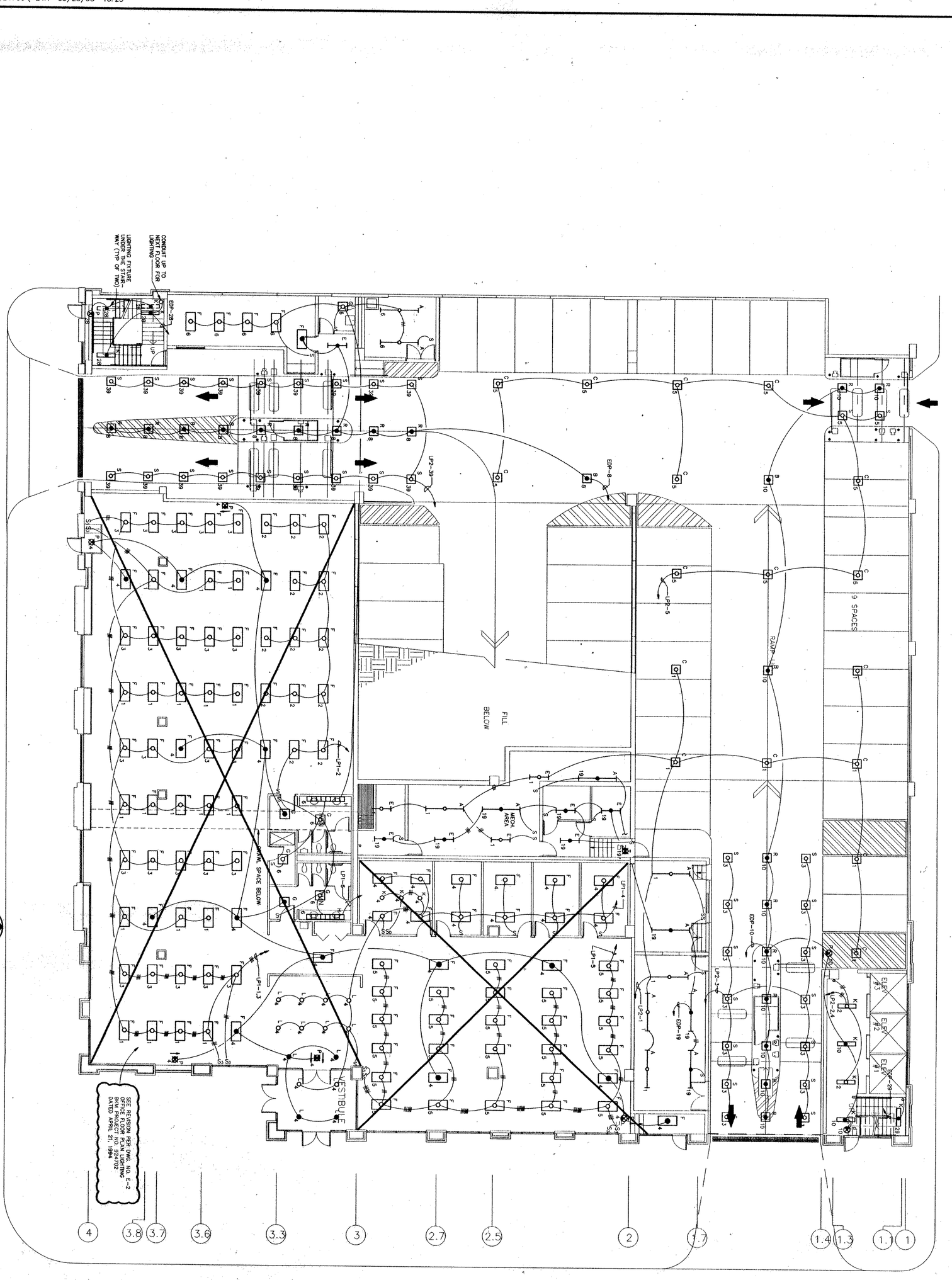

GRADE FLOOR PLAN – LIGHTING

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

APRIL 3, 1995 AS-BUILTS

SCALE:	1/8"=1'-0"		
DATE:	6-24-1993		
PROJECT NO.	J-343		
DESIGN	DRAWN	CHKD.	
R.P.	I.P.	R.M.S.	

DRAWING NO. E-4

GRADE FLOOR PLAN LIGHTING

NO.	DATE	BY
REVISIONS		
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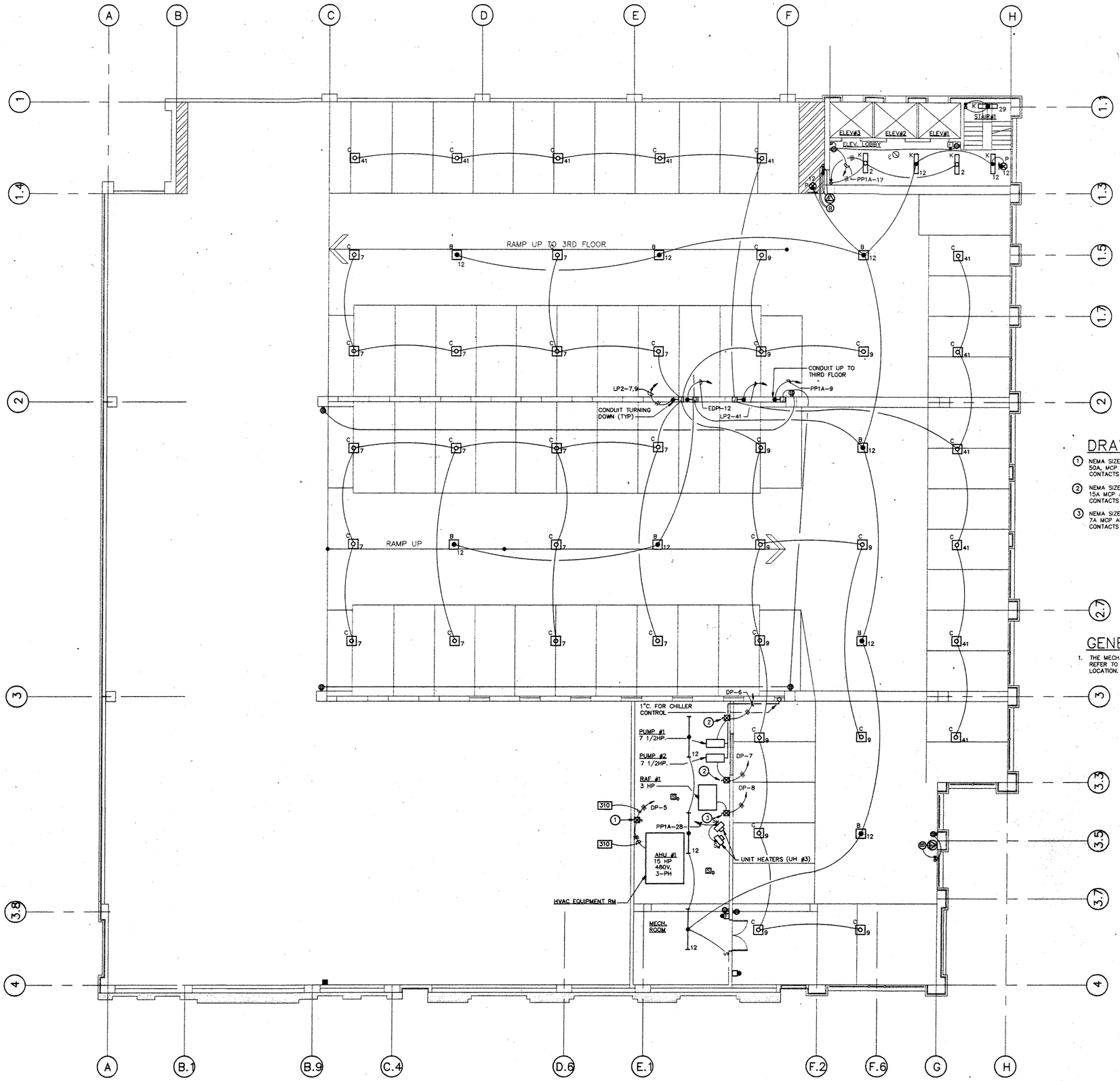

DRAWING NOTES:

1. NEMA SIZE 2, 480V, 3P, COMBINATION MAGNETIC MOTOR STARTER WITH 50A, MCP ADJ 150–500A IN NEMA 1 ENCLOSURE. PROVIDE AUXILIARY CONTACTS FOR ATC CONNECTION.
2. NEMA SIZE 1, 480V, 3P, COMBINATION MAGNETIC MOTOR STARTER WITH 15A MCP ADJ 50–180A IN NEMA 1 ENCLOSURE. PROVIDE AUXILIARY CONTACTS FOR ATC CONNECTION.
3. NEMA SIZE 1, 480V, 3P, COMBINATION MAGNETIC MOTOR STARTER WITH 7A MCP ADJ 18–70A IN NEMA 1 ENCLOSURE. PROVIDE AUXILIARY CONTACTS FOR ATC CONNECTION.

GENERAL NOTES:

1. THE MECHANICAL SYSTEM EQUIPMENT ARE SHOWN APPROXIMATE. REFER TO CORRESPONDING MECHANICAL DRAWINGS FOR EXACT LOCATION.

SECOND FLOOR PLAN – POWER & LIGHTING

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

GRAPHIC SCALE: 0 4 8 16 24

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

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SECOND FLOOR PLAN POWER & LTG

DRAWING NO. E-5

SCALE:	1/8"=1'-0"
DATE:	6-24-1993
PROJECT NO.	J-343

DESIGN	DRAWN	CH'KD.
R.P.	I.P.	R.N.S.

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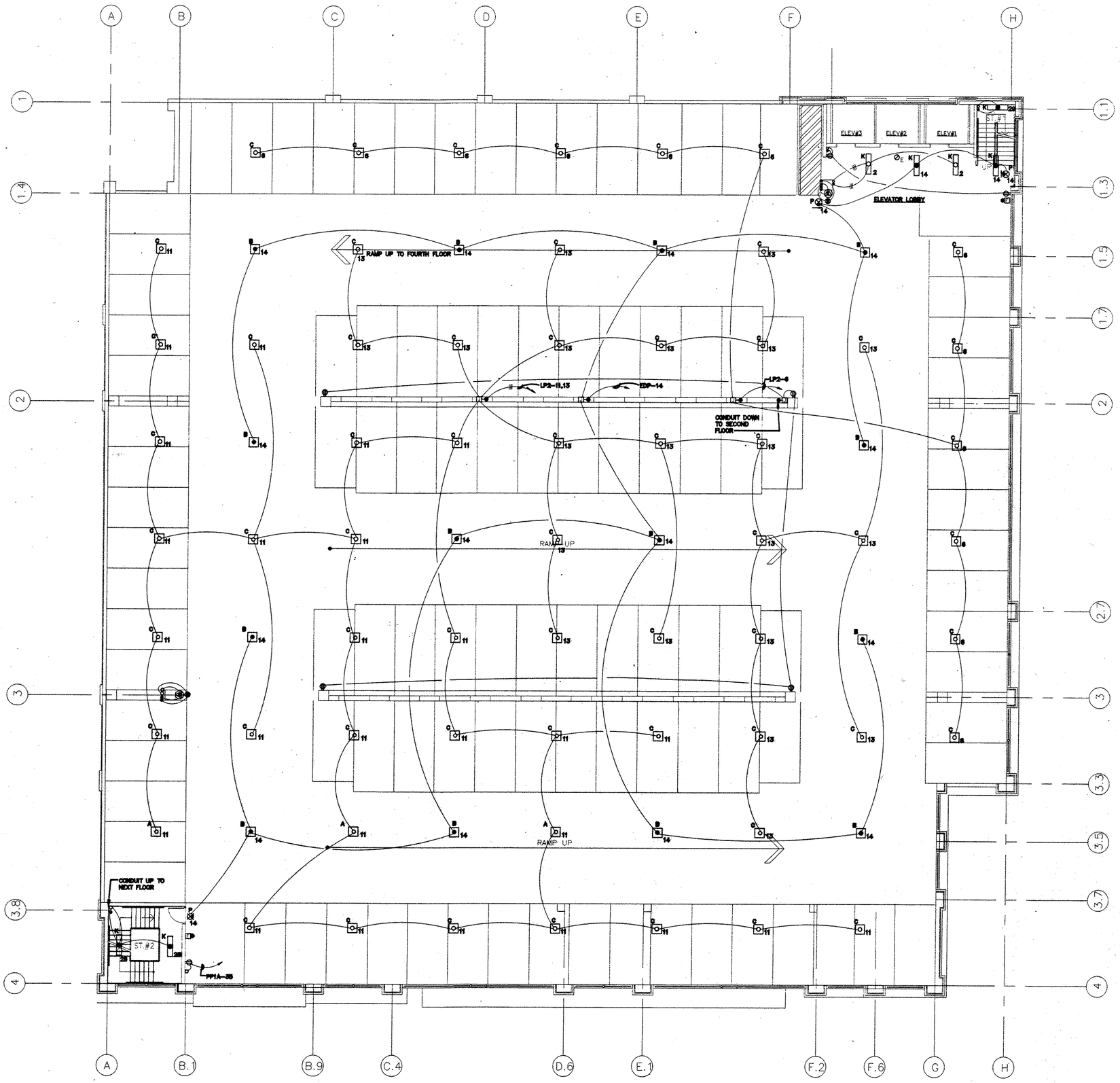

THIRD FLOOR PLAN – POWER AND LIGHTING

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

N

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A	11-15-93	R.P.

