US Army Corps
of Engineers
Louisville District

USAR Center Expand and Modernize USARC

Indianapolis, Indiana

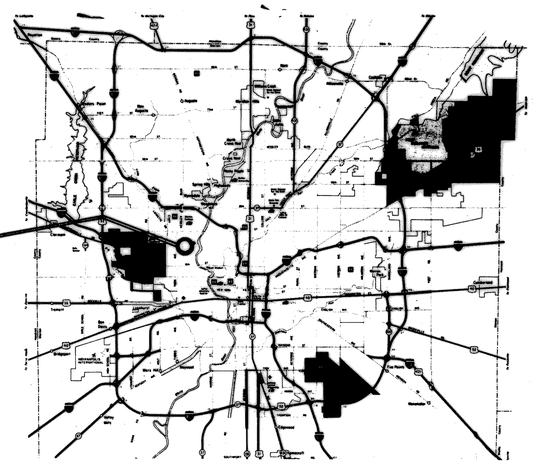
James Associates Architects & Engineers, Inc.
2828 East 45th Street, P.O. Box 55809
Indianapolis, Indiana 46205

PN 0137000 FY 85
SFP # DACA27-85-R-0009
AE Contract # DACA 41-82-C-0182

RECORD DRAWING-"AS BUILT"
IN016-0015

PROJECT LOCATION

2625 KESSLER BOULEVARD,
INDIANAPOLIS, INDIANA



NORTH

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C-3	GRADING, DRAINAGE AND UTILITIES
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C-5	BORING LOGS
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A-5	FIRST LEVEL UNIT B FLOOR PLAN
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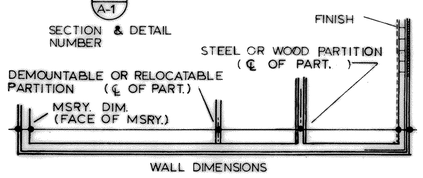
SHEET NO.	SHEET TITLE
M-1	UNIT A TUNNEL PLAN
M-2	UNIT B TUNNEL PLAN
M-3	FIRST LEVEL UNIT A MECHANICAL PLAN
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M-8	MECHANICAL SCHEDULES AND DETAILS
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E-2	FIRST LEVEL UNIT A LIGHTING PLAN
E-3	FIRST LEVEL UNIT B LIGHTING PLAN
E-4	SECOND LEVEL UNIT A LIGHTING PLAN
E-5	SECOND LEVEL UNIT B LIGHTING PLAN
E-6	FIRST LEVEL UNIT A POWER PLAN
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E-11	RISER DIAGRAM AND PANEL SCHEDULE
E-12	FIRE ALARM RISER
E-13	TELEPHONE RISER
E-14	DETAILS
E-15	LIGHT FIXTURE SCHEDULE

MATERIAL INDICATIONS

ORIGINAL GRADE OR EARTH
FILL EARTH
ROCK
GRAVEL
FILL
RIPRAP
GROUT OR SAND
SELECT CLAY BACKFILL
WOOD ACROSS GRAIN BLOCKING
CONCRETE
CONCRETE REINFORCED
CONCRETE BLOCK OR HOLLOW TILE
BRICK OR STONE MASONRY
CAST STONE
CERAMIC TILE
CAST IRON
STEEL
ZINC, LEAD OR ALLOYS
ALUMINUM OR MAGNESIUM
WATER
INSULATION ELECTRICAL
SMALL SCALE
LARGE SCALE
WOOD WITH GRAIN
CONCRETE BLOCK LARGE SCALE
RUBBER
BRONZE, BRASS OR COPPER
INSULATION THERMAL ACOUSTICS

GRAPHIC SYMBOLS

100 — EXIST. CONTOUR LINE
100 — NEW CONTOUR LINE
+ 100.0' EXIST. SPOT GRADE ELEVATION
+ 100.0' NEW SPOT GRADE ELEVATION
BOUNDARY LINES PROPERTY LINES
FLOOR LINES IN EXT. ELEVATIONS, CENTER & PROJECTED LINES
BREAK LINE
FLOOR LEVEL LINE
FLOOR ELEV IN PLAN
TEST BORING
REVISION
COLUMN COORDINATES
SECTION & DETAIL NUMBER
5C / A-7 SECTION REFERENCE DETAIL REFERENCE
MATCH LINE
101 W1 4 DOOR, WINDOW, AND EQUIPMENT NUMBER
NAME 101 ROOM NAME
EXISTING DOOR
NEW DOOR
WALL FOR DEMOLITION
NEW WALL CONSTRUCTION
NORTH



WALL DIMENSIONS

ABBREVIATIONS

SYMBOLS USED AS ABBREVIATIONS:

L - angle
C - centerline ℄
[- channel
P - plate
ø - round

ABBREVIATIONS:

ACC - access
AP - access panel
ACT - acoustical tile
ADD - addition
AGG - aggregate
A/C - air conditioning
AHU - air handling unit
A - air pipe line
ARV - air relief valve
ALT - alternate
AL - aluminum
AB - anchor bolt
& - and
APPROX. - approximately
ARCH - architect (ural)
AD - area drain
ASPH. - asphalt
AT - asphalt tile
@ - at
AVE - avenue

BH - baseboard heater
BSMT - basement
BPL - bearing plate
BM - bench mark
BIT - bituminous
BLK - block
BLKG - blocking
BD - board
BLVD - boulevard
BTU - British thermal unit
BLDG - building
B - building line
BBD - bulletin board

CAB - cabinet
CPT - carpet (ed)
CSMT - casement
CI - cast iron
CB - catch basin
CLG - ceiling
CEM - cement
CT - ceramic tile
CB - chalkboard
CLO - closet
COL - column
CONC - concrete
CP - concrete pipe
CONSP - construction
CONT - continuous or continue
CJ - control joint
CONV - convector
CORR - corrugated
CRS - course (s)
CU - cubic
CFM - cubic feet per minute

DIA - diameter
DIM - dimension
DO - ditto
DIV - division
DR - door
DH - double hung
DS - downspout
DWG - drawing
DF - drinking fountain

E - east
ELEC - electric (all)
EC - electrical contractor
EWC - electric water cooler
EL or ELEV - elevation
EMER - emergency
EQ - equal
EQUIP - equipment
EST - estimate
EXH - exhaust
EXIST - existing
EXP - exposed
EXT - exterior

F - Fahrenheit
FIN - finish (ed)
FA - fire alarm
FE - fire extinguisher
FEC - fire extinguisher cabinet
FHC - fire hose cabinet
FLR - flooring
FD - floor drain
FT - foot, feet
FTG - footing
FDN - foundation
FA - fresh air
FC - fan coil
GA - gage, gauge
GALV - galvanized
GI - galvanized iron
G - gas pipe line
GC - general contract (or)
GL - glass, glazing
GVL - gravel
GYP BD - gypsum board

HC - handicapped
HDWE - hardware
HTG - heating
HVAC - heating/ventilation/air conditioning
HT - height
HC - hollow core
HM - hollow metal
HP - horsepower
HB - hose bib

INCIN - incinerator
INC - incorporated
ID - inside diameter (dimension)
INSUL - insulation
INV - invert
IP - iron pipe

KW - kilowatts
KIT - kitchen
KO - knockout

LAB - laboratory
LAM - laminate (d)
LAV - lavatory
LH - left hand
LT WT - light weight
LL - live load
LLH - long leg horizontal
LLV - long leg vertical

MH - manhole
MFG - manufacturer
MO - masonry opening
MAX - maximum
MECH - mechanical
MET - metal
M - meter (s)
MM - millimeter (s)
MIN - minimum
MISC - miscellaneous
MULL - mullion

NOM - nominal
N - north
NIC - not in contract
NO or # - number

OC - on center (s)
OPNG - opening
OPP - opposite
OZ - ounce
OA - outside air
OD - outside diameter (dimension)
OH - overhead

PR - pair
PNL - panel
PKWY - parkway
PVMT - pavement
PL - plate
PG - plate glass
PWD - plywood
PT - point
POL - polished
PVC - polyvinyl chloride
PSF - pounds per square foot
PSI - pounds per square inch
PC - precast
PREFAB - prefabricated
P - property line

QT - quarry tile

RAD - radius
REFR - refrigerator
REINF - reinforced
REQ'D - required
RA - return air
RAG - return air grille
REV - revision(s), revised
RH - right hand
R - riser
RD - roof drain
RM - room
RO - rough opening

SECT - section
SH - sheet
SIM - similar
SC - solid core
S - south
SQ - square
SS - stainless steel
STD - standard
STOR - storage
ST - storm drain
SCT - structural clay tile
SUSP - suspended
SYM - symmetry (ical)
SA - sanitary sewer
SUP - supply air

TYP - typical

TB - tackboard
TS - tackstrip
TEL - telephone
TV - television
TEMP - temperature
T&G - tongue and groove
T - tread
TYP - typical

UL - Underwriter Laboratories
UR - urinal
UH - unit heater
UV - unit ventilator

VENT - ventilation
VERT - vertical
V - vinyl
VAT - vinyl asbestos tile
VT - vitrified tile

WC - water closet
WGT - weight
WWF - welded wire fabric
W - west
W/ - with
W/O - without
WD - wood
WPT - working point

ABBREVIATIONS

BC - bottom of curb
BS - bottom of step

CO - clean out
CMP - corrugated metal pipe

EP - edge of pavement

INV - invert

MEG - match existing pavement
MRG - match resurfaced grade

P - pavement
PVC - polyvinyl chloride

R - radius
RCP - reinforced concrete pipe

TC - top of curb
TS - top of step
TW - top of wall

VCP - vitrified clay pipe

W - walk

Prepared by:
Reviewed by: Asst Ch. Engineering Div.
Recommended by: Chief, Engineering Div.
Approved by: Corps of Engineers Date: 11 MAR 85
Approved for Functional Adequacy by:
Date:

Revisions			
Symbol	Descriptions	Date	Approved

JAMES ASSOCIATES
ARCHITECTS AND ENGINEERS
2828 EAST 45TH STREET
INDIANAPOLIS, IN 46205

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
LOUISVILLE, KENTUCKY

Designed by:
Drawn by: MB
Checked by: DH, PP
Reviewed by:
Approved by:

US Army Corps of Engineers

USAR CENTER INDIANAPOLIS, INDIANA
EXPAND AND MODERNIZE USARC
MRD 84 MCAR 5A

INDEX

Scale:
Date: 20 JANUARY 84
Drawing Code: DEF-29-06-
Sheet reference number: X-1
Sheet 1 of 67

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RECORD DRAWING-"AS BUILT"

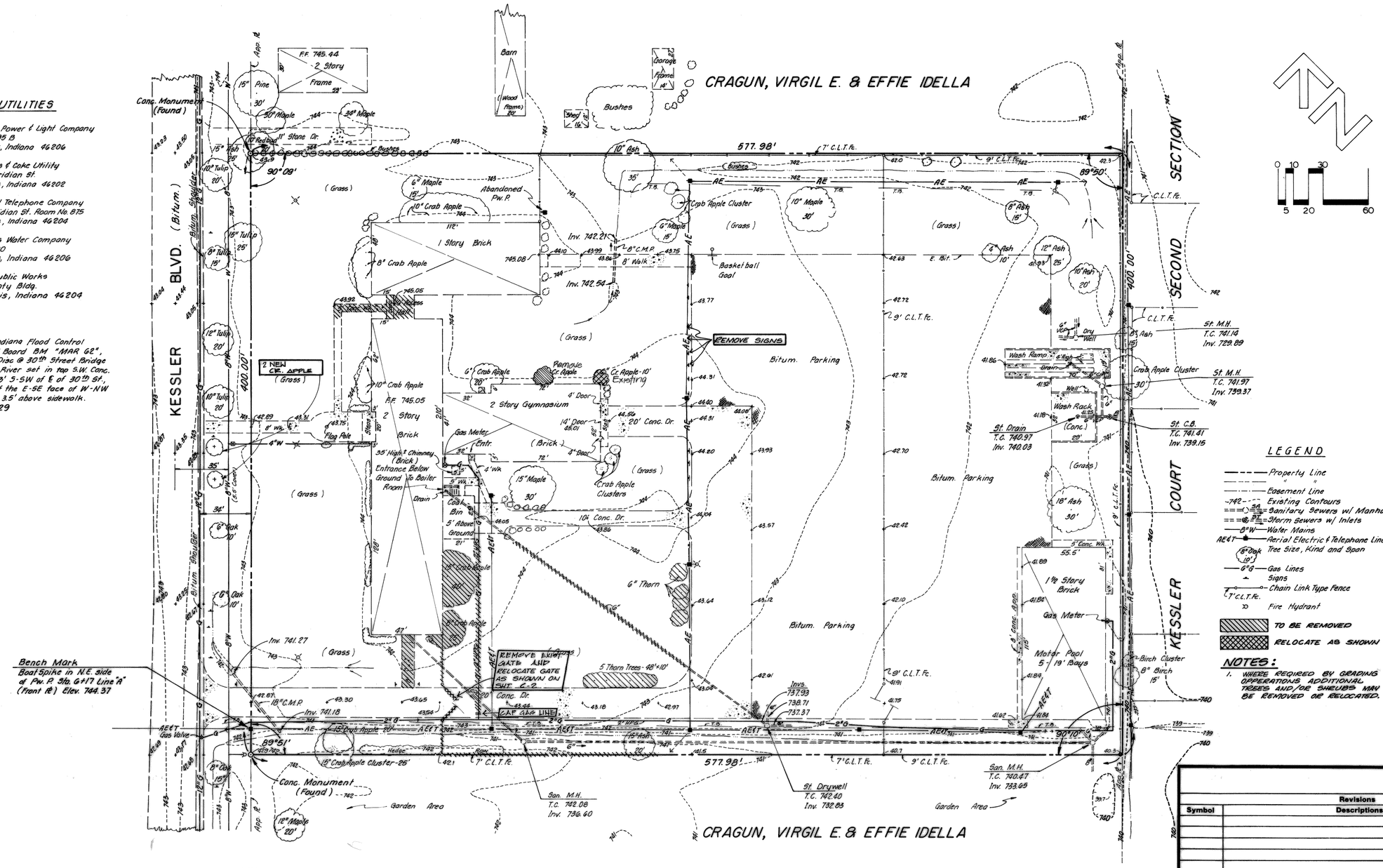
29917

PUBLIC UTILITIES

Electric	Indianapolis Power & Light Company P.O. Box 1595 B Indianapolis, Indiana 46206
Gas	Citizen's Gas & Coke Utility 2020 N. Meridian St. Indianapolis, Indiana 46202
Telephone	Indiana Bell Telephone Company 220 N. Meridian St. Room No. 875 Indianapolis, Indiana 46204
Water	Indianapolis Water Company P.O. Box 1220 Indianapolis, Indiana 46206
Sewers	Dept. of Public Works City-County Bldg. Indianapolis, Indiana 46204

NOTES:

Source Of Level Datum - Indiana Flood Control State Flood Board BM "MAR 62", A Bronze Disc @ 30th Street Bridge Over White River set in top S.W. Conc. Handrail, 43' S-SW of E of 30th St., 8' W-NW of the E-SE face of W-NW Abutment, 3.5' above sidewalk. Elev. 716.29



LEGEND

NOTES:

1. WHERE REQUIRED BY GRADING OPERATIONS ADDITIONAL TREES AND/OR SHRUBS MAY BE REMOVED OR RELOCATED.

I, THE UNDERSIGNED, HEREBY CERTIFY THAT THE WITHIN PLAT REPRESENTS A SURVEY OF THE DESCRIBED AREA AND THAT ALL STAKES, MONUMENTS, AND MARKS SET, TOGETHER WITH THOSE FOUND ARE AS SHOWN.

CERTIFIED THIS 28th DAY OF December, 19 84

RICHARD B. WETZEL, L.S.
REGISTERED LAND SURVEYOR NO. 10568
STATE OF INDIANA

RICHARD B. WETZEL REGISTERED No. 10568 STATE OF INDIANA LAND SURVEYOR

Revisions

Symbol	Descriptions	Date	Approved

JAMES ASSOCIATES
ARCHITECTS AND ENGINEERS
2828 EAST 45TH STREET
INDIANAPOLIS, IN 46205

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
LOUISVILLE, KENTUCKY

Designed by:	
Drawn by:	H L R
Checked by:	
Reviewed by:	
Approved by:	

US Army Corps of Engineers

USAR CENTER, INDIANAPOLIS, INDIANA
EXPAND AND MODERNIZE USARC
MRD - 84 - MCAR - 5A

EXISTING CONDITIONS & DEMOLITION

Scale: 1" = 30'
Date: 20 JANUARY 84
Drawing Code: DEF-16-06
Sheet reference number: C-1
Sheet 2 of 67

83011
C-02 C-01
C-01 C-01

REVISED BY LOU. DIST CORPS OF ENGRS TO "AS BUILT" CONDITIONS

RECORD DRAWING-"AS BUILT"

IN016-0015 C1&5 OPE-11836-2

29017

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Electric	Indianapolis Power & Light Company P.O. Box 1595 B Indianapolis, Indiana 46206
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CRAGUN, VIRGIL E. & EFFIE IDELLA

KESSLER BLVD. (Bitum.)

SECOND SECTION

KESSLER COURT

577.98'

400.00'

89°50'

90°09'

Bench Mark
Boat Spike in N.E. side of Pw. P. Sta. G+17 Line "A" (Front ℞) Elev. 744.37

NEW ADDITION

· KEYNOTES ·

1. INTEGRAL CONCRETE CURB (SEE DETAIL 4D/C4)
2. CONCRETE SIDEWALK (SEE DETAIL 5C/C4)
3. WHEELCHAIR RAMP (SEE DETAIL 3D/C4)
4. CONCRETE STOOP (SEE DETAIL 5B/51)
5. 7' CHAIN LINK FENCE
6. 4" PAINTED LINE (WHITE)
7. BRICK SCREEN WALL (SEE DETAIL 1C/C4)
8. PAINTED HANDICAPPED SYMBOL
9. HANDICAPPED PARKING SIGN
10. RELOCATED GATE
11. CAN WASHER (SEE DETAILS SHEET F3, F5)
12. CONCRETE PAVEMENT (SEE DETAIL 4D/C4)
13. * CONTRACTION JOINT (SEE DETAIL 2C/C4)
14. * 8'0" WIDE FRENCH DRAIN (SEE DETAIL 2D/C4)
15. CONCRETE DRIVEWAY (SEE DETAIL 4B/C4)

* FRENCH DRAINS AND CONTRACTION JOINTS SHALL BE LOCATED TO EXTEND THE EXISTING DRAINS AND JOINTS TO THE BACK OF THE NEW CURB.

NOTE: SODDING SHALL PLACED AROUND THE BUILDING IN ALL AREAS DISTURBED BY CONSTRUCTION IN ACCORDANCE WITH DETAIL 5A/C4

LEGEND

- Property Line
- Easement Line
- Existing Contours
- Sanitary Sewers w/ Manholes
- Storm Sewers w/ Inlets
- 8"W — Water Mains
- AE&T — Aerial Electric & Telephone Lines w/ Poles
- Tree Size, Kind and Span
- Gas Lines
- Signs
- Chain Link Type Fence
- Fire Hydrant

PROJECT SIGN

(Name of Project) or (Base)
Name of Job
Acme Construction Co.

4" BLACK-HELVETICA BOLD
4" BLACK-HELVETICA MEDIUM
WHITE BACKGROUND
2" WIDE (DOUBLE) FACE SIGN ONLY)
GOV'T FURNISHED LOGO
US Army Corps of Engineers Louisville District
4" MINIMUM
1¾" R. (OUTSIDE)
3/4" PLYWOOD
3/4" BLACK
SEE DETAIL 1
4" NO. 16 FLATHEAD SCREWS
2¼" NO. 12 FLATHEAD SCREWS
96"
48"
3/4" PLYWOOD PANEL
1 1/4" x 2"
1/2"
4" x 4" POST
GROUND LINE

SECTION A-A | SECTION B-B | DETAIL 1

SINGLE FACE SIGN | DOUBLE FACE SIGN

Revisions			
Symbol	Descriptions	Date	Approved

JAMES ASSOCIATES
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2828 EAST 45TH STREET
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U.S. ARMY ENGINEER DISTRICT
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US Army Corps of Engineers

USAR CENTER, INDIANAPOLIS, INDIANA
EXPAND AND MODERNIZE USARC
MRD-84-MCAR-5A

SITE PAVING & STRIPING

Scale: 1" = 30'
Date: 20 JANUARY 84
Drawing Code: DEF-16-06-02
Sheet reference number: C-2
Sheet 3 of 67

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RECORD DRAWING-"AS BUILT"

83011
C-02 C-82 C-81 C-01 40
C-02 C-82 C-81

29917

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CRAGUN, VIRGIL E. & EFFIE IDELLA

KESSLER BLVD. (Bitum.)

SECOND SECTION COURT

577.98'

400.00'

89°50'

90°09'

F.F. 745.44 2 Story Frame 59'

1 Story Brick

2 Story Gymnasium

2 Story Brick F.F. 745.05

Barn (Wood Frame) 20'

Carport Frame 14'

Shed 16'

Bushes

Abandoned Pw. P.

Basket ball Goal

Bitum. Parking

Wash Ramp

Wash Rack

Motor Pool 5-1 Story Bays

1½ Story Brick

Gas Meter

Garden Area

Conc. Monument (Found)

Bench Mark
Boat Spike in N.E. side of Pw. P. Sta. 6+17 Line "A" (Front Rt.) Elev. 744.37

741.16 Outlet

8" PVC DRAIN SLOPED .51%

REMOVE AND REPLACE EXIST. PAVEMENT AS REQ'D TO INSTALL VALVE AND ROAD BOX.

PAVEMENT CUT TO JOINT, REMOVED AND REPLACED

SA M.H. T.C. 744.50 INV. 740.78

INV. 741.50 C.O.

75' OF 6" VCP @ 10%

250' OF 6" PVC @ 1.0%

APPROX. 340'

EXISTING 11½" WATERLINE (ELEV. -9.0)

10,000 GAL FUEL OIL STORAGE TANK (SEE SHEET P-4)

(INV. 738.66 (EXISTING))

2" HP GAS

2" HP GAS TO BE INSTALLED BY UTILITY COMPANY

SET PIPE UNDER DRIVE VALVE & ROAD BOX

SA M.H. T.C. 741.0± (EXIST. GR.) N. INV. 738.20 E&W. INV. 738.80 ± (EXIST.)

St. M.H. T.C. 741.14 Inv. 729.89

St. M.H. T.C. 741.97 Inv. 739.37

St. C.B. T.C. 741.41 Inv. 739.15

St. Drain T.C. 740.97 Inv. 740.03

St. Drywell T.C. 742.40 Inv. 732.85

San. M.H. T.C. 742.08 Inv. 736.60

San. M.H. T.C. 740.47 Inv. 733.95

Invs. 737.93 138.71 737.37

741.07 741.09

741.64 741.87

741.27

741.18

Trees 40'-60'

Hedge

15" Crab Apple Cluster-25'

Crab Apple Cluster

Birch Cluster

Drain Tile

Gas Meter

Entrance Below Ground To Boiler Room

3.5' High Chimney (Brick)

Flag Pole

Conc. Bin

5' Above Ground

Conc. Pad

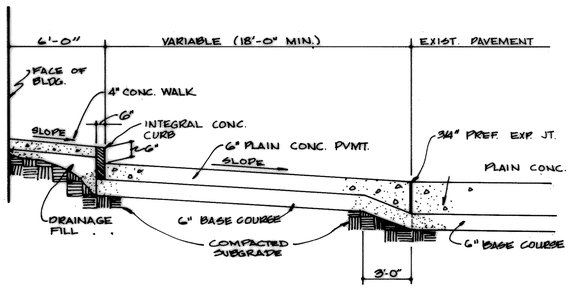
Conc. Dr.

Gas Valve

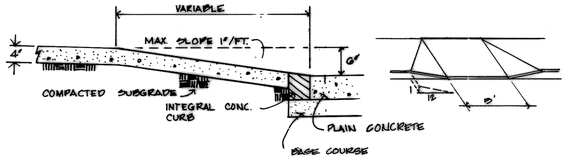
Vent Pipe

Vent Pipe

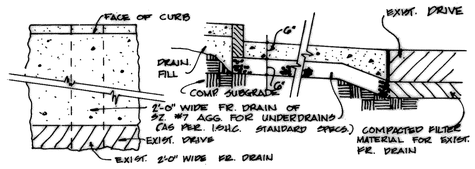
Vent Pipe



PAVEMENT SECTION
NO SCALE — 4D C-2



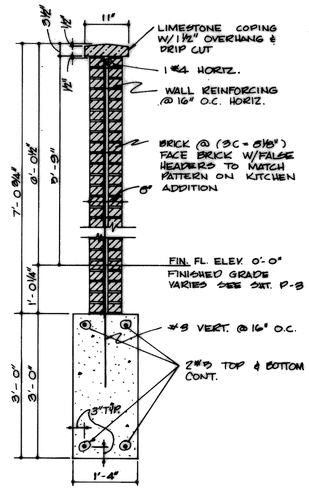
WHEEL CHAIR RAMP
NO SCALE — 3D C-2



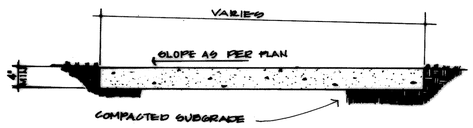
PLAN SECTION

FRENCH DRAIN
NO SCALE — 2D C-2

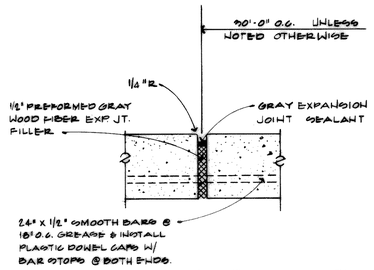
I.S.H.C. = INDIANA STATE HIGHWAY COMM.



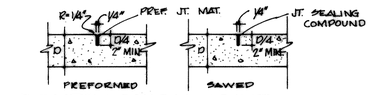
BRICK SCREEN WALL
SCALE 3/4" = 1'-0" — 1C C-2



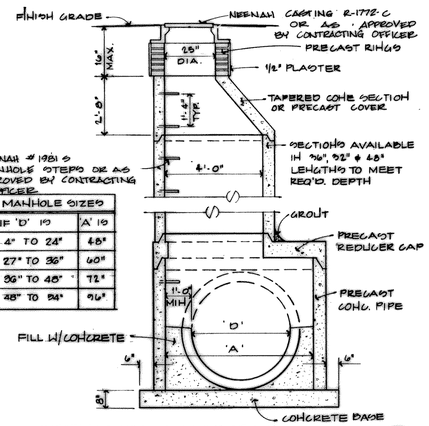
CONCRETE WALK
NO SCALE — 3C C-2



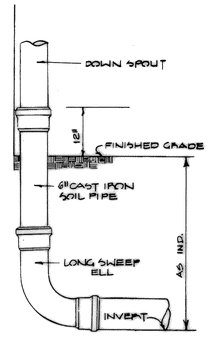
EXPANSION JOINT
NO SCALE — 3C C-2



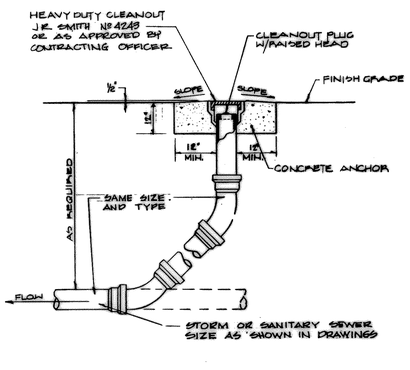
CONTRACTION JOINT
NO SCALE — 2C C-2



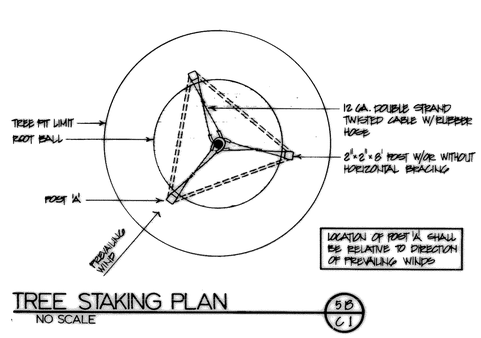
PRECAST MANHOLE
SCALE : 3/8 = 1'-0" — 3C C-3



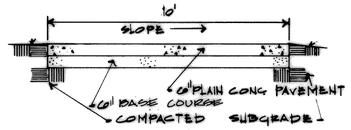
DOWNSPOUT BOOT
NO SCALE — 2B C-3



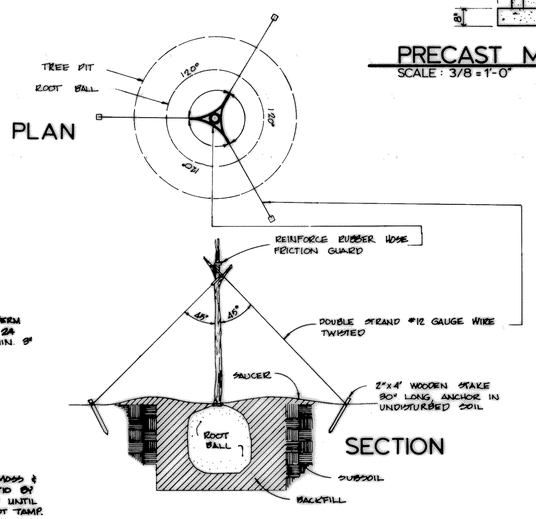
EXTERIOR CLEANOUT
NO SCALE — 1B C-3



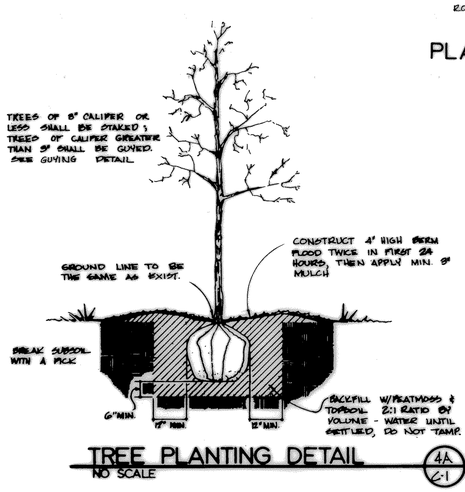
TREE STAKING PLAN
NO SCALE — 5B C-1



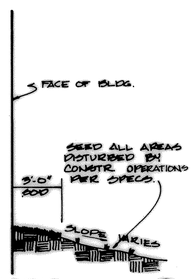
CONCRETE DRIVEWAY
NO SCALE — 4B C-2



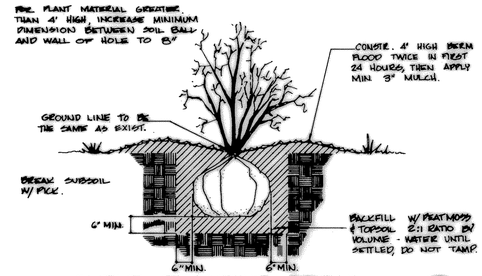
TREE GUYING DETAIL
FOR 3" CALIPER OR GREATER OR CONIFERS — 3A C-1



TREE PLANTING DETAIL
NO SCALE — 4A C-1



SODDING
NO SCALE — 5A C-2



SHRUB PLANTING DETAIL
NO SCALE — 2A C-1

Revisions			
Symbol	Descriptions	Date	Approved

JAMES ASSOCIATES
ARCHITECTS AND ENGINEERS
2828 EAST 45TH STREET
INDIANAPOLIS, IN 46205

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
LOUISVILLE, KENTUCKY

Designed by:
Drawn by: H L R
Checked by:
Reviewed by:
Approved by:

US Army Corps of Engineers

USAR CENTER, INDIANAPOLIS, INDIANA
EXPAND AND MODERNIZE USARC
MRD-84-MCAR-5A

DETAILS

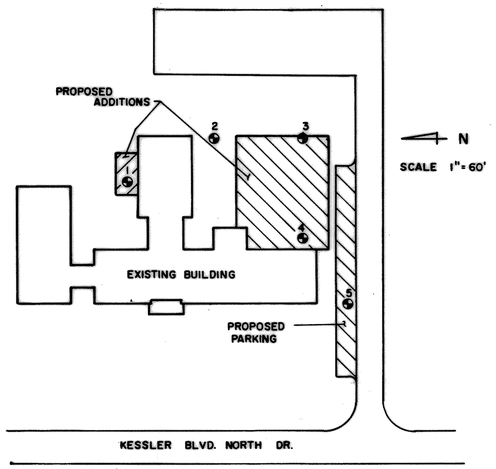
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Date: 20 JANUARY 84
Drawing Code: DEF-16-05
Sheet reference number: C-4
Sheet 5 of 67

IN016-0015 C4of5 OPF-11836-5

REVISED BY LOU. DIST CORPS OF ENGRS TO "AS BUILT" CONDITIONS

RECORD DRAWING-"AS BUILT"

89011



BORING PLAN
USAR CENTER
INDIANAPOLIS, INDIANA

ATEC ASSOCIATES

FIGURE 1

ATEC Associates, Inc.
Consulting Geotechnical & Materials Engineers

LOG OF BORING NO. 1

CLIENT Department of the Army c/o James Associates
PROJECT NAME Proposed Addition to USARC
PROJECT LOCATION 2625 Kessler Boulevard North Drive, Indpls, IN
BORING LOCATION See Boring Plan
FOREMAN P. McAdams
INSPECTOR

JOB NO. 21-23103
DATE 8/23/82
BORING METHOD HSA
ROCK CORE DIA. ___ IN.
SHELBY TUBE DIA. 3 IN.

MATERIAL DESCRIPTION	STRATUM DEPTH, FT.	DEPTH, FT.	STD. PENETRATION SAMPLE NO.	BLOWS/6 IN. THREE 6 IN. INCREMENTS	RECOVERY, %	SHELBY TUBE NO.	BORING AND SAMPLING NOTES
SURFACE ELEVATION 743.7*							
0.2' Topsoil				5			*Surface elevation referenced to existing ARC floor elevation 745.05
Black, Gray and Brown mottled slightly moist Sandy Clay with trace Gravel (FILL)	3.0		1	11/9	95		
				5			
Dark Brown moist stiff SANDY CLAY (CL) with trace Gravel	6.0	5	2**	5/7	50		
				3			Pocket Penetrometer 4.5+ TSF (Top portion of tube only)
Brown slightly moist loose CLAYEY SAND (SC) with trace of Silty Clay occlusions with some Gravel	8.0		3	4/3	60	75 1*	
				6			
Brown slightly moist medium dense fine to coarse SAND (SP-SM) with trace Silt and little Gravel		10	4	8/12	60		
							Boring caved to 13.4' @ completion
--dense 13.5'-15.0'				19			
		15	5	22/26	10		Sample 5 drove on cobble or coarse gravel
--moist, finer and with less Gravel 18.5'-20.0'				8			
		20	6	12/18	80		**Pocket Penetrometer 4.5+ TSF
Bottom of Test Boring 20.0'							

WATER LEVEL OBSERVATIONS
NOTED ON RODS None FT.
AT COMPLETION Dry FT.
AFTER 18 HRS. Dry FT.

BORING METHOD
HSA—HOLLOW STEM AUGER
CFA—CONTINUOUS FLIGHT AUGER
DC —DRIVEN CASING
MD —MUD DRILLING
RC —ROCK CORING
CA —CASING ADVANCER

*THESE SHELBY TUBE SAMPLES OBTAINED IN AN AUXILIARY BORING DRILLED A FEW FEET FROM THIS BORING

ATEC Associates, Inc.
Consulting Geotechnical & Materials Engineers

LOG OF BORING NO. 2

CLIENT Department of the Army c/o James Associates
PROJECT NAME Proposed Addition to USARC
PROJECT LOCATION 2625 Kessler Boulevard North Drive, Indpls, IN
BORING LOCATION See Boring Plan
FOREMAN P. McAdams
INSPECTOR

JOB NO. 21-23103
DATE 8/23/82
BORING METHOD HSA
ROCK CORE DIA. ___ IN.
SHELBY TUBE DIA. ___ IN.

MATERIAL DESCRIPTION	STRATUM DEPTH, FT.	DEPTH, FT.	STD. PENETRATION SAMPLE NO.	BLOWS/6 IN. THREE 6 IN. INCREMENTS	RECOVERY, %	SHELBY TUBE NO.	BORING AND SAMPLING NOTES
SURFACE ELEVATION 744.1*							
0.2' Topsoil				7			*Surface elevation referenced to existing ARC floor elevation 745.05
Gray-Brown slightly moist very stiff Sandy Silt (FILL)	3.0		1	18/12	65		
				7			
Dark Brown slightly moist very stiff SANDY CLAY (CL) with trace Gravel	5.5	5	2**	9/9	45		
				6			Pocket Penetrometer 4.0 TSF
Brown slightly moist medium dense SAND (SP-SM) with trace Silt and little Gravel			3	8/8	50		
				6			
		10	4	11/15	65		Boring caved to 7.5' @ completion
--dense 13.5'-15.0' and 18.5'-20.0'				19			
		15	5	21/21	55		**Pocket Penetrometer 4.0 TSF
				20			
		20	6	20/17	60		
Bottom of Test Boring 20.0'							

WATER LEVEL OBSERVATIONS
NOTED ON RODS None FT.
AT COMPLETION Dry FT.
AFTER 15 HRS. Dry FT.