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THIRD FLOOR PLAN POWER & LTG

DRAWING NO.
E-6

SCALE:	1/8"=1'-0"
DATE:	6-24-1993
PROJECT NO.	J-343

DESIGN	DRAWN	CH'KD.
R.P.	I.P.	R.N.S.

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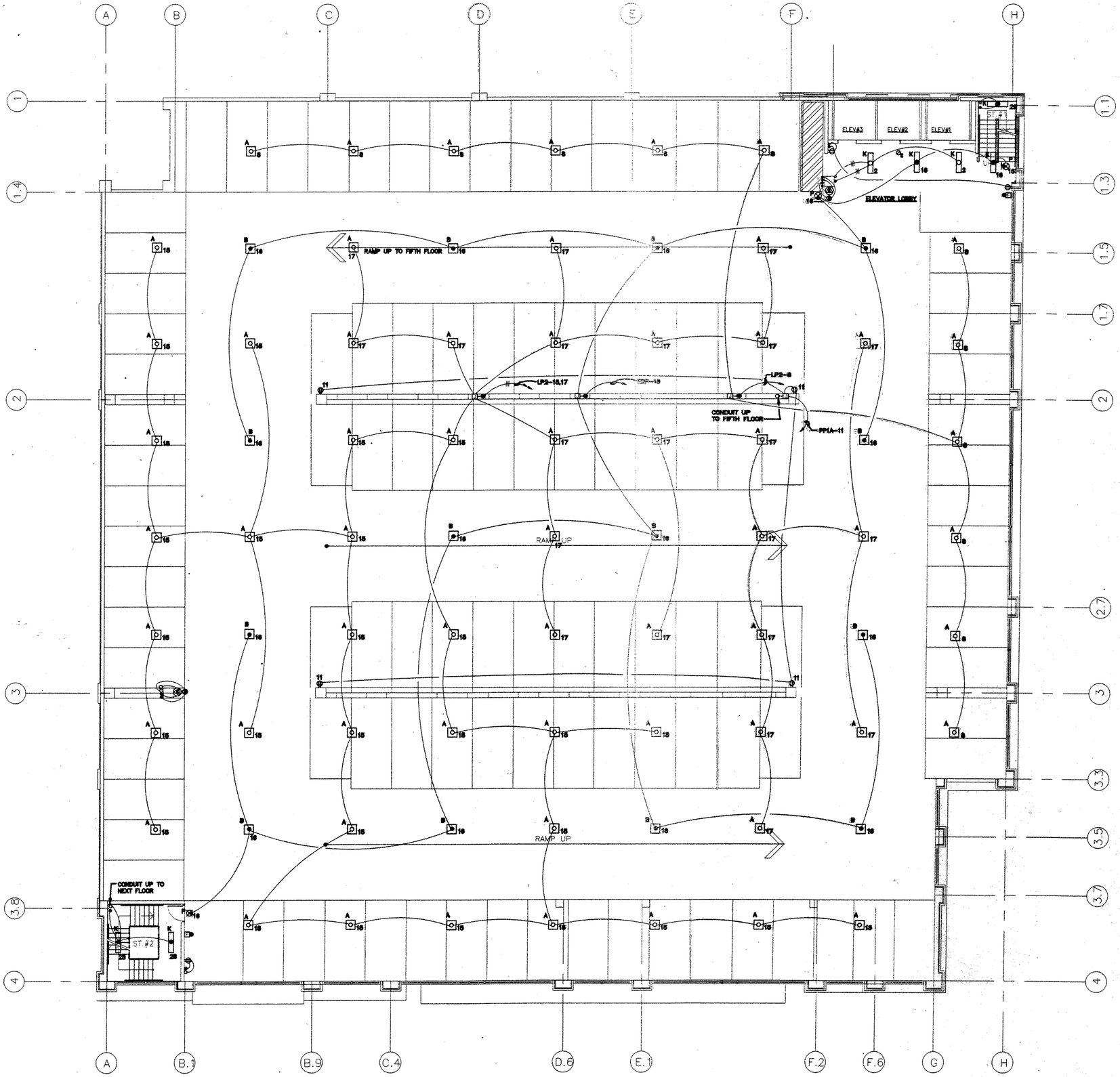

FOURTH FLOOR PLAN – POWER & LIGHTING

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

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1	11-24-93	R.P.

REVISIONS

FOURTH FLOOR PLAN POWER & LTG

DRAWING NO. E-7

SCALE:	1/8"=1'-0"
DATE:	6-24-1993
PROJECT NO.	J-343

DESIGN	DRAWN	CHKD.
R.P.	I.P.	R.N.S.

BKM #924700

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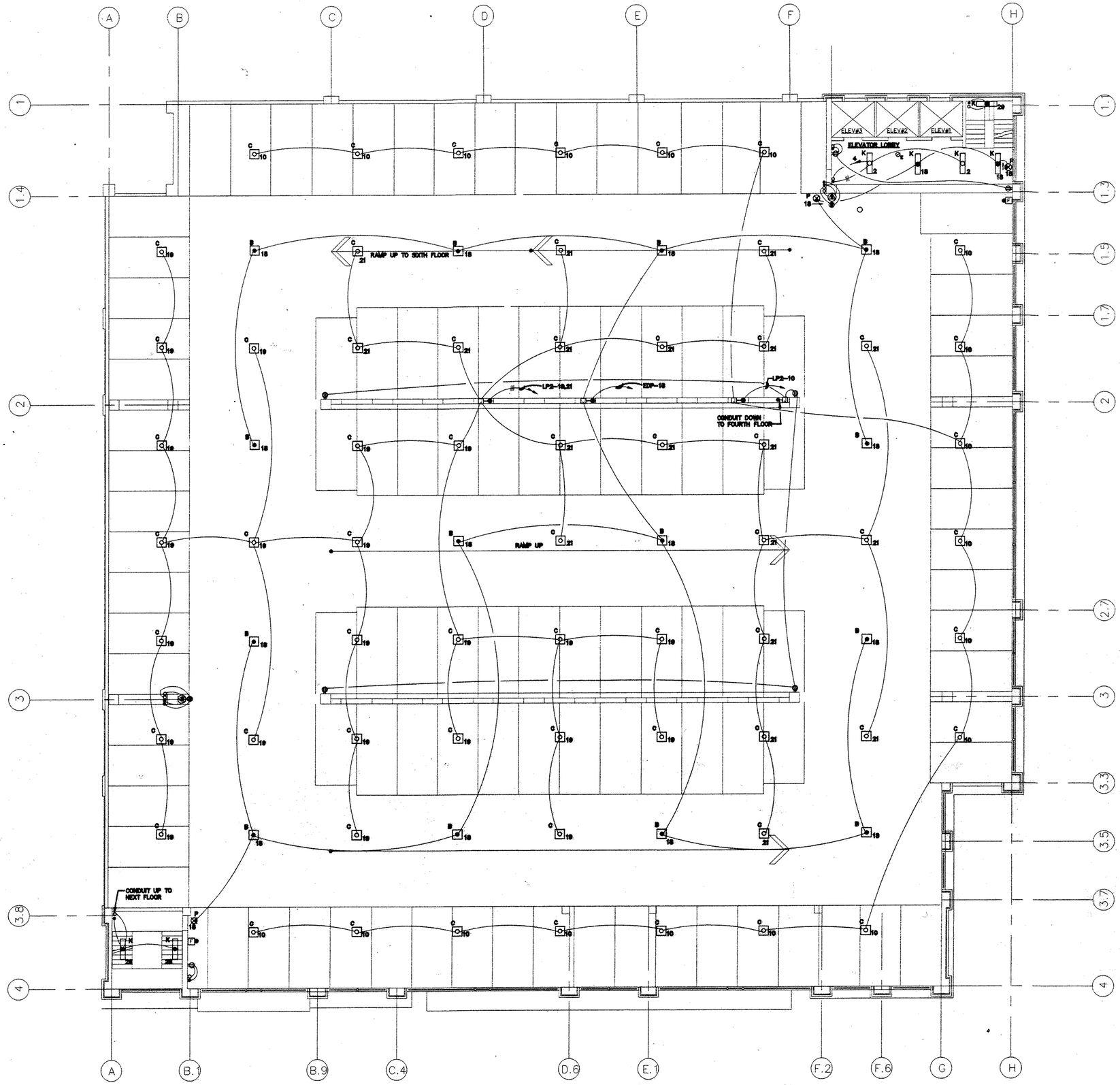

FIFTH FLOOR PLAN – POWER & LIGHTING

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

N

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A	11-24-93	R.P.

REVISIONS

FIFTH FLOOR PLAN POWER & LTG

DRAWING NO.
E-8

SCALE:	1/8"=1'-0"
DATE:	6-24-1993
PROJECT NO.	J-343

DESIGN	DRAWN	CH'KD.
R.P.	I.P.	R.N.S.

BKM #924700

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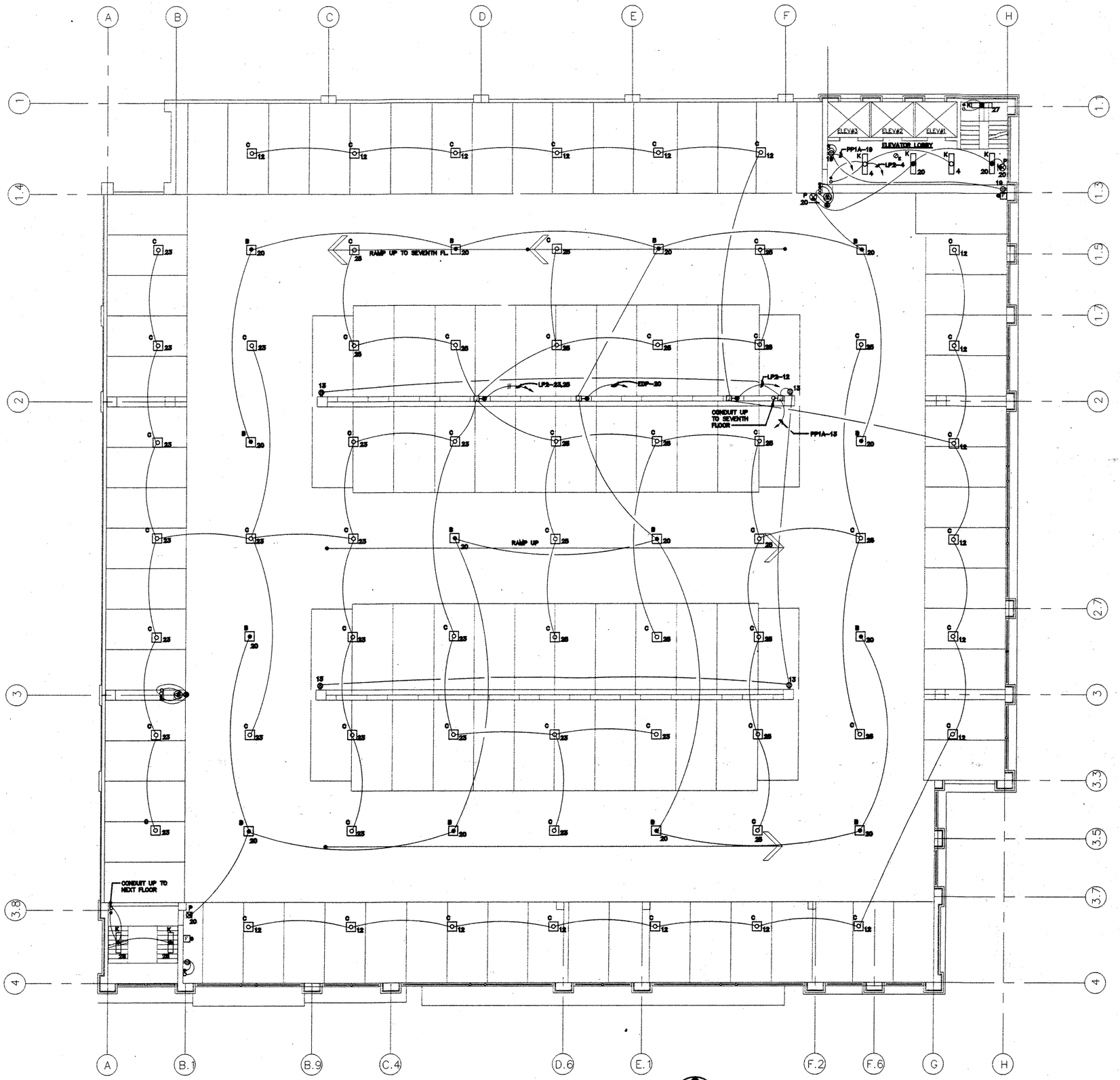

SIXTH FLOOR PLAN – POWER & LIGHTING

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

N

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A	11-24-93	R.P.

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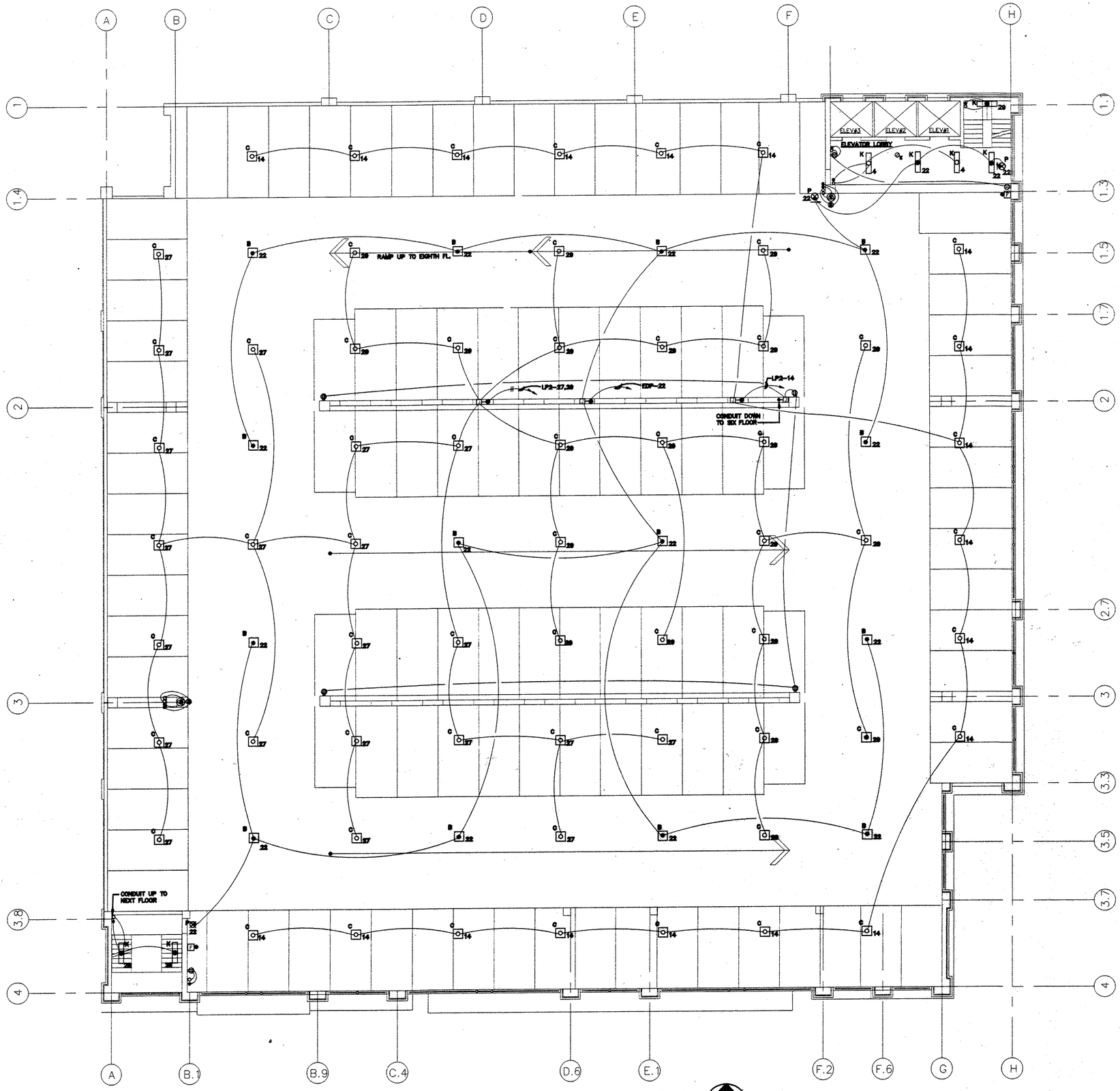
SIXTH FLOOR PLAN POWER & LTG

DRAWING NO. E-9

SCALE:	1/8"=1'-0"
DATE:	6-24-1993
PROJECT NO.	J-343

DESIGN	DRAWN	CH'KD.
R.P.	I.P.	R.N.S.



SEVENTH FLOOR PLAN – POWER & LIGHTING

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

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A	11-24-93	R.P.

REVISIONS

SEVENTH FLOOR PLAN POWER & LTG

DRAWING NO.
E-10

SCALE:	1/8"=1'-0"
DATE:	5-24-1993
PROJECT NO.	J-343

DESIGN	DRAWN	CH'KD.
R.P.	I.P.	R.N.S.

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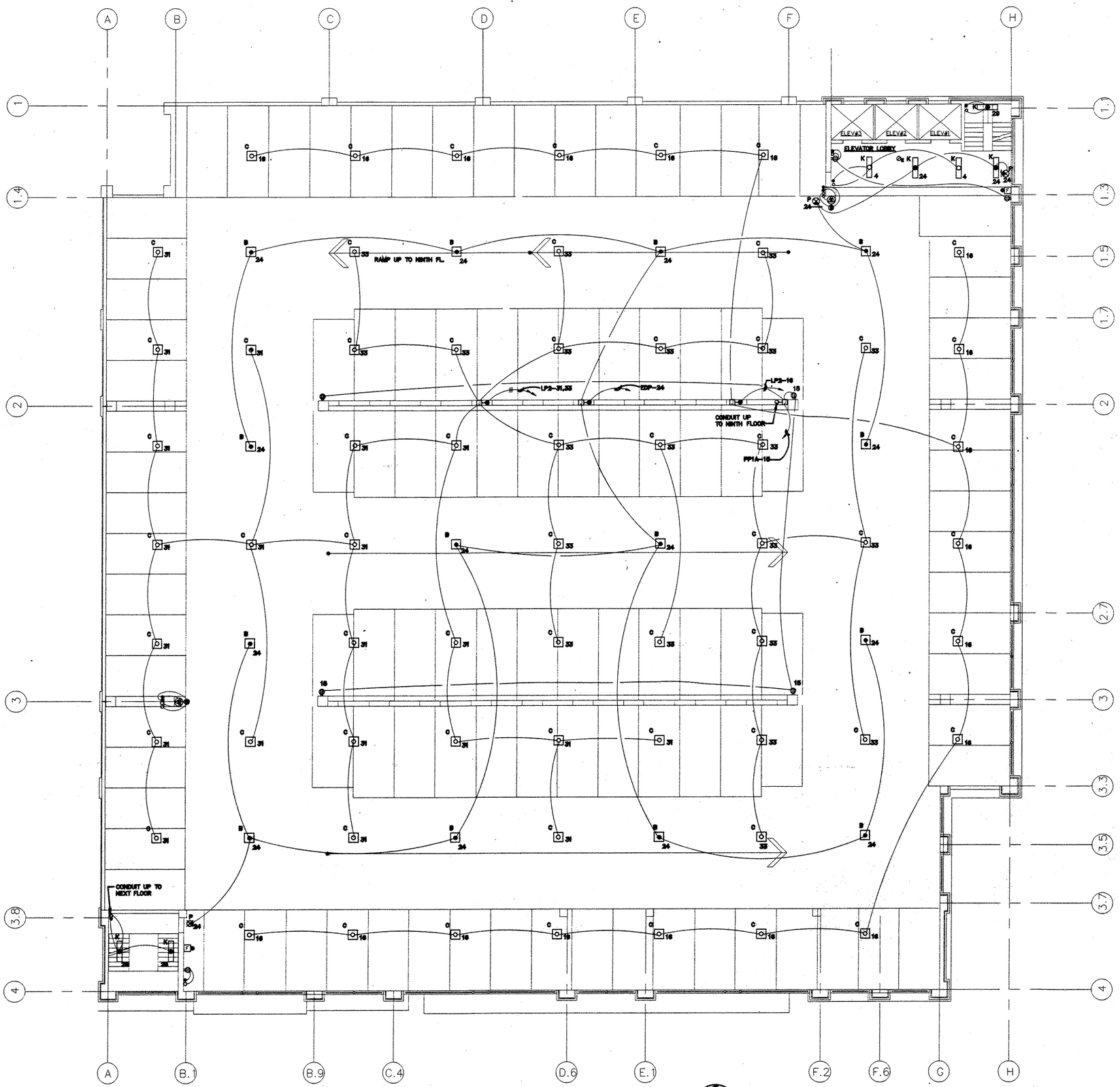

EIGHTH FLOOR PLAN – POWER & LIGHTING

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

N

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EIGHTH FLOOR PLAN POWER & LTG

DRAWING NO.
E-11

SCALE:	1/8"=1'-0"
DATE:	6-24-1993
PROJECT NO.	J-343

DESIGN	DRAWN	CH'KD.
R.P.	I.P.*	R.N.S.

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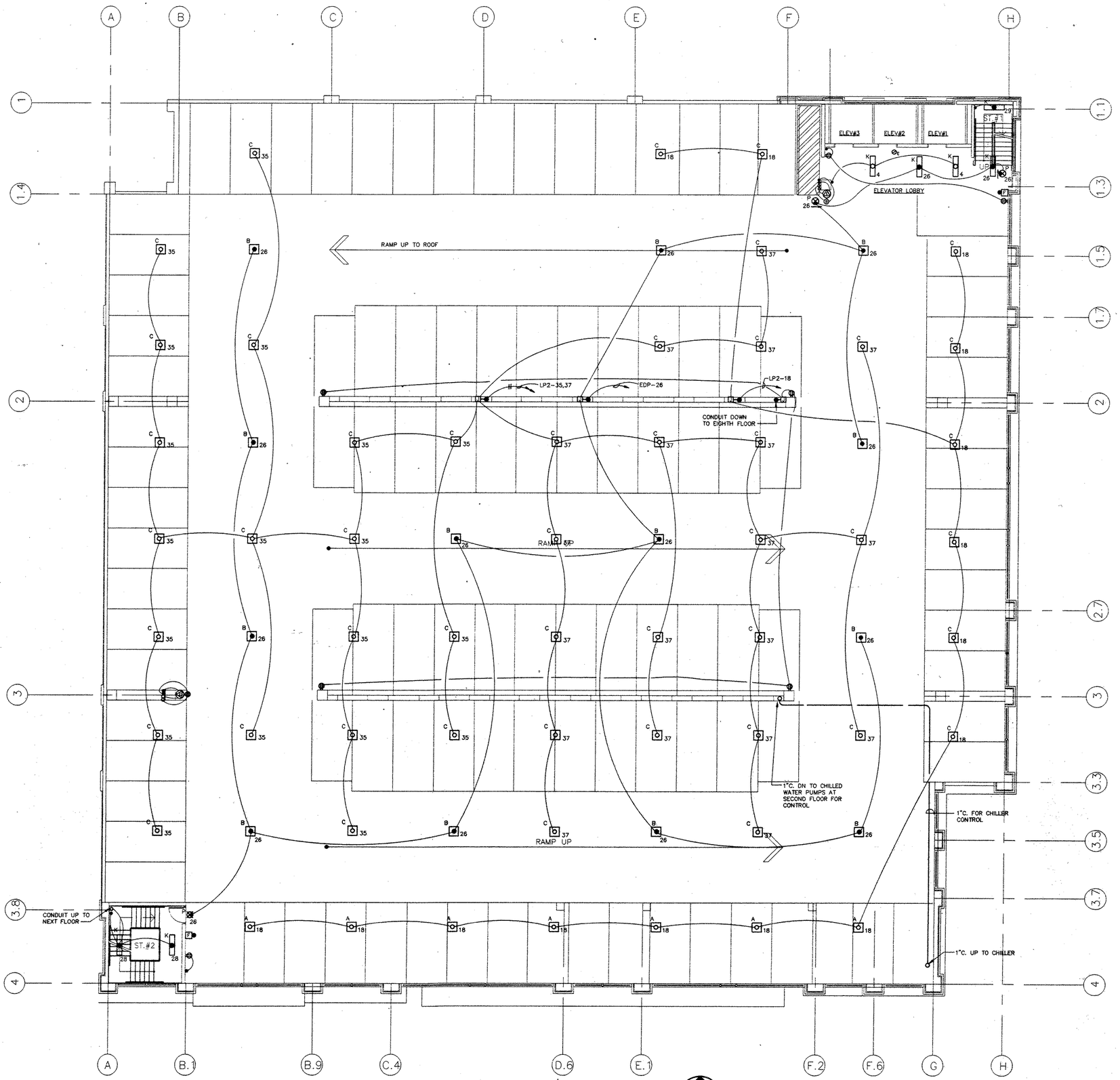