BORING METHOD
HSA—HOLLOW STEM AUGER
CFA—CONTINUOUS FLIGHT AUGER
DC —DRIVEN CASING
MD —MUD DRILLING
RC —ROCK CORING
CA —CASING ADVANCER

*THESE SHELBY TUBE SAMPLES OBTAINED IN AN AUXILIARY BORING DRILLED A FEW FEET FROM THIS BORING

ATEC Associates, Inc.
Consulting Geotechnical & Materials Engineers

LOG OF BORING NO. 3

CLIENT Department of the Army c/o James Associates
PROJECT NAME Proposed Addition to USARC
PROJECT LOCATION 2625 Kessler Boulevard North Drive, Indpls, IN
BORING LOCATION See Boring Plan
FOREMAN P. McAdams
INSPECTOR

JOB NO. 21-23103
DATE 8/23/82
BORING METHOD HSA
ROCK CORE DIA. ___ IN.
SHELBY TUBE DIA. 3 IN.

MATERIAL DESCRIPTION	STRATUM DEPTH, FT.	DEPTH, FT.	STD. PENETRATION SAMPLE NO.	BLOWS/6 IN. THREE 6 IN. INCREMENTS	RECOVERY, %	SHELBY TUBE NO.	BORING AND SAMPLING NOTES
SURFACE ELEVATION 743.5*							
0.2' Topsoil				14			*Surface elevation referenced to existing ARC floor elevation 745.05
Brown and Gray mottled slightly moist Sandy Clay with trace Gravel and brick fragments (FILL)	3.0		1	15/12	70		
				4		45	
Dark Brown moist medium dense SAND (SP-SM) with trace Silt and little Gravel	5.5	5	2**	3/4		70 1*	Pocket Penetrometer 4.0 TSF
			3	5 8/9	60		
				6			
		10	4	9/10	70		Boring caved to 9.3' @ completion
--dense 13.5'-15.0' and 18.5'-20.0'				8			
		15	5	17/23	65		**Pocket Penetrometer 2.0 TSF
				14			
		20	6	18/21	70		
Bottom of Test Boring 20.0'							

WATER LEVEL OBSERVATIONS
NOTED ON RODS None FT.
AT COMPLETION Dry FT.
AFTER 7.5 HRS. Dry FT.

BORING METHOD
HSA—HOLLOW STEM AUGER
CFA—CONTINUOUS FLIGHT AUGER
DC —DRIVEN CASING
MD —MUD DRILLING
RC —ROCK CORING
CA —CASING ADVANCER

*THESE SHELBY TUBE SAMPLES OBTAINED IN AN AUXILIARY BORING DRILLED A FEW FEET FROM THIS BORING

ATEC Associates, Inc.
Consulting Geotechnical & Materials Engineers

LOG OF BORING NO. 4

CLIENT Department of the Army c/o James Associates
PROJECT NAME Proposed Addition to USARC
PROJECT LOCATION 2625 Kessler Boulevard North Drive, Indpls, IN
BORING LOCATION See Boring Plan
FOREMAN P. McAdams
INSPECTOR

JOB NO. 21-23103
DATE 8/23/82
BORING METHOD HSA
ROCK CORE DIA. ___ IN.
SHELBY TUBE DIA. ___ IN.

MATERIAL DESCRIPTION	STRATUM DEPTH, FT.	DEPTH, FT.	STD. PENETRATION SAMPLE NO.	BLOWS/6 IN. THREE 6 IN. INCREMENTS	RECOVERY, %	SHELBY TUBE NO.	BORING AND SAMPLING NOTES
SURFACE ELEVATION 744.1*							
0.2' Topsoil				30			*Surface elevation referenced to existing ARC floor elevation 745.05
Brown slightly moist Sandy Clay with Gravel (FILL)	3.0		1	50/27	70		
				7			
Dark Brown moist very stiff SANDY CLAY (CL) with trace Gravel	5.5	5	2**	9/12	45		
				4			
Brown slightly moist loose SAND (SP-SM) with trace Silt and little Gravel			3	4/3	65		
				7			
		10	4	8/9	65		Boring caved to 9.5' @ completion
--medium dense 8.5'-10.0'							
--dense 13.5'-15.0' and 18.5'-20.0'				8			
		15	5	16/19	45		**Pocket Penetrometer 4.5 + TSF
				8			
		20	6	23/22	85		
Bottom of Test Boring 20.0'							

WATER LEVEL OBSERVATIONS
NOTED ON RODS None FT.
AT COMPLETION Dry FT.
AFTER 2 HRS. Dry FT.

BORING METHOD
HSA—HOLLOW STEM AUGER
CFA—CONTINUOUS FLIGHT AUGER
DC —DRIVEN CASING
MD —MUD DRILLING
RC —ROCK CORING
CA —CASING ADVANCER

*THESE SHELBY TUBE SAMPLES OBTAINED IN AN AUXILIARY BORING DRILLED A FEW FEET FROM THIS BORING

ATEC Associates, Inc.
Consulting Geotechnical & Materials Engineers

LOG OF BORING NO. 5

CLIENT Department of the Army c/o James Associates
PROJECT NAME Proposed Addition to USARC
PROJECT LOCATION 2625 Kessler Boulevard North Drive, Indpls, IN
BORING LOCATION See Boring Plan
FOREMAN P. McAdams
INSPECTOR

JOB NO. 21-23103
DATE 8/23/82
BORING METHOD HSA
ROCK CORE DIA. ___ IN.
SHELBY TUBE DIA. ___ IN.

MATERIAL DESCRIPTION	STRATUM DEPTH, FT.	DEPTH, FT.	STD. PENETRATION SAMPLE NO.	BLOWS/6 IN. THREE 6 IN. INCREMENTS	RECOVERY, %	SHELBY TUBE NO.	BORING AND SAMPLING NOTES
SURFACE ELEVATION 743.7*							
0.4' Topsoil				6			*Surface elevation referenced to existing ARC floor elevation 745.05
Brown slightly moist Sandy Silt with trace roots (FILL)	1.5		1	23/30	90		
			2	12			
Brown moist hard Sandy Clay (FILL)	3.0			17/14	100		
		5	3**	6			Boring caved to 3.0' @ completion
Dark Brown moist stiff SANDY CLAY (CL) with trace Gravel				6/6	50		
Bottom of Test Boring 5.0'							**Pocket Penetrometer 4.25 TSF

WATER LEVEL OBSERVATIONS
NOTED ON RODS None FT.
AT COMPLETION Dry FT.
AFTER ___ HRS. ___ FT.

BORING METHOD
HSA—HOLLOW STEM AUGER
CFA—CONTINUOUS FLIGHT AUGER
DC —DRIVEN CASING
MD —MUD DRILLING
RC —ROCK CORING
CA —CASING ADVANCER

*THESE SHELBY TUBE SAMPLES OBTAINED IN AN AUXILIARY BORING DRILLED A FEW FEET FROM THIS BORING

Revisions			
Symbol	Descriptions	Date	Approved

JAMES ASSOCIATES
ARCHITECTS AND ENGINEERS
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INDIANAPOLIS, IN 46205

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
LOUISVILLE, KENTUCKY

Designed by:
Drawn by: HLR
Checked by:
Reviewed by:
Approved by:

US Army Corps of Engineers

USAR CENTER, INDIANAPOLIS, INDIANA
EXPAND AND MODERNIZE USARC
MRD-84-MCAR-5A

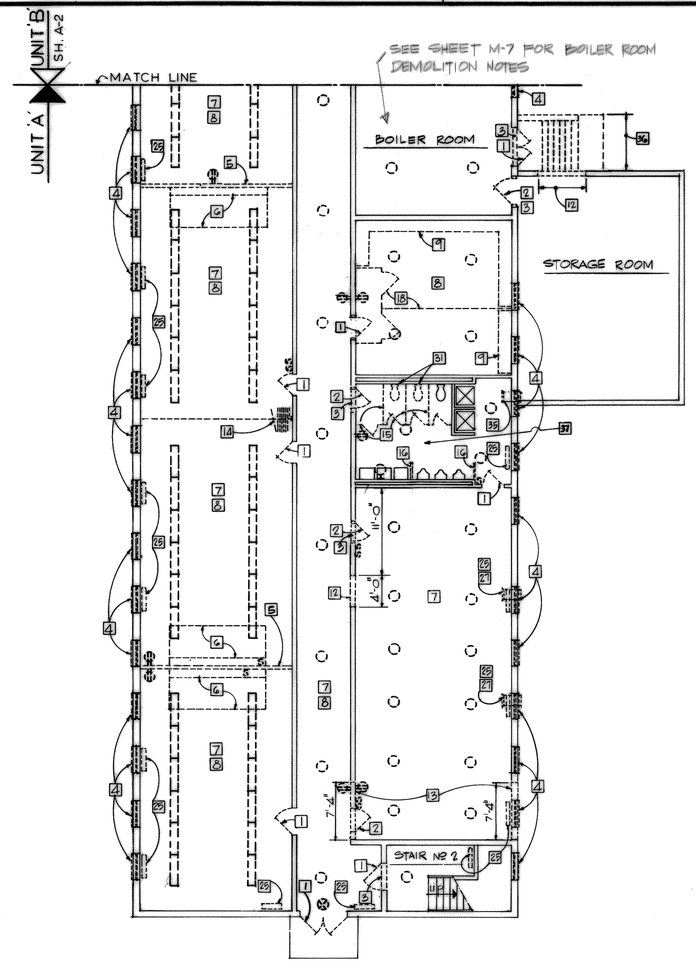
SOIL BORINGS

Scale: N/A
Date: 20JANUARY 84
Drawing Code: DEF-16-14
Sheet reference number: C-5
Sheet 6 of 67

IN016-0015 C5 of 51 OPF-11836-6

RECORD DRAWING-"AS BUILT"

85011

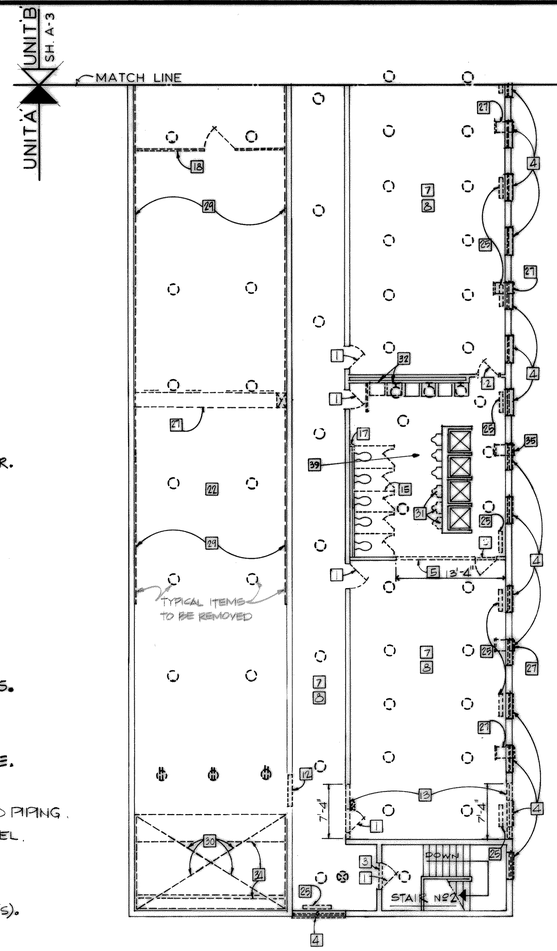


FIRST LEVEL UNIT A DEMOLITION PLAN

SCALE 1/8" = 1'-0"

DEMOLITION NOTES

1. REMOVE EXISTING DOOR(S) AND HARDWARE.
2. REMOVE EXISTING DOOR, FRAME, AND HARDWARE.
3. REMOVE EXISTING THRESHOLD.
4. REMOVE EXISTING WINDOW(S), FRAME, AND SILL.
5. REMOVE EXISTING WALL IN ITS ENTIRETY.
6. REMOVE EXISTING PLATFORM AND CHALKBOARD.
7. REMOVE EXISTING FLOOR COVERING AND BASE.
8. REMOVE EXISTING ACOUSTICAL CEILING.
9. REMOVE EXISTING WOOD SHELVING.
10. REMOVE EXISTING HANGERS AND WOOD STRIPS.
11. REMOVE EXISTING TACK AND DISPLAY BOARD.
12. REMOVE THIS PORTION OF EXISTING WALL FOR NEW DOOR AND FRAME.
13. REMOVE THIS PORTION OF EXISTING WALL(S) FOR NEW CORRIDOR.
14. REMOVE EXISTING FOLDING WALL IN ITS ENTIRETY.
15. REMOVE EXISTING TOILET PARTITION(S).
16. REMOVE EXISTING URINAL PARTITION(S).
17. REMOVE THIS PORTION OF EXISTING WALL FROM FLOOR TO ABOVE CEILING.
18. REMOVE EXISTING WIRE MESH PARTITION.
19. REMOVE EXISTING SCREEN DOOR AND FRAME.
20. REMOVE EXISTING VESTIBULE COMPLETELY, ROOF, FRAMING, EAST AND WEST WALLS, SLAB, AND FOOTINGS.
21. REMOVE EXISTING RAILING.
22. REMOVE EXISTING ACOUSTICAL CEILING AND LIGHT BAFFLES.
23. REMOVE EXISTING ARMS VAULT DOOR. SALVAGE FOR REUSE.
24. REMOVE EXISTING KITCHEN EQUIPMENT.
25. REMOVE EXISTING STEAM RADIATOR(S), UNIT HEATER(S), THERMOSTAT(S) AND PIPING. SALVAGE AND TURN OVER TO OWNER. CAP OFF PIPING IN TUNNEL.
26. REMOVE EXISTING HEATING UNIT(S), VENT UNIT(S), RETURN AIR DUCT(S), AND GRILLE(S).
27. REMOVE EXISTING EXHAUST FAN(S), DUCT(S), AND GRILLE(S).
28. REMOVE EXISTING CONTROL(S), COMPLETE.
29. REMOVE EXISTING ACOUSTICAL WALL TREATMENT FROM FACE OF EXISTING MASONRY WALL(S)
30. REMOVE ALL EXISTING SAND AND ETC. FROM EXISTING FIRING RANGE SAND PIT. SEE HAZARDOUS WASTE SECTION OF SPECIFICATIONS.
31. REMOVE EXISTING FIXTURE(S) AND RELEASE TO OWNER. CAP EXISTING PLUMBING SERVICES (WATER, WASTE, AND VENT) BEHIND THE WALL.
32. REMOVE EXISTING LAVATORIES, EXISTING CARRIER ARMS AND REMOVE EXISTING PLUMBING SERVICES. CAP EXISTING PLUMBING SERVICES (WATER, WASTE, AND VENT BEHIND THE WALL. RE-USE LAVATORIES AT NEW LOCATION AS SHOWN ON PLUMBING DRAWINGS.
33. REMOVE EXISTING WICKET FRAME, SLIDING DOOR, AND TRACK.
34. REMOVE EXISTING BULLET STOP FROM OLD FIRING RANGE.
35. REMOVE EXISTING TOILET ROOM EXHAUST FAN(S) AND GRILLE(S). SALVAGE FOR RE-INSTALLATION IN NEW WINDOW FRAMES.
36. REMOVE EXISTING CONC. STEPS, CONC. SLABS, AND CONC. RETAINING WALL COMPLETELY. REMOVE AREA DRAIN AND PREPARE SEWER FOR NEW CONNECTION.
37. REMOVE ALL EXIST. TOIL. RM. ACCESS. EXCEPT SHELF, MIRRORS & SOAP DISP @ EXIST. LAV'S.
38. ALL EXIST. T.R. ACCESS. TO REMAIN EXCEPT THOSE ON PARTITIONS BEING REMOVED. PROVIDE NEW TISSUE DISP. & GRAB BARS AS SHOWN.
39. ALL EXIST. T.R. ACCESS. TO REMAIN EXCEPT THOSE ON PARTITIONS BEING REMOVED. PROVIDE NEW ACCESS. AS SHOWN



SECOND LEVEL UNIT A DEMOLITION PLAN

SCALE 1/8" = 1'-0"

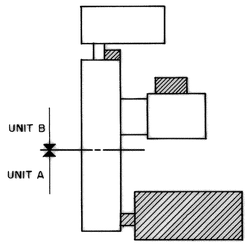
GENERAL CONTRACTOR NOTE:

PATCH AND PREPARE FOR NEW FINISHES, ALL HOLES AND OR PENETRATIONS IN EXISTING WALLS AND FLOORS, AFTER DEMOLITION WORK IS COMPLETE.

SEE SHEET A-2 FOR SALVAGE NOTES.

ELECTRICAL DEMOLITION NOTES

1. DISCONNECT AND REMOVE ALL EXISTING INTERIOR LIGHT FIXTURES INCLUDING EXIT LIGHTS.
2. DISCONNECT ALL EQUIPMENT ELECTRICALLY THAT IS TO BE REMOVED FROM SERVICE.
3. DISCONNECT AND REMOVE ALL ELECTRICAL EQUIPMENT THAT IS TO BE REMOVED FROM SERVICE.
4. DISCONNECT AND REMOVE ALL ELECTRICAL ITEMS IN OR ON WALLS, PARTITIONS, CEILINGS AND FLOORS WHICH WILL BE REMOVED FOR THIS RENOVATION.
5. REMOVE EXISTING EXPOSED CONDUITS NO LONGER USED. CONDUITS IMBEDDED IN MASONRY SHALL BE CUT OFF FLUSH WITH SURFACE AND PATCHED.
6. WHERE OUTLETS ARE REMOVED AND/OR CONDUIT IS CUT OFF, ALL EXISTING CONDUCTORS SHALL BE REMOVED BACK TO NEXT OUTLET, JUNCTION BOX OR PANEL BOARD.
7. EXISTING CONDUCTORS REMOVED FROM SERVICE SHALL NOT BE REUSED FOR THE NEW WORK.
8. WHERE EXISTING CIRCUIT HAS BEEN INTERRUPTED, THE REMAINING CONDUIT AND CIRCUIT SHALL BE REROUTED AND RECONNECTED TO PROVIDE CONTINUITY OF THAT CIRCUIT TO REMAIN IN SERVICE.
9. BLANK COVERS SHALL BE INSTALLED WHEREVER DEVICE IS REMOVED AND OUTLET BOX REMAINS IN PLACE.
10. EXISTING CONDUITS REMAINING IN PLACE MAY BE UTILIZED FOR THE NEW WORK.



KEY PLAN

NO SCALE

NEW CONSTRUCTION

Revisions			
Symbol	Descriptions	Date	Approved

JAMES ASSOCIATES
ARCHITECTS AND ENGINEERS
2828 EAST 45TH STREET
INDIANAPOLIS, IN 46205

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
LOUISVILLE, KENTUCKY

Designed by:

Drawn by: DH

Checked by: DH, PP

Reviewed by:

Approved by:

US Army Corps of Engineers

USAR CENTER INDIANAPOLIS, INDIANA
EXPAND AND MODERNIZE USARC
MRD 84 MCAR 5A

DEMOLITION PLAN

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

Date: 20 JANUARY 84

Drawing Code: DEF-29-06-

Sheet reference number: A-1

Sheet 7 of 67.

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	AB-1	AB-1
AO-1	AO-1	

IN0116-0015 A1&23 1 OPF-11836-7

REVISED BY LOU. DIST CORPS OF ENGRS TO "AS BUILT" CONDITIONS

RECORD DRAWING-"AS BUILT"

TYP REMOVED FROM WALL FOR FURRING AND DRYWALL

CEILING HUNG UNIT HEATER REMOVED (4)

EXISTING ARMS VAULT
NOT REQD

OUT OF ORDER

EXIST. ASH URNS TO REMAIN

EXISTING FLAG CASE TO REMAIN

EXIST. DISPLAY CASE TO REMAIN

STAIR NO 1

UP

EXIST. EWC

DOWN

BOILER ROOM

ASSEMBLY ROOM

UNIT 'A'
SH A-1

UNIT 'B'

MATCH LINE

FIRST LEVEL UNIT 'B' DEMOLITION PLAN

SCALE 1/8" = 1'-0"

12" 0 5' 10' 15'

ITEMS TO BE SALVAGED AND RETURNED TO THE OWNER

1. ALL LIGHT FIXTURES AND GLOBES.
2. WINDOW FRAMES AND LOCKS.
3. DOOR CLOSURES.
4. STEAM TRAPS
5. RELIEF VALVES
6. RADIATORS
7. FAN COIL UNITS
8. AIR HANDLING UNITS
9. TOILET FIXTURES
10. EXHAUST FANS

UNIT B

UNIT A

KEY PLAN
NO SCALE
NEW CONSTRUCTION

SEE SHT A-1 FOR DEMOLITION NOTES

Revisions			
Symbol	Descriptions	Date	Approved
1	AMENDMENT NO 1	4/19/85	

JAMES ASSOCIATES
ARCHITECTS AND ENGINEERS
2828 EAST 45TH STREET
INDIANAPOLIS, IN 46205

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
LOUISVILLE, KENTUCKY

Designed by:
Drawn by: DH
Checked by: DH, PP
Reviewed by:
Approved by:

US Army Corps of Engineers

USAR CENTER INDIANAPOLIS, INDIANA
EXPAND AND MODERNIZE USARC
MRD 84 MCAR 5A

DEMOLITION PLAN

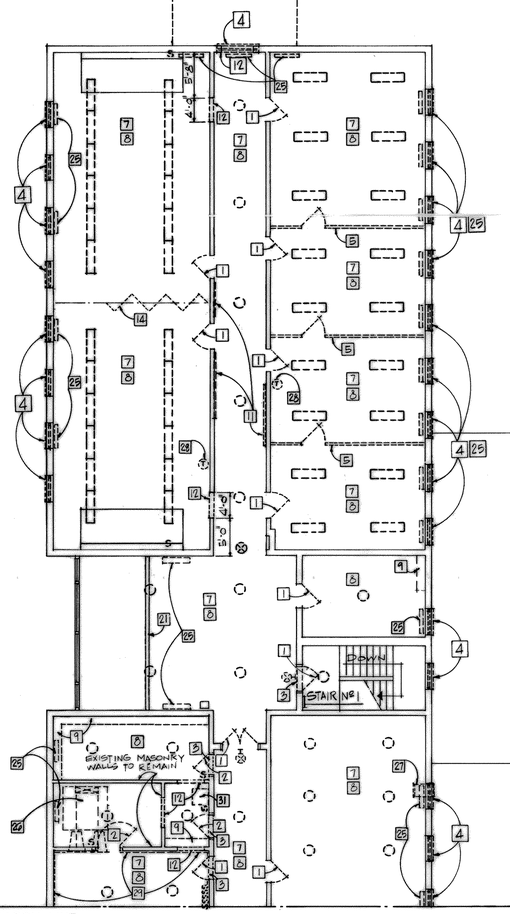
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Date:
Sheet reference number: A-2
Drawing Code: DEF-29-06-
Sheet 8 of 67

AD-2	AB-4	AB-4	
AD-2	AD-2		

IN016-0015 A20723 1 OPF-11836-8

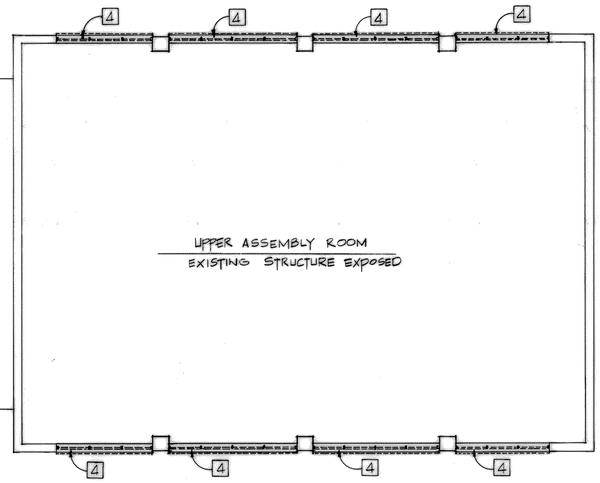
REVISED BY LOU. DIST CORPS OF ENGRS TO "AS BUILT" CONDITIONS

RECORD DRAWING-"AS BUILT"



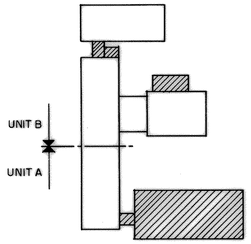
SECOND LEVEL UNIT B DEMOLITION PLAN

SCALE 1/8" = 1'-0"



SEE SHT. A-1 FOR DEMOLITION NOTES

SEE SHEET A-2 FOR SALVAGE NOTES.



KEY PLAN
NO SCALE
NEW CONSTRUCTION

Revisions			
Symbol	Descriptions	Date	Approved

JAMES ASSOCIATES
ARCHITECTS AND ENGINEERS
2828 EAST 45TH STREET
INDIANAPOLIS, IN 46205

U.S. ARMY ENGINEER DISTRICT
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USAR CENTER INDIANAPOLIS, INDIANA
EXPAND AND MODERNIZE USARC
MRD 84 MCAR 5A

DEMOLITION PLAN

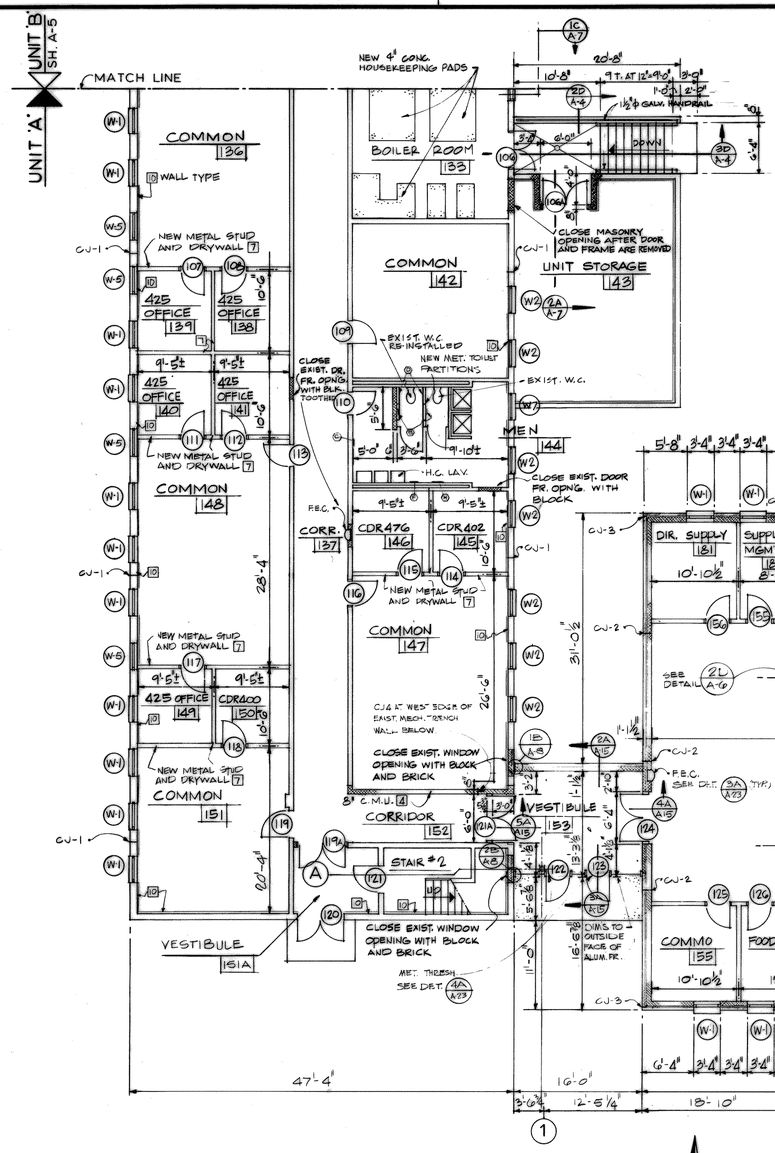
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Date: 20 JANUARY 84
Drawing Code: DEF-29-06-
Sheet reference number: A-3
Sheet 9 of 67

83011		
A0-3	A6-3	A6-3
	A0-3	

IN016-0015 1936231 OPF-11836-9

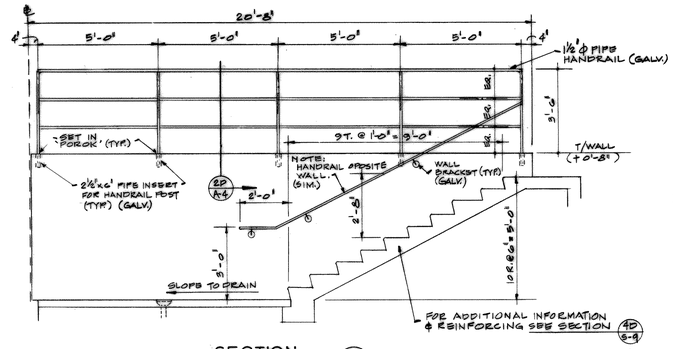
REVISED BY LOU. DIST CORPS OF ENGRS TO "AS BUILT" CONDITIONS

RECORD DRAWING-"AS BUILT"

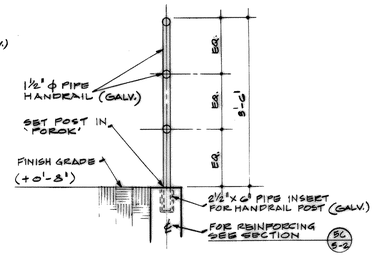


FIRST LEVEL UNIT A FLOOR PLAN

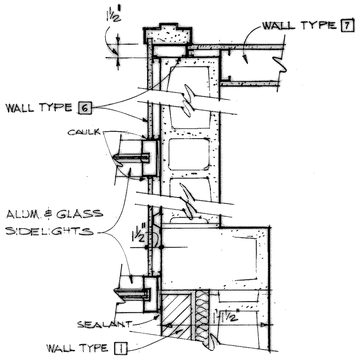
SCALE 1/8" = 1'-0"



SECTION
SCALE 3/8"=1'-0" (3D A-4)



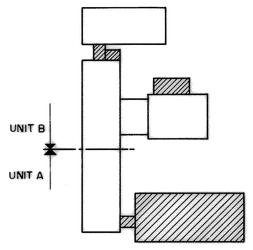
SECTION
SCALE 3/4"=1'-0" (2D A-4)



DETAIL
SCALE: 1 1/2" = 1'-0" (1C A-4)

GROSS FLOOR AREA

	NEW	EXISTING	TOTAL
LEVEL 1	9,773	22,886	32,659
LEVEL 2	8,950	9,970	18,920
TOTAL	18,723 +	32,856	51,579



KEY PLAN
NO SCALE
NEW CONSTRUCTION

TOILET ROOM ACCESSORIES LEGEND

- (A) 4'-0" x 6" METAL SHELF + 48" TO BOTTOM
- (B) SURFACE MOUNTED TOILET TISSUE DISPENSER +30" A.F.F. TO ℄
- (C) WASTE RECEPTICAL + 36" A.F.F. TO TOP
- (D) 4'-0" LONG METAL GRAB BAR + 32" A.F.F. TO ℄
- (E) 18"W x 30"H. STAINLESS STEEL EDGED MIRROR + 48" A.F.F. TO BOTTOM
- (F) METAL PAPER TOWEL DISPENSER + 60" A.F.F. TO TOP
- (G) METAL SANITARY NAPKIN DISPOSER + 24" A.F.F. TO TOP
- (H) METAL SANITARY NAPKIN DISPENSER +60" A.F.F. TO TOP
- (I) METAL SOAP DISPENSER + 40" A.F.F. TO ℄
- (J) DUAL SANITARY NAPKIN DISPENSER +34"

NOTE:

7 SEE SHT. A-5 FOR WALL TYPE INDICATIONS

WALL CONTROL JOINTS

- CJ-1 FIELD CUT CONTROL JOINT IN EXIST. CONS SEE DETAIL (5D A-23)
- CJ-2 BRICK EXPANSION JOINT & BLOCK CONTROL JOINT IN NEW CONSTRUCTION SEE DETAIL (5C A-23)
- CJ-3 BRICK EXPANSION JOINT IN NEW CONSTRUCTION SEE DETAIL (5B A-23)
- CJ-4 INTERIOR BLOCK WALL CONTROL JOINT SEE DETAIL (5B1 A-23)

GENERAL NOTE:

PATCH AND PREPARE FOR NEW FINISHES ALL HOLES AND OR PENETRATIONS IN EXISTING WALLS & FLOORS, AFTER DEMOLITION WORK IS COMPLETE.