NINTH FLOOR PLAN – POWER & LIGHTING

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

APRIL 3, 1995 AS-BUILTS

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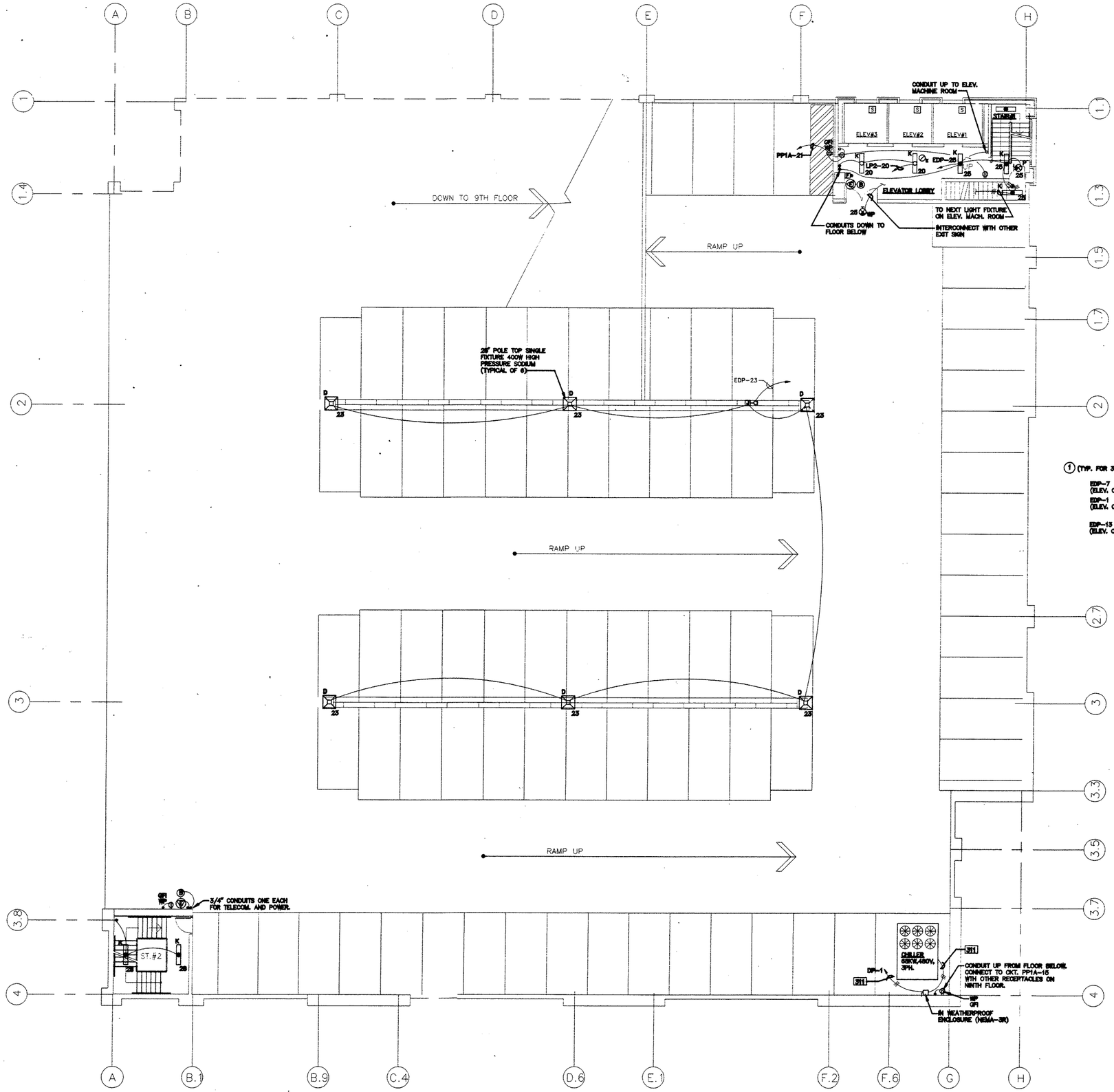
NINTH FLOOR PLAN POWER & LTG

DRAWING NO.
E-12

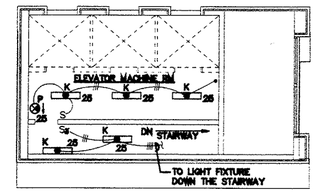
SCALE:	1/8"=1'-0"
DATE:	6-24-1993
PROJECT NO.	J-343

DESIGN	DRAWN	CH'KD.
R.P.	I.P.	R.N.S.



ROOF LEVEL FLOOR PLAN – POWER & LIGHTING

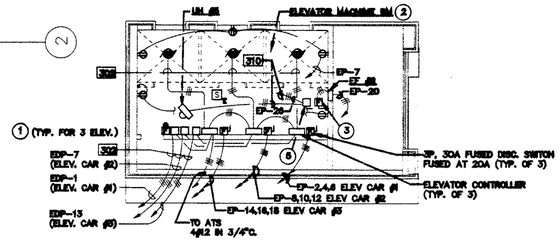
SCALE: 1/8"=1'-0"



ELEVATOR MACHINE ROOM

PLAN – LIGHTING

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



ELEVATOR MACHINE ROOM

PLAN – POWER

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

DRAWING NOTES:

1. 125A, 480V, 3P ENCLOSED UNIT CIRCUIT BREAKER.
2. ALL DISCONNECTS FOR ELEV. CIRCUITS SHALL HAVE PROVISIONS FOR PADLOCKING IN THE OPEN POSITION.
3. NEMA 1 ENCLOSURE, 30A, 3P, FUSED AT 5 AMPS, 250VAC DISCONNECT.
4. NEMA-3R ENCLOSURE, 200A, 3P, 600VAC DISCONNECT.
5. NEMA 1 ENCLOSURE, 30A, 3P, 250VAC DISCONNECT. INSTALL THIS DISCONNECT BELOW THE DISCONNECT AS NOTED IN NOTE 3 ABOVE.

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ROOF LEVEL FLOOR PLAN POWER & LTG

DRAWING NO.
E-13

SCALE: 1/8"=1'-0"
DATE: 6-24-1993
PROJECT NO. J-343

DESIGN	DRAWN	CHKD.
R.P.	I.P.	R.N.S.

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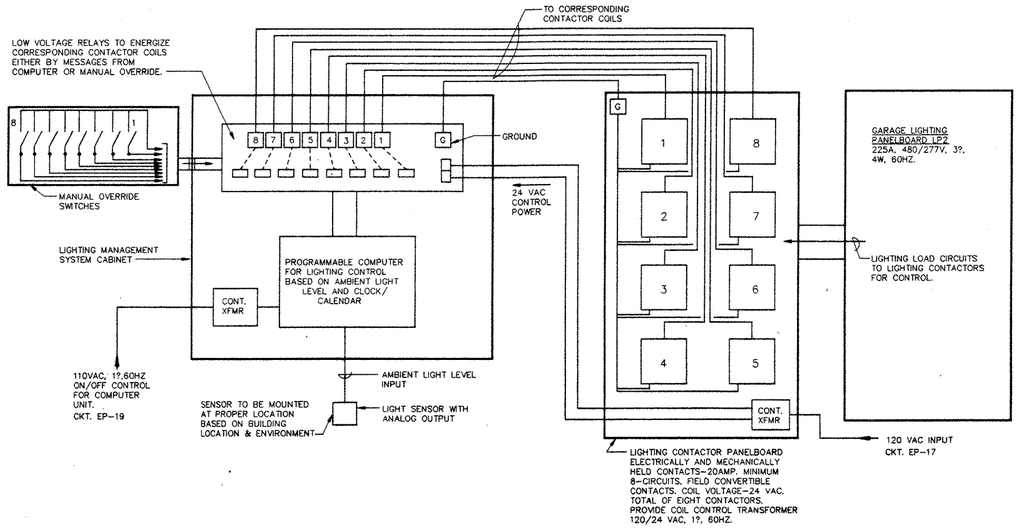

LIGHTING CONTROL SCHEMATIC

NO SCALE

LIGHTING CONTACTOR RELAY #	AREA SERVED	LIGHTING CIRCUIT # WITH PANELBOARD	REMARK
1	ROOF DECK	EDP-6	ON-AT DUSK OFF-AT DAWN AND ALSO ON/OFF BASED ON CLOCK/CALENDAR
2	EXTERIOR	EDP-21,23,25	ON-AT DUSK OFF-AT DAWN
3	PERIMETER LIGHTING SECOND FLOOR THRU FIFTH FLOOR	LP2-6,8,10,41	ON-AT DUSK OFF-AT DAWN
4	PERIMETER LIGHTING SIXTH FLOOR THRU NINTH FLOOR	LP2-12,14,16,18	ON-AT DUSK OFF-AT DAWN
5	INTERIOR LIGHTING SECOND FLOOR THRU FIFTH FLOOR	LP2-7,9,11,13,15,17,19,21	ON/OFF BASED ON CLOCK/CALENDAR
6	INTERIOR LIGHTING SIXTH FLOOR THRU NINTH FLOOR	LP-23,25,27,29,31,33,35,37	ON/OFF BASED ON CLOCK/CALENDAR
7	PRATT AND PENN STREET ENTRANCE LIGHTING	LP2-3,39	ON-AT DAWN OFF-AT DUSK
8	SPARE	-	-

LIGHTING CIRCUIT CONTROL SCHEDULE

DRAWING NOTES:

1. LIGHTING MANAGEMENT SYSTEM CABINET, MANUAL OVERRIDE SWITCH CABINET AND CONTACTOR RELAY CABINET SHALL BE LOCATED IN MAIN ELECTRICAL ROOM ADJACENT TO LIGHTING PANEL-LP2. REFER TO DRAWING E-19.
2. EACH CONTACTOR RELAY TO CONTROL EIGHT LIGHTING CIRCUITS THROUGH NO OR NC CONTACTS AS APPLICABLE. SQUARE D LIGHTING CONTACTORS CLASS 8903 OR EQUAL.
3. PROVIDE BATTERY BACK-UP POWER FOR LIGHTING MANAGEMENT SYSTEM COMPUTER TO MAINTAIN THE PROGRAM AND NOT TO LOOSE THE CONTROL SCHEME.
4. LIGHT SENSOR WITH ANALOG OUTPUT SHALL BE LOCATED IN A CRITICAL AREA BASED ON THE GARAGE SURROUNDING ENVIRONMENT TO SUIT THE BEST LIGHTING CONTROL. LIGHTING MANAGEMENT SYSTEM SUPPLIER SHALL RECOMMEND THE LOCATION OF THE SENSOR FOR THE BEST PERFORMANCE.
5. LIGHTING MANAGEMENT SYSTEM COMPUTER, THROUGH IT'S PROGRAM AND UTILIZING LIGHT SENSOR INPUT, SHALL BE ABLE TO DEMARK THE LIGHTING LEVEL AS FOLLOWS: 0 THROUGH 100, 0 - BEING SUNNY DAY LIGHT AND 100 - BEING DARK AT NIGHT.

APRIL 3, 1995 AS-BUILTS

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NO.	DATE	BY
1	11-24-93	R.P.

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LIGHTING CONTROL

DRAWING NO. E-14

SCALE: AS NOTED
DATE: 6-24-1993
PROJECT NO. J-343
DESIGN RP | DRAWN IP | CH'KD. RNS

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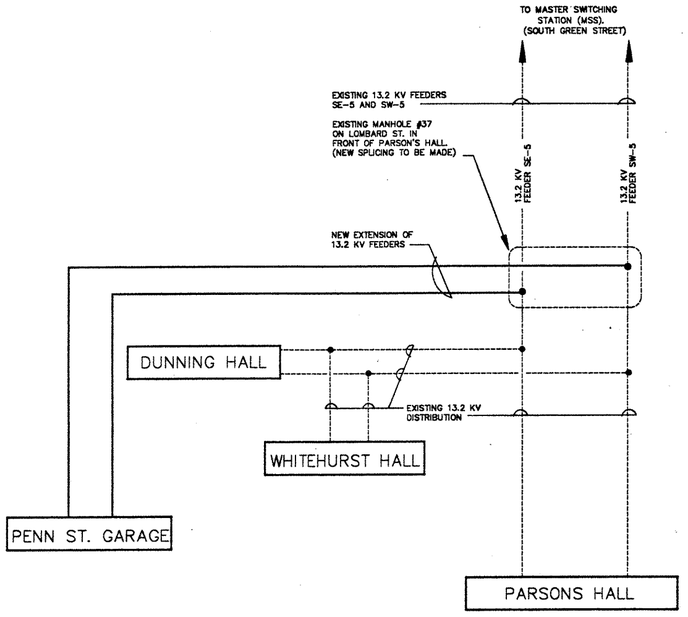


ONE-LINE DIAGRAM OF 13.2 KV DISTRIBUTION

NO SCALE

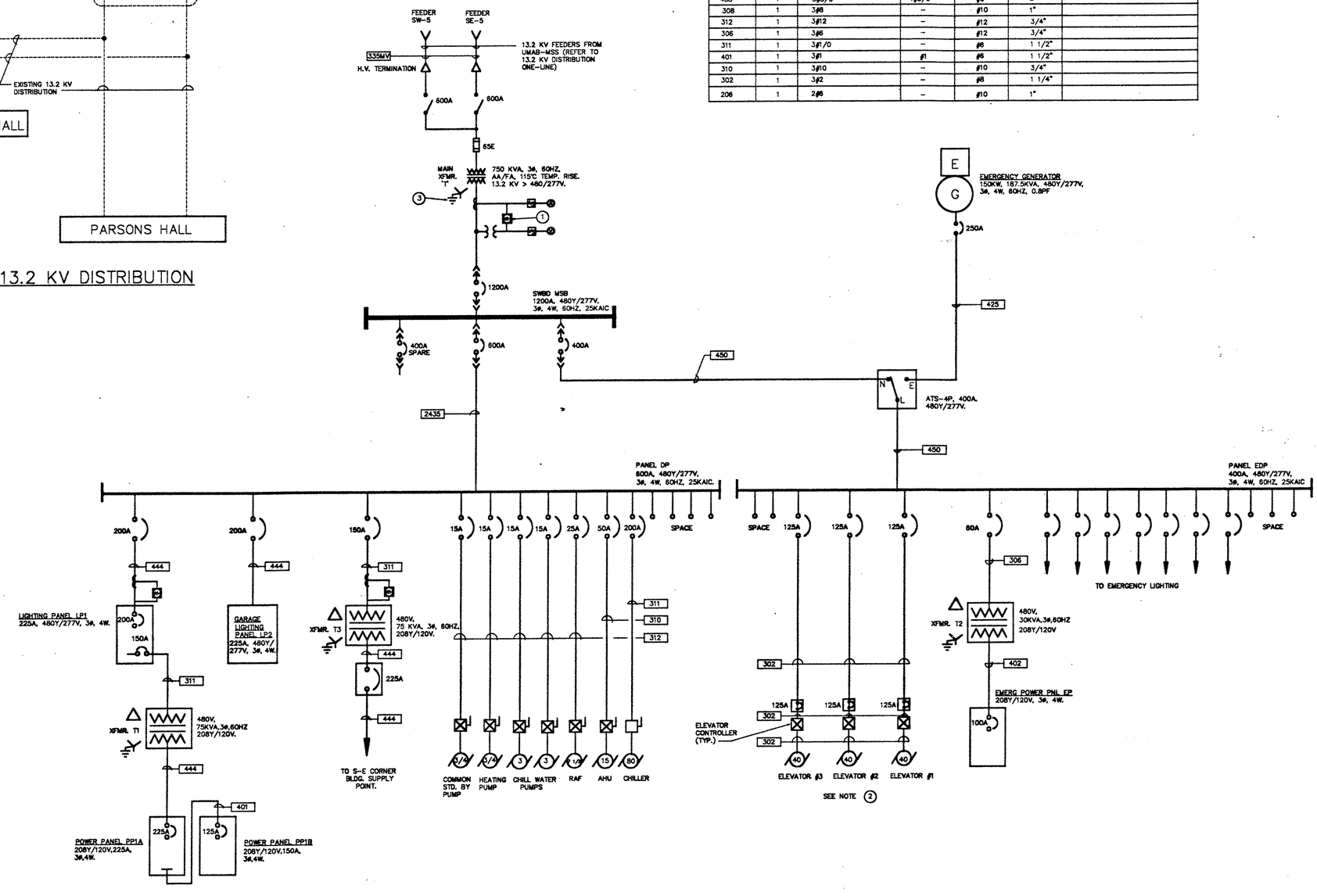
DRAWING NOTES:

1. THE WATTHOUR METER SHALL BE A MECHANICAL TYPE WITH CLOCK DIAL FACE AND SHALL HAVE TWO PULSE OUTPUTS OF SUITABLE VALUE FOR REMOTE METERING AND A DEMAND REGISTER. PROVIDE 1"C. TO TELECOM. ROOM WITH 3-4 PAIR CABLE FOR THREE METERS FOR REMOTE ENERGY MANAGEMENT.
2. DURING EMERGENCY, ONLY ONE ELEVATOR WILL OPERATE. ELEVATOR CONTROLS SHALL BE SET SUCH THAT ELEVATOR #1 WILL REMAIN FUNCTIONAL ON EMERGENCY POWER IN GENERAL. FOR SUSTAINED MECHANICAL PROBLEM OR BREAKDOWN OF ELEVATOR #1, CONTROL WILL SHIFT THE EMERGENCY OPERATION TO EITHER ELEVATOR #2 OR ELEVATOR #3 IN ORDER.
2. SEE GROUNDING REQUIREMENT ON DRAWING E-19.

FEEDER SCHEDULE

NOTES:
1. PHASE CONDUCTORS, NEUTRAL GROUND AND CONDUIT SHOWN IN THE FEEDER SCHEDULE APPLY TO EACH SET WHEN MULTIPLE SETS ARE REQUIRED. ALL CONDUCTORS ARE COPPER UNLESS OTHERWISE NOTED.
2. CONDUCTORS HAVE BEEN SELECTED IN ACCORDANCE WITH THE AMPACITIES LISTED IN TABLE 310-16 OF THE 1993 NEC. THIS TABLE APPLIES TO CONDUCTORS IN RACEWAYS IN FREE AIR. USE OF UNDERGROUND ELECTRICAL DUCTS MAY REQUIRE CHANGES IN CONDUCTOR AND CONDUIT SIZES.

NUMBER	SETS	PHASE CONDUCTORS	NEUTRAL	GROUND	CONDUIT	REMARKS
335MV	1	3-1/C#350KCMIL CU	–	#2, 600V	*	CABLE SHALL BE EPRN * PARTLY THROUGH EXISTING DPW DUCTBANK AND PARTLY THROUG 4" CONDUIT IN NEW DUCT BANK
2435	2	3#350 KCMIL	#350 KCMIL	#1	3"	
450	1	3#500 KCMIL	#500 KCMIL	#3	3 1/2"	
425	1	3#250 KCMIL	#250 KCMIL	#4	3"	
444	1	3#4/0	#4/0	#4	2 1/2"	
301	1	3#1	–	#8	1 1/2"	
304	1	3#4	–	#8	1"	
433	1	3#3/0	1#3/0	#6	2"	
308	1	3#8	–	#10	1"	
312	1	3#12	–	#12	3/4"	
306	1	3#6	–	#12	3/4"	
311	1	3#1/0	–	#6	1 1/2"	
401	1	3#1	#1	#6	1 1/2"	
310	1	3#10	–	#10	3/4"	
302	1	3#2	–	#8	1 1/4"	
208	1	2#6	–	#10	1"	



ONE - LINE DIAGRAM

NO SCALE

APRIL 3, 1995 AS-BUILTS

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ONE-LINE DIAGRAMS

DRAWING NO. E-15

SCALE:	1/8"=1'-0"
DATE:	6-24-1993
PROJECT NO.	J-343

DESIGN	DRAWN	CH'KD.
R.P.	I.P.	R.N.S.

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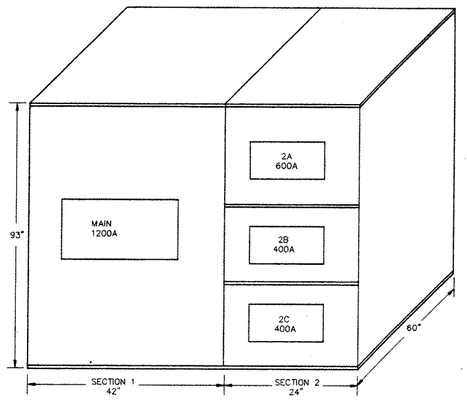

SWBD – MSB ELEVATION

NOT TO SCALE

PANEL EDP VOLTAGE 480Y/277V MOUNTING SURFACE LOCATION ELECTRICAL ROOM
BUS 400 A 3 Ø: 4 W ENTRY TOP
MAIN LUGS ONLY AIC 25,000 FEEDER 450
NOTE: ALL BREAKERS 20A, 1P UNLESS OTHERWISE NOTED.

POLE	EQUIPMENT SERVED	LOAD (KVA) AØ	BØ	CØ	CB	BUS	CB	LOAD (KVA) AØ	BØ	CØ	EQUIPMENT SERVED	POLE
1	ELEVATOR CAR #1	14.4			100A	A B C	60A	9.2			TRANSFORMER T2	2
3	↓		14.4						8.7		↓	4
5				14.4						8.7		6
7	ELEVATOR CAR #2	14.4			100A			2.0			PRATT ST. ENT. LTG.	8
9	↓		14.4						2.0		PENN & LEMON ST. ENT. LTG.	10
11				14.4						1.1	2ND FLOOR LTG.	12
13	ELEVATOR CAR #3	14.4			100A			1.9			3RD FLOOR LTG.	14
15	↓		14.4						1.9		4TH FLOOR LTG.	16
17				14.4						1.9	5TH FLOOR LTG.	18
19	UTILITY ROOMS GR. FLOOR LTG.	1.1						1.9			6TH FLOOR LTG.	20
21	OFFICE LTG.		2.4						1.9		7TH FLOOR LTG.	22
23	ROOF DECK LTG.			2.8						1.9	8TH FLOOR LTG.	24
25	ELEV. LOBBY ROOF + MACHINE RM	0.9						1.1			9TH FLOOR LTG.	26
27	SPARE		–						1.8		STAIR #2 LTG.	28
29	STAIR #1 LTG.			1.0						–	SPARE	30
31	SPARE	–						–			SPARE	32
33	SPARE		–						–		SPACE	34
35	SPACE			–						–	↓	36
37	↓	–						–				38
39			–						–			40
41				–						–		42
		45.2	45.6	47		SUB–TOTALS		16.1	16.3	13.6		

CONNECTED LOAD:
AØ: 62.9 KVA= 227 A
BØ: 62.7 KVA= 226 A
CØ: 61.4 KVA= 222 A

PANEL PP1A VOLTAGE 208Y/120V MOUNTING SURFACE LOCATION ELECTRICAL CLOSET
BUS 225A 3 Ø: 4 W ENTRY TOP
MAIN 225A AIC 10,000 FEEDER 444

POLE	EQUIPMENT SERVED	LOAD (KVA) AØ	BØ	CØ	CB	BUS	CB	LOAD (KVA) AØ	BØ	CØ	EQUIPMENT SERVED	POLE
1	RECEPT. MAINT. RM. GR. FLOOR	1.0			20A	A B C	15A	0.4			PUMP #3	2
3	RECEPT. MGR'S OFFICE		0.8		20A				0.4		↓	4
5	RECEPT. ELEV. LOBBY GR. FLOOR			0.8	20A					0.4		6
7	RECEPT. GARAGE GR. FLOOR	0.6			20A		15A	0.4			PUMP #4	8
9	RECEPT. 2nd & 3rd INTERIOR		1.5		20A				0.4			10
11	RECEPT. 4th & 5th INTERIOR			1.5	20A					0.4	↓	12
13	RECEPT. 6th & 7th INTERIOR	1.5			20A			1.0			ROLLING GRILL PRATT ST.	14
15	RECEPT. 8th & 9th INTERIOR		1.5		20A				1.0		ROLLING GRILL PENN ST.	16
17	RECEPT. ELEV. LOBBY 2,3,4,5			1.5	20A					1.0	ROLLING GRILL LEMON ST.	18
19	RECEPT. ELEV. LOBBY 6,7,8,9	1.5			20A		25A	2.0			WATER HEATER	20
21	RECEPT. ELEV. LOBBY ROOF+M/C		1.5		20A				2.0		↓	22
23	EF#1, EF#5			0.7	15A					2.0		24
25	EF#3	0.9			15A		15A	0.1			UNIT HEATERS	26
27	EF#2		1.2		20A				0.1		UNIT HEATERS	28
29	EF#4			1.2	20A		25A			2.1	UNIT HEATER	30
31	TWHP (MGR'S OFF)+WH(TOILET)	5.1			60A			2.1			↓	32
33	↓		3.1				15A		2.1			34
35	RECEPT. GARAGE S–W CORNER			1.8						0.1	CAB. HEATER	36
37	SPARE	–						–			SPACE	38
39	JACKET WATER HEATER (E–G)		2.5		30A			–			↓	40
41	↓			2.5					–	–		42
		10.6	14.1	10		SUB–TOTALS		5.4	5.4	5.4		

CONNECTED LOAD:
AØ: 16 KVA= 134 A
BØ: 19.5 KVA= 163 A
CØ: 15.4 KVA= 129 A

NOTE: PROVIDE THROUGH–FEED LUGS TO CONNECT PANEL PP1B.