Revisions			
Symbol	Descriptions	Date	Approved

JAMES ASSOCIATES
ARCHITECTS AND ENGINEERS
2828 EAST 45TH STREET
INDIANAPOLIS, IN 46205

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
LOUISVILLE, KENTUCKY

Designed by:
Drawn by: DH, GS
Checked by: DH, PP
Reviewed by:
Approved by:

US Army Corps of Engineers

USAR CENTER, INDIANAPOLIS, INDIANA
EXPAND AND MODERNIZE USARC
MRD - 84 - MCAR - 5A

FLOOR PLAN

Scale: 1/8"= 1'-0"
Date: 20 JANUARY 84
Drawing Code: DEF-29-06-
Sheet reference number: A-4
Sheet 10 of 67

83011		
AB-2	AB-2	
AB-3	AB-3	
AO-4	AO-4	

REVISED BY LOU. DIST CORPS OF ENGRS TO "AS BUILT" CONDITIONS

RECORD DRAWING-"AS BUILT"

IN016-0015 A44123 1 OPF-11836-10

29017

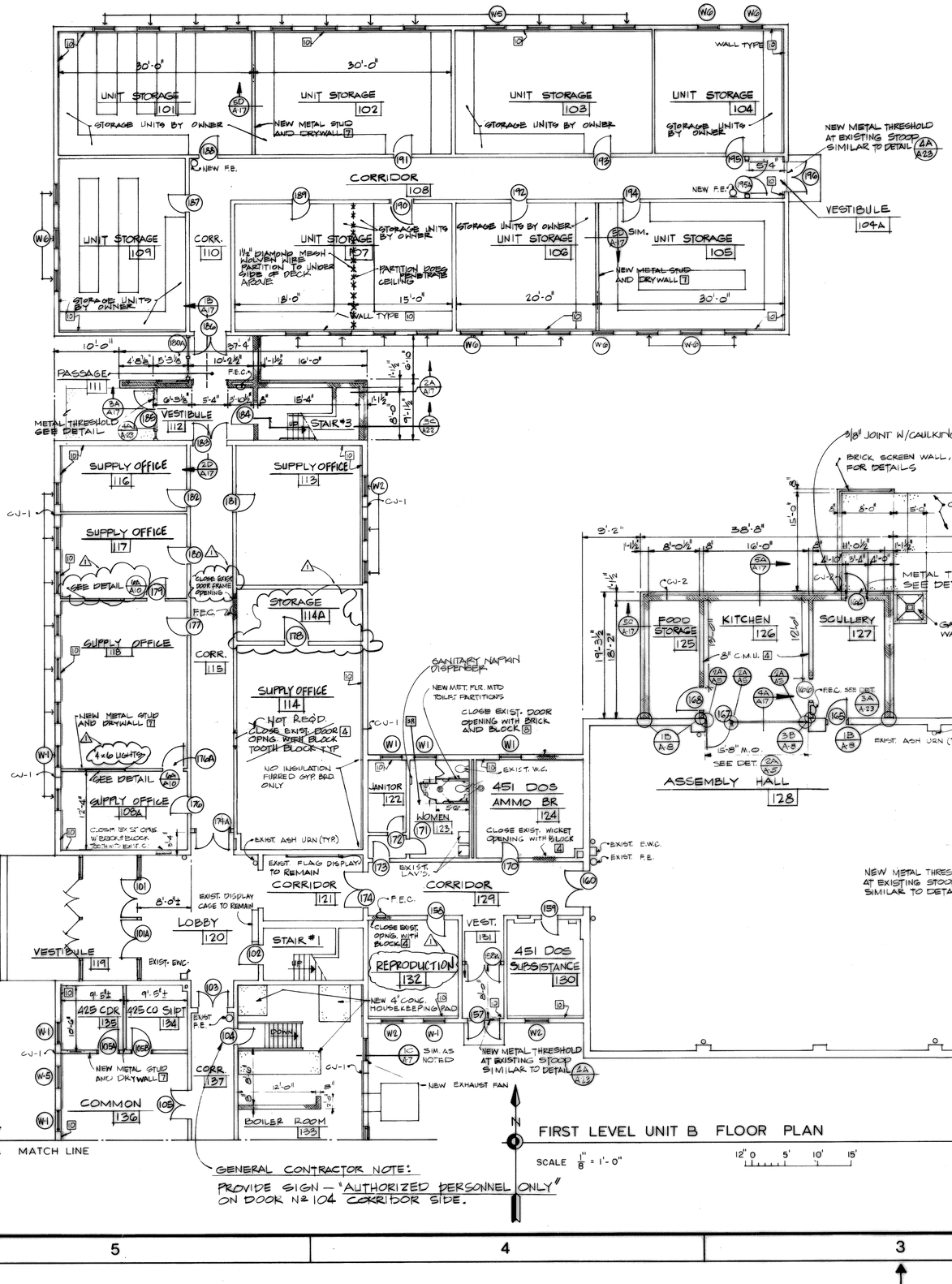
5 | 4 | 3 | 2 | 1

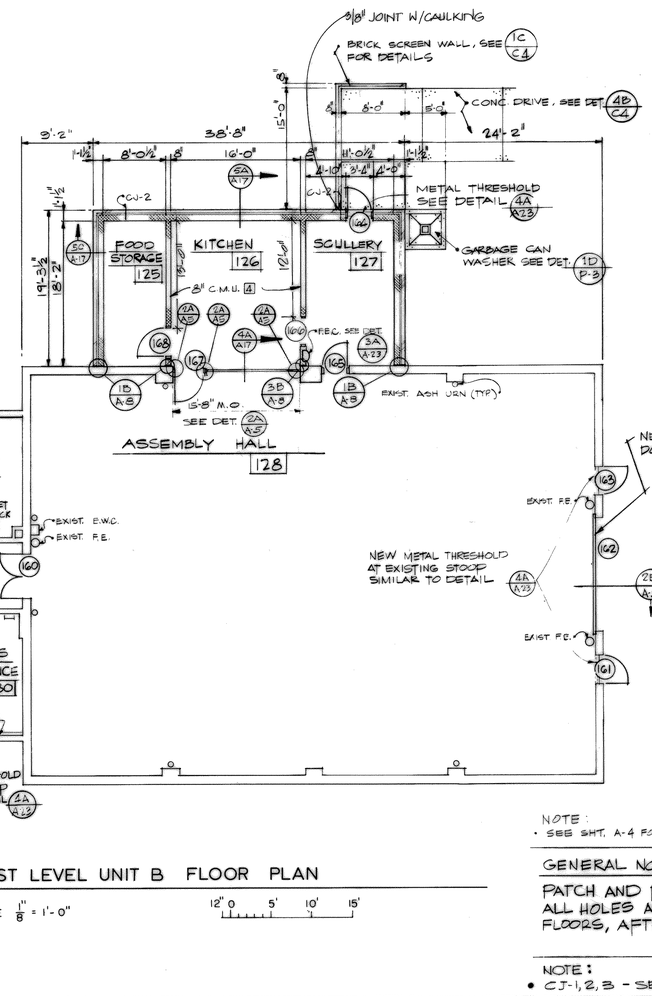
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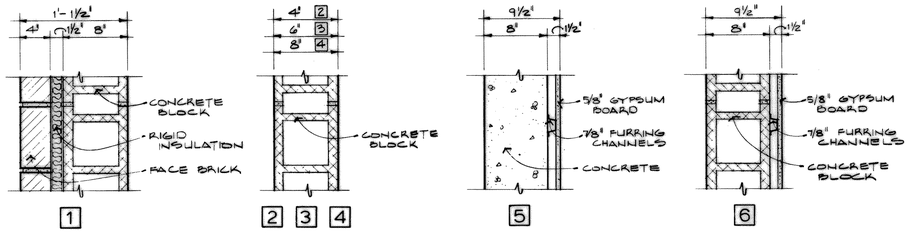
C

B

A

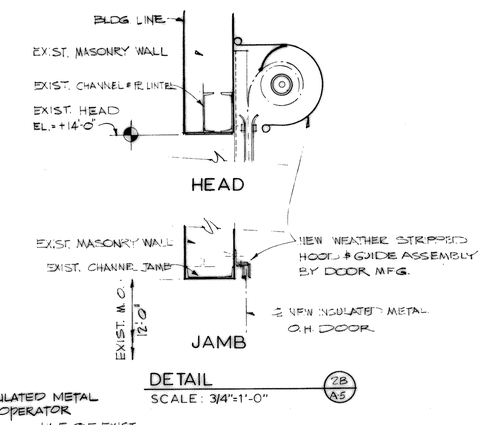


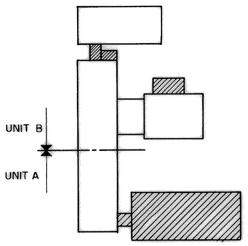




WALL TYPES

SCALE: 1½" = 1'-0"





KEY PLAN

NO SCALE

▨ NEW CONSTRUCTION

Symbol	Revisions Descriptions	Date	Approved
1	AMENDMENT N2 1	4/19/88	

JAMES ASSOCIATES
ARCHITECTS AND ENGINEERS
2828 EAST 45TH STREET
INDIANAPOLIS, IN 46205

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
LOUISVILLE, KENTUCKY

Designed by:

Drawn by: DH, GS

Checked by: DH, PP

Reviewed by:

Approved by:

US Army Corps of Engineers

USAR CENTER, INDIANAPOLIS, INDIANA
EXPAND AND MODERNIZE USARC
MRD - 84 - MCAR - 5A

FLOOR PLAN

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

Date:

Drawing Code: DEF-29-06-

Sheet reference number: A-5

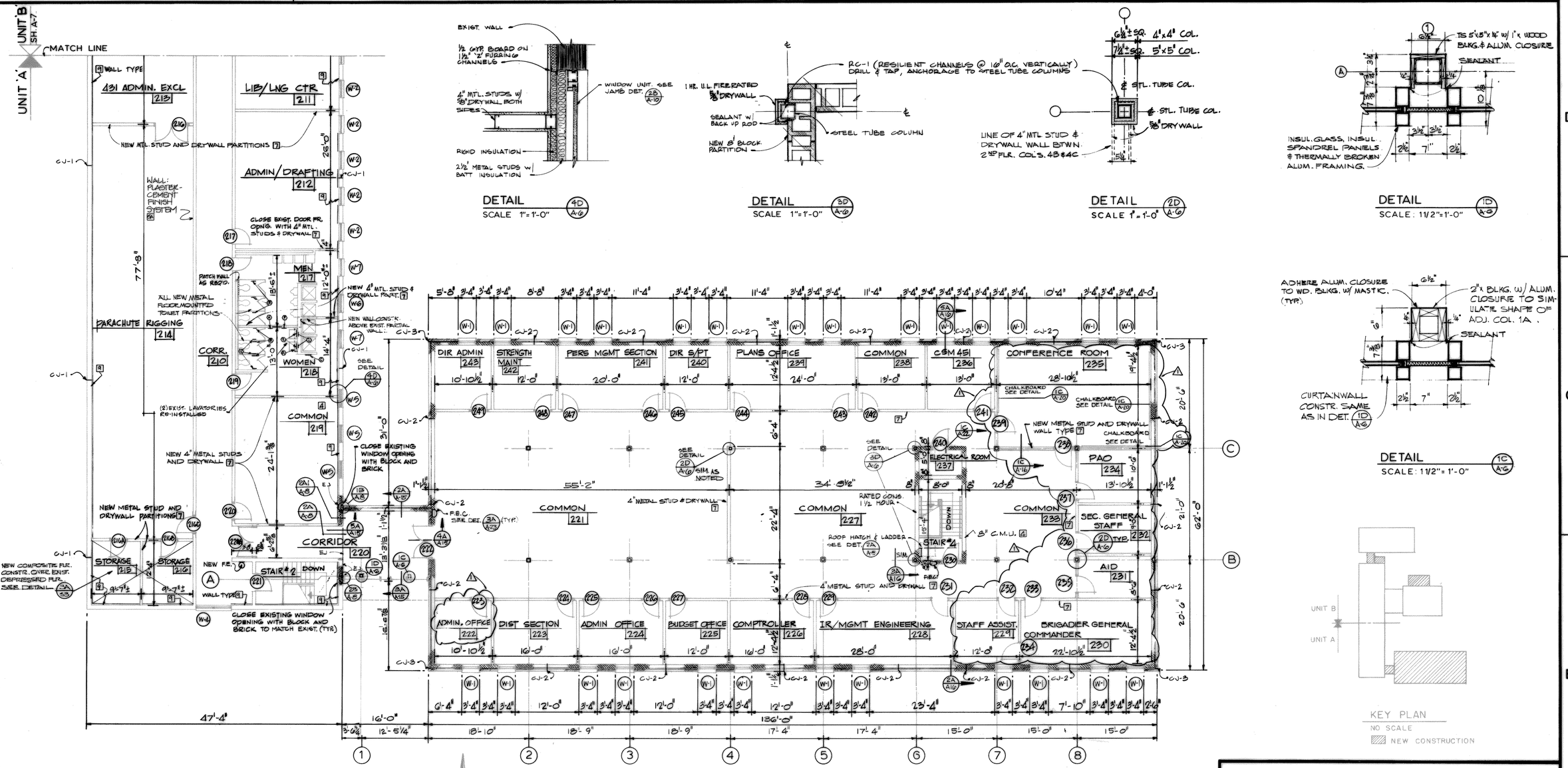
Sheet 11 of 67

83011			
A-04	AB-4	A6-4	
A-05	AB-5	A6-5	
	A-04	A6-4	
	A-05	A6-5	

IN016-0015 A58231 OPC-11836-11

REVISED BY LOU. DIST CORPS OF ENGRS TO "AS BUILT" CONDITIONS

RECORD DRAWING-"AS BUILT"



DETAIL
SCALE 1"=1'-0" 4D A-6

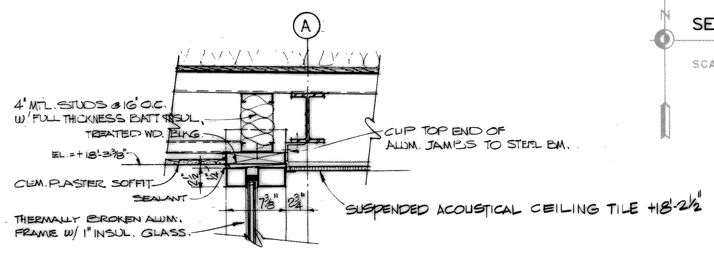
DETAIL
SCALE 1"=1'-0" 3D A-6

DETAIL
SCALE 1"=1'-0" 2D A-6

DETAIL
SCALE: 1 1/2"=1'-0" 1D A-6

DETAIL
SCALE: 1 1/2"=1'-0" 1C A-6

KEY PLAN
NO SCALE
NEW CONSTRUCTION



DETAIL
SCALE: 1 1/2"=1'-0" 5A A-15

SECOND LEVEL UNIT A FLOOR PLAN
SCALE 1/8" = 1'-0"

NOTE:
- CJ-1,2,3 – SEE SHT. A-4 FOR CONTROL JOINT INDICATIONS
- [7] SEE SHT. A-5 FOR WALL TYPE INDICATIONS
- EJ - SEE S.T. A-8 FOR EXPAN. JT. DETAILS
- SEE SHT. A-4 FOR TOILET ROOM ACCESSORIES

GENERAL NOTE:
PATCH AND PREPARE FOR NEW FINISHES ALL HOLES AND OR PENETRATIONS IN EXISTING WALLS & FLOOR, AFTER DEMOLITION WORK IS COMPLETE.

Revisions			
Symbol	Descriptions	Date	Approved
1	AMENDMENT NO. 1	4/19/85	

JAMES ASSOCIATES
ARCHITECTS AND ENGINEERS
2828 EAST 45TH STREET
INDIANAPOLIS, IN 46205

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
LOUISVILLE, KENTUCKY

Designed by:
Drawn by: DH, GS
Checked by: DH, PP
Reviewed by:
Approved by:

US Army Corps of Engineers

USAR CENTER, INDIANAPOLIS, INDIANA
EXPAND AND MODERNIZE USARC
MRD-84-MCAR 5A

FLOOR PLAN

Scale: 1/8"= 1'-0"
Date:
Drawing Code: DEF-29-06-
Sheet reference number: A-6
Sheet 12 of 67

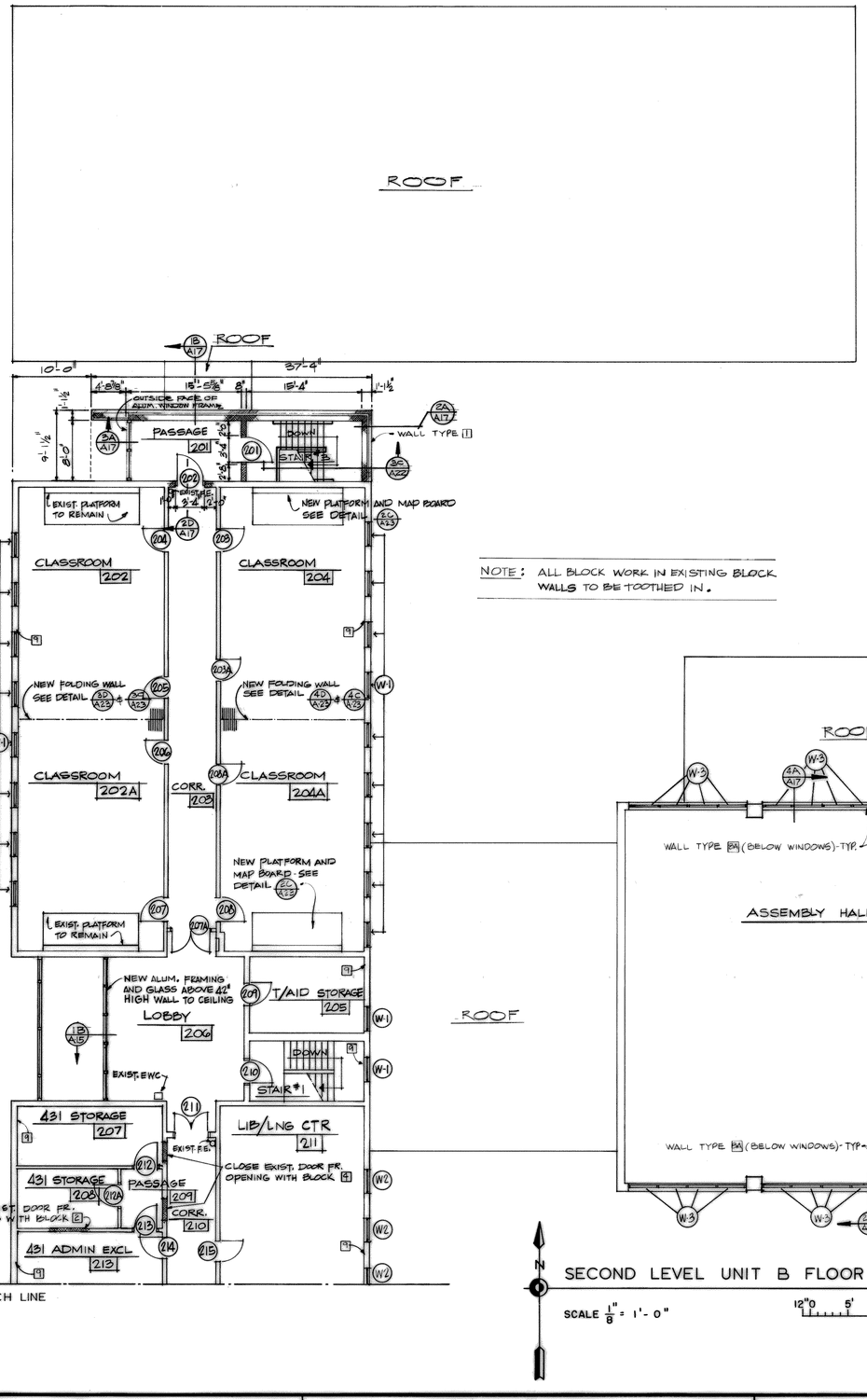
B3011
AD-6 AB-6
AB-7 AB-8
AD-6 AD-6

REVISED BY LOU. DIST CORPS OF ENGRS TO "AS BUILT" CONDITIONS

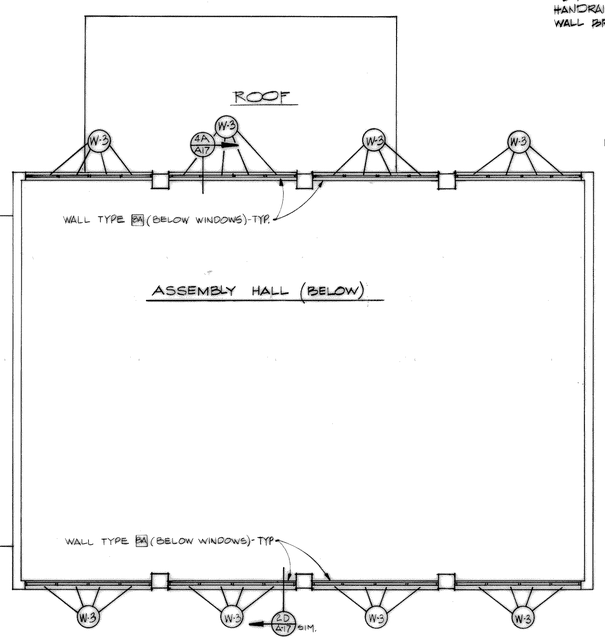
RECORD DRAWING-"AS BUILT"

IN0116-0015 A6of231

OPF-11836-12

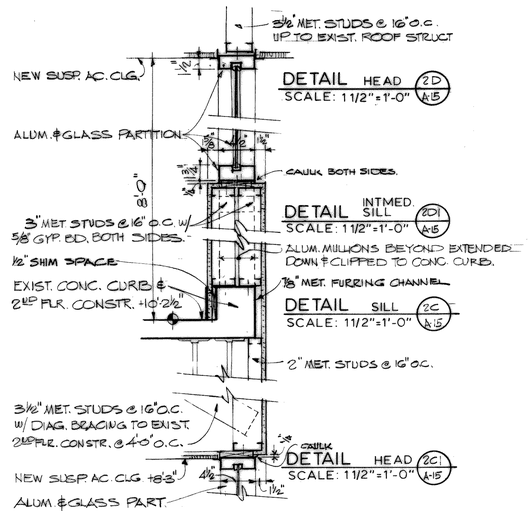


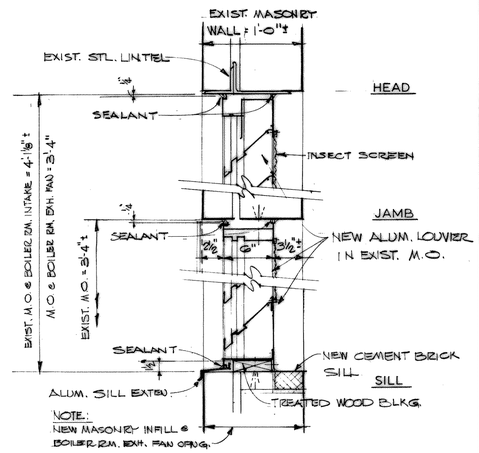
NOTE: ALL BLOCK WORK IN EXISTING BLOCK WALLS TO BE TOOTHED IN.



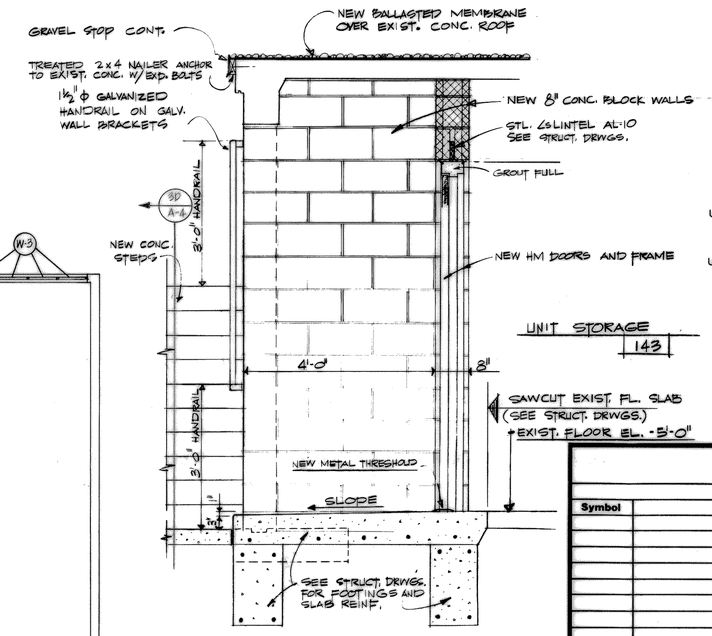
SECOND LEVEL UNIT B FLOOR PLAN

SCALE 1/8" = 1'-0"

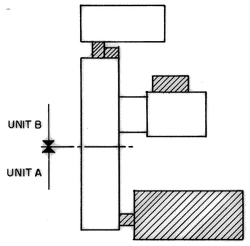




DETAIL 1C A-5
SCALE: 1 1/2" = 1'-0"



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



KEY PLAN
NO SCALE
NEW CONSTRUCTION

GENERAL NOTE:
PATCH AND PREPARE FOR NEW FINISHES ALL HOLES AND OR PENETRATIONS IN EXISTING WALLS, AFTER DEMOLITION WORK IS COMPLETE.

NOTE:
• [1] SEE SHT. A-5 FOR WALL TYPES INDICATIONS

Revisions			
Symbol	Descriptions	Date	Approved

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US Army Corps of Engineers

USAR CENTER INDIANAPOLIS, INDIANA
EXPAND AND MODERNIZE USARC
MRD - 84 - MCAR - 5A

FLOOR PLAN

Designed by:	
Drawn by:	DH, GS
Checked by:	DH, PP
Reviewed by:	
Approved by:	
Scale:	1/8" = 1'-0"
Date:	20 JANUARY 84
Drawing Code:	DEF-29-06-
Sheet reference number:	A-7
Sheet	13 of 67

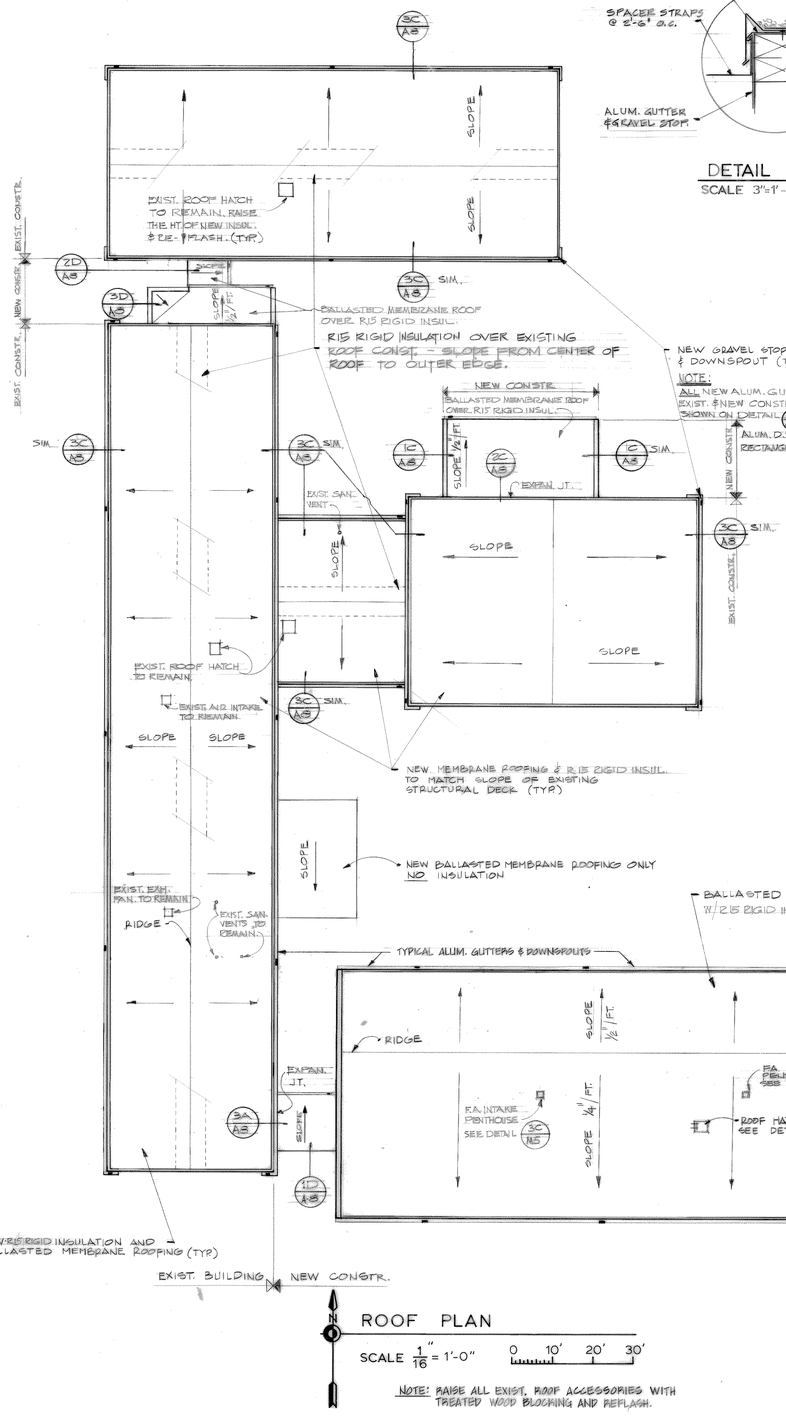
88011		
A-03	AB-8	AB-8
A-07	AB-9	AB-9
A-07	AB-9	AB-9

IN016-0015 19 of 23

RECORD DRAWING-"AS BUILT"

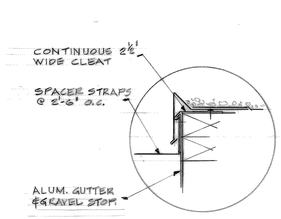
OPF-11836-13

NOTE:
ALL EXISTING ROOFING, GRAVEL STOPS, GUTTERS AND DOWNSPOUTS TO BE REMOVED.

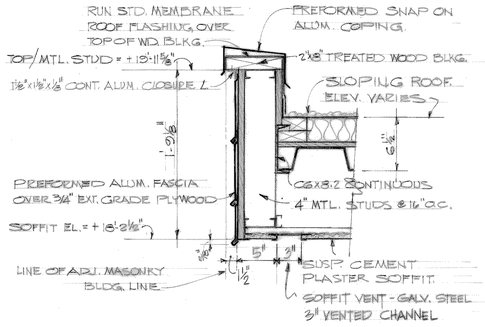


ROOF PLAN
SCALE 1/16" = 1'-0" 0 10' 20' 30'

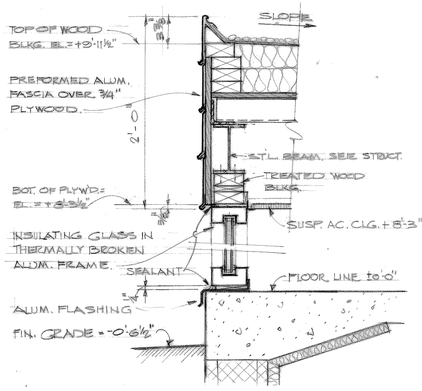
NOTE: RAISE ALL EXIST. ROOF ACCESSORIES WITH TREATED WOOD BLOCKING AND REFLASH.



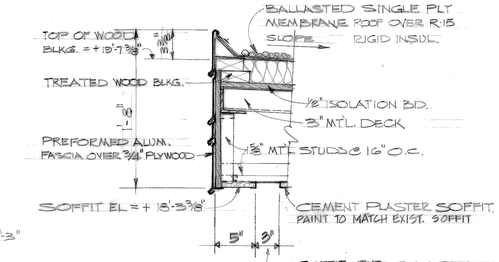
DETAIL SCALE 3"=1'-0" 4D A-8



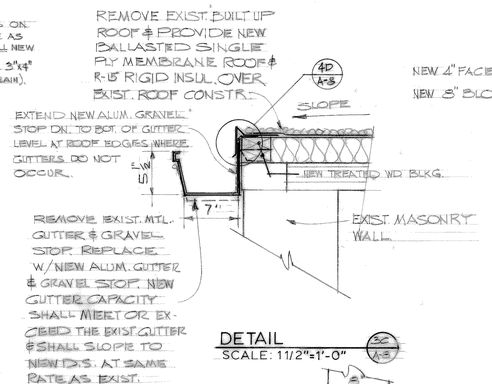
DETAIL SCALE: 11/2"= 1'-0" 3D A-13



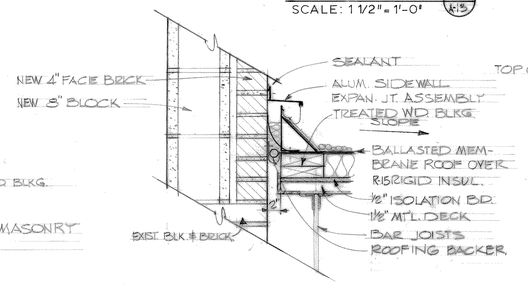
DETAIL SCALE: 1 1/2" = 1'-0" 2D A-13



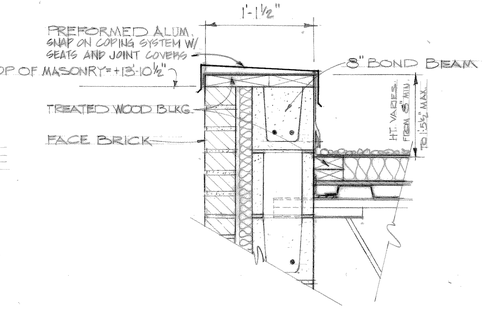
DETAIL SCALE: 1 1/2" = 1'-0" 1D A-8



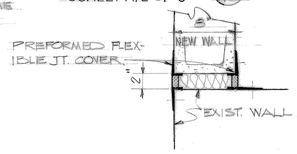
DETAIL SCALE: 1 1/2"=1'-0" 3C A-8



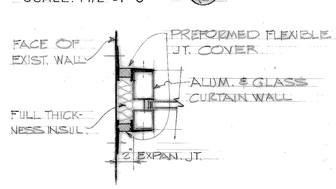
DETAIL SCALE: 1 1/2" = 1'-0" 2C A-8



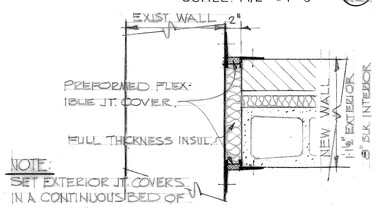
DETAIL SCALE: 1 1/2" = 1'-0" 1C A-8



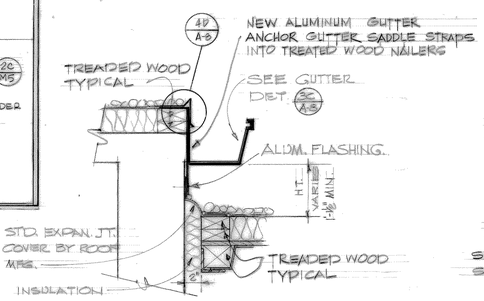
DETAIL SCALE: 1 1/2"=1'-0" 2B A-8



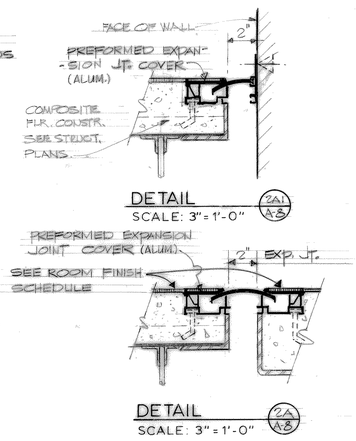
DETAIL SCALE: 11/2"=1'-0" 2B A-8



DETAIL SCALE: 11/2"=1'-0" 1B A-8



DETAIL SCALE: 11/2"=1'-0" 3A A-8



DETAIL SCALE: 3"=1'-0" 2A1 A-8

DETAIL SCALE: 3"=1'-0" 2A A-8

Revisions			
Symbol	Descriptions	Date	Approved

JAMES ASSOCIATES
ARCHITECTS AND ENGINEERS
2828 EAST 45TH STREET
INDIANAPOLIS, IN 46205

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
LOUISVILLE, KENTUCKY

Designed by:
Drawn by: MB, GS
Checked by: DH, PP
Reviewed by:
Approved by:

US Army Corps of Engineers

USAR CENTER, INDIANAPOLIS, INDIANA
EXPAND AND MODERNIZE USARC
MRD - 84 - MCAR - 5A

ROOF PLAN AND DETAILS

Scale: 1/16"= 1'-0" OR AS NOTED
Date: 20 JANUARY 84
Drawing Code: DEF-29-06-
Sheet reference number: A-8
Sheet 14 of 67

REVISED BY LOU. DIST CORPS OF ENGRS TO "AS BUILT" CONDITIONS

RECORD DRAWING-"AS BUILT"