SWBD–MSB VOLTAGE 480Y/277V 3 Ø: 4 W: 60 HZ AIC RATING 25,000
BUS 1200 A LOCATION ELECTRICAL ROOM

SECT	SERVING	CIRCUIT BREAKER FRAME	SENSOR	PLUG	FUNCT	REMARKS	CONNECTED LOAD AØ (AMPS)	BØ (AMPS)	CØ (AMPS)	TOTAL KVA
1	MAIN	1200	1200	1200	LSIG	ICCB, DO, MO	–	–	–	–
2A	PANEL DP	800	600	600	LSIG	ICCB, DO, MO	419	415	415	346
2B	ATS (EDP)	800	400	400	LSIG	ICCB, DO, MO	227	226	222	187
2C	SPARE	800	400	400	LSIG	ICCB, DO, MO	–	–	–	–
						TPTAL –	646	641	637	533

FUNCT: L = ADJ CURRENT SETTING, ADJ LONG–TIME DELAY; S = ADJ SHORT–TIME PICK UP, ADJ SHORT–TIME DELAY; I = ADJ INSTANTANEOUS PICK UP; G = ADJ GROUND FAULT PICK UP, ADJ GROUND FAULT DELAY

REMARKS: DO = DRAW–OUT; EO = ELECTRICALLY OPERATED; MO = MANUALLY OPERATED; CLF = CURRENT LIMITING FUSES; 100% = 100% EQUIPMENT RATED; ICCB = INSULATED CASE CIRCUIT BREAKER; CL = CURRENT LIMITING

PANEL LP1 VOLTAGE 480Y/277V MOUNTING SURFACE LOCATION ELECTRICAL CLOSET
BUS 225 A 3 Ø: 4 W ENTRY TOP
MAIN CB–200 AMP AIC 18,000 FEEDER 444
NOTE: ALL BREAKERS 20A, 1P UNLESS OTHERWISE NOTED.

POLE	EQUIPMENT SERVED	LOAD (KVA) AØ	BØ	CØ	CB	BUS	CB	LOAD (KVA) AØ	BØ	CØ	EQUIPMENT SERVED	POLE
1	LTG – RM. 138,139,141–147	3.2				A B C		3.5			LTG – RM. 105 THRU 112,115,117	2
3	LTG – RM. 140,137		2.5						2.6		LTG – RM. 101 THRU 104,133,135	4
5	LTG – RM. 148–152			1.6						1.8	MGR'S OFF. & RESTROOMS	6
7	TRANSFORMER T1	25			150A			–			SPACE	8
9	↓		25						–			10
11				25						–		12
13	LTG – CORRIDOR	2.0						–				14
15	LTG–RMS.118–123,125,127,128,131		3.7						–			16
17	LTG–RMS.111,113,114,116,124,129,130			2.0						–		18
19	SPACE	–						–				20
21	SPACE		–						–			22
23	SPACE			–						–		24
25												26
27												28
29												30
31												32
33												34
35												36
37												38
39												40
41												42
		30.2	31.2	28.6		SUB–TOTALS		3.5	2.6	1.8		

CONNECTED LOAD:
AØ: 33.7 KVA= 122 A
BØ: 33.8 KVA= 122 A
CØ: 30.4 KVA= 110 A

PANEL PP1B VOLTAGE 208Y/120V MOUNTING SURFACE LOCATION ELECTRICAL CLOSET
BUS 150A 3 Ø: 4 W ENTRY TOP
MAIN 125A AIC 10,000 FEEDER 401
NOTE: ALL BREAKERS 20A, 1P UNLESS OTHERWISE NOTED.

POLE	EQUIPMENT SERVED	LOAD (KVA) AØ	BØ	CØ	CB	BUS	CB	LOAD (KVA) AØ	BØ	CØ	EQUIPMENT SERVED	POLE
1	RESTROOM/JAN. RM	0.6				A B C		1.1			OFFICE & MAINT. 128,131	2
3	KITCHEN		1.0						1.1		OFFICE 125,127	4
5	CORIDOR (SOUTH)			0.9						1.2	OFFICE 122,123	6
7	OFFICE 120,121	1.0						1.2			CONF. RM. (SOUTH) 110	8
9	OFFICE 118,119		1.2						1.2		OFFICE 107,108,109	10
11	OFFICE 115,117			1.2						1.2	OFFICE 105,106	12
13	RECEPTION	1.2						1.2			OFFICE 147,148	14
15	OFFICE 103		1.2						1.2		OFFICE 149,150	16
17	OFFICE 103A,105			1.2						1.2	OFFICE 151,152	18
19	CONF. RM. (NORTH) 144	1.2						1.0			OFFICE 139,140	20
21	OFFICE 145–147		1.2						0.6		TEL. COMM. RM. 138	22
23	OFFICE 142,143			1.0						1.2	PRINTER AREA 153	24
25	RECEPT. MECHANICAL ROOM	0.8						1.2			OFFICE 114,116,124	26
27	RECEPT. GR. FLOOR		0.9						1.2		OFFICE 113,129,114,126	28
29	PUMP #5			0.5	15A					1.2	OFFICE 111,113,130	30
31	PUMP #5	0.5						1.0			OFFICE 133	32
33	PUMP #5		0.5						1.0		OFFICE 135	34
35	WATER HEATER #2			1.5						1.0	OFFICE 104	36
37	SPECIAL RECEPT.	0.5					15A	1.0			OFFICE 140	38
39	SPECIAL RECEPT.		0.5						1.0		OFFICE 140	40
41	CORRIDOR (NORTH)			1.0						1.0	OFFICE 137	42
		5.8	6.5	7.3		SUB–TOTALS		7.7	7.3	8.0		

CONNECTED LOAD:
AØ: 13.5 KVA= 113 A
BØ: 13.8 KVA= 115 A
CØ: 15.3 KVA= 128 A

PANEL DP VOLTAGE 480Y/277V MOUNTING SURFACE LOCATION ELECTRICAL ROOM
BUS 600 A 3 Ø: 4 W ENTRY TOP
MAIN MLO AIC 25,000 FEEDER 2435

POLE	EQUIPMENT SERVED	LOAD (KVA) AØ	BØ	CØ	CB	BUS	CB	LOAD (KVA) AØ	BØ	CØ	EQUIPMENT SERVED	POLE
1	CHILLER	34			200	A B C	200	26.5			LP–2	2
	↓		34						25		↓	
				34						25.9		
3	LP–1	30.4			200		150	10			XFMR T3	4
	↓		31.3						10		↓	
				30.7						10		
5	AHU #1	6.0			50		25	3.1			PUMP #1	6
	↓		6.0						3.1		↓	
				6.0						3.1		
7	PUMP #2	3.1			25		15	1.3			RAF #1	8
	↓		3.1						1.3		↓	
				3.1						1.3		
9	PUMP #7	0.3			15		15	0.4			PUMP #9	10
	↓		0.3						0.4		↓	
				0.3						0.4		
11	PUMP #8	0.4			–		–	–			SPACE	12
	↓		0.4						–		↓	
				0.4						–		
13	SPACE	–			–		–	–				14
	↓		–						–			
				–						–		
		74.2	75.1	74.5		SUB–TOTALS		41.3	39.8	40.7		

CONNECTED LOAD:
AØ: 115.9 KVA= 419 A
BØ: 114.9 KVA= 415 A
CØ: 114.9 KVA= 415 A

PANEL LP2 VOLTAGE 480Y/277V MOUNTING SURFACE LOCATION ELECTRICAL ROOM
BUS 225 A 3 Ø: 4 W ENTRY TOP
MAIN MLO AIC 18,000 FEEDER 444
NOTE: ALL BREAKERS 20A, 1P UNLESS OTHERWISE NOTED.

POLE	EQUIPMENT SERVED	LOAD (KVA) AØ	BØ	CØ	CB	BUS	CB	LOAD (KVA) AØ	BØ	CØ	EQUIPMENT SERVED	POLE
1	UTILITY RMS. & GR. FL. GARAGE	2.1				A B C		1.5			ELEV. LOB.+GARAGE LTG.(GR.–5TH)	2
3	PENN ST. ENTRANCE		2.8						1.5		ELEV. LOB.+GARAGE LTG(6th–9th)	4
5	GR. FLOOR GARAGE			1.8						2.6	THIRD FLOOR PERIMETER	6
7	SECOND FLOOR INTERIOR	2.2						2.6			FOURTH FLOOR PERIMETER	8
9	SECOND FLOOR INTERIOR		1.4						2.6		FIFTH FLOOR PERIMETER	10
11	THIRD FLOOR INTERIOR			2.9						2.6	SIXTH FLOOR PERIMETER	12
13	THIRD FLOOR INTERIOR	2.9						2.6			SEVENTH FLOOR PERIMETER	14
15	FOURTH FLOOR INTERIOR		2.9						2.6		EIGHTH FLOOR PERIMETER	16
17	FOURTH FLOOR INTERIOR			2.9						2.6	NINTH FLOOR PERIMETER	18
19	FIFTH FLOOR INTERIOR	2.9						1.0			RAMP UNDERSIDE+ELEV.LOBBY(ROOF)	20
21	FIFTH FLOOR INTERIOR		2.9						–		SPARE	22
23	SIXTH FLOOR INTERIOR			2.9						–	SPARE	24
25	SIXTH FLOOR INTERIOR	3.9						–			SPARE	26
27	SEVENTH FLOOR INTERIOR		3.9						–		SPARE	28
29	SEVENTH FLOOR INTERIOR			3.9						–	SPACE	30
31	EIGHTH FLOOR INTERIOR	3.9						–				32
33	EIGHTH FLOOR INTERIOR		3.9						–			34
35	NINTH FLOOR INTERIOR			3.9						–		36
37	NINTH FLOOR INTERIOR	3.9						–				38
39	PRATT ST. ENTRANCE		2.5						–			40
41	SECOND FLOOR PERIMETER			1.8						–		42
		18.8	18.3	18.1		SUB–TOTALS		7.7	6.7	7.8		

CONNECTED LOAD:
AØ: 26.5 KVA= 96 A
BØ: 25 KVA= 91 A
CØ: 25.9 KVA= 94 A

PANEL EP VOLTAGE 208Y/120V MOUNTING SURFACE LOCATION ELECTRICAL RM
BUS 100A 3 Ø: 4 W ENTRY TOP
MAIN 100A AIC 10,000 FEEDER 402
NOTE: ALL BREAKERS 20A, 1P UNLESS OTHERWISE NOTED.

POLE	EQUIPMENT SERVED	LOAD (KVA) AØ	BØ	CØ	CB	BUS	CB	LOAD (KVA) AØ	BØ	CØ	EQUIPMENT SERVED	POLE
1	RECEPT. ELECT./GEN. ROOM	0.8				A B C		1.0			ELEV. #1 LIGHTING	2
3	RECEPT. TELECOM. ROOM		0.8						1.0		ELEV. #1 POWER	4
5	RECEPT. TELECOM. ROOM			0.8						1.0	ELEV. #1 INTERCOM	6
7	RECEPT. ELEV. M/C ROOM	0.8						1.0			ELEV #2 LIGHTING	8
9	E–G BATTERY CHARGER		0.6						1.0		ELEV. #2 POWER	10
11	PRATT ST. BOOTH			1.0	60A					1.0	ELEV. #2 INTERCOM	12
13	↓	1.0						0.2			ELEV. #3 LIGHTING	14
15	HEAT TRACE		1.0						0.2		ELEV. #3 POWER	16
17	LIGHTING CONTROL			0.5						0.2	ELEV. #3 INTERCOM	18
19	LIGHTING CONTROL	0.5			15A			0.5			EF#6	20
21	EMER. BLUE LTS. (WEST)		0.8						0.5		↓	22
23	SPARE			–						0.5		24
25	PUMP #11	0.9			15A		15A	2.5			UH #5 ELEV. MACH. RM.	26
27	PUMP #12		0.9		15A				2.5		↓	28
29	SPARE			–						2.5		30
31	EXIT DOOR PRATT ST.	–			60A			1.0			PENN ST. BOOTH	32
33	EXIT DOOR PENN ST. EMER BLUE LTS(EAST)		0.8						1.0		↓	34
35	INTERCOM			0.4						–	SPACE	36
37	LEMON ST. BOOTH	1			60A			–			FIRE ALARM (FACP)	38
39	↓		1						–		SPARE	40
41	PENN ST. PED LTG.			–						–	↓	42
		5	5.9	2.7		SUB–TOTALS		6.2	6.2	5.2		

CONNECTED LOAD:
AØ: 11.2 KVA= 93 A
BØ: 12.1 KVA= 100 A
CØ: 7.9 KVA= 66 A

APRIL 3, 1995 AS–BUILTS

WHITING–TURNER CONTRACTING COMPANY
DESMAN ASSOCIATES ARCHITECTS ENGINEERS
BURDETTE, KOEHLER, MURPHY & ASSOCIATES, INC. CONSULTING ENGINEERS

PENN STREET PARKING FACILITY
UNIVERSITY OF MARYLAND AT BALTIMORE

NO.	DATE	BY
4	11–15–93	R.P.

REVISIONS

SWBD/PANEL SCHEDULES

DRAWING NO. E–16

SCALE:	1/8"=1'–0"	
DATE:	6–24–1993	
PROJECT NO.	J–343	
DESIGN	DRAWN	CH'KD.
R.P.	I.P.	R.N.S.

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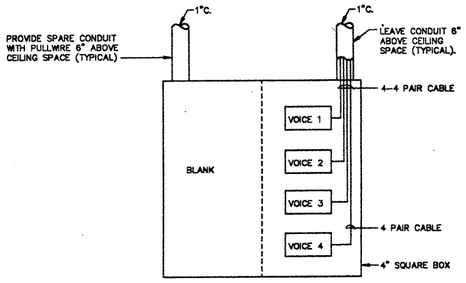
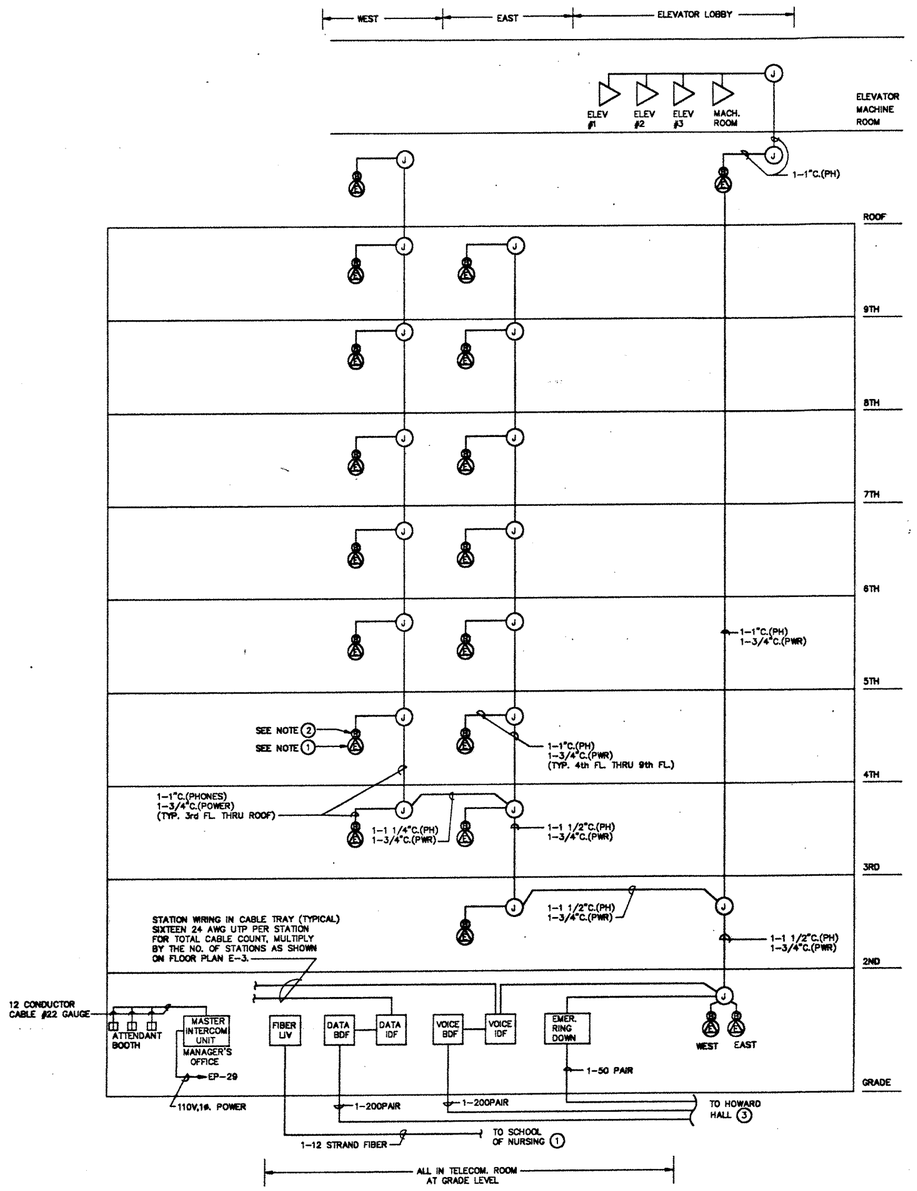


TYPICAL COMMUNICATION OUTLET

NO SCALE



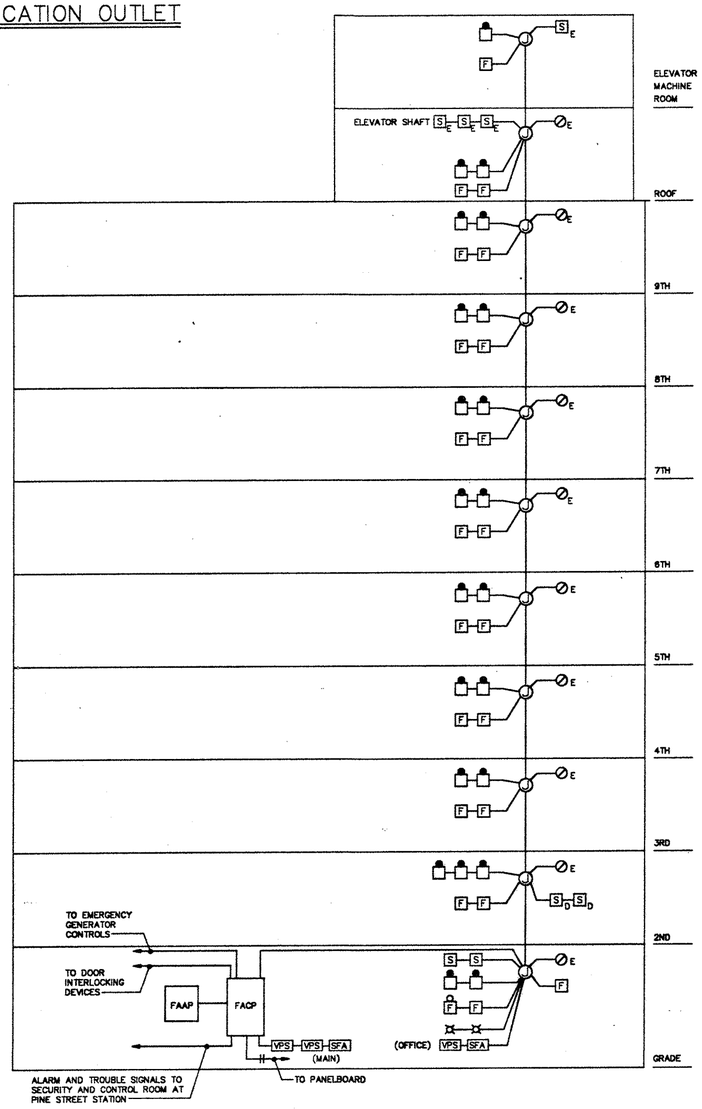
COMMUNICATION RISER DIAGRAM

NO SCALE

NOTES:

(1) EACH RING DOWN PHONE SHALL BE SERVED BY A FOUR PAIR CABLE IN CONDUIT. THESE 4-PAIR CABLES CAN BE A PART OF 200-PAIR VOICE CABLE.

(2) EACH BLUE LIGHT SHALL BE POWERED FROM EMERGENCY PANELBOARD "EP" AT 120V, 1ø.



FIRE ALARM RISER DIAGRAM

NO SCALE

NOTE:

RISER DIAGRAM PROVIDES INFORMATION FOR CONNECTION OF DEVICES. REFER TO PLANS FOR SPECIFIC QUANTITIES AND LOCATIONS OF DEVICES.

APRIL 3, 1995 AS-BUILTS

WHITING-TURNER
CONTRACTING COMPANY

DESMAN ASSOCIATES
ARCHITECTS ENGINEERS

BURDETTE, KOEHLER, MURPHY & ASSOCIATES, INC.
CONSULTING ENGINEERS

PENN STREET PARKING FACILITY
UNIVERSITY OF MARYLAND AT BALTIMORE

NO.	DATE	BY
1	3-29-95	

REVISIONS

FIRE ALARM RISER

DRAWING NO.
E-17

SCALE:	1/8"=1'-0"
DATE:	6-24-1993
PROJECT NO.	J-343

DESIGN	DRAWN	CHKD.
R.P.	I.P.	R.N.S.

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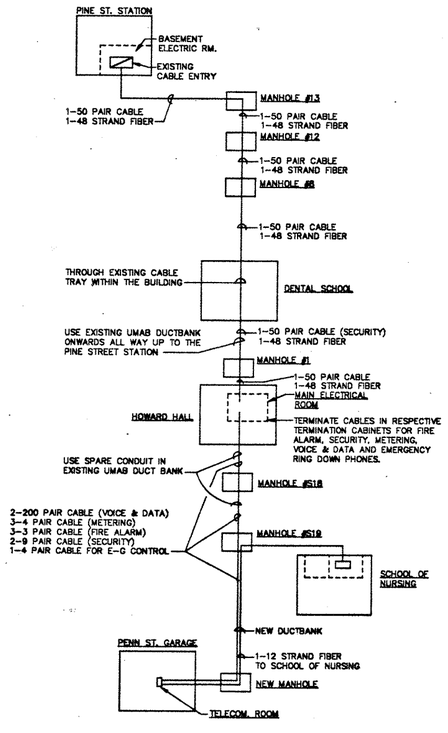
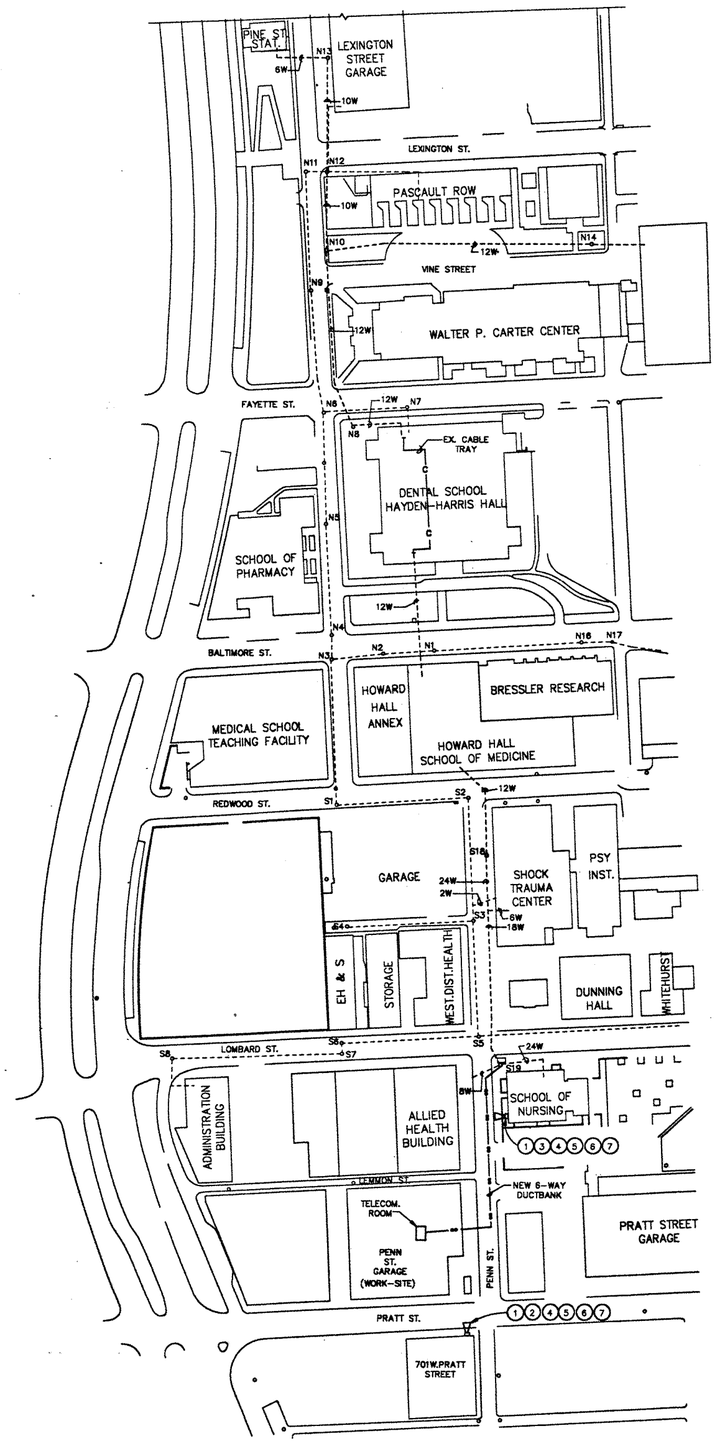


BUILDING INTERFACE—SINGLE LINE DIAGRAM

NO SCALE

SYMBOL LIST

SYMBOL	DESCRIPTION
---------O	EXISTING DUCTBANK & MANHOLE
---------O	EXISTING DUCTBANK & MANHOLE WITH NEW CABLING, REFER TO ONE LINE DIAGRAM AND BUILDING PLANS
—— ▪ —— ▪ ——	NEW TELECOM. DUCT BANK
—— C ——	EXISTING CABLE TRAY WITH NEW CABLING, REFER TO SINGLE LINE DIAGRAM AND BUILDING PLANS
6W	6 WAY DUCTBANK
10W	10 WAY DUCTBANK
12W	12 WAY DUCTBANK
24W	24 WAY DUCTBANK
N1	MANHOLE NO. 1 NORTH OF HOWARD HALL
S1	MANHOLE NO. 1 SOUTH OF HOWARD HALL
	CAMERA FOR UMAB BLDG. EXTERIOR CCTV SURVEILLACE SYSTEM (QTY. TWO)



CAMPUS SITE PLAN

SCALE: 1"=100'-0"

N

GENERAL NOTES:

1. ALL LOCATIONS ARE APPROXIMATE, CONTRACTOR TO VERIFY ITS CORRECTNESS AND CONDITIONS OF THE EXISTING DUCTBANKS TO REUSE.
2. CONTRACTOR TO RUN CABLES PARTLY THROUGH NEW & PARTLY THROUGH EXISTING UMAB OWNED DUCTBANK.
3. CONTRACTOR SHALL SUBMIT SKETCHES SHOWING THE EXISTING DUCTBANKS TO REUSE FOR OWNER/ENGINEER APPROVAL PRIOR TO START CABLING.