IN016-0015 A80723

OPF-11836-14

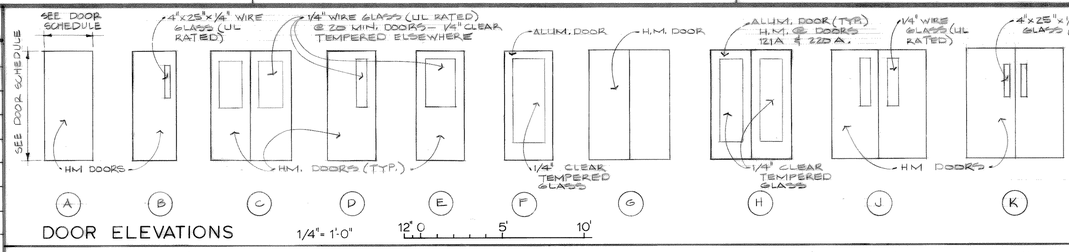
83011

DOOR SCHEDULE

DOOR NO.	DOOR ELEV.	FRAME ELEV.	DOOR SIZE	HDWE. SET NO.	HEAD	JAMB	SILL	REMARKS
101	H	F11	PAIR 2'-6"x7'-0"	2	H11	J11		ALUM. FRAMES, 1/4" TEMP. GLASS.
101A	H	F11	PAIR 2'-0"x7'-0"	2	H11	J11		ALUM. FRAMES, 1/4" TEMP. GLASS.
102	B	EXIST.	3'-0"x6'-10"	3	E	E		'B' LABEL - 1 HR.
103	C	EXIST.	PAIR 2'-6"x6'-10"	4	E	E		
104	A	EXIST.	3'-0"x6'-10"	5	E	E		20 MIN. LABEL ; SIGN: AUTHORIZED PERSONNEL ONLY
105	C	EXIST.	PAIR 2'-6"x6'-10"	6	E	E		20 MIN.
105A	D	F1	3'-0"x6'-10"	7	H2	J2		
105B	D	F1	3'-0"x6'-10"	7	H2	J2		
106	G	F4	PAIR 2'-6"x6'-10"	8	H13	J9		
106A	G	F4	PAIR 2'-6"x 7'-0"	8	H14	J13		
107	D	F1	3'-0"x6'-10"	7	H2	J2		
108	D	F1	3'-0"x6'-10"	7	H2	J2		
109	E	EXIST.	3'-0"x6'-10"	5	E	E		20 MIN.
110	A	F1	3'-0"x6'-10"	10	H1	J1		20 MIN.
111	D	F1	3'-0"x6'-10"	7	H2	J2		
112	D	F1	3'-0"x6'-10"	7	H2	J2		
113	E	EXIST.	3'-0"x6'-10"	5	E	E		20 MIN.
114	D	F1	3'-0"x6'-10"	7	H2	J2		
115	D	F1	3'-0"x6'-10"	7	H2	J2		
116	E	F1	3'-0"x6'-10"	5	H1	J1		20 MIN.
117	D	F1	3'-0"x6'-10"	7	H2	J2		
118	D	F1	3'-0"x6'-10"	7	H2	J2		
119	E	EXIST.	3'-0"x6'-10"	5	E	E		20 MIN.
119A	C	F6	PAIR 3'-0"x6'-10"	4	H4	J4		
120	C	EXIST.	PAIR 3'-0"x6'-10"	11	E	E		
121	D	EXIST.	3'-8"x6'-10"	3	E	E		'B' LABEL - 1 HR.
121A	C	F4A	PAIR 2'-0"x6'-10"	4	H4	J4		
122	F	F10	3'-0"x7'-0"	14	H11	J11		ALUM. FRAMES W/ THERMAL BREAK, INSUL. GLASS.
123	F	F10	3'-0"x7'-0"	14	H11	J11		ALUM. FRAMES W/ THERMAL BREAK, 1" TEMP. INSULL GLASS.
124	K	F5	PAIR 3'-0"x6'-10"	13	H3	J3		'B' LABEL - 1 HR.
125	D	F1	3'-0"x6'-10"	5	H2	J2		20 MIN.
126	D	F1	3'-0"x6'-10"	5	H2	J2		20 MIN.
127	D	F1	3'-0"x6'-10"	5	H2	J2		20 MIN.
128	D	F1	3'-0"x6'-10"	5	H2	J2		20 MIN.
129	D	F1	3'-0"x6'-10"	5	H2	J2		20 MIN.
130	D	F1	3'-0"x6'-10"	5	H2	J2		20 MIN.
131	D	F1	3'-0"x6'-10"	5	H2	J2		20 MIN.
132	D	F1	3'-0"x6'-10"	5	H2	J2		20 MIN.
132A	J	F4A	PAIR 4'-10"x6'-10"	13	H2	J2		20 MIN.
133	EXIST.	——	——	REUSE	H12	J12		REUSE EXIST. VAULT DOOR
134	B	F1	3'-0"x6'-10"	3	H4	J4		'B' LABEL - 1 HR.
135	F	F6	3'-0"x7'-0"	2	H11A	J11		ALUM. FRAMES; 1/4" TEMP. GLASS
136	F	F6	3'-0"x7'-0"	2	H11A	J11		ALUM. FRAMES, 1/4" TEMP. GLASS
137	F	F6	3'-0"x7'-0"	14	H11A	J11		ALUM. FRAMES W. THERMAL BREAK, 1" TEMP. INSUL. GLASS.
138	F	F6	3'-0"x7'-0"	14	H11A	J11		ALUM. FRAMES W/ THERMAL BREAK, 1" TEMP. INSUL. GLASS.
139	D	F1	3'-0"x6'-10"	5	H2	J2		20 MIN.
140	D	F1	3'-0"x6'-10"	15	H2	J2		
141	D	F1	3'-0"x6'-10"	5	H2	J2		20 MIN.
142	D	F1	3'-0"x6'-10"	5	H2	J2		20 MIN.
143	D	F1	3'-0"x6'-10"	15	H2	J2		
144	D	F1	3'-0"x6'-10"	5	H2	J2		20 MIN.
145	D	F1	3'-0"x6'-10"	5	H2	J2		20 MIN.
146	D	F1	3'-0"x6'-10"	5	H2	J2		20 MIN.
147	A	F1	3'-0"x6'-10"	9	H4	J4		20 MIN.
148	D	F1	3'-0"x6'-10"	5	H2	J2		20 MIN.
149	D	F1	3'-0"x6'-10"	5	H2	J2		20 MIN.
150	D	F1	3'-0"x6'-10"	5	H2	J2		20 MIN.
151	D	F1	3'-0"x6'-10"	5	H2	J2		20 MIN.
152	D	F1	3'-0"x6'-10"	15	H2	J2		
153	D	F1	3'-0"x6'-10"	5	H2	J2		20 MIN.
154	D	F1	3'-0"x6'-10"	5	H2	J2		20 MIN. LABEL
155	D	F1	3'-0"x6'-10"	5	H2	J2		20 MIN.
156	D	F1	3'-0"x6'-10"	5	H2	J2		20 MIN.
157	C	EXIST.	PAIR 2'-6"x6'-10"	1	E	E		
158	D	EXIST.	3'-0"x6'-10"	5	E	E		20 MIN.
158A	C	F4	PAIR 2'-6"x6'-10"	2	H4	J4		
159	D	EXIST.	3'-0"x6'-10"	5	E	E		20 MIN.
160	J	EXIST.	PAIR 3'-0"x6'-10"	13	E	E		20 MIN.
161	A	EXIST.	3'-0"x6'-10"	14	E	E		INSULATED
162	——	——	4'-0"x14'-0"	CYL.	——	——		OVERHEAD DOOR
163	A	EXIST.	3'-0"x6'-10"	14	E	E		INSULATED
164	D	F1	3'-0"x7'-0"	12	H7	J7		
165	D	F1	3'-0"x6'-10"	5	H9	J9		1½ HR 'B' LABEL
166	——	F2	3'-10"x7'-0"	——	H6	J6		FRAMED OPNG ONLY
167	D	F7	3'-0"x7'-0"	5	H8	J8/J9		1½ HR 'B' LABEL
168	D	F7	3'-6"x7'-0"	9	H6	J6		
170A	A	F1	3'-0"x6'-10"	5	H2	J2A		
170	D	EXIST.	3'-0"x6'-10"	5	E	E		20 MIN.
171	A	F1	3'-0"x6'-10"	16	H5	J5		DOOR LOUVER (1#)
172	B	EXIST.	2'-8"x6'-10"	9	E	E		
173	A	F1	3'-0"x6'-10"	17	H1	J1		20 MIN.
174	C	EXIST.	PAIR 3'-0"x6'-8"	13	E	E		20 MIN.
174A	C	F4	PAIR 2'-6"x6'-10"	4	H4	J4		
175	A	F1	3'-0"x6'-10"	5	H1	J1		20 MIN.
176	A	EXIST.	3'-0"x6'-10"	5	E	E		20 MIN.
177	A	EXIST.	3'-0"x6'-10"	5	E	E		20 MIN.
178	A	F1	3'-0"x6'-10"	5	H1	J1		20 MIN.
179	A	EXIST.	3'-0"x6'-10"	15	E	E		
180	A	EXIST.	3'-0"x6'-10"	5	E	E		20 MIN.
180A	—	F-8	——	——	——	——		ALUM. FRAMES W/ THERMAL BREAK 1" TEMP. INSUL. GLASS.
181	A	EXIST.	3'-0"x6'-10"	5	E	E		20 MIN.
182	A	EXIST.	3'-0"x6'-10"	5	E	E		20 MIN.
183	C	EXIST.	PAIR 2'-6"x6'-10"	13	E	E		20 MIN.
184	B	F1	3'-0"x6'-10"	3	H4	J4		'B' LABEL - 1 HR.
185	H	F9	PAIR 2'-0"x7'-0"	11	H11	J11		ALUM. FRAMES W/ TEMP. INSUL. GLASS.
186	C	EXIST.	PAIR 2'-6"x6'-10"	13	E	E		20 MIN.
187	A	EXIST.	3'-0"x6'-10"	5	E	E		'B' LABEL - 1 HR.
188	A	EXIST.	3'-0"x6'-10"	5	E	E		'B' LABEL - 1 HR
189	A	EXIST.	3'-0"x6'-10"	5	E	E		'B' LABEL - 1 HR
190	A	F1	3'-0"x6'-10"	5	H1	J1		'B' LABEL - 1 HR
191	A	EXIST.	3'-0"x6'-10"	5	E	E		'B' LABEL - 1 HR
192	A	EXIST.	3'-0"x6'-10"	5	E	E		'B' LABEL - 1 HR
193	A	EXIST.	3'-0"x6'-10"	5	E	E		'B' LABEL - 1 HR
194	A	EXIST.	3'-0"x6'-10"	5	E	E		'B' LABEL - 1 HR
195	A	EXIST.	3'-0"x6'-10"	5	E	E		'B' LABEL - 1 HR
196	C	EXIST.	PAIR 2'-6"x6'-10"	1	E	E		
195A	C	F4	PAIR 2'-6"x6'-10"	2	H4	J4		
201	B	F1	3'-0"x6'-10"	3	H4	J4		'B' LABEL - 1 HR
202	E	F2	3'-6"x6'-10"	16	H10	J10		
203	E	EXIST.	3'-0"x6'-10"	5	E	E		20 MIN.
203A	E	EXIST.	3'-0"x6'-10"	5	E	E		20 MIN.
204	E	F1	3'-0"x6'-10"	5	H1	J1		20 MIN.
205	E	EXIST.	3'-0"x6'-10"	5	E	E		20 MIN.
206	E	EXIST.	3'-0"x6'-10"	5	E	E		20 MIN.
207	E	F1	3'-0"x6'-10"	5	H1	J1		20 MIN.
208	E	EXIST.	3'-0"x6'-10"	5	E	E		20 MIN.
208A	E	EXIST.	3'-0"x6'-10"	5	E	E		20 MIN.
209	A	EXIST.	3'-0"x6'-10"	5	E	E		'B' LABEL - 1 HR
210	B	EXIST.	3'-0"x6'-10"	3	E	E		'B' LABEL - 1 HR
211	C	EXIST.	PAIR 2'-6"x6'-10"	4	E	E		
212	A	F1	3'-0"x6'-10"	9	H5	J5		
212A	A	F1	3'-0"x6'-10"	9	H5	J5		
213	D	F1	3'-0"x6'-10"	9	H5	J5		
214	E	EXIST.	3'-0"x6'-10"	5	E	E		20 MIN.
215	E	EXIST.	2'-8"x6'-10"	5	E	E		20 MIN.
216	C	F5	PAIR 3'-0"x6'-10"	18	H2	J2		
217	E	EXIST.	2'-8"x6'-10"	5	E	E		20 MIN.
218	A	EXIST.	2'-8"x6'-10"	17	E	E		20 MIN.
219	A	EXIST.	2'-8"x6'-10"	17	E	E		20 MIN.
220	E	F1	3'-0"x6'-10"	5	H1	J1		20 MIN.
220A	H	F4A	PAIR 2'-0"x6'-10"	4	H4	J4		
221	B	EXIST.	3'-0"x6'-10"	3	E	E		'B' LABEL - 1 HR
222	K	F5	PAIR 3'-0"x6'-10"	13	H3	J3		'B' LABEL - 1 HR
223	D	F1	3'-0"x6'-10"	5	H2	J2		20 MIN.
224	D	F1	3'-0"x6'-10"	5	H2	J2		20 MIN.
225	D	F1	3'-0"x6'-10"	5	H2	J2		20 MIN.
226	D	F1	3'-0"x6'-10"	5	H2	J2		20 MIN.
227	D	F1	3'-0"x6'-10"	5	H2	J2		20 MIN.
228	D	F1	3'-0"x6'-10"	5	H2	J2		20 MIN.
229	D	F1	3'-0"x6'-10"	5	H2	J2		20 MIN.
230	B	F1	3'-0"x6'-10"	3	H4	J4		'B' LABEL - 1 HR
231	D	F1	3'-0"x6'-10"	5	H2	J2		20 MIN.
232	D	F1	3'-0"x6'-10"	5	H2	J2		20 MIN.
233	D	F1	3'-0"x6'-10"	5	H2	J2		20 MIN.
234	D	F1	3'-0"x6'-10"	5	H2	J2		20 MIN.
235	D	F1	3'-0"x6'-10"	5	H2	J2		20 MIN.
236	D	F1	3'-0"x6'-10"	5	H2	J2		20 MIN.
237	D	F1	3'-0"x6'-10"	15	H2	J2		
238	D	F1	3'-0"x6'-10"	5	H2	J2		20 MIN.
239	D	F1	3'-0"x6'-10"	5	H2	J2		20 MIN.
240	A	F1	3'-0"x6'-10"	9	H4	J4		
241	D	F1	3'-0"x6'-10"	5	H2	J2		20 MIN.
242	D	F1	3'-0"x6'-10"	5	H2	J2		20 MIN.
243	D	F1	3'-0"x6'-10"	5	H2	J2		20 MIN.
244	D	F1	3'-0"x6'-10"	5	H2	J2		20 MIN.
245	D	F1	3'-0"x6'-10"	5	H2	J2		20 MIN.
246	D	F1	3'-0"x6'-10"	5	H2	J2		20 MIN.
247	D	F1	3'-0"x6'-10"	5	H2	J2		20 MIN.
248	D	F1	3'-0"x6'-10"	5	H2	J2		20 MIN.
249	D	F1	3'-0"x6'-10"	5	H2	J2		20 MIN.
207A	C	F4	PAIR 2'-6"x6'-10"	4	H4	J4		
216A		F1	3'-0"x6'-10"	9	H2	J2		
216B		F1	3'-0"x6'-10"	9	H2	J2		
216C	E	F1	3'-0"x6'-10"	5	H1	J1		20 MIN.
210A	—	F 12	1'-11.4"x8'-0"	——	—	—		ALUM. FRAME 1/4" TEMP GLASS

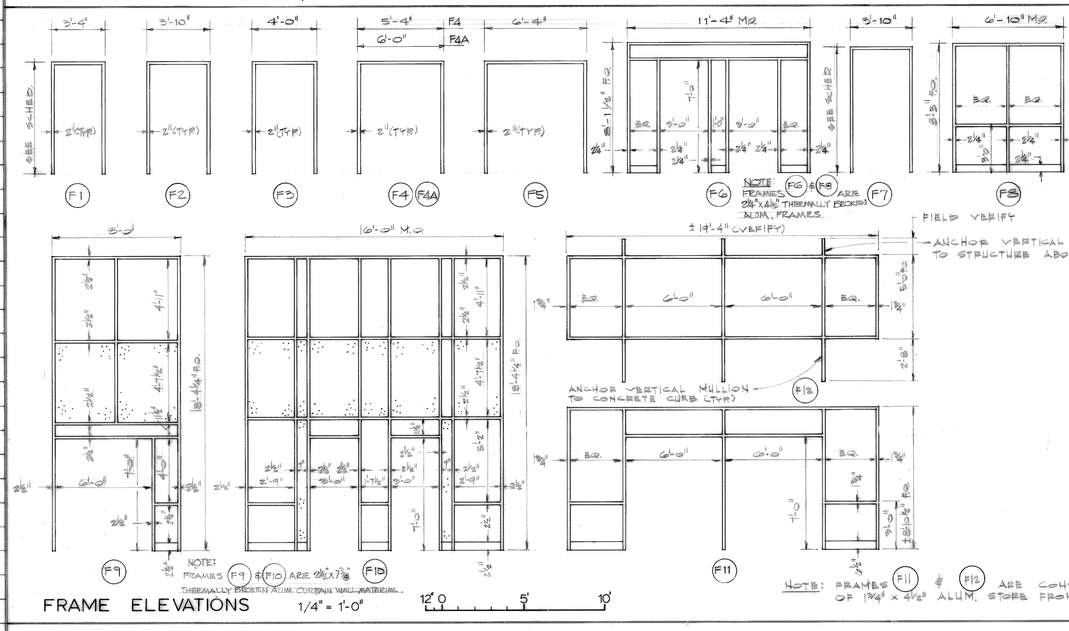
DOOR ELEVATIONS

1/4" = 1'-0"



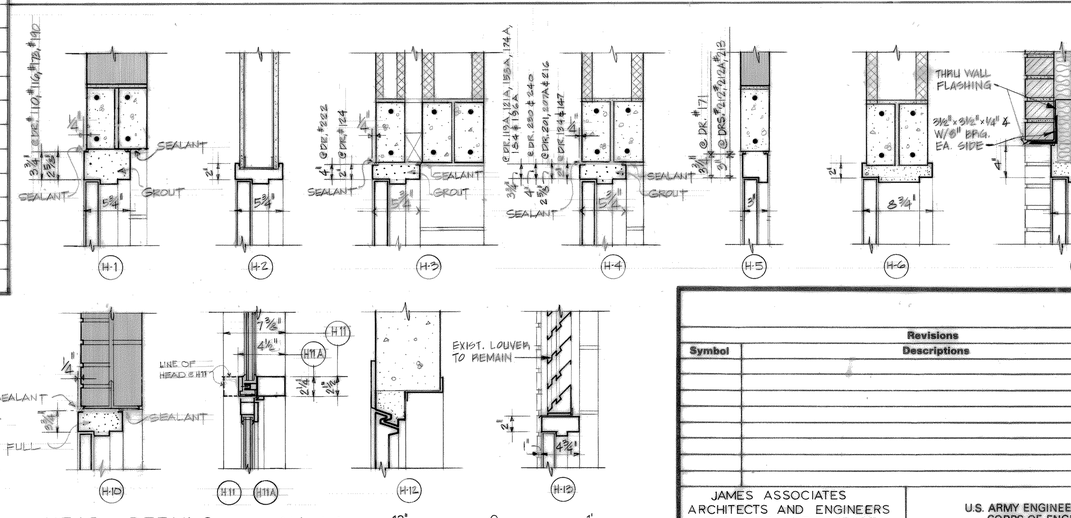
FRAME ELEVATIONS

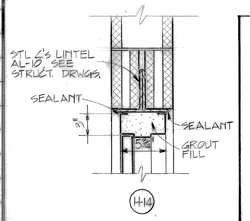
1/4" = 1'-0"



HEAD DETAILS

1½" = 1'-0"





NOTE:
1. VERIFY ALL DOOR FRAME OPNG. HEIGHTS (FIN. FLOOR TO EXIST. OR NEW LINTEL CURVING)
2. GROUT FRAMES FULL & SEAL BOTH SIDES OF FRAME W/SEALANT (TYP.)
3. GENERAL CONTRACTOR TO FIELD VERIFY CONDITION OF EXISTING THRESHOLDS. THRESHOLDS THAT ARE IN POOR CONDITION ARE TO BE REPLACED. IN THE CASE OF EXISTING DOORS AND FRAMES BEING REMOVE AND REPLACED WITH WIDER DOORS AND FRAMES. THE EXIST. THRESHOLDS WILL BE REPLACED ALSO.

Revisions			
Symbol	Descriptions	Date	Approved

JAMES ASSOCIATES
ARCHITECTS AND ENGINEERS
2828 EAST 45TH STREET
INDIANAPOLIS, IN 46205

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
LOUISVILLE, KENTUCKY

Designed by:	
Drawn by:	MAB
Checked by:	DH, PP
Reviewed by:	
Approved by:	

US Army Corps of Engineers

USAR CENTER, INDIANAPOLIS, INDIANA
EXPAND AND MODERNIZE USARC
MRD-84-MCAR-5A

DOOR SCHEDULE

Scale:	Sheet reference number:
Date: 20 JANUARY 84	A-9
Drawing Code: DEF-29-06-	Sheet 15 of 67

83011

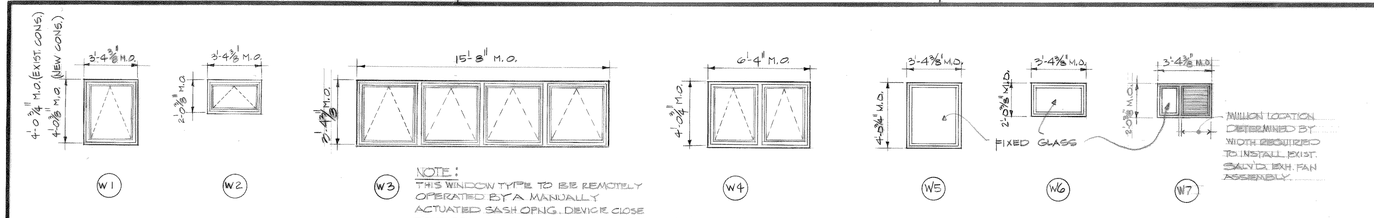
REVISED BY LOU. DIST CORPS OF ENGRS TO "AS BUILT" CONDITIONS

RECORD DRAWING-"AS BUILT"

IN016-0015 11/9/23

OPE-11836-15

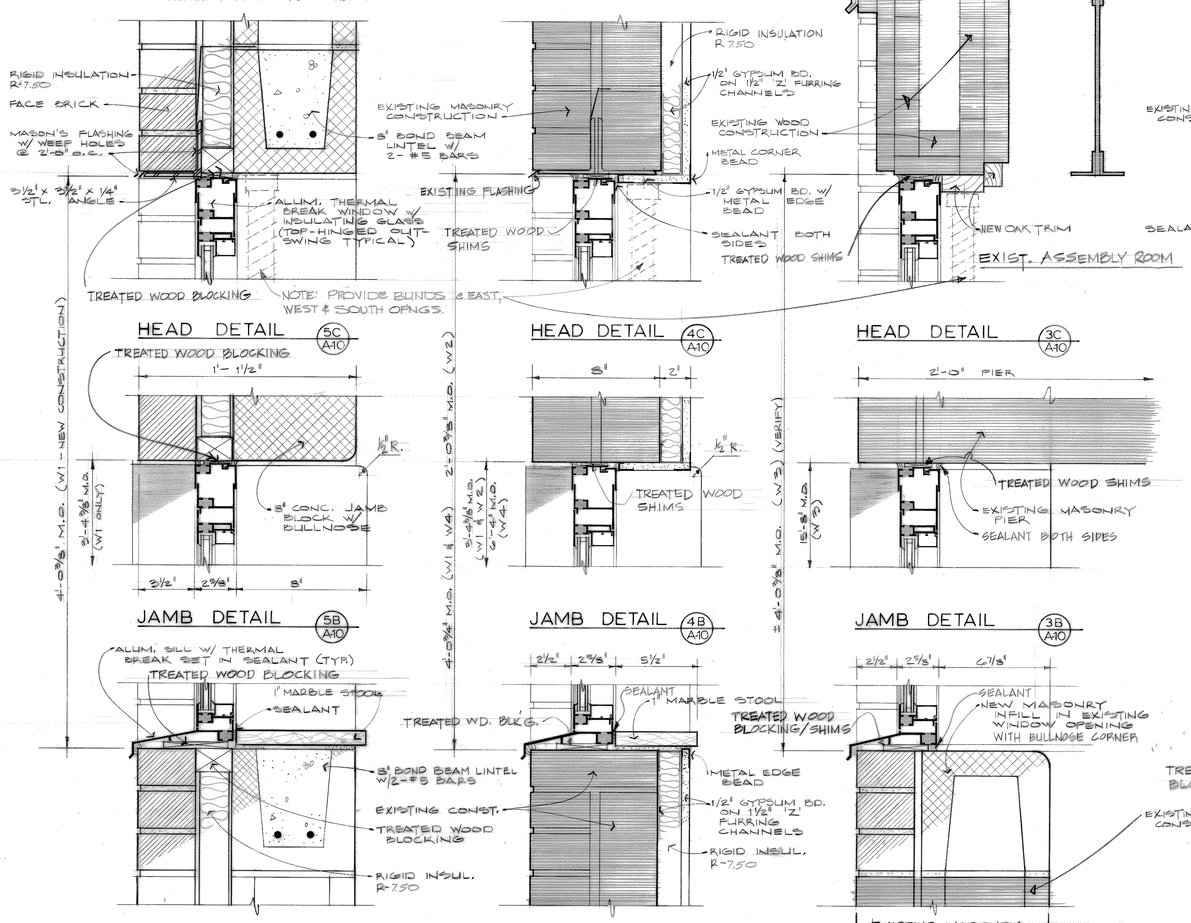
20917



WINDOW ELEVATIONS

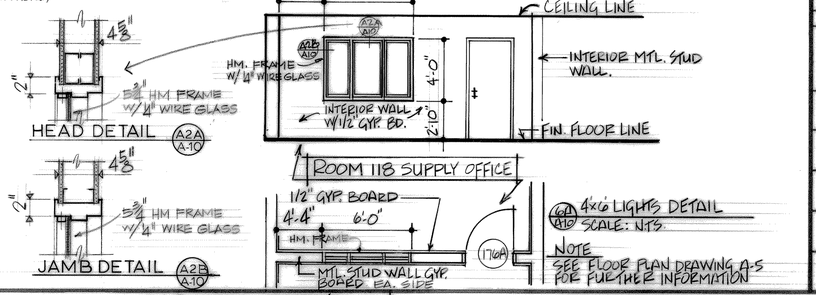
SCALE: 1/4"= 1'-0" 12"0 5' 10'

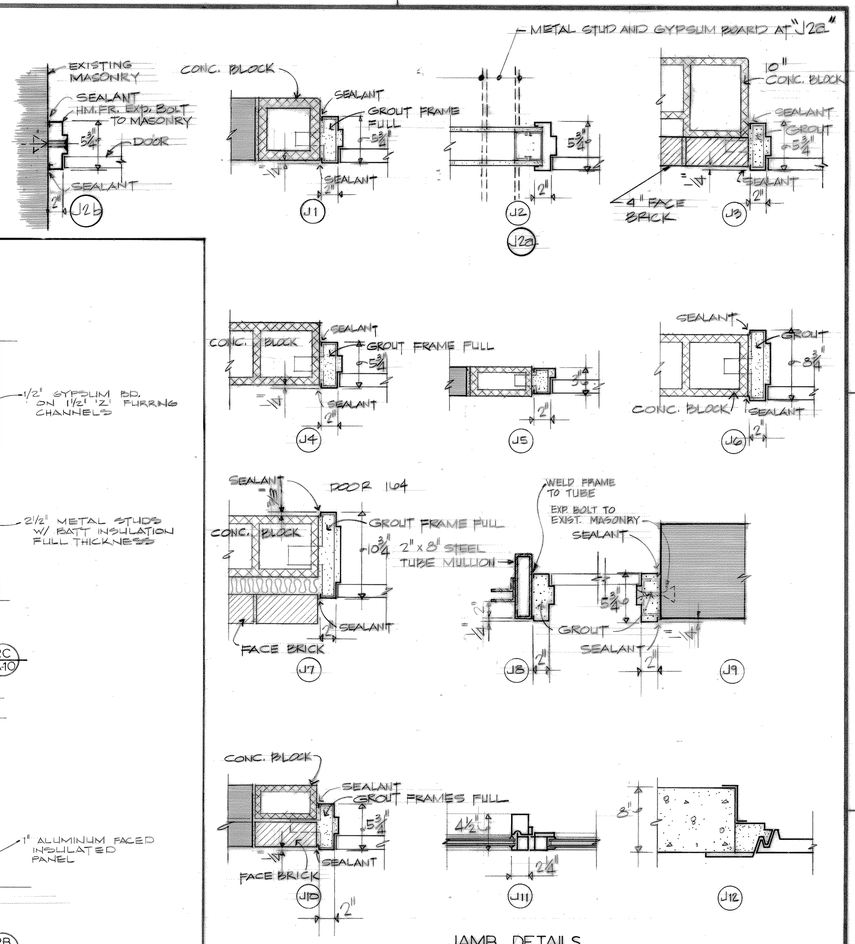
GENERAL WINDOW NOTE: CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS OF OPENINGS TO RECIEVE NEW WINDOWS.



WINDOW DETAILS

SCALE: 3"= 1'-0" 12" 6" 0 1'





Revisions			
Symbol	Descriptions	Date	Approved

JAMES ASSOCIATES
ARCHITECTS AND ENGINEERS
2828 EAST 45 TH STREET
INDIANAPOLIS, IN 46205

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
LOUISVILLE, KENTUCKY

Designed by:
Drawn by: TR , MB
Checked by: DH, PP
Reviewed by:
Approved by:

US Army Corps of Engineers

USAR CENTER, INDIANAPOLIS, INDIANA
EXPAND AND MODERNIZE USARC
MRD - 84 - MCAR - 5A

DOOR AND WINDOW DETAILS

Scale: 3" = 1'-0" 1-1/2" = 1'-0"
Date: 20 JANUARY 84
Drawing Code: DEF-29-06-
Sheet reference number: A-10
Sheet 16 of 67

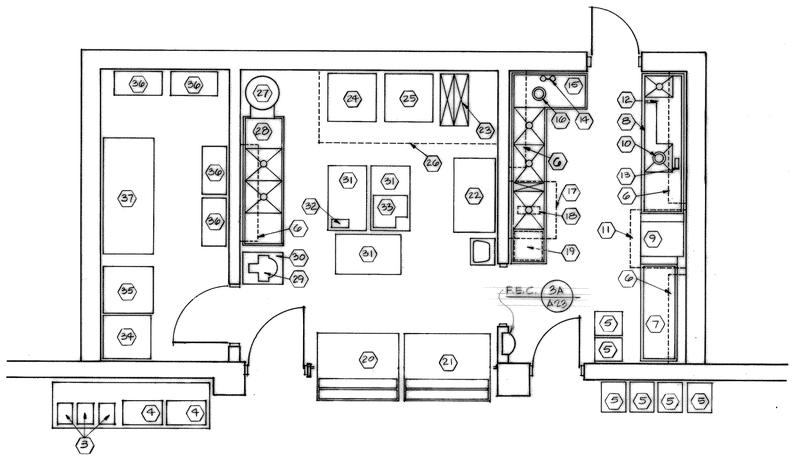
83011

REVISED BY LOU. DIST CORPS OF ENGRS TO "AS BUILT" CONDITIONS

RECORD DRAWING-"AS BUILT"

IW0160015 A10of23

OPE-11836-16



KITCHEN EQUIPMENT PLAN

SCALE 1/4" = 1'-0" 12" 0 5' 10'

NOTE:
REFER TO SECTION IIA OF SPECIFICATIONS FOR DETAILS AND PERTINENT INFORMATION ON ALL FOOD SERVICE EQUIPMENT.

KITCHEN EQUIPMENT SCHEDULE

ITEM NO.	EQUIP. IDENT. NO.	QUAN.	ITEM DESCRIPTION	DIMENSIONS (INCHES) W	D	H	ELECTRICAL VOLTS	PHASE	HORSEPOWER	KILOWATTS	AMPS	PLUMBING HOT WATER	COLD WATER	WASTE	VENT	C.F.M. EXHAUST	REMARKS	OMAR FUNDED
1	S-14-5	3	BEVERAGE/SALAD DISPENSER	24	30	36	—	—	—	—	—	—	—	—	—	—		●
2	DR-9-1	2	TRAY RACK	26	27	62	—	—	—	—	—	—	—	—	—	—		●
3	B-16-2	3	SILVERWARE DISPENSER	15	12	9	—	—	—	—	—	—	—	—	—	—		●
4	B-3-1	2	AUTOMATIC COFFEE MAKER	29	18	21	208	1	—	6.0	28.9	—	3/4"	1 1/4"	1 1/4"	—		●
5	D-12-5	6	TRAY BUSSING RACK	18	21	69	—	—	—	—	—	—	—	—	—	—		●
6	D-19-2	4	WALL MOUNTED SHELF	—	13	—	—	—	—	—	—	—	—	—	—	—	STAINLESS STEEL	
7	D-2-1	1	CLEAN DISHTABLE	—	26	37	—	—	—	—	—	—	—	—	—	—		
8	D-2-2	1	SOILED DISHTABLE	—	34	37	—	—	—	—	—	(2) 3/4	(2) 3/4	(1) 2" (1) 3"	(1) 1 1/2" (1) 2"	—		
9	D-3-3	1	DISHWASHING MACHINE	26	30	66	208	3	1	18.0 5.0	67.9	3/4 100° 3/4 100°	—	4"	2"	—	FLOOR SINK	
10	D-9-2	1	GARBAGE DISPOSAL	—	—	—	200	3	7 1/2	—	26.2	—	—	2"	1 1/2"	—		
11	———	1	EXHAUST HOOD	42	42	18	—	—	—	—	—	—	—	—	—	630	EXH. FAN #1	
12	D-20-1	1	RECIRCULATING PUMP	8	12	15	115	1	1/3	—	7.2	—	—	—	—	—		
13	D-16-2	1	PRERINSE SPRAY ASSEMBLY	8	—	72	—	—	—	—	—	3/4"	3/4"	—	—	—		
14	D-16-1	1	PRERINSE SPRAY	4	—	60	—	—	—	—	—	3/4"	3/4"	—	—	—		
15	PW-4-2	1	SINK	—	28	44	—	—	—	—	—	3/4"	3/4"	2"	1 1/2"	—	FLOOR SINK	
16	D-9-1	1	GARBAGE DISPOSAL	—	—	—	200	3	5	—	16.7	—	—	2"	1 1/2"	—		
17	D-10-2	1	EXHAUST HOOD	42	36	18	—	—	—	—	—	—	—	—	—	630	EXH. FAN #2	
18	PW-1-1	1	HOT WATER HEATER (180°F)	8	18	13	208	3	—	9.0	25.0	3/4"	—	—	—	---		
19	PW-2-1	1	HOT WATER HEATER (180°F)	23	22	32	208	3	—	15.0	41.7	3/4"	—	—	—	—		
20	S-8-3	1	COLD FOOD COUNTER	60	28	36	115	1	1/4	—	5.8	—	—	—	—	—		●
21	S-35-1	1	HOT FOOD TABLE	64	34	36	208	3	—	6.0	16.7	—	—	—	—	—		●
22	K-35-1	1	STORAGE RACK	55	30	66	—	—	—	—	—	—	—	—	—	—		●
23	K-17-6	1	FRYER	21	39	37	—	—	—	—	—	—	—	—	—	—	120,000 BTUH (GAS)	●
24	K-37-1	1	RANGE	36	42	36	—	—	—	—	—	—	—	—	—	—	132,000 BTUH (GAS)	
25	K-37-2	1	RANGE	36	42	36	—	—	—	—	—	—	—	—	—	—	162,000 BTUH (GAS)	
26	K-18-1	1	EXHAUST HOOD	132	48	24	—	—	—	—	—	—	—	—	—	4560	EXH. FAN #4	
27	K-49-1	1	VEGETABLE PEELER	24	28	50	115	1	1/2	—	25.8	—	3/4"	1 1/2"	1 1/2"	—		
28	K-40-2	1	VEGETABLE PREP. SINK	96	30	44	—	—	—	—	—	3/4"	3/4"	2"	1 1/2"	—	FLOOR SINK	
29	K-25-1	1	MIXING MACHINE	20	22	32	115	1	1/2	—	9.8	—	—	—	—	—		●
30	K-42-1	1	MIXER STAND	24	30	24	—	—	—	—	—	—	—	—	—	—		●
31	S-34-3	3	FOOD PREPARATION TABLE	48	30	36	—	—	—	—	—	—	—	—	—	—		●
32	K-26-1	1	CAN OPENER	6	8	14	115	1	—	—	—	—	—	—	—	—		●
33	K-24-1	1	MEAT SLICING MACHINE	24	27	30	115	1	1/3	—	7.2	—	—	—	—	—		●
34	R-1-1	1	FROZEN FOOD CABINET	32	36	85	115	1	1/2	—	9.8	—	—	—	—	—		●
35	B-22-1	1	ICE MAKING MACHINE	36	38	72	115	1	1	—	16.0	—	3/4"	2"	—	—	FLOOR DRAIN W/ FUNNEL	
36	D-14-2	4	FOOD SERVICE SHELVING	36	18	80	—	—	—	—	—	—	—	—	—	—		●
37	S-24-3	1	REFRIGERATOR	87	38	85	208	1	3/4	—	6.9	—	—	—	—	—		●

Revisions			
Symbol	Descriptions	Date	Approved

JAMES ASSOCIATES
ARCHITECTS AND ENGINEERS
2828 EAST 45TH STREET
INDIANAPOLIS, IN 46205

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
LOUISVILLE, KENTUCKY

Designed by:
Drawn by: MB,
Checked by: DH, PP
Reviewed by:
Approved by:

US Army Corps of Engineers

USAR CENTER, INDIANAPOLIS, INDIANA
EXPAND AND MODERNIZE USARC
MRD-84-MCAR-5A

KITCHEN EQUIPMENT PLAN

Scale: 1/4" = 1'-0"
Date: 20 JANUARY 84
Drawing Code: DEF-29-06-
Sheet reference number: A-11
Sheet 17 of 67

83011
A-11 AB-10
A-11 AB-10

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RECORD DRAWING-"AS BUILT" ORF-11836-17