DRAWING NOTES:

1. TENTATIVE CAMERA LOCATION OF UMAB BUILDING—EXTERIOR CCTV SURVEILLANCE SYSTEM. CAMERAS SHALL BE MOUNTED ON EXTERIOR WALL TO THE BUILDING. THE SELECTION OF EXACT LOCATION OF THE CAMERAS SHALL BE FIELD DETERMINED BY THE CONTRACTOR TO PROVIDE THE BEST COVERAGE OF THE CRITICAL AREAS AS DESIRED BY THE OWNER.
2. THE CAMERA LOCATED ON 701W PRATT ST. BUILDING SHALL BE FOCUSSED TO COVER PRATT ST. ENTRANCE AND SURROUNDINGS.
3. THE CAMERA LOCATED ON SCHOOL OF NURSING SHALL BE FOCUSSED TO COVER PENN. ST. ENTRANCE AND SURROUNDINGS.
4. CAMERAS ARE TO BE SUPPORTED STRUCTURRALY WITH THE BUILDING WITHOUT AFFECTING THE INTEGRITY OF THE BUILDING STRUCTURE.
5. CAMERAS ARE TO BE INDIVIDUALLY INTERFACED WITH THE UMAB CENTRAL SECURITY MONITORING CENTER AT PINE STREET BUILDING. THE EXISTING SPARE FIBER OPTIC CABLES CONNECTING THE RESPECTIVE BUILDINGS WITH THE PINE STREET BLDG. SHALL BE USED FOR CONTROL/MONITORING OF CAMERS. CONTRACTOR SHALL PROVIDE THE NECESSARY FIBER OPTIC INTERCONNECTION INSIDE THE BUILDINGS BETWEEN THE CAMERA UNIT AND THE EXISTING BUILDING FIBER OPTIC SERVICE TERMINALS.
6. CONTRACTOR SHALL PROVIDE AT LEAST TWO WEEKS NOTICE TO THE AUTHORITY OF THE FOLLOWING BUILDINGS BEFORE THE ACTUAL WORK STARTS:
   a) 701W PRATT STREET.
   b) SCHOOL OF NURSING.
7. 110 VAC, 1-PHASE POWER TO CCTV CAMERA SHALL ALSO BE PROVIDED.

WHITING-TURNER CONTRACTING COMPANY
DESMAN ASSOCIATES ARCHITECTS ENGINEERS

BURDETTE, KOEHLER, MURPHY & ASSOCIATES, INC. CONSULTING ENGINEERS

PENN STREET PARKING FACILITY
UNIVERSITY OF MARYLAND AT BALTIMORE

NO.	DATE	BY
REVISIONS		

CAMPUS TELECOM. CABLING

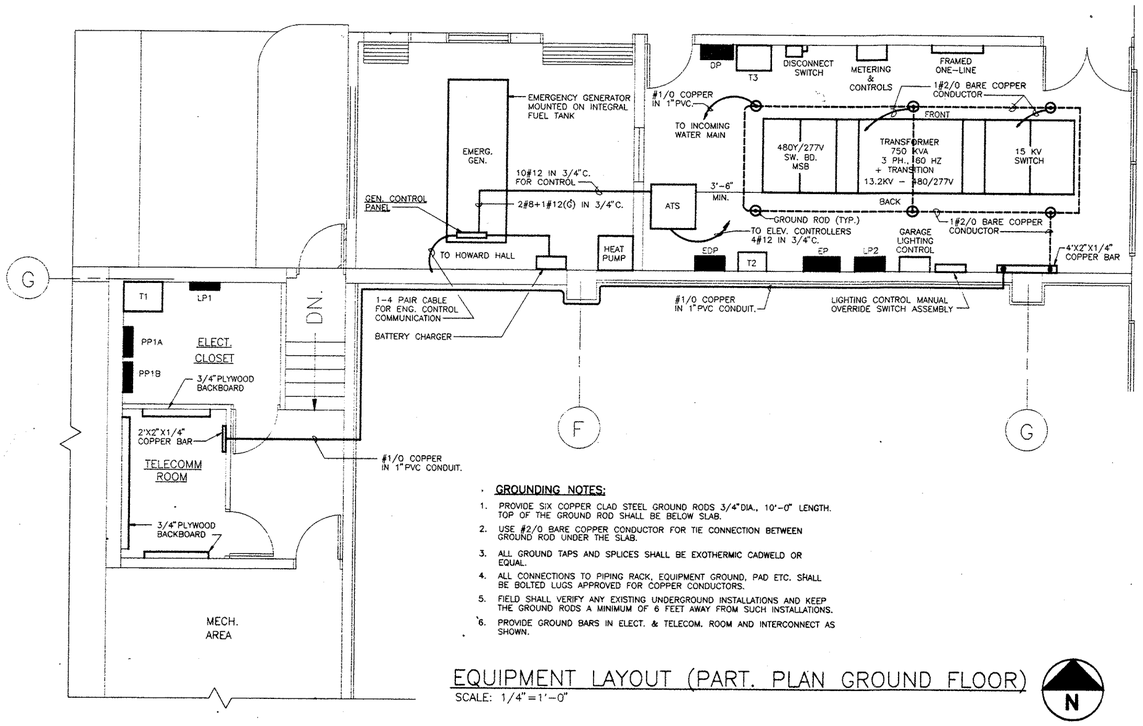
DRAWING NO. E-18

SCALE:	AS NOTED
DATE:	6-24-1993
PROJECT NO.	J-343

DESIGN	DRAWN	CHKD.
RP	IP	RNS

APRIL 3, 1995 AS-BUILTS

J343-1



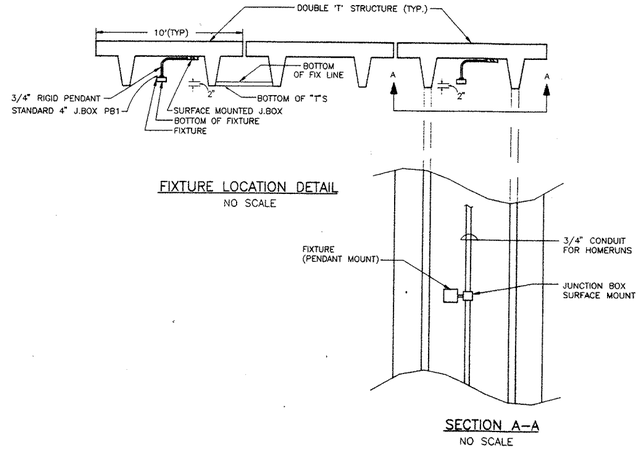
EQUIPMENT LAYOUT (PART. PLAN GROUND FLOOR)

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

N

GROUNDING NOTES:

1. PROVIDE SIX COPPER CLAD STEEL GROUND RODS 3/4"DIA., 10'-0" LENGTH. TOP OF THE GROUND ROD SHALL BE BELOW SLAB.
2. USE #2/0 BARE COPPER CONDUCTOR FOR TIE CONNECTION BETWEEN GROUND ROD UNDER THE SLAB.
3. ALL GROUND TAPS AND SPLICES SHALL BE EXOTHERMIC CADWELD OR EQUAL.
4. ALL CONNECTIONS TO PIPING RACK, EQUIPMENT GROUND, PAD ETC. SHALL BE BOLTED LUGS APPROVED FOR COPPER CONDUCTORS.
5. FIELD SHALL VERIFY ANY EXISTING UNDERGROUND INSTALLATIONS AND KEEP THE GROUND RODS A MINIMUM OF 6 FEET AWAY FROM SUCH INSTALLATIONS.
6. PROVIDE GROUND BARS IN ELECT. & TELECOM. ROOM AND INTERCONNECT AS SHOWN.



FIXTURE LOCATION DETAIL

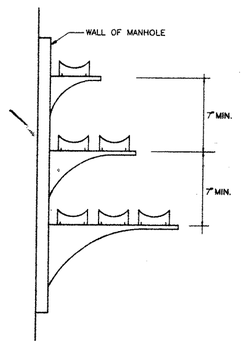
NO SCALE

SECTION A-A

NO SCALE

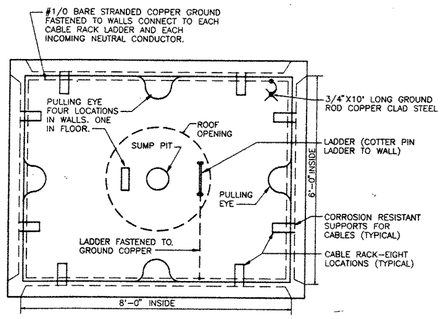
FIXTURE MOUNTING DETAIL

NO SCALE



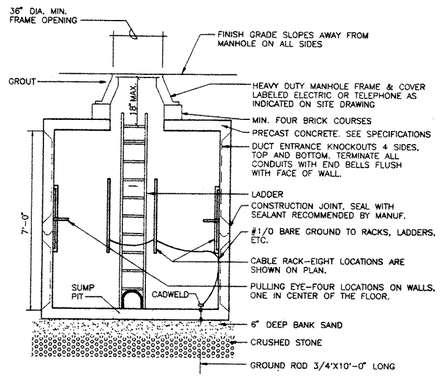
TYPICAL CABLE RACK

NOT TO SCALE



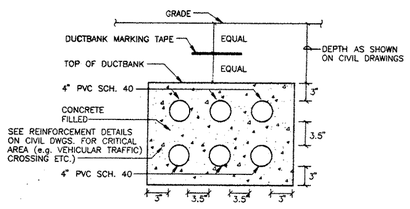
DETAIL-TYPICAL MANHOLE PLAN

NOT TO SCALE



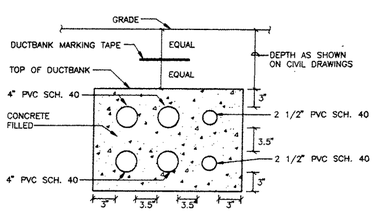
TYPICAL MANHOLE DETAIL

NOT TO SCALE



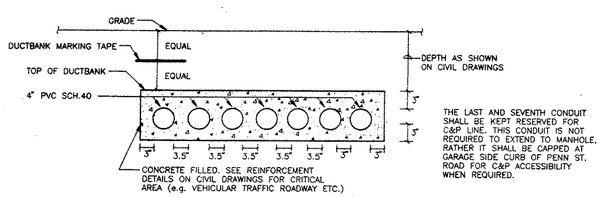
CONCRETE ENCASED COMMUNICATION DUCTBANK (6-WAY) SECTION A-A

NO SCALE



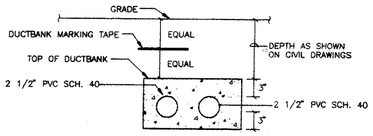
CONCRETE ENCASED ELECTRIC DUCTBANK (6-WAY) SECTION B-B

NO SCALE



CONCRETE ENCASED COMMUNICATION DUCTBANK (6-WAY) SECTION D-D

NO SCALE



NOTE:
1) SEE CIVIL AND STRUCTURAL DRAWINGS FOR BOTH CONCRETE AND REINFORCED CONCRETE ENCASED DUCTWORK DETAILS AND ELEVATIONS.

CONCRETE ENCASED ELECTRIC DUCTBANK (2-WAY) SECTION C-C

NO SCALE

APRIL 3, 1995 AS-BUILTS

WHITING-TURNER
CONTRACTING COMPANY
DESMAN ASSOCIATES
ARCHITECTS ENGINEERS

BURDETTE, KOEHLER, MURPHY & ASSOCIATES, INC.
CONSULTING ENGINEERS
300 THE QUADRANGLE, 216 YORK ROAD
BALTIMORE, MARYLAND 21212 (410) 435-8555

PENN STREET PARKING FACILITY
UNIVERSITY OF MARYLAND AT BALTIMORE

NO.	DATE	BY
1	11-24-93	R.P.

REVISIONS

ELECTRICAL DETAILS

DRAWING NO.
E-19

SCALE:	1/8"=1'-0"
DATE:	6-24-1993
PROJECT NO.	J-343

DESIGN	DRAWN	CHKD.
R.P.	I.P.	R.N.S.

G:\PROJECTS\9247\01\E19 11/23/93 11:59