FINISH AND COLOR SCHEDULE

SPACE NO.	SPACE NAME	FLOOR MATL.	FLOOR COLR.	BASE MATL.	BASE COLR.	WAINSCOT MATL.	WAINSCOT COLR.	WAINSCOT HGT.	WALL MATL.	WALL COLR.	CEILING MATL.	CEILING COLR.	CEILING HGT.	TRIM MATL.	TRIM COLR.	REMARKS
101	UNIT STORAGE	1	51B50	1	NO. 3	—	—	—	1,2	37722	1	WHITE	8'-3"			37722
102	UNIT STORAGE	1	51B50	1	NO. 3	—	—	—	1,2	37722	1	WHITE	8'-3"			37722
103	UNIT STORAGE	1	51B50	1	NO. 3	—	—	—	1,2	37722	1	WHITE	8'-3"			37722
104	UNIT STORAGE	1	51B50	1	NO. 3	—	—	—	1,2	37722	1	WHITE	8'-3"			37722
105	UNIT STORAGE	1	51B50	1	NO. 3	—	—	—	1,2	37722	1	WHITE	8'-3"			37722
106	UNIT STORAGE	1	51B50	1	NO. 3	—	—	—	1,2	37722	1	WHITE	8'-3"			37722
107	UNIT STORAGE	1	51B50	1	NO. 3	—	—	—	1,2	37722	1	WHITE	8'-3"			37722
108	CORRIDOR	1	51B50	1	NO. 3	—	—	—	5	37722	1	WHITE	8'-3"			37722
109	UNIT STORAGE	1	51B50	1	NO. 3	—	—	—	1,2	37722	1	WHITE	8'-3"			37722
110	CORRIDOR	1	51B50	1	NO. 3	—	—	—	5	37722	1	WHITE	8'-3"			37722
111	PASSAGE	1	51B50	1	NO. 3	—	—	—	1	37722	1	WHITE	8'-3"			
112	VESTIBULE	1	51B50	1	NO. 3	—	—	—	1,6,7	37722	1	WHITE	8'-3"			LEFT N & S WALL PAINT 35550
	STAIR NO 3	1	51B50	1	NO. 3	—	—	—	1,7	37722	1	WHITE				
113	SUPPLY OFFICE	1	51B50	1	NO. 3	—	—	—	1,2	37722	1	WHITE	8'-3"			
114	SUPPLY OFFICE	1	51B50	1	NO. 3	—	—	—	1,2	37722	1	WHITE	8'-3"			
115	CORRIDOR	1	51B50	1	NO. 3	—	—	—	5	37722	1	WHITE	8'-3"			WEST WALL PAINT 35185
116	SUPPLY OFFICE	1	51B50	1	NO. 3	—	—	—	1,2	37722	1	WHITE	8'-3"			
117	SUPPLY OFFICE	1	51B50	1	NO. 3	—	—	—	1,2	37722	1	WHITE	8'-3"			
118	SUPPLY OFFICE	1	51B50	1	NO. 3	—	—	—	1,2	37722	1	WHITE	8'-3"			
118A																
119	VESTIBULE	1	51B50	1	NO. 3	—	—	—	6,8	37722	1	WHITE	19'-6½"			
120	LOBBY	1	51B50	1	NO. 3	—	—	—	5,8	35185	1	WHITE	8'3" 9'-6			
	STAIR NO 1	1	51B50	1	NO. 3	—	—	—	5	37722						
121	CORRIDOR	1	51B50	1	NO. 3	—	—	—	5	37722	1	WHITE	8'-3"			SOUTH WALL PAINT 35185
122	JANITOR	1	51B50	1	NO. 3	—	—	—	5	37722	1	WHITE	8'-3"			
123	MEN	2		—	—	1		4'-1"	5	37722	1	WHITE	8'-3"			PAINT TOILET STALLS 35185
124	451 DOS AMMO BR	1	51B50	1	NO. 3	—	—	—	5	37722	1	WHITE	8'-3"			
125	FOOD STORAGE	3		2		—	—	—	3,7	37722	4	WHITE	9'-0"			RED FLR. & P/BASE
126	KITCHEN	3		2		—	—	—	3,7	35550	4	WHITE	9'-0"			AS PER SPEC
127	SCULLERY	3		2		—	—	—	3,7	37722	4	WHITE	9'-0"			
128	ASSEMBLY HALL	4		4	36118	—	—	—	5	35550	5	WHITE	18'-4½"			
129	CORRIDOR	1	51B50	1	NO. 3	—	—	—	5	37722	1	WHITE	8'-3"			SOUTH WALL PAINT 35185
130	451 DOS SUBSISTANCE	1	51B50	1	NO. 3	—	—	—	5	37722	1	WHITE	8'-3"			
131	VESTIBULE	1	51B50	1	NO. 3	—	—	—	5	37722	1	WHITE	8'-3"			WEST WALL PAINT 35185
132	REPRODUCTION	1	51B50	1	NO. 3	—	—	—	5	37722	1	WHITE	8'-3"			
133	BOILER ROOM	4		—		—	—	—	5	37722	G		14'-0½"			
134	425 CO SUPT.	1	51B50	1	NO. 3	—	—	—	1,2	37722	1	WHITE	8'-3"			
135	425 CDR	1	51B50	1	NO. 3	—	—	—	1,2	37722	1	WHITE	8'-3"			
136	COMMON	1	51B50	1	NO. 3	—	—	—	1,2	37722	1	WHITE	8'-3"			EAST WALL PAINT 35185
137	CORRIDOR	1	51B50	1	NO. 3	—	—	—	5	37722	1	WHITE	8'-3"			
138	425 OFFICE	1	51B50	1	NO. 3	—	—	—	1,2	37722	1	WHITE	8'-3"			SOUTH WALL PAINT 35550
139	425 OFFICE	1	51B50	1	NO. 3	—	—	—	1	37722	1	WHITE	8'-3"			SOUTH WALL PAINT 35550
140	425 OFFICE	1	51B50	1	NO. 3	—	—	—	1	37722	1	WHITE	8'-3"			NORTH WALL PAINT 35550
141	425 OFFICE	1	51B50	1	NO. 3	—	—	—	1,2	37722	1	WHITE	8'-3"			NORTH WALL PAINT 35550
142	COMMON	1	51B50	1	NO. 3	—	—	—	1,2	37722	1	WHITE	8'-3"			NORTH WALL PAINT 35185
143	UNIT STORAGE	4		—		—	—	—	5	37722	7		9'-0¼"			
144	WOMEN	2		—	—	1		4'-1"	5	37722	1	WHITE	7'-9¼"			PAINT TOILET STALLS 35185
145	CDR 402	1	51B50	1	NO. 3	—	—	—	1,2	37722	1	WHITE	8'-3"			NORTH WALL PAINT 35550
146	CDR 476	1	51B50	1	NO. 3	—	—	—	1,2	37722	1	WHITE	8'-3"			NORTH WALL PAINT 35550
147	COMMON	1	51B50	1	NO. 3	—	—	—	1,2	37722	1	WHITE	8'-3"			SOUTH WALL PAINT 35185
148	COMMON	1	51B50	1	NO. 3	—	—	—	1,2	37722	1	WHITE	8'-3"			EAST WALL PAINT 35185
149	425 OFFICE	1	51B50	1	NO. 3	—	—	—	1,2	37722	1	WHITE	8'-3"			SOUTH WALL PAINT 35550
150	CDR 400	1	51B50	1	NO. 3	—	—	—	1,2	37722	1	WHITE	8'-3"			NORTH WALL PAINT 35550
151	COMMON	1	51B50	1	NO. 3	—	—	—	1,2	37722	1	WHITE	8'-3"			SOUTH WALL PAINT 35550
152	CORRIDOR	1	51B50	1	NO. 3	—	—	—	5	37722	1	WHITE	8'-3"			SOUTH WALL PAINT 35185
	STAIR NO 2	1	51B50	1	NO. 3											
153	VESTIBULE	1	51B50	1	NO. 3	—	—	—	3,6,7	37722	1	WHITE	8'-4"			SOUTH WALL PAINT 35185
154	COMMON	1	51B50	1	NO. 3	—	—	—	1,2	35185	1	WHITE	8'-6"			W. ENTRANCE WALL ARCHIVES VAULT PAINT 37722
155	COMM O	1	51B50	1	NO. 3	—	—	—	1,2	37722	1	WHITE	8'-6"			WEST WALL PAINT 35550
156	FOOD SERVICE	1	51B50	1	NO. 3	—	—	—	1,2	35550	1	WHITE	8'-6"			
157	PROD/INST.	1	51B50	1	NO. 3	—	—	—	1,2	37722	1	WHITE	8'-6"			EAST WALL PAINT 35550
158	SUCS/NCOIC. MAINT	1	51B50	1	NO. 3	—	—	—	1,2	37722	1	WHITE	8'-6"			
159	DIR. SUCS.	1	51B50	1	NO. 3	—	—	—	1,2	37722	1	WHITE	8'-6"			WEST WALL PAINT 35550
160	TRANS.	1	51B50	1	NO. 3	—	—	—	1,2	37722	1	WHITE	8'-6"			
161	RETENTION	1	51B50	1	NO. 3	—	—	—	1,2	37722	1	WHITE	8'-6"			WEST WALL PAINT 35550
162	CORRIDOR	1	51B50	1	NO. 3	—	—	—	1,2,9	37722	1	WHITE	8'-6"			SOUTH WALL PAINT 35185
163	ARMS VAULT	5		5		—	—	—	10	—	10	—	9'-1⅞"			
164	CORRIDOR	1	51B50	1	NO. 3	—	—	—	1,2,9	37722	1	WHITE	8'-6"			NORTH WALL PAINT 35185
165	ELECTRICAL ROOM	5		1	NO. 3	—	—	—	1	37722	1	WHITE	8'-6"			
166	VESTIBULE	1	51B50	1	NO. 3	—	—	—	1,6	35185	1	WHITE	8'-1½"			
167	MAINTENANCE	1	51B50	1	NO. 3	—	—	—	1,2	37722	1	WHITE	8'-6"			
168	MAINTENANCE	1	51B50	1	NO. 3	—	—	—	1,2	37722	1	WHITE	8'-6"			
169	COMMON	1	51B50	1	NO. 3	—	—	—	1,2	35185	1	WHITE	8'-6"			WEST WALL PAINT 37722
	STAIR NO 4	1	51B50	1	NO. 3	—	—	—	1	37722						
170	DIRECTOR OF MAINT.	1	51B50	1	NO. 3	—	—	—	1,2	37722	1	WHITE	8'-6"			EAST WALL PAINT 35550
171	MAINTENANCE	1	51B50	1	NO. 3	—	—	—	1,2	37722	1	WHITE	8'-6"			
172	MAINTENANCE	1	51B50	1	NO. 3	—	—	—	1,2	37722	1	WHITE	8'-6"			

FINISH AND COLOR SCHEDULE

SPACE NO	SPACE NAME	FLOOR MATL.	FLOOR COLR.	BASE MATL.	BASE COLR.	WAINSCOT MATL.	WAINSCOT COLR.	WAINSCOT HGT.	WALL MATL.	WALL COLR.	CEILING MATL.	CEILING COLR.	CEILING HGT.	TRIM MATL.	TRIM COLR.	REMARKS
173	STG. DIV.	1	51B50	1	NO. 3				1,2	37722	1	WHITE	8'-6"			WEST WALL PAINT 35550
174	GS DIV.	1	51B50	1	NO. 3				1,2	37722	1	WHITE	8'-6"			EAST WALL PAINT 35550
175	GEN. SUPPLY DIV.	1	51B50	1	NO. 3				1,2	37722	1	WHITE	8'-6"			WEST WALL PAINT 35550
176	MECHANICS ROOM	1	51B50	1	NO. 3				1,2	37722	1	WHITE	8'-6"			EAST WALL PAINT 35550
177	PLANS/POLICY DIV.	1	51B50	1	NO. 3				1,2	37722	1	WHITE	8'-6"			EAST WALL PAINT 35550
178	PLANS/POLICY OFFICER	1	51B50	1	NO. 3				1,2	37722	1	WHITE	8'-6"			WEST WALL PAINT 35550
179	SUPPLY NCOIC	1	51B50	1	NO. 3				1,2	37722	1	WHITE	8'-6"			WEST WALL PAINT 35550
180	SUPPLY MGM'T.	1	51B50	1	NO. 3				1,2	37722	1	WHITE	8'-6"			EAST WALL PAINT 35550
181	DIR. OF SUPPLY	1	51B50	1	NO. 3				1,2	37722	1	WHITE	8'-6"			WEST WALL PAINT 35550
104A	VESTIBULE	1	51B50	1	NO. 3				1,2,5		1	WHITE	8'-3"			
151A	VESTIBULE	1	51B50	1	NO. 3				1,2,5		1	WHITE	8'-3"			
	STAIR NO 3	1	51B50	1	NO. 3				1	37722	1	WHITE	8'-6"			
201	PASSAGE	1	51B50	1	NO. 3				1,6,8	37722	1	WHITE	8'-0"			
202	CLASSROOM	1	51B50	1	NO. 3				2,5	36559	1	WHITE	8'-6"			
202A	CLASSROOM	1	51B50	1	NO. 3				2,5	36559	1	WHITE	8'-6"			
203	CORRIDOR	1	51B50	1	NO. 3				5	37722	1	WHITE	8'-6"			
204	CLASSROOM	1	51B50	1	NO. 3				2,5	36559	1	WHITE	8'-6"			WEST WALL PAINT 35550
204A	CLASSROOM	1	51B50	1	NO. 3				2,5	36559	1	WHITE	8'-6"			NORTH WALL PAINT 35550
205	T/AID STORAGE	1	51B50	1	NO. 3				2,5	37722	1	WHITE	8'-6"			SOUTH WALL PAINT 35550
206	LOBBY	1	51B50	1	NO. 3				1,5,6,8	35185	1	WHITE	8'-0"			
	STAIR NO 1	1	51B50	1	NO. 3				2,5	37722	1	WHITE	8'-6"			
207	431 STORAGE	1	51B50	1	NO. 3				2,5	37722	1	WHITE	8'-6"			
208	431 STORAGE	1	51B50	1	NO. 3				2,5	37722	1	WHITE	8'-6"			
209	PASSAGE	1	51B50	1	NO. 3				2,5	37722	1	WHITE	8'-6"			
210	CORRIDOR	1	51B50	1	NO. 3				5	37722	1	WHITE	8'-6"			WEST WALL PAINT 35185
211	LIB/LNG CTR	1	51B50	1	NO. 3				2,5	36559	1	WHITE	8'-6"			NORTH WALL PAINT 35190
212	ADMIN./DRAFTING	1	51B50	1	NO. 3				1,2,5	37722	1	WHITE	8'-6"			NORTH WALL PAINT 35550
213	431 ADMIN. EXCL	1	51B50	1	NO. 3				1,2,5	37722	1	WHITE	8'-6"			WEST WALL PAINT 35550
214	PARACHUTE RIGGING	1	51B50	1	NO. 3				1,2,5	37722	1	WHITE	8'-6"			WEST WALL PAINT 35185
215	STORAGE	1	51B50	1	NO. 3				2	37722	1	WHITE	8'-6"			
216	STORAGE	1	51B50	1	NO. 3				1,2	37722	1	WHITE	8'-6"			
217	MEN	2		—	—	2		4'-1"	1,2,5	37722	1	WHITE	8'-6"			PAINT TOILET STALLS 35185
218	WOMEN	2		—	—	2		4'-1"	1,2,5	37722	1	WHITE	8'-6"			PAINT TOILET STALLS 35185
219	COMMON	1	51B50	1	NO. 3				1,2,5	37722	1	WHITE	8'-6"			NORTH WALL PAINT 35185
220	CORRIDOR	1	51B50	1	NO. 3				1,5,6,8	37722	1	WHITE	8'-6"&8'-0"			SOUTH WALL PAINT 35185
	STAIR NO 2	1	51B50	1	NO. 3				2,5	37722	1	WHITE	8'-6"			
221	COMMON	1	51B50	1	NO. 3				1,2	37722	1	WHITE	9'-0"			PAINT PARTITION WALL 35185
222	ADMINISTRATION OFFICE	1	51B50	1	NO. 3				1,2	37722	1	WHITE	9'-0"			WEST WALL PAINT 35550
223	DIST SECTION	1	51B50	1	NO. 3				1,2	37722	1	WHITE	9'-0"			WEST WALL PAINT 35550
224	ADMIN. OFFICE	1	51B50	1	NO. 3				1,2	37722	1	WHITE	9'-0"			EAST WALL PAINT 35550
225	BUDGET OFFICE	1	51B50	1	NO. 3				1,2	37722	1	WHITE	9'-0"			EAST WALL PAINT 35550
226	COMPTROLLER	1	51B50	1	NO. 3				1,2	37722	1	WHITE	9'-0"			WEST WALL PAINT 35550
227	COMMON	1	51B50	1	NO. 3				1,2	37722	1	WHITE	9'-0"			PARTITION & EAST WALL 37722
228	IR/MGMT. ENGINEERING	1	51B50	1	NO. 3				1,2	37722	1	WHITE	9'-0"			EAST WALL PAINT 35550
229	STAFF ASSISTANT	1	51B50	1	NO. 3				1,2	37722	1	WHITE	9'-0"			WEST WALL PAINT 35550
230	BRIGADIER GENERAL	6	*	6	*				11	*	1	WHITE	9'-0"			* COLORS TO BE SELECT'D.
231	AID	1	51B50	1	NO. 3				1,2	37722	1	WHITE	9'-0"			WEST WALL PAINT 35550
232	SEC. GEN. STAFF	1	51B50	1	NO. 3				1,2	37722	1	WHITE	9'-0"			EAST WALL PAINT 35550
	STAIR NO 4	1	51B50	1	NO. 3				1	37722	1	WHITE	9'-0"			
233	COMMON	1	51B50	1	NO. 3				1,2	37722	1	WHITE	9'-0"			WEST WALL PAINT 37722
234	PAO	1	51B50	1	NO. 3				1,2	37722	1	WHITE	9'-0"			EAST WALL PAINT 35550
235	CONFERENCE ROOM	1	51B50	1	NO. 3				1,2	37722	1	WHITE	9'-0"			WEST WALL PAINT 35550
236	CSM 451	1	51B50	1	NO. 3				1,2	37722	1	WHITE	9'-0"			WEST WALL PAINT 35550
237	ELECTRICAL ROOM	1	51B50	1	NO. 3				1,2	37722	1	WHITE	9'-0"			
238	COMMON	1	51B50	1	NO. 3				1,2	37722	1	WHITE	9'-0"			EAST WALL PAINT 35185
239	PLANS OFFICE	1	51B50	1	NO. 3				1,2	37722	1	WHITE	9'-0"			WEST WALL PAINT 35550
240	DIR SIPT	1	51B50	1	NO. 3				1,2	37722	1	WHITE	9'-0"			EAST WALL PAINT 35550
241	PERS MGMT SECTION	1	51B50	1	NO. 3				1,2	37722	1	WHITE	9'-0"			EAST WALL PAINT 35550
242	STRENGTH MAINT	1	51B50	1	NO. 3				1,2	37722	1	WHITE	9'-0"			WEST WALL PAINT 35550
243	DIR OF ADMIN	1	51B50	1	NO. 3				1,2	37722	1	WHITE	9'-0"			WEST WALL PAINT 35550
	H.M. DOORS & FRAMES															BRONZE
	STAIR RAILINGS & LADDERS															BRONZE
114A	STORAGE ROOM	1	51B50	1	NO.3				1,2	37722	1	WHITE	8'-3"			

FLOOR

1. VINYL COMPOSITION TILE
2. EXISTING CERAMIC TILE - PATCH AS REQ'D.
3. QUARRY TILE (ABRASIVE FINISH).
4. EXISTING CONCRETE EXPOSED SURFACE.
5. NEW CONCRETE WITH HARDENER.
6. CARPET - COLOR TO BE SELECTED - CARBON GRAY

BASE

1. 4" RUBBER
2. QUARRY TILE
3. 4" EPOXY PAINT (BLACK)
4. 4" PAINT
5. NO BASE
6. WOOD - COLOR TO BE SELECTED

WAINSCOT

1. EXISTING CERAMIC TILE - PATCH AS REQ'D.
2. CERAMIC TILE ON NEW WALL TO MATCH EXISTING.

WALLS

1. C.M.U. - PAINTED.
2. GYPSUM BOARD - PAINTED.
3. EPOXY PAINT ON C.M.U. WITH FILLER.
4. EPOXY PAINT.
5. EXISTING C.M.U. - PAINT. 5A. PLASTER-CEMENT FINISH ON EXIST.
6. ALUMINUM AND GLASS.
7. EPOXY PAINT ON EXISTING BRICK. CMU-PAINT.
8. EXISTING BRICK.
9. REINFORCED CONCRETE - PAINTED.
10. REINFORCED CONCRETE - RUBBED FINISH
11. WOOD PANELING - COLOR TO BE SELECTED

CEILING

1. SUSPENDED ACOUSTICAL CEILING TILE. U.L. 1 HOUR RATED CONSTRUCTION
3. EXISTING KEENE'S CEMENT, REPAIR AS REQ'D. - PAINT.
4. PLASTER/MOISTURE RESISTANT GYPSUM BOARD, EPOXY PAINT.
5. EXPOSED STRUCTURE - PAINT.
6. EXISTING PLASTER - PATCH AS REQ'D.
7. EXISTING CONCRETE.
8. SUSPENDED GYPSUM BOARD - PAINT.
9. REINFORCED CONCRETE - PAINT.
10. REINFORCED CONCRETE - RUBBED FINISH

* RED - AMERICAN CUBAN QUARRY TILE
* 51B50 - ARMSTRONG RESILIANT TILE
* WHITE - ARMSTRONG CEILING TILE
* NO. 3 - FLEX-COVE RUBBER BASE GRAY

* SIMILAR COLORS BY ANOTHER MANUFACTURER MAY BE SUBSTITUTED IF APPROVED BY THE CONTRACTING OFFICER.

ALL COLOR NUMBERS FROM DEPART. OF ARMY TECHNICAL MANUAL TM 5-807-7

Revisions			
Symbol	Descriptions	Date	Approved

JAMES ASSOCIATES
ARCHITECTS AND ENGINEERS
2828 EAST 45TH STREET
INDIANAPOLIS, IN 46205

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
LOUISVILLE, KENTUCKY

Designed by:
Drawn by: DH
Checked by: DH, PP
Reviewed by:
Approved by:

US Army Corps of Engineers

USAR CENTER, INDIANAPOLIS, INDIANA
EXPAND AND MODERNIZE USARC
MRD - 84 - MCAR - 5A

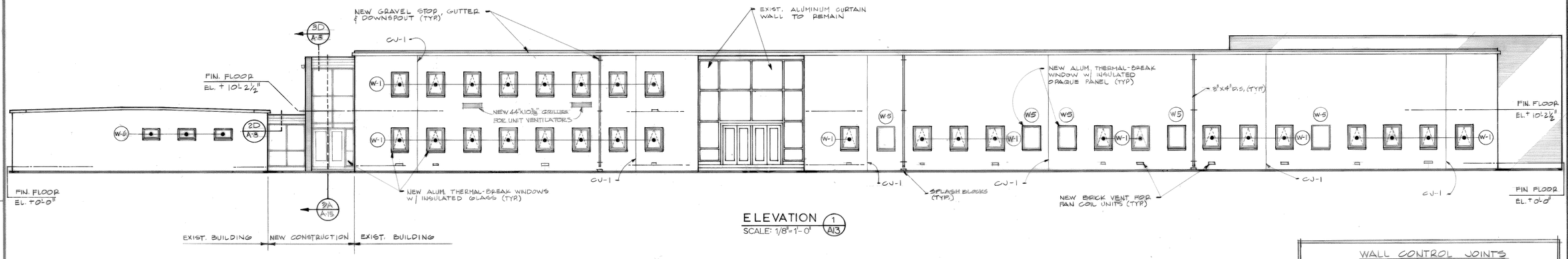
FINISH & COLOR SCHEDULE

Scale: NONE
Date: 20 JANUARY 84
Sheet reference number: A-12
Drawing Code: DEF-29-06-
Sheet 18 of 67

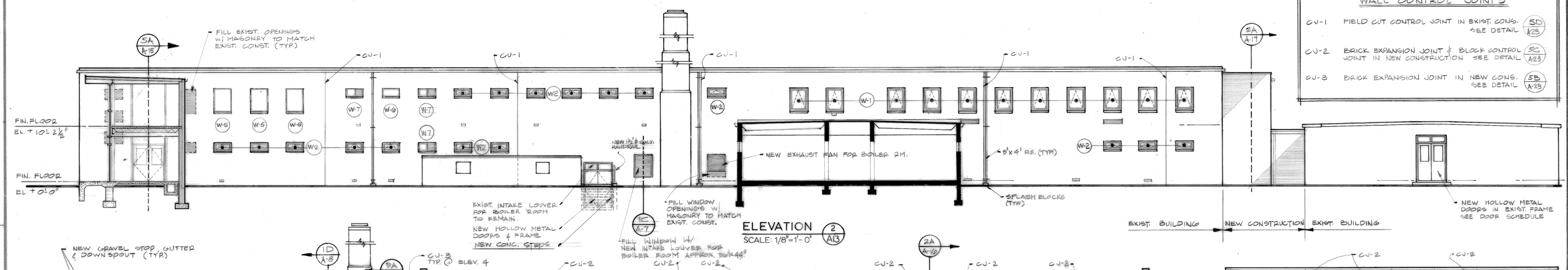
IN016-0015 A120123

REVISED BY LOU. DIST CORPS OF ENGRS TO "AS BUILT" CONDITIONS

RECORD DRAWING-"AS BUILT" OPS-11836-18

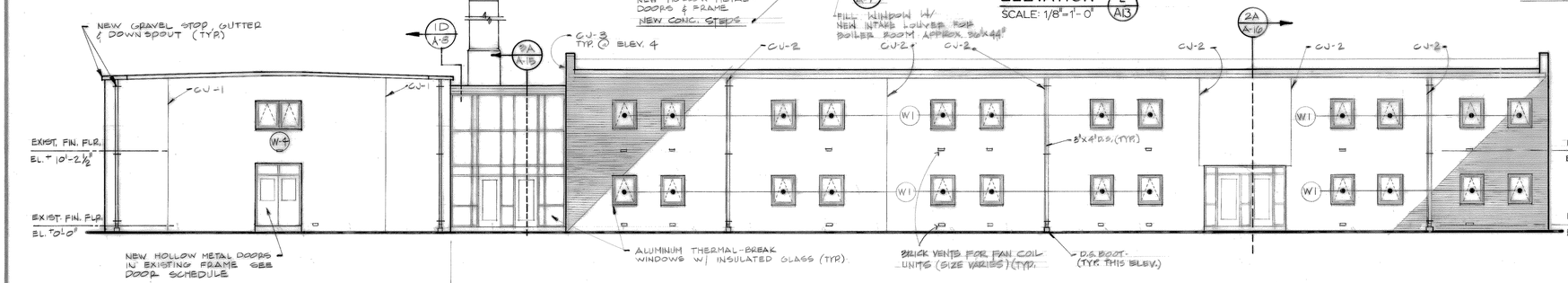


ELEVATION (1/A13)
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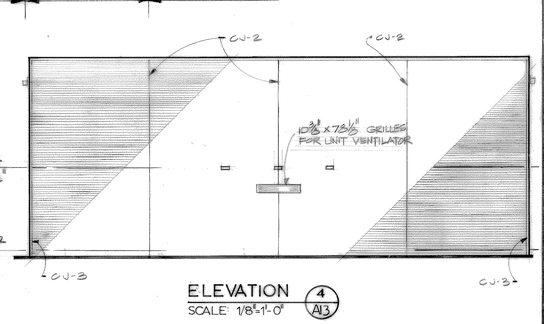


ELEVATION (2/A13)
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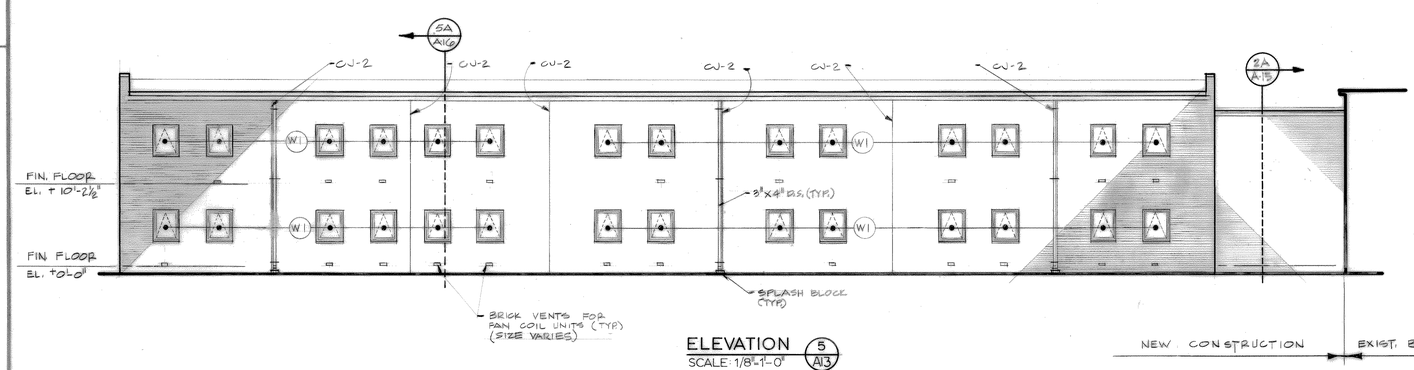
WALL CONTROL JOINTS		
CJ-1	FIELD CUT CONTROL JOINT IN EXIST. CONS. SEE DETAIL	5D A13
CJ-2	BRICK EXPANSION JOINT & BLOCK CONTROL JOINT IN NEW CONSTRUCTION SEE DETAIL	5C A13
CJ-3	BRICK EXPANSION JOINT IN NEW CONS. SEE DETAIL	5B A13



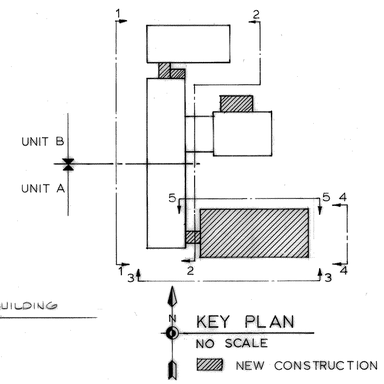
ELEVATION (3/A13)
SCALE: 1/8"=1'-0"



ELEVATION (4/A13)
SCALE: 1/8"=1'-0"



ELEVATION (5/A13)
SCALE: 1/8"=1'-0"



KEY PLAN
NO SCALE
NEW CONSTRUCTION

Revisions			
Symbol	Descriptions	Date	Approved

JAMES ASSOCIATES
ARCHITECTS AND ENGINEERS
2828 EAST 45TH STREET
INDIANAPOLIS, IN 46205

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
LOUISVILLE, KENTUCKY

Designed by:
Drawn by: MB
Checked by: DH, PP
Reviewed by:
Approved by:

US Army Corps of Engineers

USAR CENTER, INDIANAPOLIS, INDIANA
EXPAND AND MODERNIZE USARC
MRD-84-MCAR-5A

EXTERIOR ELEVATIONS

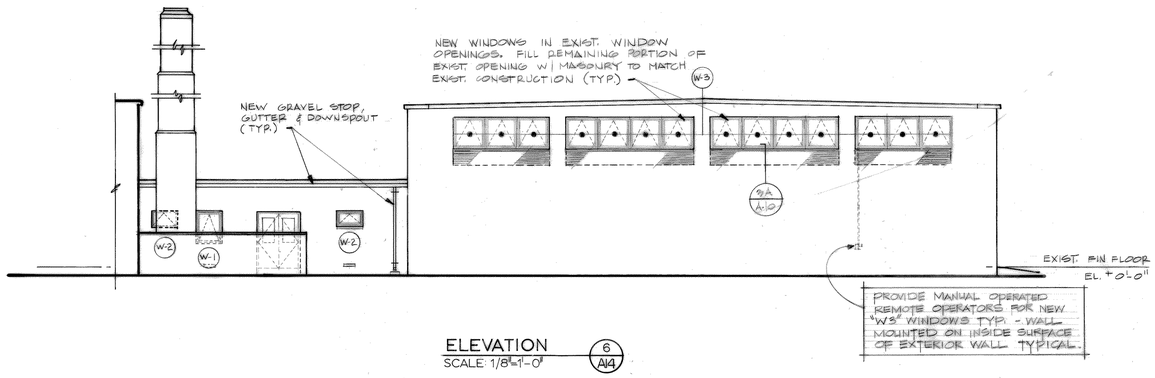
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Date: 20 JANUARY 84
Drawing Code: DEF-29-06-
Sheet reference number: A-13
Sheet 19 of 67

REVISED BY LOU. DIST CORPS OF ENGRS TO "AS BUILT" CONDITIONS

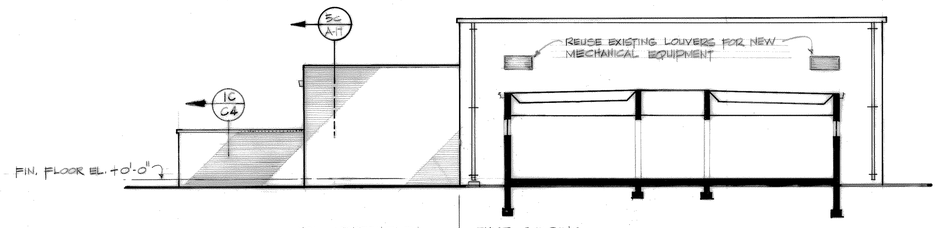
RECORD DRAWING-"AS BUILT"

IN016-0015 A13of23

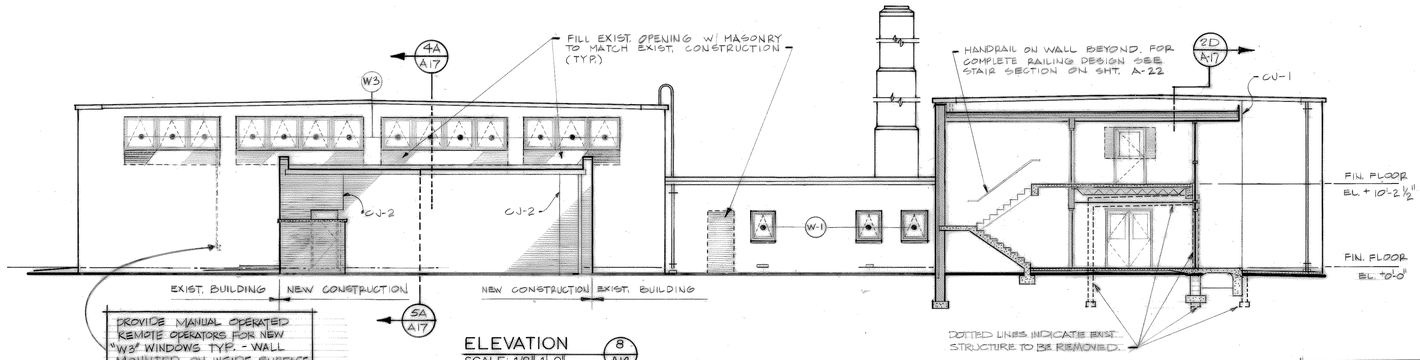
OPR-11836-19



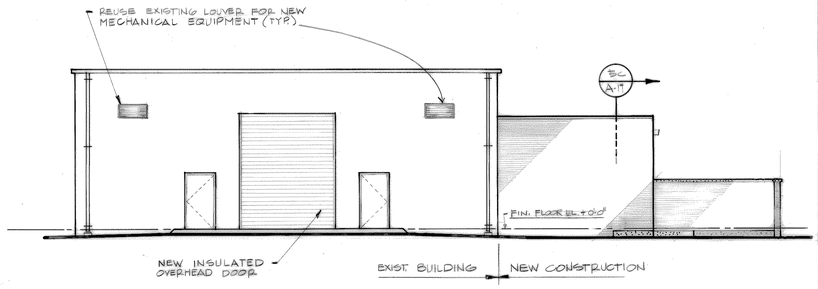
ELEVATION
SCALE: 1/8"=1'-0" 6 A14



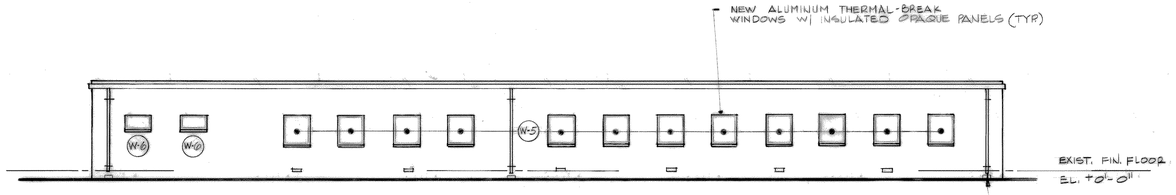
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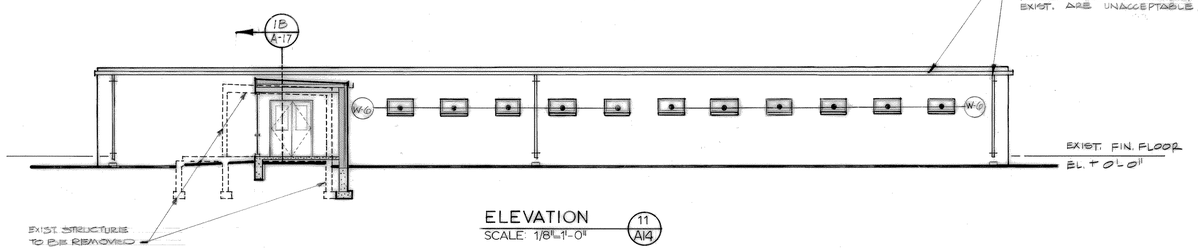
ELEVATION
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ELEVATION
SCALE: 1/8"=1'-0" 9 A14



ELEVATION
SCALE: 1/8"=1'-0" 10 A14

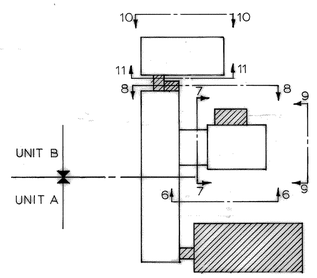


ELEVATION
SCALE: 1/8"=1'-0" 11 A14

WALL CONTROL JOINTS

CJ-1	FIELD CUT CONTROL JOINT IN EXIST. CONS. SEE DETAIL	5D M13
CJ-2	BRICK EXPANSION JOINT & BLOCK CONTROL JOINT IN NEW CONSTRUCTION SEE DET.	5C A-13

NOTE:
ALL EXIST. & NEW EXTERIOR TRIM, NOT PREFINISHED, TO BE PAINTED.



KEY PLAN
NO SCALE
NEW CONSTRUCTION

Revisions			
Symbol	Descriptions	Date	Approved

JAMES ASSOCIATES
ARCHITECTS AND ENGINEERS
2828 EAST 45TH STREET
INDIANAPOLIS, IN 46205

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
LOUISVILLE, KENTUCKY

Designed by:
Drawn by: MB
Checked by: DH, PP
Reviewed by:
Approved by:

US Army Corps of Engineers

USAR CENTER, INDIANAPOLIS INDIANA
EXPAND AND MODERNIZE USARC
MRD - 84 - MCAR - 5A

EXTERIOR ELEVATIONS

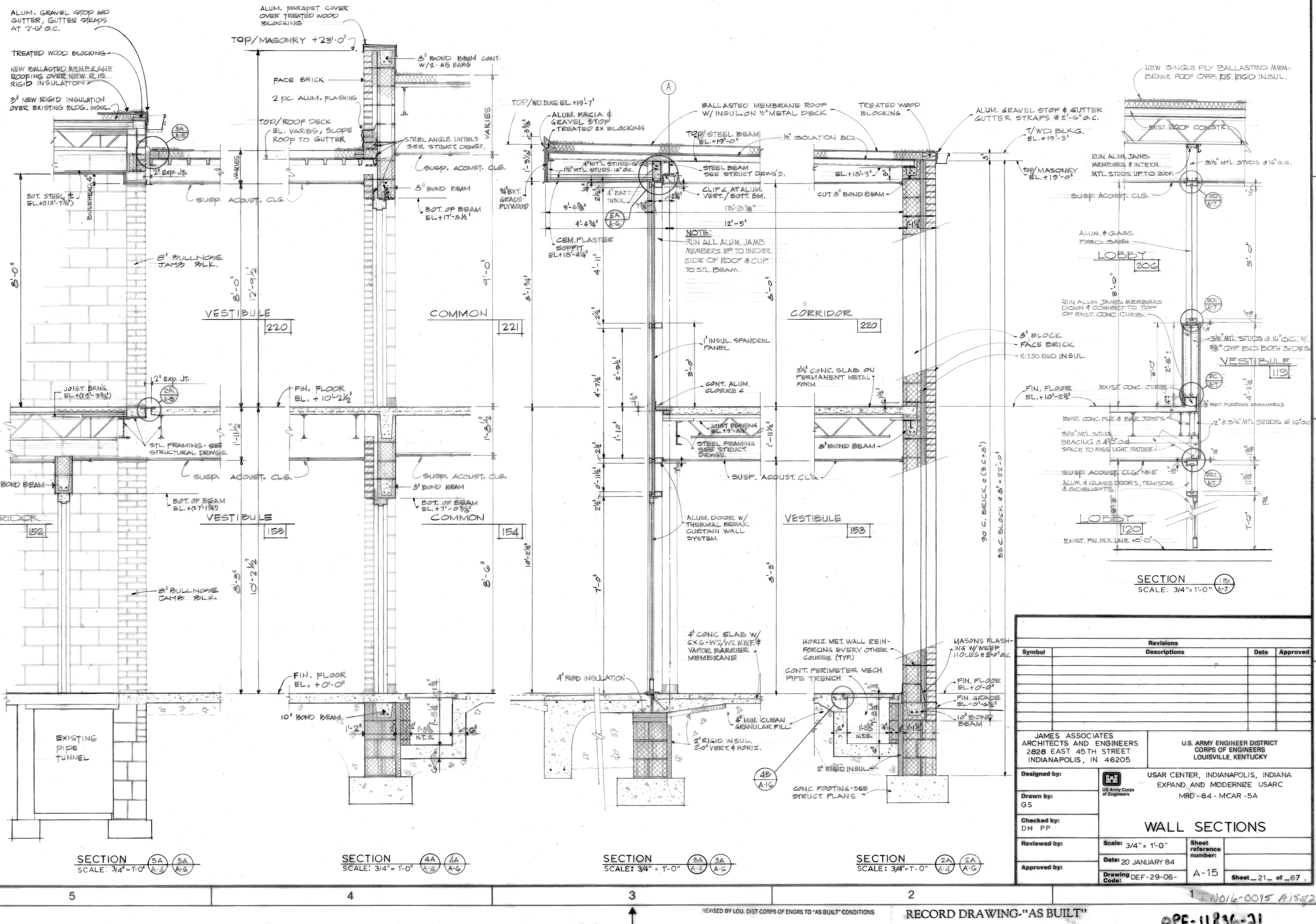
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Date: 20 JANUARY 84
Drawing Code: DEF-29-06-
Sheet reference number: A-14
Sheet 20 of 67

REVISED BY LOU. DIST CORPS OF ENGRS TO "AS BUILT" CONDITIONS

RECORD DRAWING-"AS BUILT"

1 IN016-0015 AM 6/23

OPF-11836-20



SECTION SCALE: 3/4"=1'-0" (5A A-4 / 5A A-6)

SECTION SCALE: 3/4"=1'-0" (4A A-4 / 4A A-6)

SECTION SCALE: 3/4"=1'-0" (3A A-4 / 3A A-6)

SECTION SCALE: 3/4"=1'-0" (2A A-4 / 2A A-6)

SECTION SCALE: 3/4"=1'-0" (1B A-7)

Revisions			
Symbol	Descriptions	Date	Approved

JAMES ASSOCIATES
ARCHITECTS AND ENGINEERS
2828 EAST 45TH STREET
INDIANAPOLIS, IN 46205

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
LOUISVILLE, KENTUCKY

Designed by:
Drawn by: GS
Checked by: DH PP
Reviewed by:
Approved by:

US Army Corps of Engineers

USAR CENTER, INDIANAPOLIS, INDIANA
EXPAND AND MODERNIZE USARC
MRD-84-MCAR-5A

WALL SECTIONS

Scale: 3/4"=1'-0"
Date: 20 JANUARY 84
Drawing Code: DEF-29-06-
Sheet reference number: A-15
Sheet 21 of 67

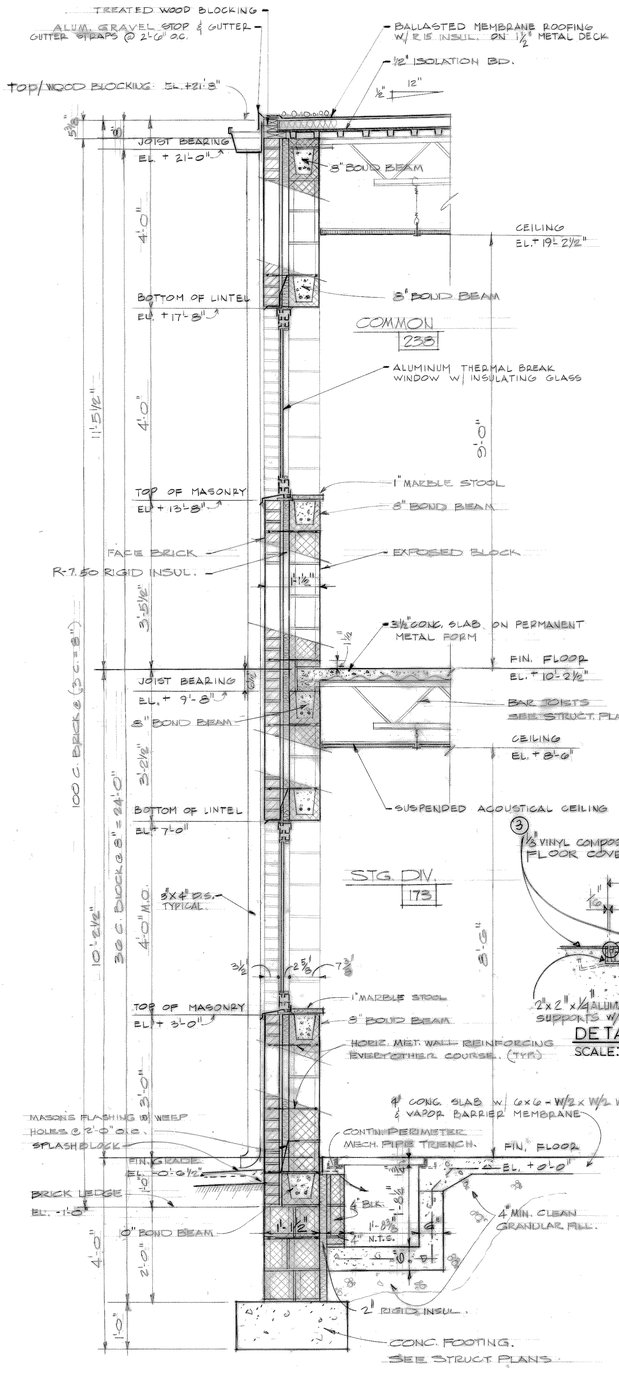
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REVISED BY LOU. DIST CORPS OF ENGRS TO "AS BUILT" CONDITIONS

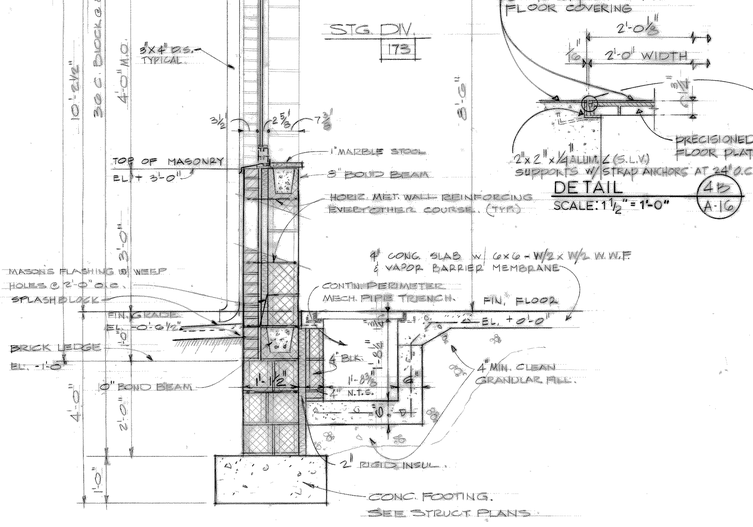
RECORD DRAWING-"AS BUILT"

1 IN016-0015 A15of23

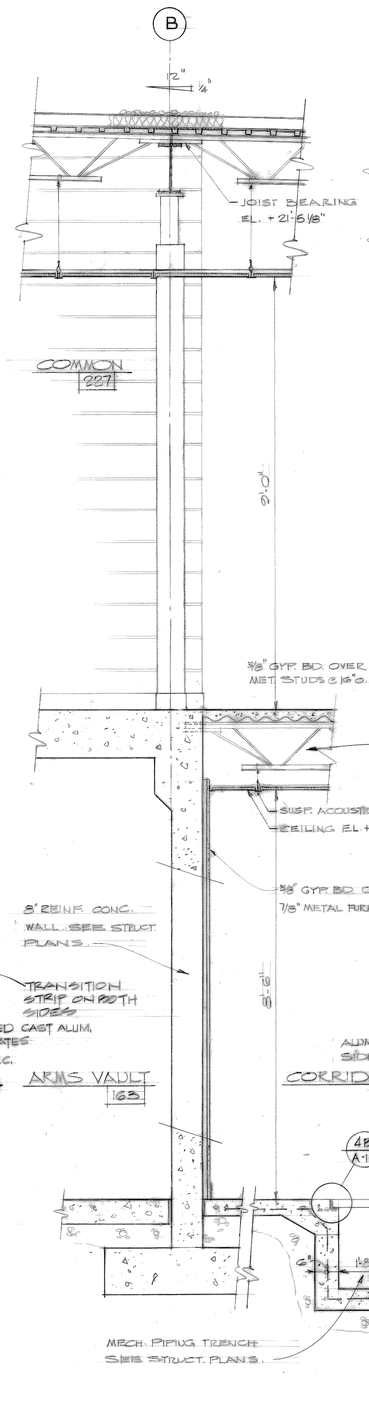
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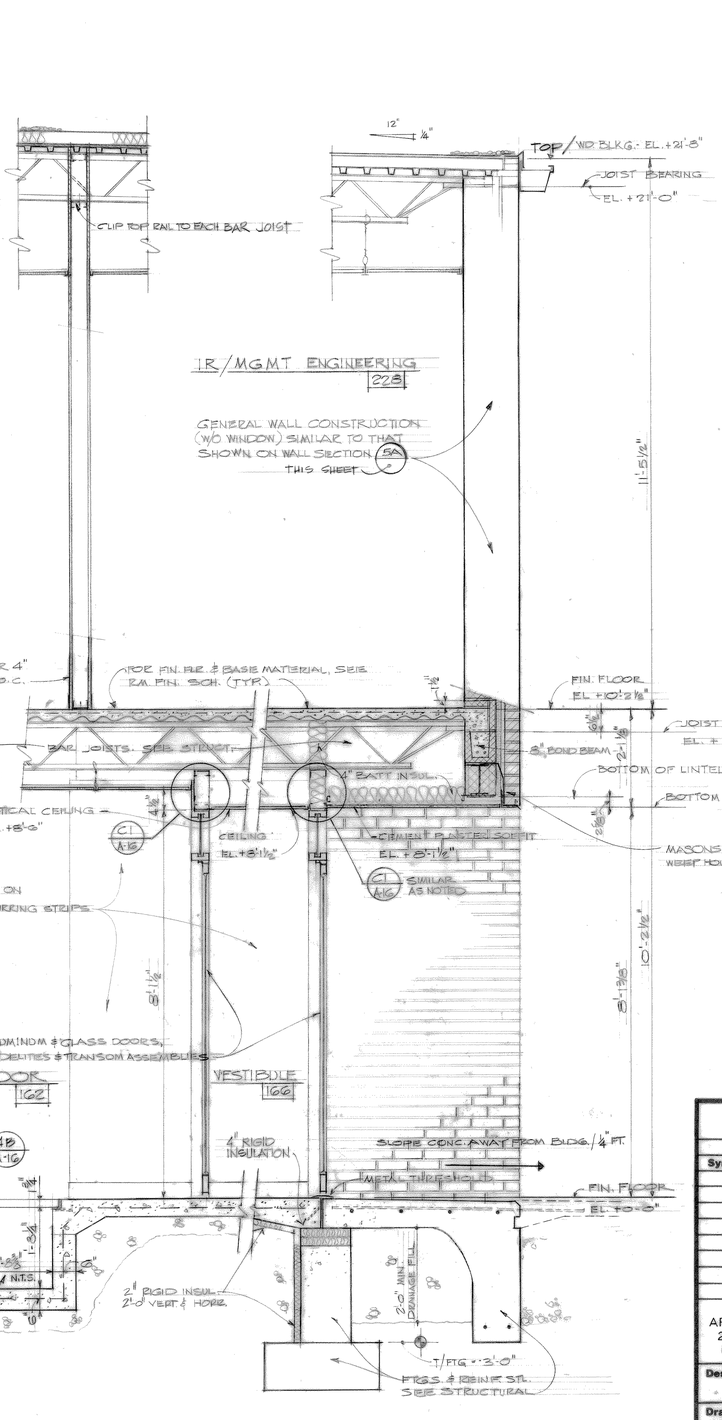
SECTION 5A A-4 / 5A A-6
SCALE 3/4"=1'-0"



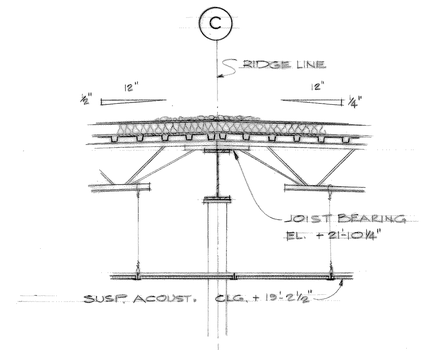
DETAIL 4B A-16
SCALE: 1½"=1'-0"



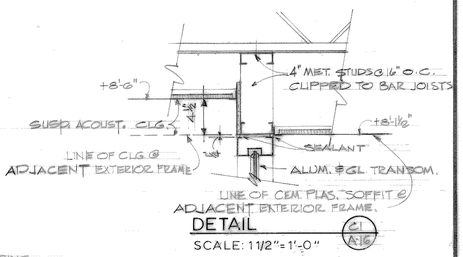
SECTION 3A A-4 / 3A A-6
SCALE 3/4"=1'-0"



SECTION 2A A-4 / 2A A-6
SCALE 3/4"=1'-0"



SECTION C1 A-6
SCALE 3/4"=1'-0"



DETAIL C1 A-16
SCALE: 1 1/2"=1'-0"

Revisions			
Symbol	Descriptions	Date	Approved

JAMES ASSOCIATES
ARCHITECTS AND ENGINEERS
2828 EAST 45TH STREET
INDIANAPOLIS, IN 46205

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
LOUISVILLE, KENTUCKY

Designed by:

Drawn by: GS, MAB

Checked by: DH, PP

Reviewed by:

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US Army Corps of Engineers

USAR CENTER, INDIANAPOLIS, INDIANA
EXPAND AND MODERNIZE USARC
MRD-84-MCAR-5A

WALL SECTIONS

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

Date: 20 JANUARY 84

Drawing Code: DEF-29-06-

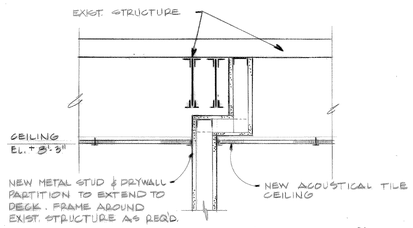
Sheet reference number: A-16

Sheet 22 of 67

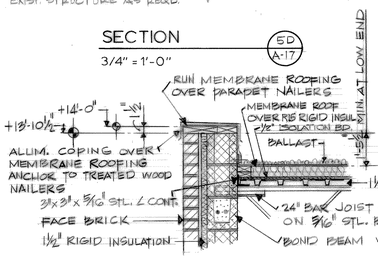
REVISED BY LOU. DIST CORPS OF ENGRS TO "AS BUILT" CONDITIONS

RECORD DRAWING-"AS BUILT" OPE-11836-22

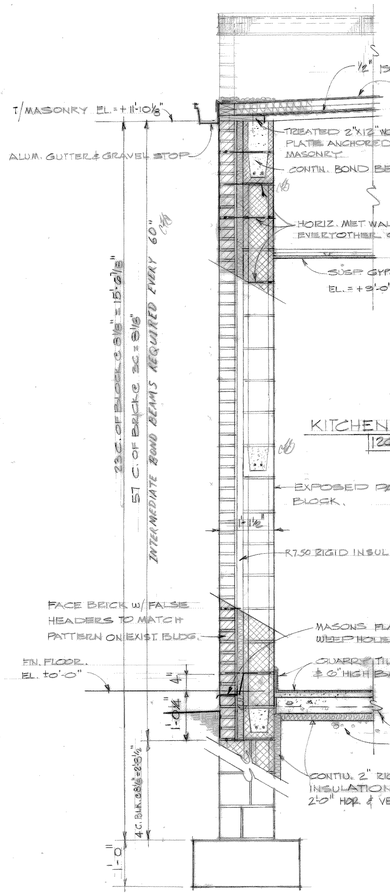
IN016-0015 11/6/23



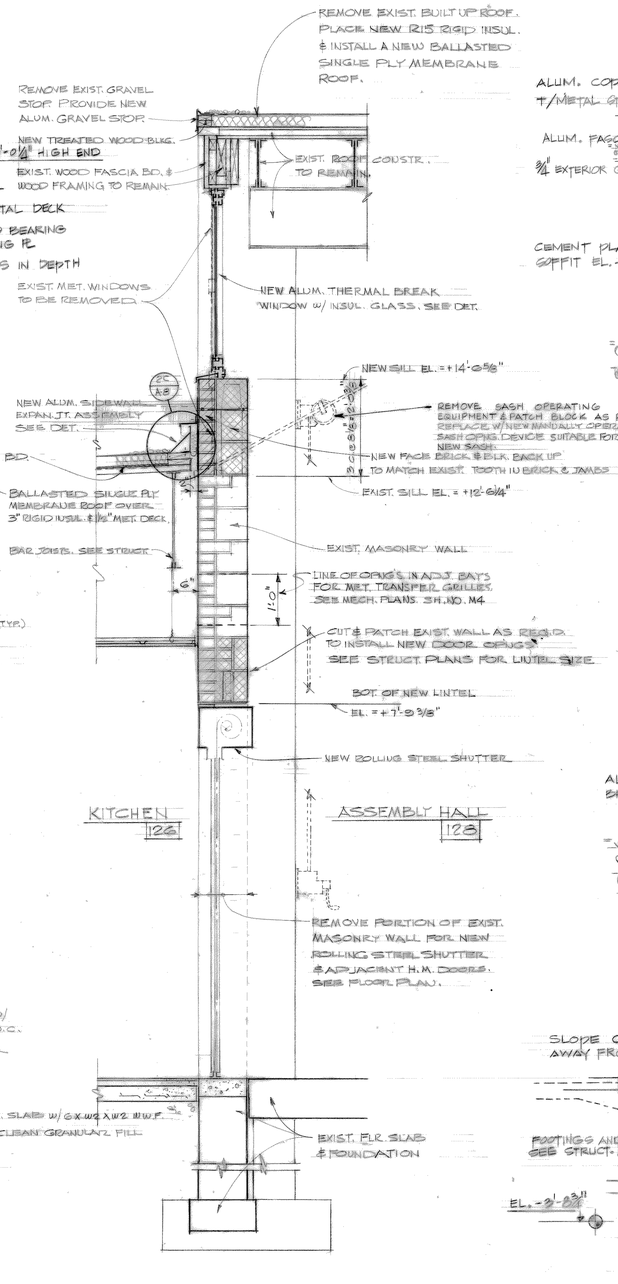
SECTION 5D A-17
3/4" = 1'-0"



SECTION 5C A-17
3/4" = 1'-0"

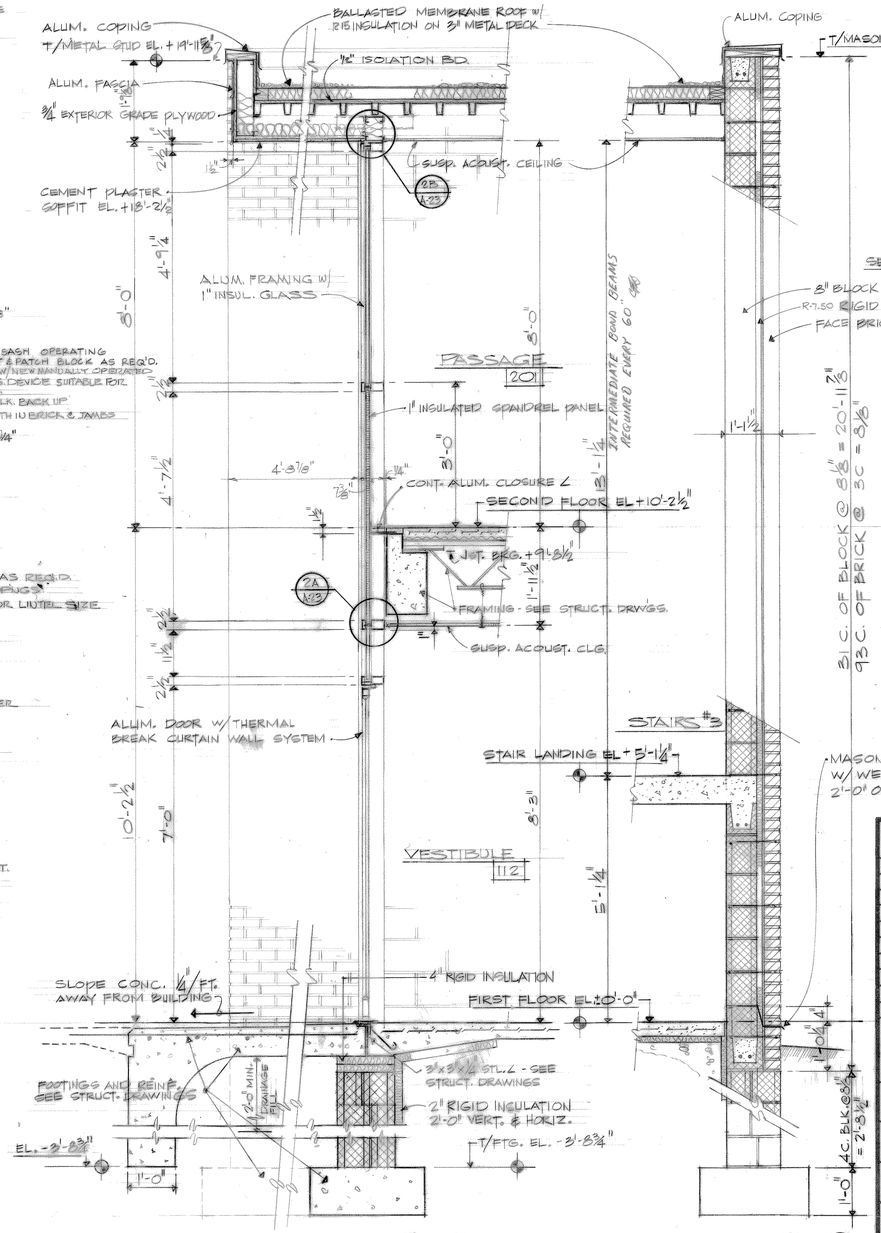


SECTION 5A A5 / 5A A7
SCALE 3/4"=1'-0"

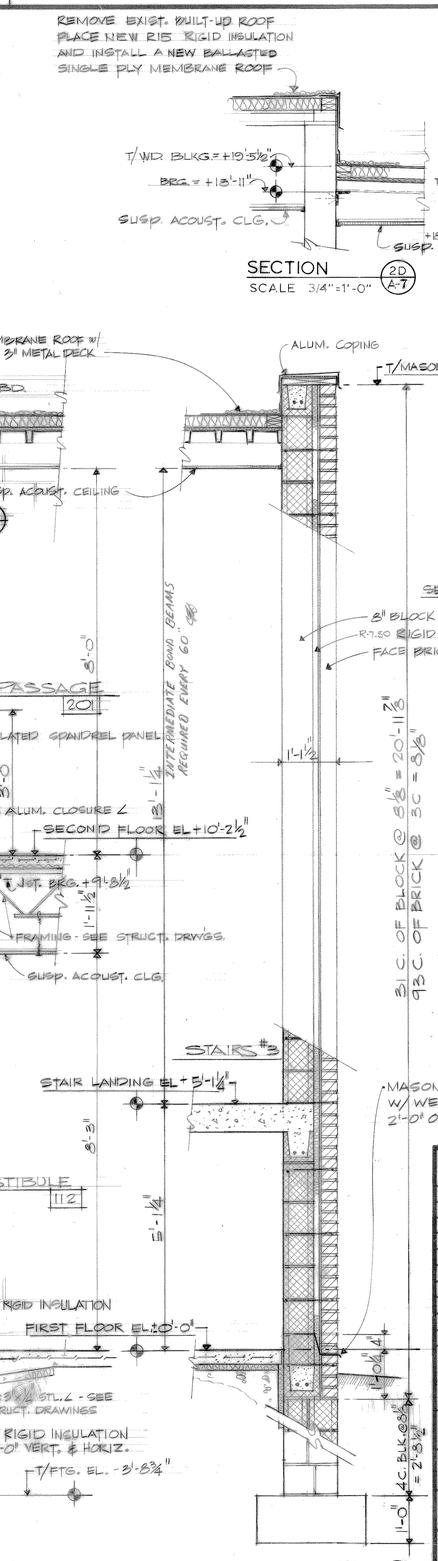


SECTION 5A A5 / 5A A7
SCALE 3/4"=1'-0"

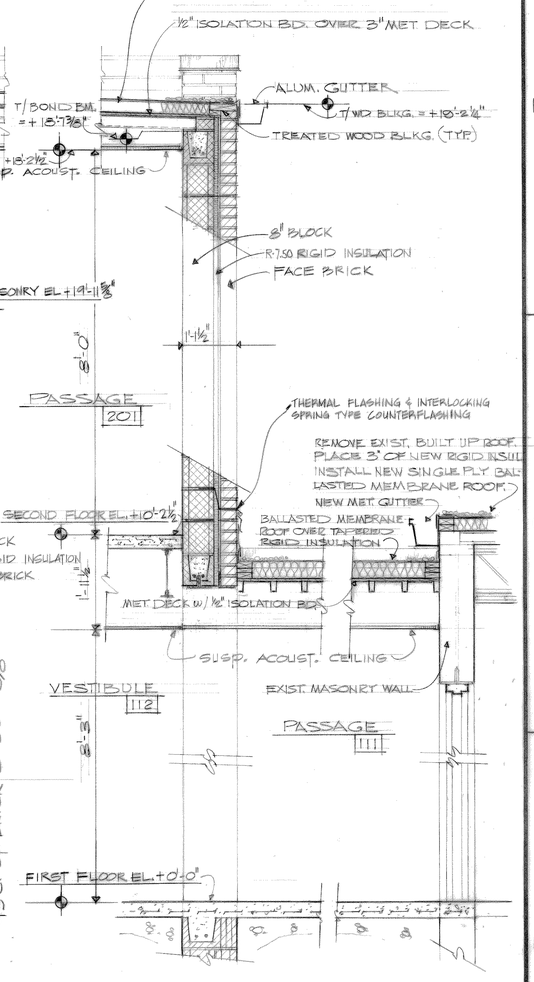
SECTION 4A A5 / 4A A7
SCALE 3/4"=1'-0"



SECTION 3A A5 / 3A A7
SCALE 3/4"=1'-0"



SECTION 2A A5 / 2A A7
SCALE 3/4"=1'-0"



SECTION 1B A5
SCALE 3/4"=1'-0"

Revisions			
Symbol	Descriptions	Date	Approved

JAMES ASSOCIATES
ARCHITECTS AND ENGINEERS
2828 EAST 45TH STREET
INDIANAPOLIS, IN 46205

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
LOUISVILLE, KENTUCKY

Designed by:
Drawn by: GS
Checked by: DH, PP
Reviewed by:
Approved by:

US Army Corps of Engineers

USAR CENTER, INDIANAPOLIS, INDIANA
EXPAND AND MODERNIZE USARC
MRD - 84 - MCAR - 5A

WALL SECTIONS

Scale: 3/4" = 1'-0"
Date: 20 JANUARY 84
Drawing Code: DEF-29-06-
Sheet reference number: A-17
Sheet 23 of 67

83011

RECORD DRAWING-"AS BUILT"

OPE-11836-23
IN016-0015 A17 of 23

29017

5 4 3 2 1

UNIT `B'

UNIT `A'

EXIST. STRUCTURE NO CEILING

EXPOSED STRUCTURE (EXISTING)

EXIST. CLG.

DRYWALL CLG. FIRE RATED

EXPOSED SLAB - PAINTED

CEMENT PLASTER SOFFIT

A

B

C

1 2 3 4 5 6 7 8

D C B A

SYMBOL LEGEND

SYMBOL	DESCRIPTION
	2' x 2' SUSPENDED ACOUSTICAL CEILING
	GYPSUM BOARD / CEMENT PLASTER CEILING
	WALL TO STRUCTURE ABOVE
	2'x 4' RECESSED FLUORESCENT FIXTURE
	1' x 4' RECESSED FLUORESCENT FIXTURE
O	RECESSED INCANDESCENT FIXTURE
⊠	EXIT LIGHT
(D_S)	SMOKE DETECTOR
(D_T)	HEAT DETECTOR
	UNIT HEATER
	EXHAUST / RETURN AIR GRILLE
	SUPPLY AIR DIFFUSER

UNIT B

UNIT A

KEY PLAN
NO SCALE
NEW CONSTRUCTION

N

FIRST LEVEL UNIT A REFLECTED CEILING PLAN

SCALE 1" = 1'-0"

12"0 5' 10' 15'

Revisions			
Symbol	Descriptions	Date	Approved

JAMES ASSOCIATES
ARCHITECTS AND ENGINEERS
2828 EAST 45TH STREET
INDIANAPOLIS, IN 46205

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
LOUISVILLE, KENTUCKY

Designed by:

Drawn by: MB, TR

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US Army Corps of Engineers

USAR CENTER, INDIANAPOLIS, INDIANA
EXPAND AND MODERNIZE USARC
MRD-84-MCAR-5A

REFLECTED CEILING PLAN

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

Date: 20 JANUARY 84

Drawing Code: DEF-29-06-

Sheet reference number: A-18

Sheet 24 of 67

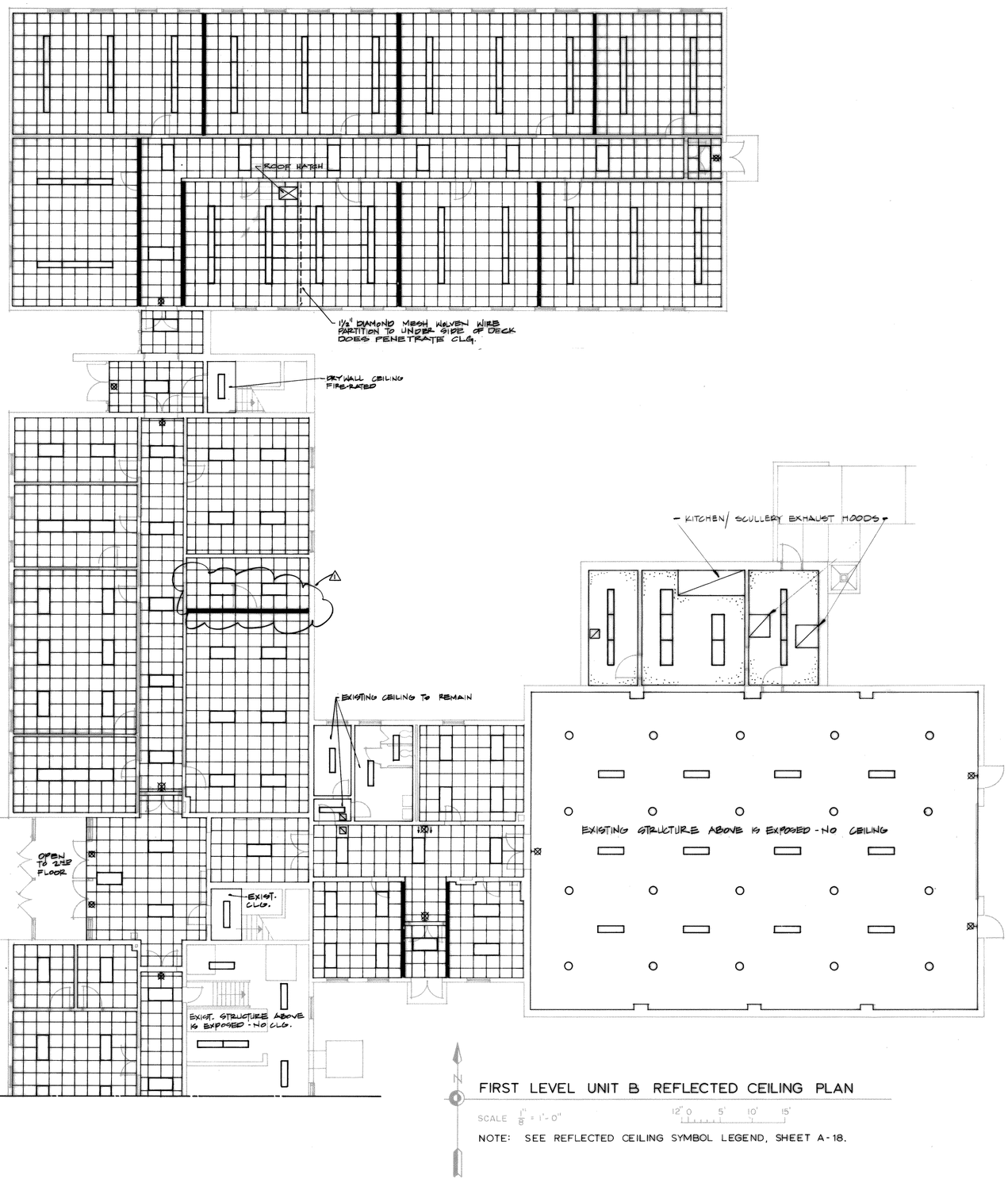
83011		
AB-2	AB-2	0
AB-3	AB-3	0
AD-1B	AD-1B	

REVISED BY LOU. DIST CORPS OF ENGRS TO "AS BUILT" CONDITIONS

RECORD DRAWING-"AS BUILT"

IN016-0015 A18of23

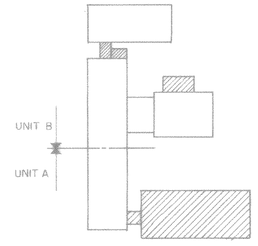
OPE-11836-24



FIRST LEVEL UNIT B REFLECTED CEILING PLAN

SCALE 1/8" = 1'-0"

NOTE: SEE REFLECTED CEILING SYMBOL LEGEND, SHEET A-18.



KEY PLAN
NO SCALE
NEW CONSTRUCTION

Revisions			
Symbol	Descriptions	Date	Approved
1	AMENDMENT NO. 1	4/19/85	

JAMES ASSOCIATES
ARCHITECTS AND ENGINEERS
2828 EAST 45TH STREET
INDIANAPOLIS, IN 46205

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
LOUISVILLE, KENTUCKY

Designed by:
Drawn by: MB, TR
Checked by: DH, PP
Reviewed by:
Approved by:

US Army Corps of Engineers

USAR CENTER, INDIANAPOLIS, INDIANA
EXPAND AND MODERNIZE USARC
MRD-84-MCAR-5A

REFLECTED CEILING PLAN

Scale: 1/8"= 1'-0"
Date:
Drawing Code: DEF-29-06-
Sheet reference number: A-19
Sheet 25 of 67

83011		
A0-19	A6-4	6
A0-5	A6-3	6
A0-19	A6-4	

REVISED BY LOU. DIST CORPS OF ENGRS TO "AS BUILT" CONDITIONS

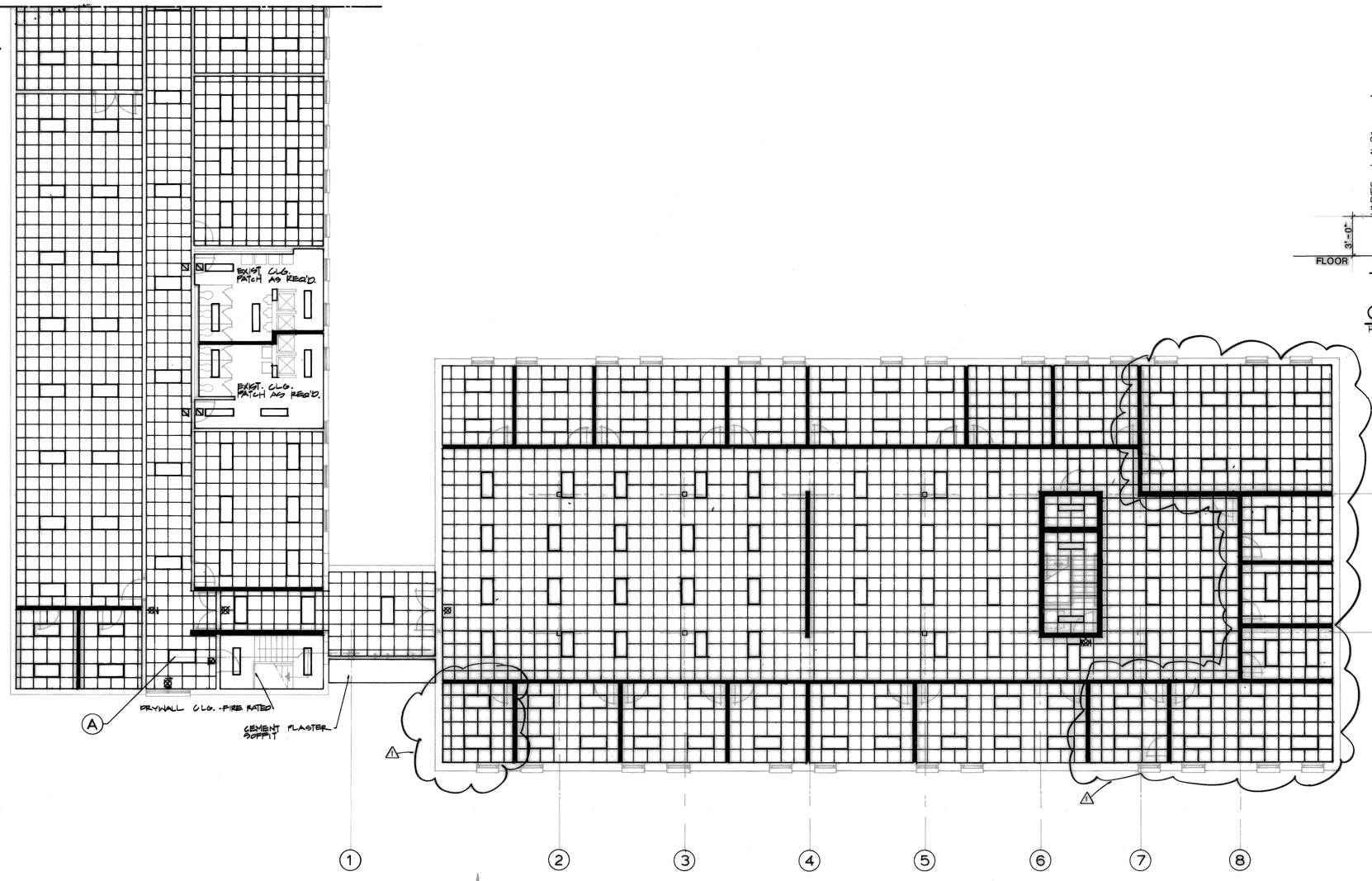
RECORD DRAWING-"AS BUILT"

IN016-0015 A19.23

OPF-11836-25

UNIT 'B'

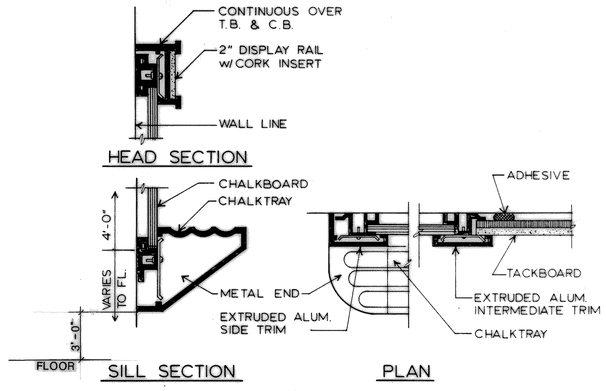
UNIT 'A'



SECOND LEVEL UNIT A REFLECTED CEILING PLAN

SCALE $\frac{1}{8}$" = 1'-0"

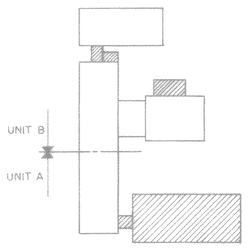
NOTE: SEE REFLECTED CEILING SYMBOL LEGEND, SHEET A-18.



CHALKBOARD & TACKBOARD DETAILS

IC A-20

HALF FULL SIZE



KEY PLAN

NO SCALE

NEW CONSTRUCTION

Revisions			
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1	AMENDMENT NO 1	4/19/85	

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ARCHITECTS AND ENGINEERS
2828 EAST 45TH STREET
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U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
LOUISVILLE, KENTUCKY

Designed by:

Drawn by: SF, TR

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US Army Corps of Engineers

USAR CENTER, INDIANAPOLIS, INDIANA
EXPAND AND MODERNIZE USARC
MRD-84-MCAR-5A

REFLECTED CEILING PLAN

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

Date:

Sheet reference number: A-20

Drawing Code: DEF-29-06-

Sheet 26 of 67

83011		
AB-6	AB-6	0
AB-7	AB-7	0
AD-20	AD-20	

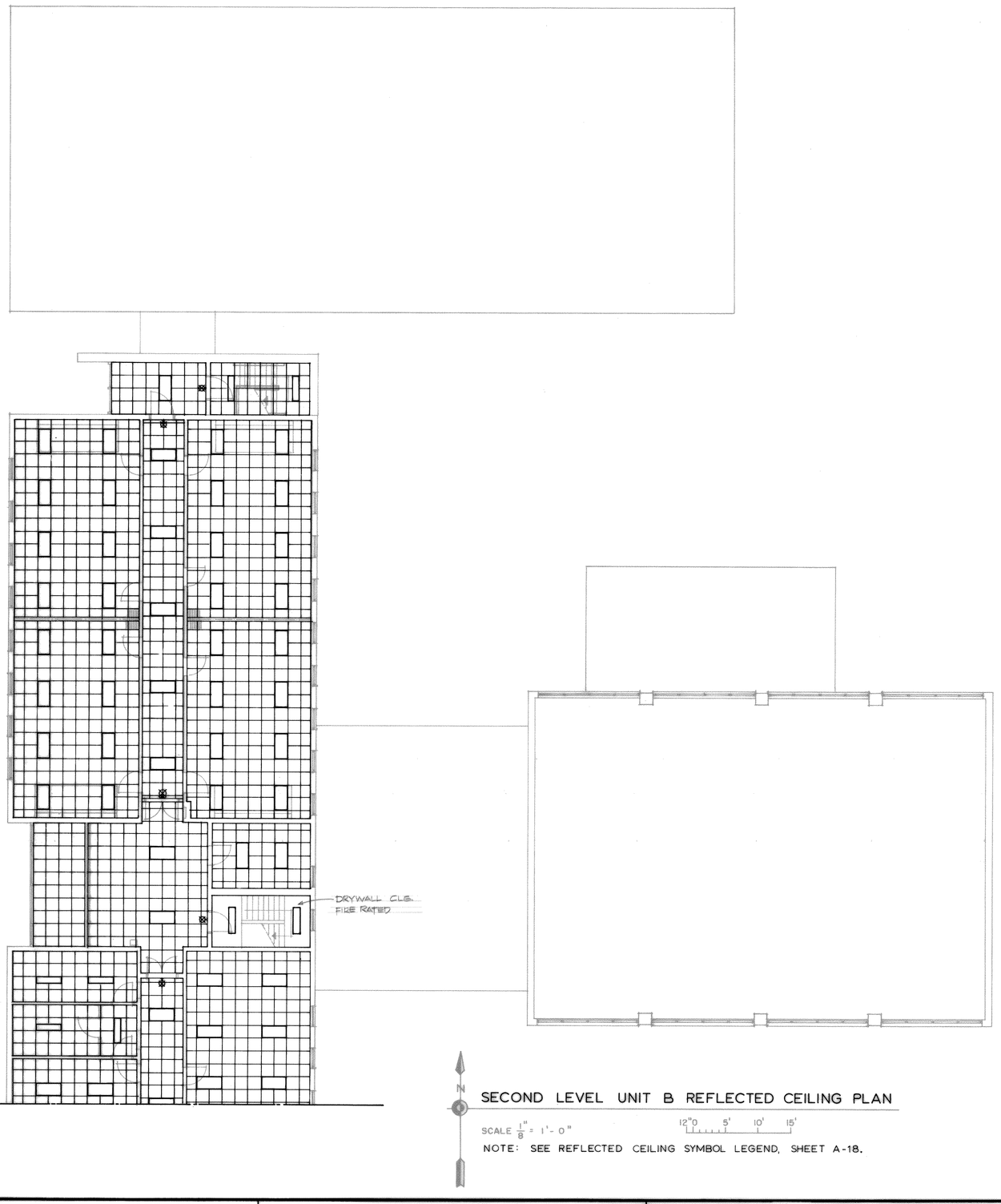
REVISED BY LOU. DIST CORPS OF ENGRS TO "AS BUILT" CONDITIONS

RECORD DRAWING-"AS BUILT"

IN016-0015 A20 of 23

OPF-11836-26

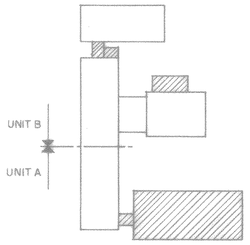
20917



SECOND LEVEL UNIT B REFLECTED CEILING PLAN

SCALE 1/8" = 1'-0"

NOTE: SEE REFLECTED CEILING SYMBOL LEGEND, SHEET A-18.



KEY PLAN
NO SCALE
NEW CONSTRUCTION

Revisions			
Symbol	Descriptions	Date	Approved

JAMES ASSOCIATES
ARCHITECTS AND ENGINEERS
2828 EAST 45TH STREET
INDIANAPOLIS, IN 46205

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
LOUISVILLE, KENTUCKY

Designed by:

Drawn by: SF, TR

Checked by: DH, PP

Reviewed by:

Approved by:

US Army Corps of Engineers

USAR CENTER, INDIANAPOLIS, INDIANA
EXPAND AND MODERNIZE USARC
MRD-84-MCAR-5A

REFLECTED CEILING PLAN

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

Date: 20 JANUARY 84

Drawing Code: DEF-29-06-

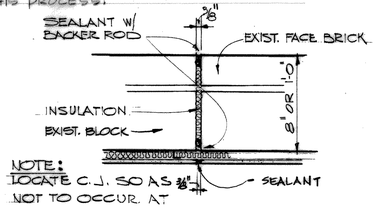
Sheet reference number: A-21

Sheet 27 of 67

83011		
A8-8	A8-8	0
A8-9	A8-9	0
A0-21	A0-21	

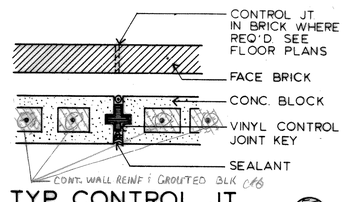
RECORD DRAWING-"AS BUILT"
OPE-11836-17
IN016-0015 A 21 of 23

NOTE: NEW CONTROL JOINTS IN EXIST. BLDG. IT WILL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO REPAIR ANY UTILITIES CUT INTO OR INTERRUPTED BY THIS PROCESS.

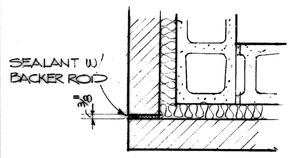


NOTE: LOCATE C.J. SO AS NOT TO OCCUR AT FLR. OR ROOF BAR JOIST BRG'S.

TYP. NEW CONTROL JT. IN EXISTING WALL (5D A-23)

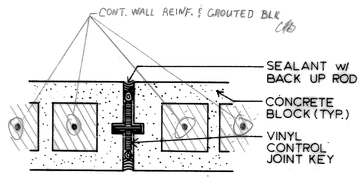


TYP. CONTROL JT. EXTERIOR WALL (5C A-23)

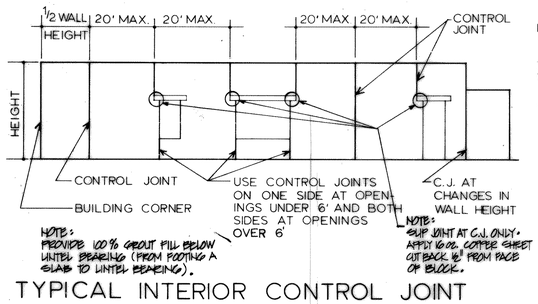


NOTE: HORZ. WALL REINFS. TO BE BROKEN AT THIS C.J.

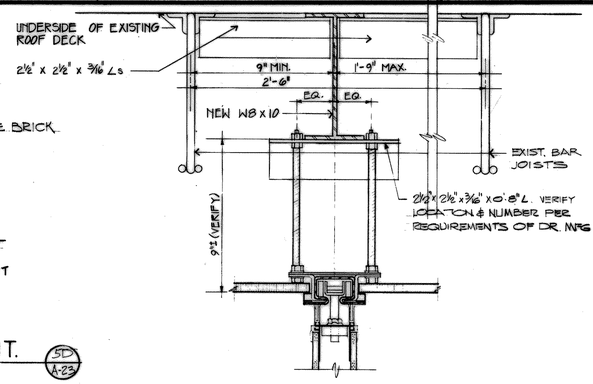
TYP. BRICK CONTROL JT. AT CORNER (5B A-23)



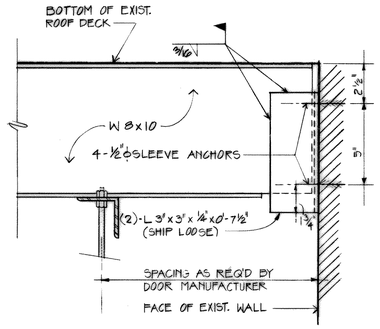
TYP. CONTROL JT. INTERIOR WALL (5B1 A-23)



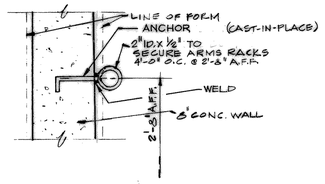
TYPICAL INTERIOR CONTROL JOINT LOCATIONS ELEVATION (5A A-23)
NO SCALE



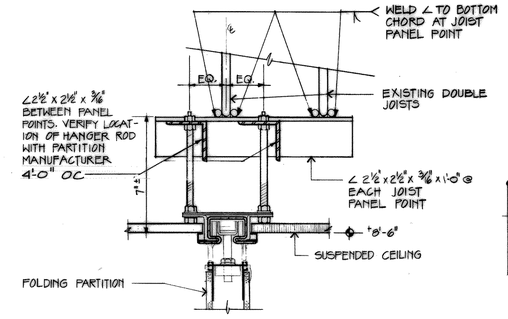
FOLDING WALL DETAIL (4D A-7)
SCALE: 3"=1'-0"



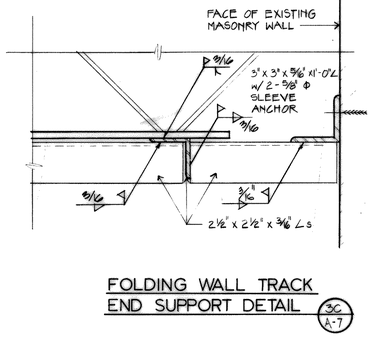
FOLDING WALL TRACK END SUPPORT DETAIL (4C A-7)
SCALE: 3"=1'-0"



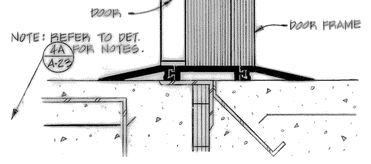
DETAIL (4B A-4)
SCALE 1½"=1'-0"



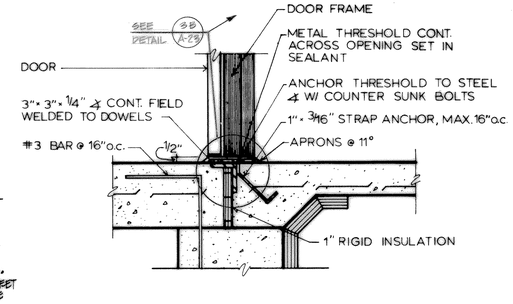
FOLDING WALL DETAIL (3D A-7)
SCALE 3"=1'-0" 0 1" 2" 3" 6



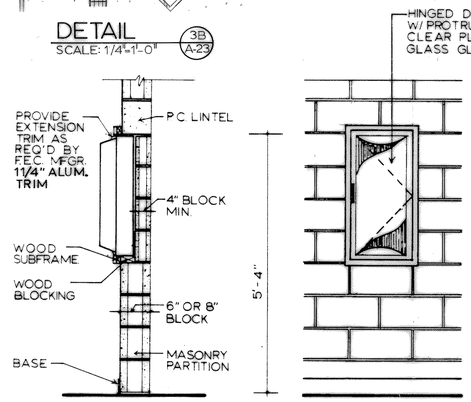
FOLDING WALL TRACK END SUPPORT DETAIL (3C A-7)



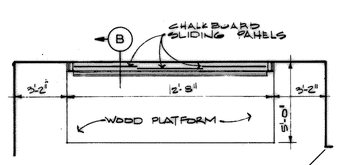
DETAIL (3B A-23)
SCALE: 1/4"=1'-0"



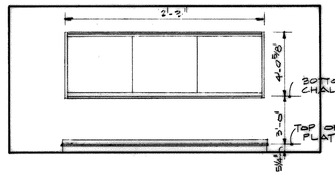
HANDICAP THRESHOLD DETAIL (4A A4) (4A A5)
SCALE: 1½" = 1'-0"



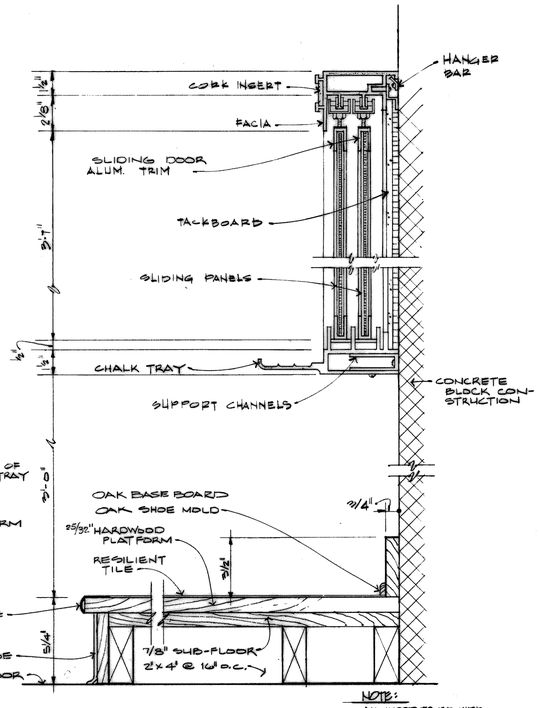
FIRE EXTINGUISHER CABINET DETAIL (3A A-23)
SCALE: 3/4" = 1'-0"



PLAN
1/4"= 1'-0"



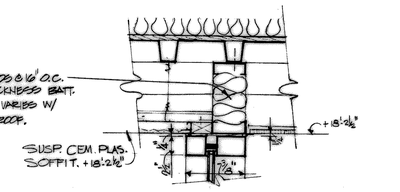
ELEVATION
1/4"= 1'-0"



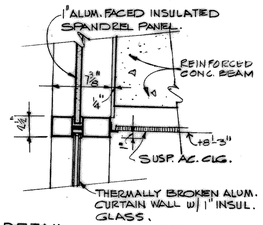
NOTE: ALL WOOD TO BE FIRE RETARDED TREATED

SECTION (B)
3"= 1'-0"

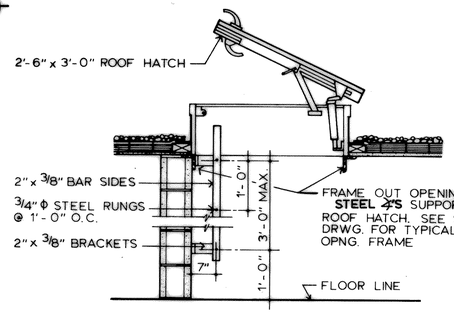
MAP BOARD DETAILS (2C A-7)
AS NOTED



DETAIL
SCALE: 1 1/2" = 1'-0" (2B A-17)



DETAIL
SCALE: 1 1/2" = 1'-0" (2A A-17)



ROOF HATCH & LADDER DETAIL (1B A-9)
SCALE: 3" = 1'-0"

Revisions			
Symbol	Descriptions	Date	Approved

JAMES ASSOCIATES
ARCHITECTS AND ENGINEERS
2828 EAST 45TH STREET
INDIANAPOLIS, IN 46205

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
LOUISVILLE, KENTUCKY

Designed by:
Drawn by: TR, SF, GS
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Approved by:

US Army Corps of Engineers

USAR CENTER, INDIANAPOLIS, INDIANA
EXPAND AND MODERNIZE USARC
MRD - 84 - MCAR - 5A

DETAILS

Scale: AS NOTED
Date: 20 JANUARY 84
Drawing Code: DEF-29-06-
Sheet reference number: A-23
Sheet 29 of 67

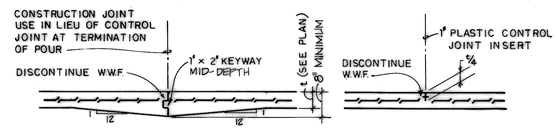
83011

REVISED BY LOU. DIST CORPS OF ENGRS TO "AS BUILT" CONDITIONS

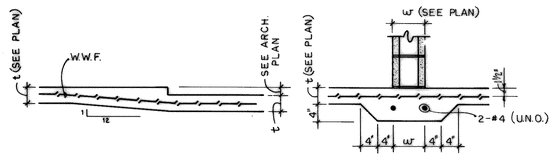
RECORD DRAWING-"AS BUILT"

IN016-0015 A23of23

DPC-11836-29

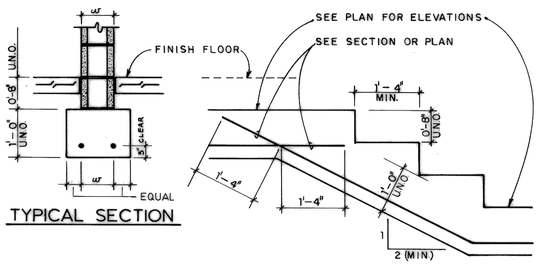


CONSTRUCTION JOINT CONTROL JOINT



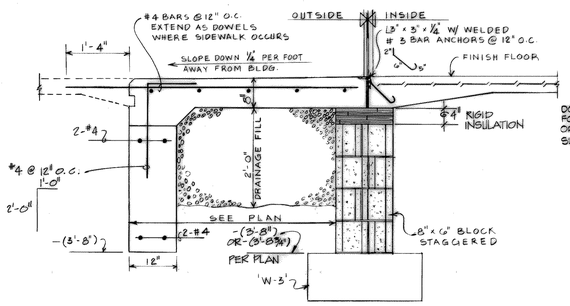
SLAB AT DEPRESSION THICKENED SLAB

TYPICAL SLAB ON GRADE DETAILS

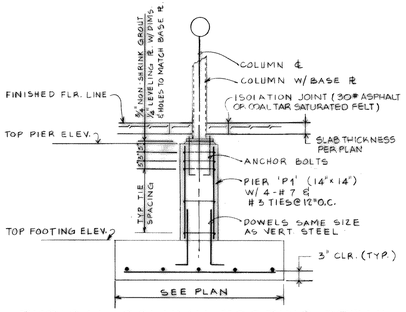


TYPICAL SECTION FOOTING STEPS

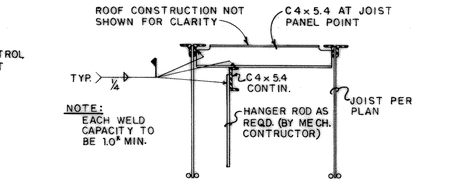
WALL FOOTING DETAILS



SECTION
SCALE: 3/4"=1'-0" (5B S-2) (5B S-5)

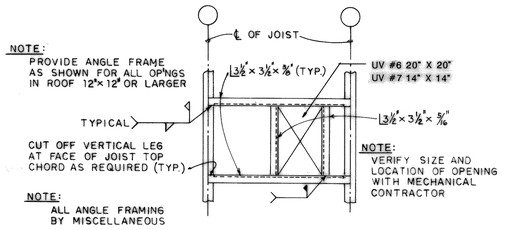


TYPICAL COLUMN FOOTING DETAIL
SCALE: 1/2"=1'-0"



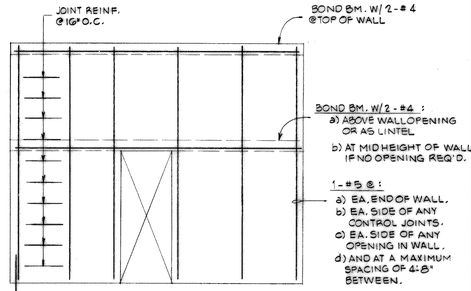
TYPICAL DETAIL FOR HANGING MECHANICAL UNIT OR OTHER LOAD

(UNLESS NOTED OTHERWISE)

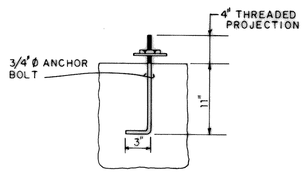


TYPICAL ROOF OPENING FRAME

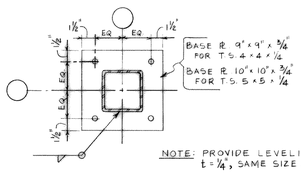
(UNLESS NOTED OTHERWISE)



TYPICAL INTERIOR - NONSTRUCTURAL MASONRY WALL REINFORCEMENT



ANCHOR BOLT DETAIL



NOTE: PROVIDE LEVELING PLATE, t = 1/4", SAME SIZE AS BASE PLATE.

TYPICAL BASE PLATE DETAIL

NOT IN SCALE

LINTEL SCHEDULE NOTES

1. All masonry bearing steel lintels shall be anchored with 2-3/4" Ø x 1'-0" + 0'-4" hooked A. bolts at each end into grout. Provide slotted holes in lintel.
2. Provide 100% grout fill (or concrete) below lintel bearing (from footing to lintel bearing).
3. All lintels located at center line of wall, unless shown otherwise.
4. For all openings and recesses in both interior and exterior walls not shown on stuctural plans and architectural sections, provide the following lintels:
   a. Brick - for spans to 7'-0", 4" x 3-1/2" x 5/16"; spans 7'-0" to 10'-0", 5" X 3-1/2" X 3/8". These angles are for each 4" thickness of wall.
      1. Angle lintels shall have a minimum end bearing on masonry of 4", but not less than one inch of such bearing for each foot of opening width.
      2. Angles in pairs shall be welded or bolted together with 1/2" diameter bolts, 1'-6", o.c.
   b. Concrete Block:
      1. Lintel block - use where blocks are exposed in a finished room. Fill with concrete (not mortar) and grout exposed joints, same as adjacent wall. All lintel block to be 8" high unless otherwise noted. Minimum bearing on masonry 8".
      2. For openings not exposed to view, provide precast concrete lintels with an 8" minimum bearing, capable of carrying 100 p.l.f. per inch width of lintel unless noted otherwise.

LINTEL SCHEDULE (OTHER THAN STANDARD)

MK	LINTEL SIZE	BOTT. ℄	ELEVATION T/BM.	ELEVATION B/℄ L.BM.	BRG.	REMARKS
AL-1 BL-2	2-L3 1/2 x 3 1/2 x 5/16 W/BOND BEAM 1-L3 1/2 x 3 1/2 x 5/16			+(7'-0") +(7'-0")	4" BRG. 6" BRG.	BLOCK WALL ⌊L L SEE SEC. 5A/A-16 BRICK VENEER
AL-2	BOND BEAM 1-L3 1/2 x 3 1/2 x 5/16			+(17'-8")	6" BRG.	BLOCK WALL SEE SEC. 5A/A-16 BRICK VENEER
AL-3	W8 X 35 1-L7 x 4 x 3/8 W/ BAR 1" x 2"			+(8'-4") +(8'-1 3/8")	℄ 5/8 x 7 1/2 x 1'-2 1/2" BRG.	BLOCK WALL SEE SEC. 5A/S-2 BRICK VENEER
AL-4	2-L5 x 3 1/2 x 5/16 W/BOND BEAM 1-L4 x 3 1/2 x 5/16			+(7'-0") +(7'-0")	8" BRG. 8" BRG.	BLOCK WALL SEE SEC. 4A/S-3 BRICK VENEER
AL-5	W8 X 18				℄ 1/2 x 5 1/2 x 0'-7	SEE SEC. 2A/S-6
AL-6	SEE AL-4			+(17'-8 1/2")	8" BRG.	SEE SEC. 1C/S-6
AL-7	W8 X 18 W/ T/℄ 5'-10"				℄ 1/2 x 5 1/2 x 0'-7	SEE SEC. 2B/S-6
AL-8 BL-8	W8 X 24	℄ 5/16 x 11 x CONT.		+(7'-9 7/8")	℄ 3/8 x 6 1/2 x 0'-7	TERMINATE BOTTOM ℄ AT FACE OF OPENING
AL-9 BL-9	3-L3 1/2 x 3 1/2 x 5/16			+(7'-0")	6" BRG.	⌊L L
AL-10	2-L5 x 3 1/2 x 5/16				6" BRG.	⌊L L ALSO FOR DOORS 175, 190, 202, 204, 207, 173
AL-11	2-L5 x 3 1/2 x 5/16 1-L4 x 3 1/2 x 5/16				8" BRG 8" BRG.	BLOCK WALL } MECH. BRICK VENEER } LOUVER
BL-12	3-L 8 1/2 x 3 1/2 x 5/16				6" BRG	⌊L L FOR MECH VENTS SEE ARCH. ELEVATIONS FOR LOCATION OF VENTS (UNITS AE6)
BL-13 BL-13A	2-L3 1/2 x 3 1/2 x 5/16 2-L3 1/2 x 3 1/2 x 5/16			+(7'-1 5/8") +(17'-3 1/8")	6" BRG.	⌊L L
BL-14	2-L5 x 3 1/2 x 5/16			+(9'-1 5/8")	8" BRG.	⌊L L
BL-15	2-L3 1/2 x 3 1/2 x 5/16					⌊L L

COLUMN FOOTING SCHEDULE

MARK	SIZE LENGTH x WIDTH x DEPTH	REINFORCEMENT (1/2 EACHWAY @ BOTT.)	REMARKS
A	2'-9" x 2'-9" x 1'-3"	PLAIN	
B	4'-0" x 4'-0" x 1'-0"	8 - #4	
C	4'-9" x 4'-9" x 1'-3"	8 - #4	
D	5'-3" x 5'-3" x 1'-3"	10 - #4	

WALL FOOTING SCHEDULE

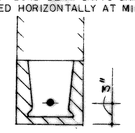
MARK	SIZE WIDTH x DEPTH	REINFORCEMENT AT BOTTOM (U.N.)	REMARKS
W-1	1'-4" x 1'-0"	2 - #5	
W-2	2'-0" x 1'-0"	2 - #5	
W-3	2'-4" x 1'-0"	3 - #5	
W-4	2'-8" x 1'-0"	3 - #5	
W-5	4'-0" x 1'-0"	4 - #5	

CONC. BLOCK LINTELS

(LIGHTWEIGHT BLOCK) NON-BEARING WALLS

WALL THICK.	LINTEL BLOCK HEIGHT	REINF.	MAX. CLEAR SPAN FT.	IN.
4	8	1-#4	5	0
		1-#6	6	0
6	8	1-#4	4	8
		2-#5	6	0
8	8	2-#4	5	0
		2-#7	6	4
10	8	2-#5	5	4
		2-#8	6	4
12	8	2-#5	5	0
		2-#8	6	0
6	16*	1-#4	8	4
		2-#5	10	8
8	16*	2-#4	9	4
		2-#7	11	4
10	16*	2-#5	9	8
		2-#8	11	8
12	16*	2-#5	9	4
		2-#8	11	4

*16" DEEP BOND BEAM UNITS SHALL BE SCORED HORIZONTALLY AT MID-DEPTH



SEE SHEET S-9 FOR GENERAL NOTES
SEE SHEET S-8 FOR ADDITIONAL TYPICAL DETAILS

Revisions			
Symbol	Descriptions	Date	Approved

JAMES ASSOCIATES
ARCHITECTS AND ENGINEERS
2828 EAST 45TH STREET
INDIANAPOLIS, IN 46205

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
LOUISVILLE, KENTUCKY

Designed by: NB
Drawn by: FG
Checked by: KP, NB
Reviewed by:
Approved by:

US Army Corps of Engineers

USAR CENTER, INDIANAPOLIS, INDIANA
EXPAND AND MODERNIZE USARC
MRD-84-MCAR-5A

TYPICAL DETAILS

Scale: AS NOTED
Date: 20 JANUARY 84
Drawing Code: DEF-29-06-
Sheet reference number: S-1
Sheet 30 of 67

88011
90-1
90-1

REVISED BY LOU. DIST CORPS OF ENGRS TO "AS BUILT" CONDITIONS

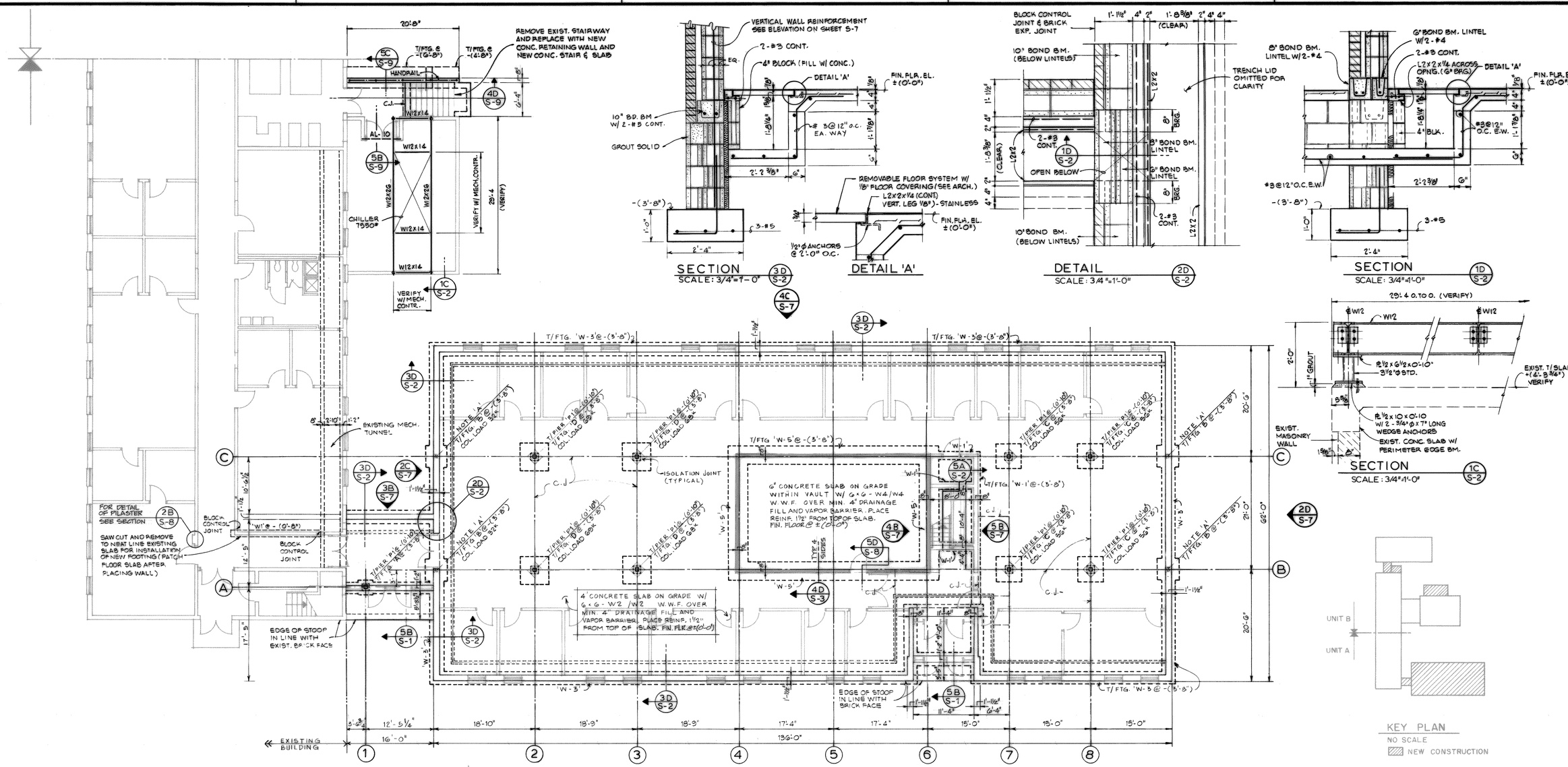
RECORD DRAWING-"AS BUILT"

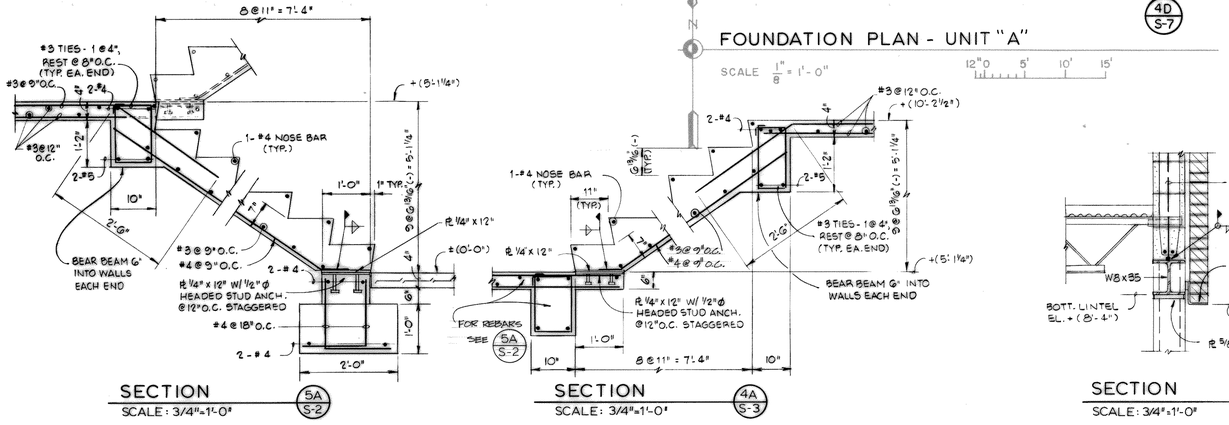
IN016-0015.51 of 9

OPF-11836-30

5 4 3 2 1

D C B A





N

FOUNDATION PLAN - UNIT "A"

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

4D S-7

NOTE 'A': FILL CORES WITH GROUT FROM FOOTING TO ROOF BEAMS.

Revisions			
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INDIANAPOLIS, IN 46205

U.S. ARMY ENGINEER DISTRICT
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US Army Corps of Engineers

USAR CENTER, INDIANAPOLIS, INDIANA
EXPAND AND MODERNIZE USARC
MRD-84-MCAR-5A

FOUNDATION PLAN UNIT "A"

Scale: AS NOTED
Date: 20 JANUARY 84
Drawing Code: DEF-29-06-
Sheet reference number: S-2
Sheet 31 of 67

83011

A-B2	AB-2	0	
A-B3	AB-3	0	
S0-2	S0-2		

INV016-0015 S2of9

RECORD DRAWING-"AS BUILT"

OPF-11836-31

5 4 3 2 1

D C B A

CONTRUCTION JOINT

4'-0"

#4 @ 18" o.c.

#4@18" o.c. (LAP 1'-8")

3/4" CLR.

2-#8

#4@ 9" o.c.

#4@ 12" o.c.

3/4" CLR.

1½" CLR.

1½" CLR.

8"

NOTE: SEE ARCHITECTURAL DRAWGS. FOR REQUIRED EYE BOLTS TO BE INSTALLED

#4 DOWELS SAME SPACE AS VERTICAL LAP 20"

#4@ 9" o.c. EACH FACE, EACH WAY (STAGGERED EACH DIRECTION)

½" PREFORMED JOINT MATERIAL (TYP. BETWEEN SLAB & WALL)

6x6 - W4/W4 W.W.F.

±(10'-0")

6'-(3'-8")

2-#8

4-#5

4'-0"

6x6 - W2 / W2 W.W.F.

SECTION
SCALE: 3/4"=1'-0" 4D S-3

FIN. FLR. @ +(10'-2½")

COLUMN PER PLAN

PL ¾"x 6"x 0'-10" W/ 2-¾"ø x 1'-3" A.B.

FIN. FLR. @ +(10'-2½")

¾" NON-SHRINK GROUT & ¼" LEVELING PL

3 TIES

3-#4

12"

8"

8"

4'-0"

SECTION

PLAN

DETAIL
SCALE: 3/4"=1'-0" 3D S-3

6x6 - W3.5/W3.5 W.W.F.

#3@18" o.c.

FIN. FLR @+(10'-2½")

3½" SLAB ON METAL FORM (28GA., 9/16" DEPTH @ 2½" PITCH) GALV.

2-#6 CONT.

PL ½"x 6" x 0'-8" W/ 2-¾"ø x 4" LONG HEADED STUD ANCHORS

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

FIN. FLR @ +(10'-2½")

+(10'-4")

2-#6 CONT.

+(9'-0")

FOR BALANCE OF NOTES SEE SECTION 2D/S-3

SECTION
SCALE: 3/4"=1'-0" 1D S-3

A

3"

BLOCK OUT 1"X 3" FOR CLOSURE L SETTING BED

CONT. L 2½"g x 2½"g x ¼" (CLIP L TO COL.)

C10 PL ½" x 10" x 0'-11" W/ 4 - ¾" ø BOLTS

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

FIN. FLR @ +(10'-2½")

+(10'-4")

2-#6 CONT.

+(9'-8½")

W12 PER PLAN

MASONRY BRG. PLATE PER PLAN

FILL CORES W/ GROUT TO FOUNDATION

SECTION
SCALE: 3/4"=1'-0" 1C S-3

AL-10 OVER DOOR NO. 110

AL-10 OVER DOOR NO. 116

MASONRY BRG PL 10" x ⅞ x 0'-7"

TYP 5A S-3

14 H 4 (TWO ROWS OF BRIDGING)

W12 x 45 +(9'-8½")

13 SPA @ 2'-8" = 34'-8"

MECH. UNIT 300#

14 H 5 (THREE ROWS OF BRIDGING)

W12 x 26

19K W12 x 30

12 SPA @ 2'-6" = 30'-0"

MASONRY BRG. PL 8" x ¾" x 0'-7"

TYP 1C S-3

TYP 2A S-3

SPECIAL 'X' BRIDGING THIS SPACE ONLY (NO WALL ANCH.)

W10 TOP CHORD EXTD. SOUTH END

10H2

PLATE READY

2" EXP. JOINT (OPEN)

EXIST. RIFLE RANGE SAND PIT - SAND TO BE REMOVED AND PIT COVERED.

20'-0"

21'-0"

62'-0"

6" 5@2'-8" = 13'-4" 1'-10" 6SPA@2'-7⅛" = 15'-9" 2'-7⅛" 26 SPA. @ 2'-8" = 69'-4" 6 @ 2'-4" = 14'-0" 12 SPA @ 2'-6" = 30'-0" 2'-0½" 1'-1½" JOIST SPACING

3'-6¾" 12'-5¼" 16'-0" 18'-10" 18'-9" 18'-9" 17'-4" 17'-4" 15'-0" 15'-0" 15'-0" 136'-0"

EXISTING BUILDING

1 2 3 4 5 6 7 8

UNIT B

UNIT A

KEY PLAN
NO SCALE
NEW CONSTRUCTION

WB = WALL BRACKET (SEE TYP. DETAILS, SHT. S-8) NOT REQD.

N

FLOOR FRAMING PLAN - UNIT "A"
SCALE 1/8" = 1'-0"

COLUMN PER PLAN

FIN. FLR. EL. +(10'-2½")

PL ¾" x G½ x 0'-10"

W12

PL ½" STIFF. N.S. & F.S.

1'-7½"

PL ¾ x 10 x 0'-10"

½"ø GRT. (W12 x 45)
¾"ø GRT. (W12 x 26)

#3 TIES

3 - #4

8" 8"

2-¾"ø x 1'-3" ANCHOR BOLT

4'-0"

SECTION

PLAN

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

+(10'-2½")

2-#6 CONT.

DOWELS #6

1-#5 VERT. @ BRG. SEE WALL ELEVS. ON SHT. S-7

+(7'-0")

L 4 x 3½ x 5/16 (L.L.V.)

SPLIT 8" BOND BEAM FOR 2-L 5 x 3½ x 5/16 (L.L.V.) W/ 2-¾"ø A.B. EA. END (PROVIDE 8" BRG.)

SECTION
SCALE: 3/4"=1'-0" 4A S-3

4"x16 GA. METAL 'C' STUDS AS STIFFENERS (TYP. EA. END)

12'-4"±

NEW 2½" CONC. SLAB ON 9/16 x 28 GA. METAL FORM W/6x6 - W2.0 x W2.0 W.W.F.

8"x16GA. 'C' JOIST @ 16" O.C.

16 GA. TRACK W/ ½"ø x 3" LONG SLEEVE ANCHORS @ 32" O.C.

FIN. FLR. EL. +(10'-2½")

EXIST. CONC. BM.

L 4 x 4 x 3/8 CONT. W/ 5/8"ø x 7" LONG WEDGE ANCHORS @ 16" O.C.

16 GA. TRACK T.E.B.

4"x16GA. METAL 'C' STUD @ 16" O.C. (IN ALIGNMENT W/ JOIST)

11'-4"

7"

SECTION
SCALE: 3/4"=1'-0" 3A S-3

+(9'-8½")

2" 2"

BM. PER PLAN (TYP.)

THRU ½"ø x 9"

COL. PER PLAN

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

Revisions			
Symbol	Descriptions	Date	Approved
1	AMENDMENT #1 - REVISE ARCHITECTURAL SCREENED BASE	19 APR 85	

JAMES ASSOCIATES
ARCHITECTS AND ENGINEERS
2828 EAST 45TH STREET
INDIANAPOLIS, IN 46205

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
LOUISVILLE, KENTUCKY

Designed by: NB
Drawn by: F G
Checked by: K P, N B
Reviewed by:
Approved by:

US Army Corps of Engineers

USAR CENTER, INDIANAPOLIS, INDIANA
EXPAND AND MODERNIZE USARC
MRD-84-MCAR-5A

FLOOR FRAMING PLAN UNIT "A"

Scale: AS NOTED
Date: 20 JANUARY 84
Drawing Code: DEF-29-06-
Sheet reference number: S-3
Sheet 32 of 67

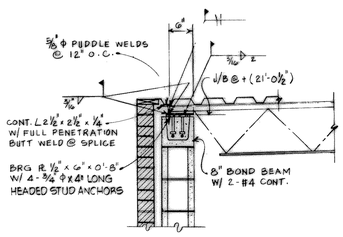
83011			
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REVISED BY LOU. DIST CORPS OF ENGRS TO "AS BUILT" CONDITIONS

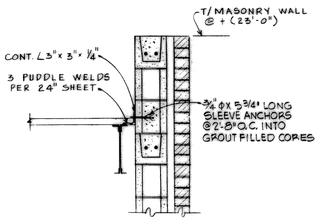
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IN016-0015 S3869

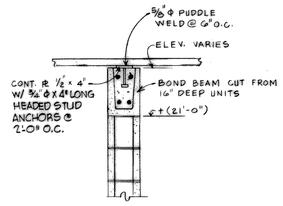
OPF-11836-32



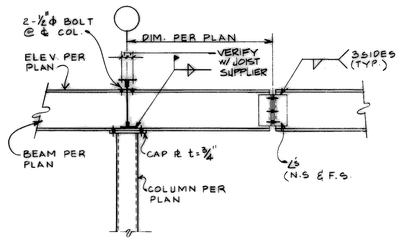
SECTION 4D S-4
SCALE: 3/4"=1'-0"



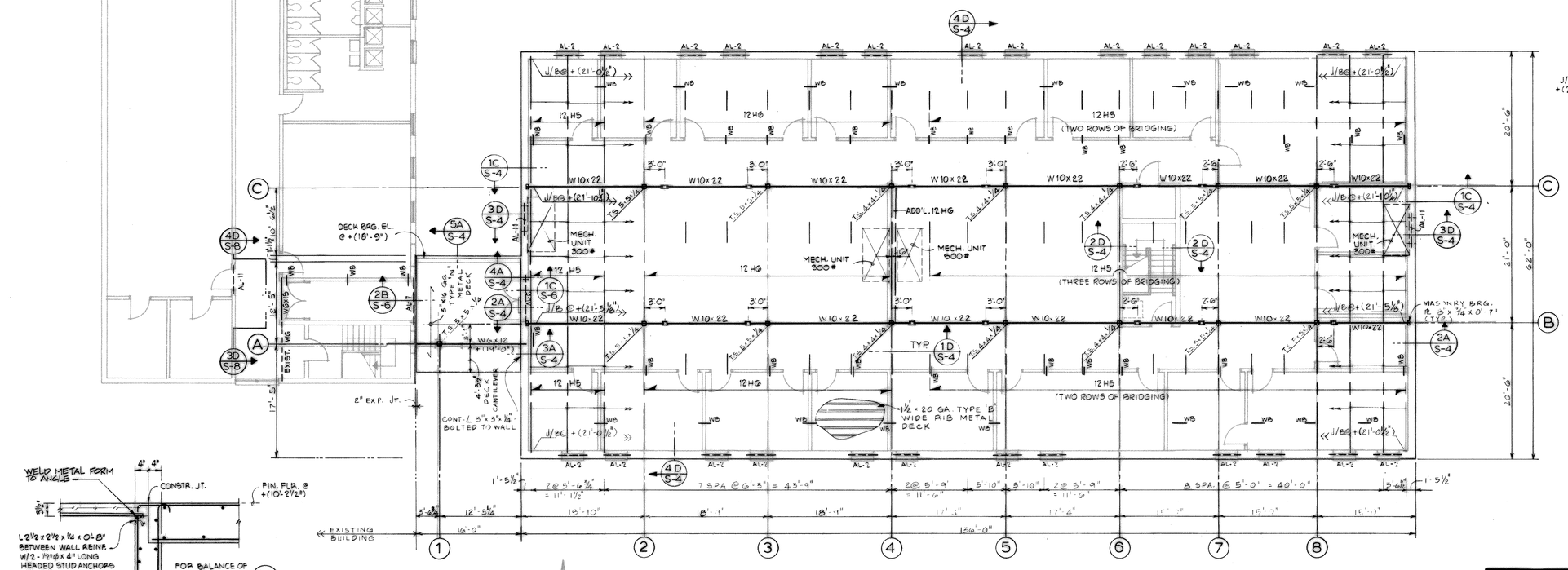
SECTION 3D S-4
SCALE: 3/4"=1'-0"



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



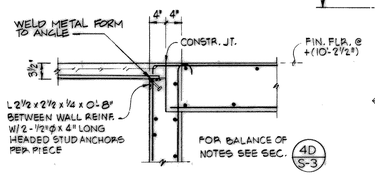
SECTION 1D S-4
SCALE: 3/4"=1'-0"



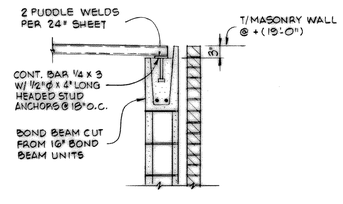
ROOF FRAMING PLAN - UNIT "A"
SCALE ⅛" = 1'-0"

WB = WALL BRACKET (SEE TYP DETAILS, SHT. S-8) NOT REQD.

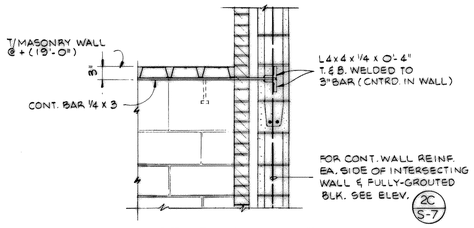
SEE SHT. S-8 FOR DECK WELDING SCHEDULE



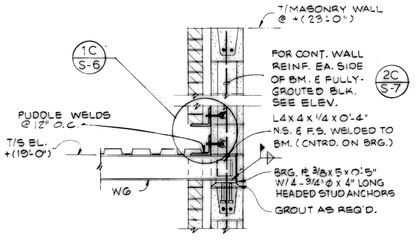
SECTION 5B S-3
SCALE: 3/4"=1'-0"



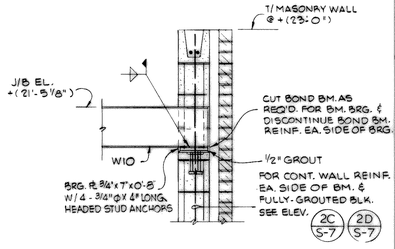
SECTION 5A S-4
SCALE: 3/4"=1'-0"



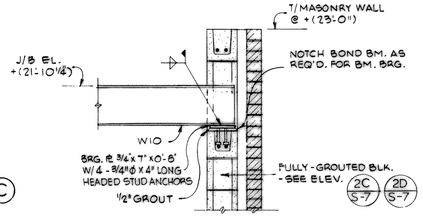
SECTION 4A S-4
SCALE: 3/4"=1'-0"



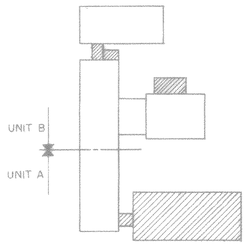
SECTION 3A S-4
SCALE: 3/4"=1'-0"



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



SECTION 1C S-4
SCALE: 3/4"=1'-0"



KEY PLAN
NO SCALE
NEW CONSTRUCTION

Revisions			
Symbol	Descriptions	Date	Approved
1	AMENDMENT #1 - REVISE ARCHITECTURAL SCREENED BASE	19 APR 85	

JAMES ASSOCIATES
ARCHITECTS AND ENGINEERS
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USAR CENTER, INDIANAPOLIS, INDIANA
EXPAND AND MODERNIZE USARC
MRD - 84 - MCAR - 5A

ROOF FRAMING PLAN UNIT "A"

Scale: AS NOTED
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Drawing Code: DEF-29-06-
Sheet reference number: S-4
Sheet 33 of 67

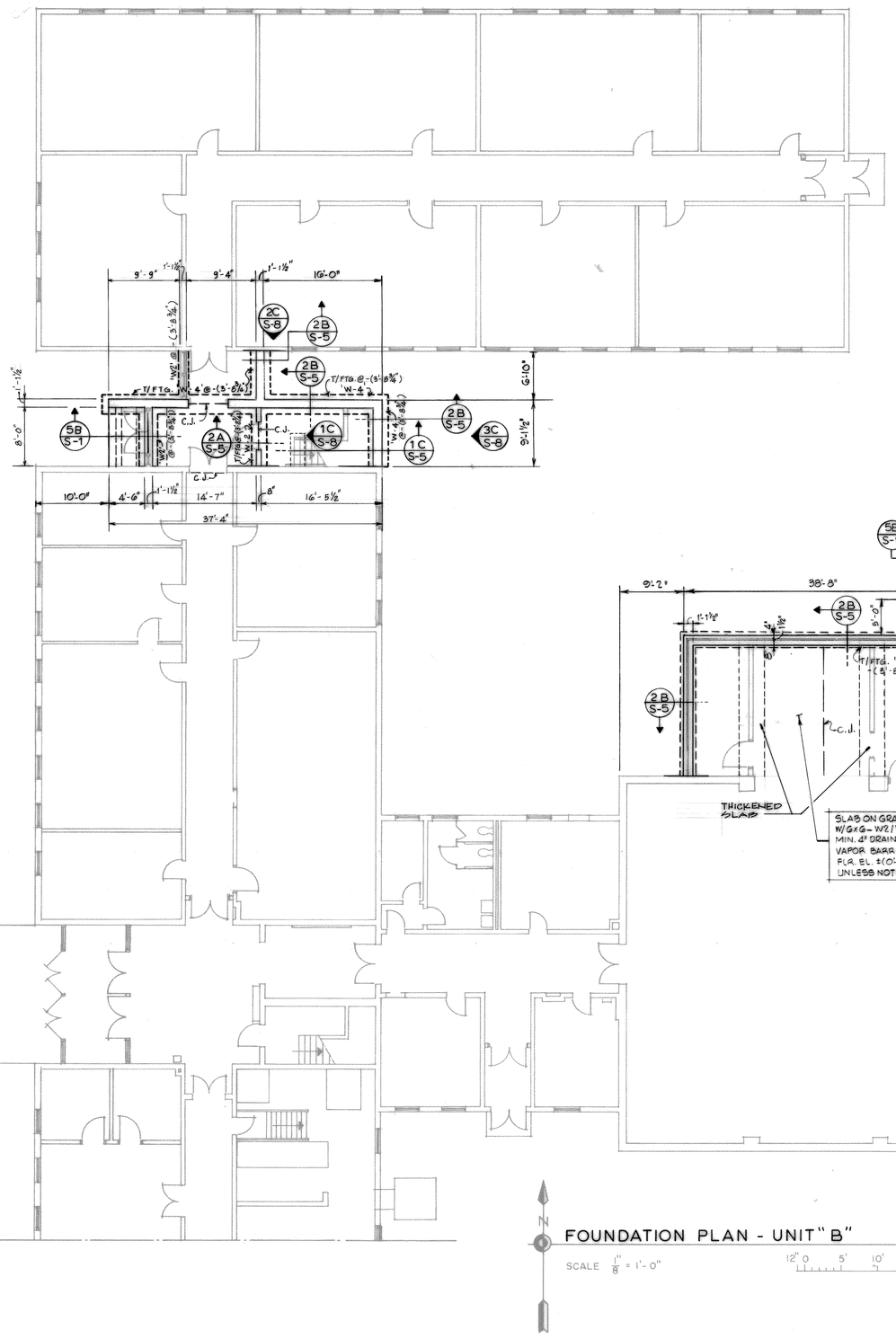
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S0-4	S0-4	

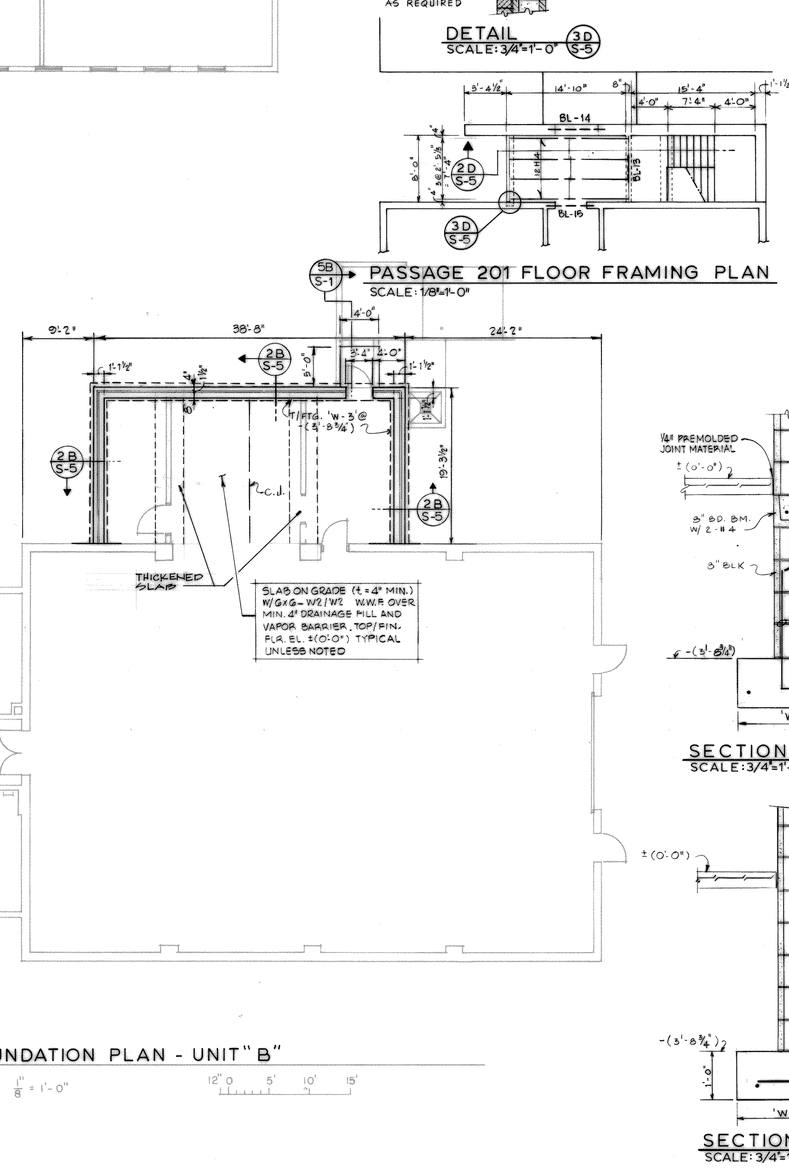
REVISED BY LOU. DIST CORPS OF ENGRS TO "AS BUILT" CONDITIONS

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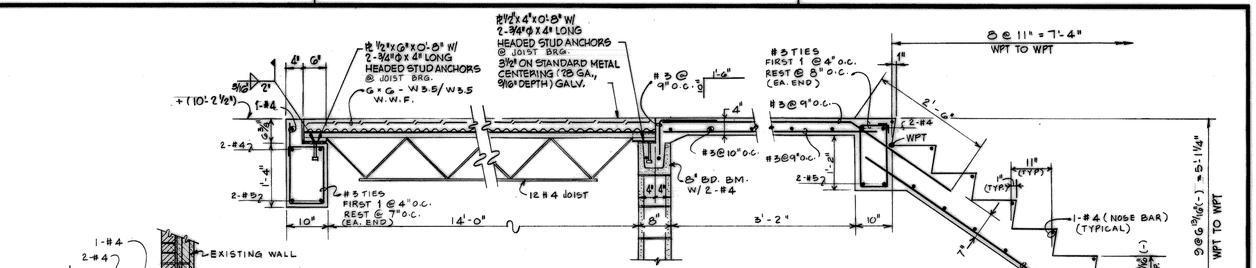
IN016-0015 S4069

OPE-11836-33

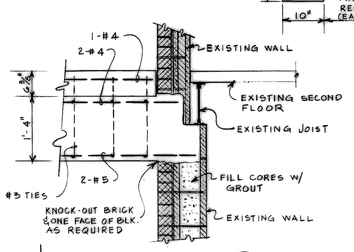




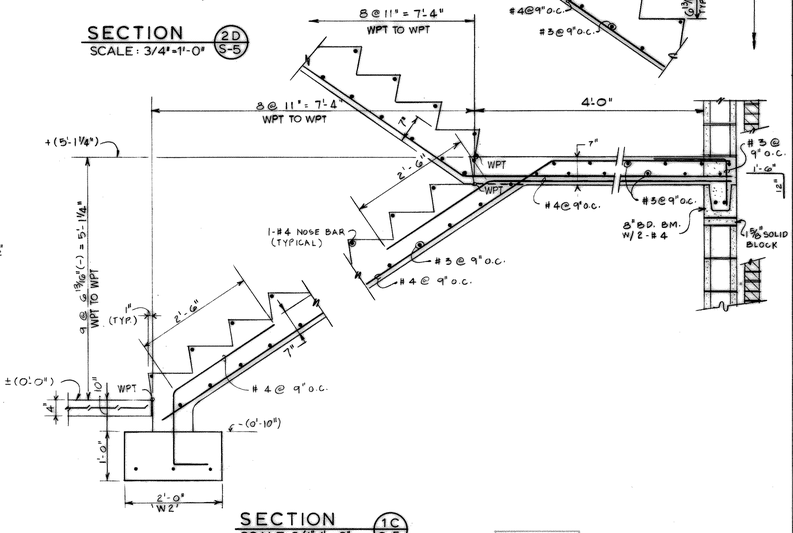
FOUNDATION PLAN - UNIT "B"
SCALE 1/8" = 1'-0"



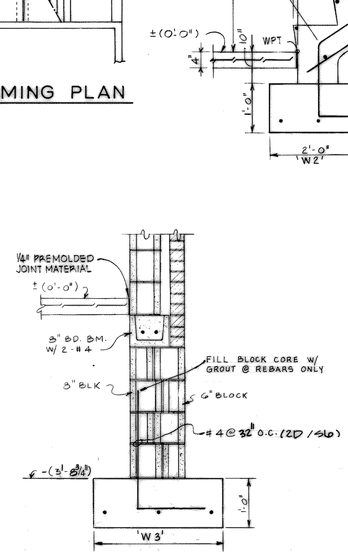
SECTION
SCALE: 3/4"=1'-0" (2D / S-5)



DETAIL
SCALE: 3/4"=1'-0" (3D / S-5)

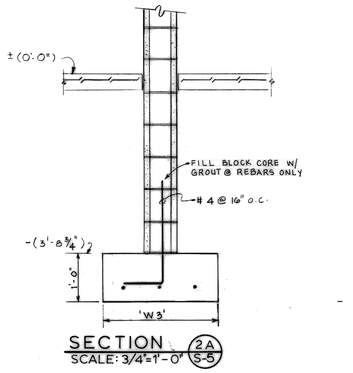


SECTION
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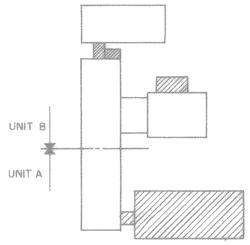


5B S-1 PASSAGE 201 FLOOR FRAMING PLAN
SCALE: 1/8"=1'-0"

SECTION
SCALE: 3/4"=1'-0" (2B / S-5)



SECTION
SCALE: 3/4"=1'-0" (2A / S-5)



KEY PLAN
NO SCALE
NEW CONSTRUCTION

Revisions			
Symbol	Descriptions	Date	Approved

JAMES ASSOCIATES
ARCHITECTS AND ENGINEERS
2828 EAST 45TH STREET
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U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
LOUISVILLE, KENTUCKY

Designed by: NB
Drawn by: RN, FG
Checked by: KP, NB
Reviewed by:
Approved by:

US Army Corps of Engineers

USAR CENTER, INDIANAPOLIS, INDIANA
EXPAND AND MODERNIZE USARC
MRD-84-MCAR-5A

FOUNDATION PLAN UNIT "B"

Scale: AS NOTED
Date: 20 JANUARY 84
Drawing Code: DEF-29-06-
Sheet reference number: S-5
Sheet 34 of 67

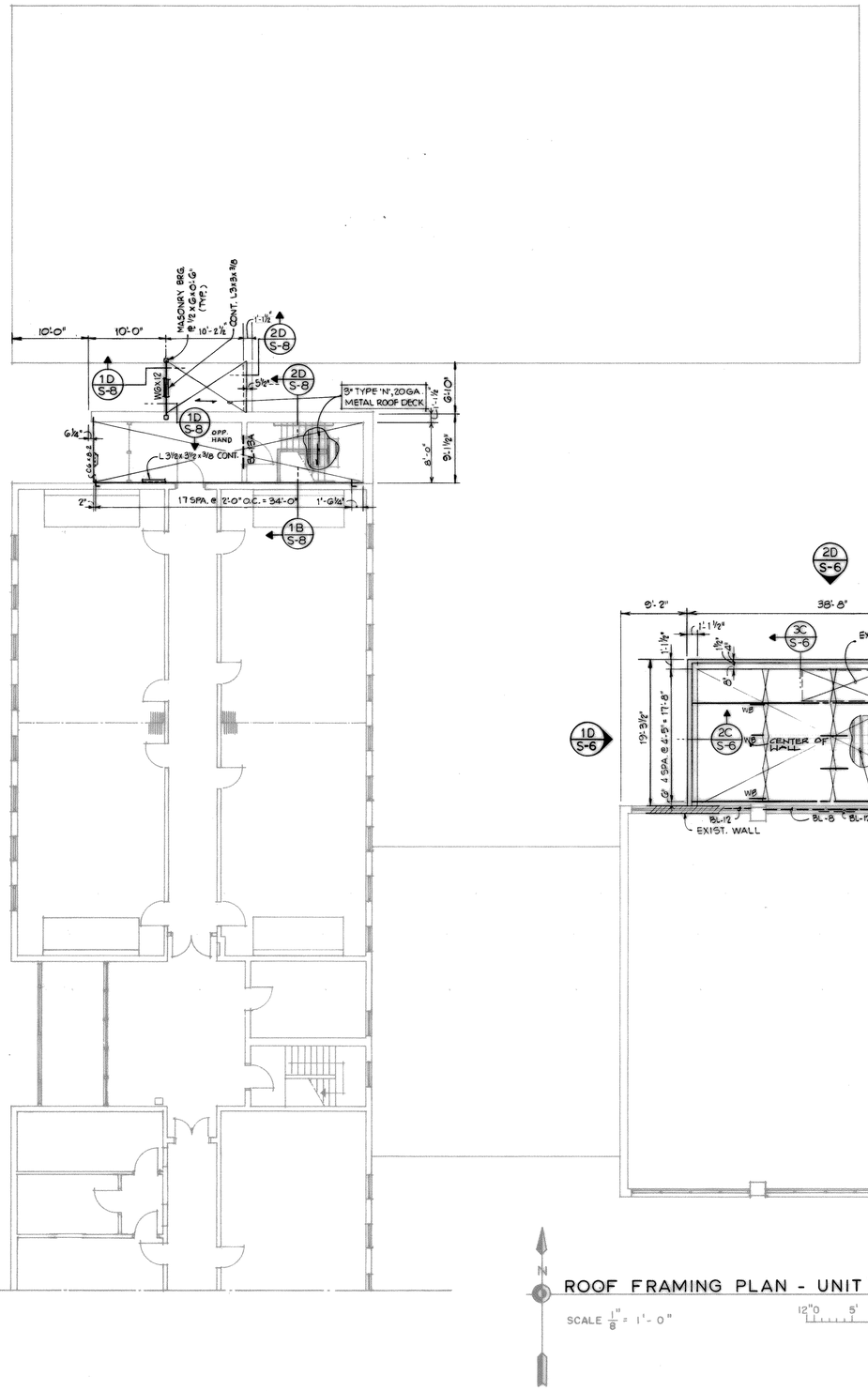
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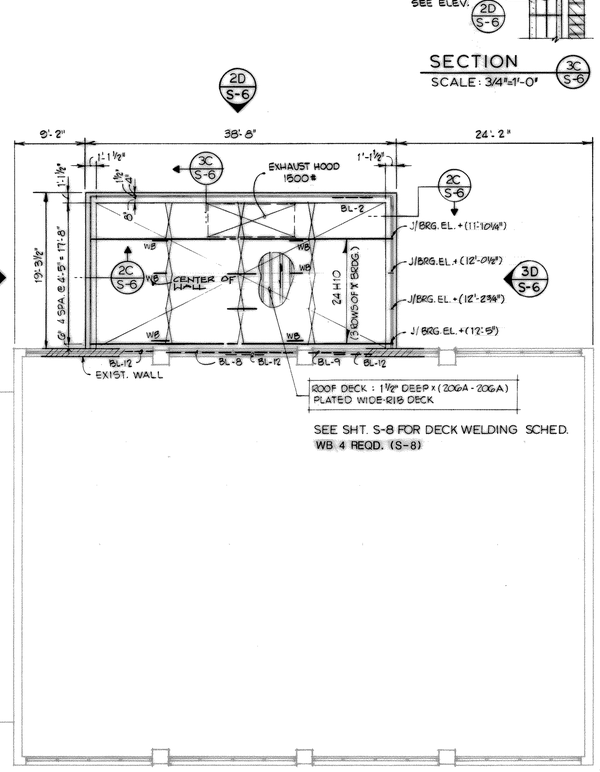
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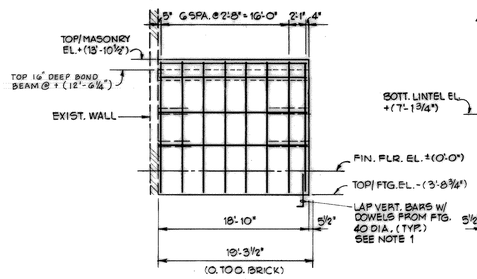
IN016-0015 55 of 9

OPE-11836-34

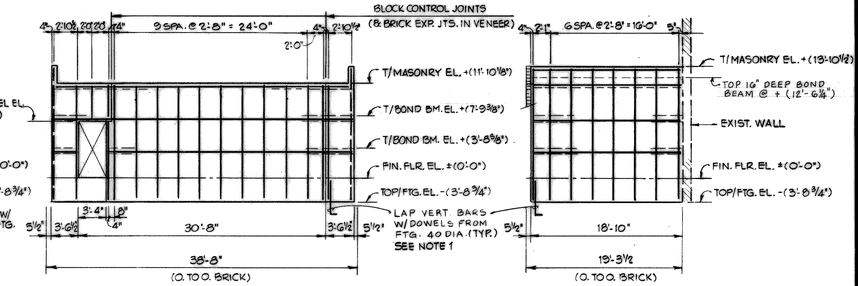




SEE SHT. S-8 FOR DECK WELDING SCHED.
WB 4 REQD. (S-8)

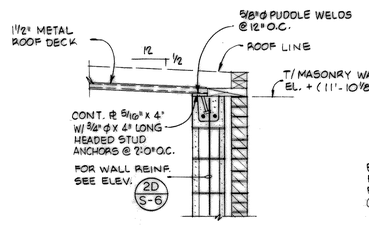


ELEVATION 3D S-6
SCALE : 1/8"=1'-0"

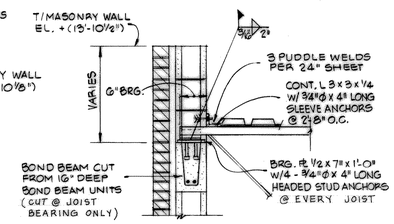


ELEVATION 2D S-6
SCALE : 1/8"=1'-0"

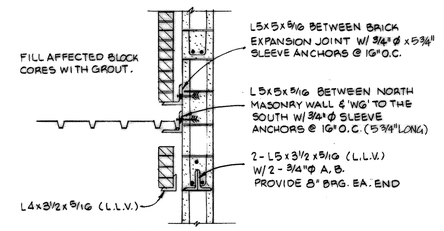
ELEVATION 1D S-6
SCALE : 1/8"=1'-0"



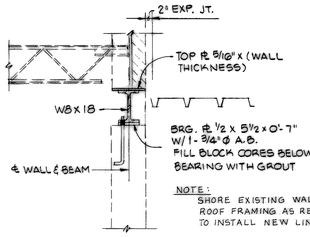
SECTION 3C S-6
SCALE : 3/4"=1'-0"



SECTION 2C S-6
SCALE : 3/4"=1'-0"



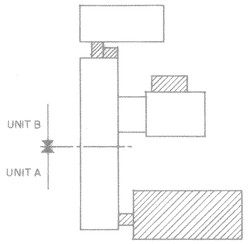
SECTION 1C S-4
SCALE : 3/4"=1'-0"



NOTE :
SHORE EXISTING WALL AND ROOF FRAMING AS REQUIRED TO INSTALL NEW LINTEL.

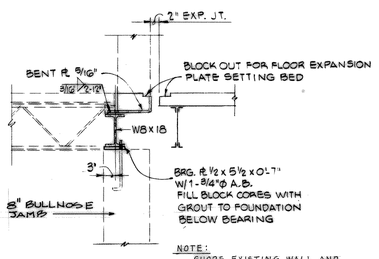
REINFORCING NOTE :
VERT. REINFORCING : 1- #5 (UNLESS NOTED)
HORIZ. REINFORCING : 2-#4 IN 8" BOND BEAM (UNLESS NOTED)

NOTE 1 :
DOWELS FROM FOOTING TO MATCH BAR SIZE AND SPACING OF VERTICAL BARS IN WALL.



KEY PLAN
NO SCALE
NEW CONSTRUCTION

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



NOTE :
SHORE EXISTING WALL AND ROOF FRAMING AS REQUIRED TO INSTALL NEW LINTEL.

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

N

ROOF FRAMING PLAN - UNIT "B"

SCALE 1/8" = 1'-0"

12"0 5' 10' 15'

Revisions			
Symbol	Descriptions	Date	Approved

JAMES ASSOCIATES
ARCHITECTS AND ENGINEERS
2828 EAST 45TH STREET
INDIANAPOLIS, IN 46205

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
LOUISVILLE, KENTUCKY

Designed by: NB
Drawn by: RN
Checked by: KP, NB
Reviewed by:
Approved by:

US Army Corps of Engineers

USAR CENTER, INDIANAPOLIS, INDIANA
EXPAND AND MODERNIZE USARC
MRD - 84 - MCAR - 5A

ROOF FRAMING PLAN UNIT "B"

Scale: 1/8"= :'- 0"
Date: 20 JANUARY 84
Drawing Code: DEF - 29 - 06 -
Sheet reference number: S-6
Sheet 35 of 67

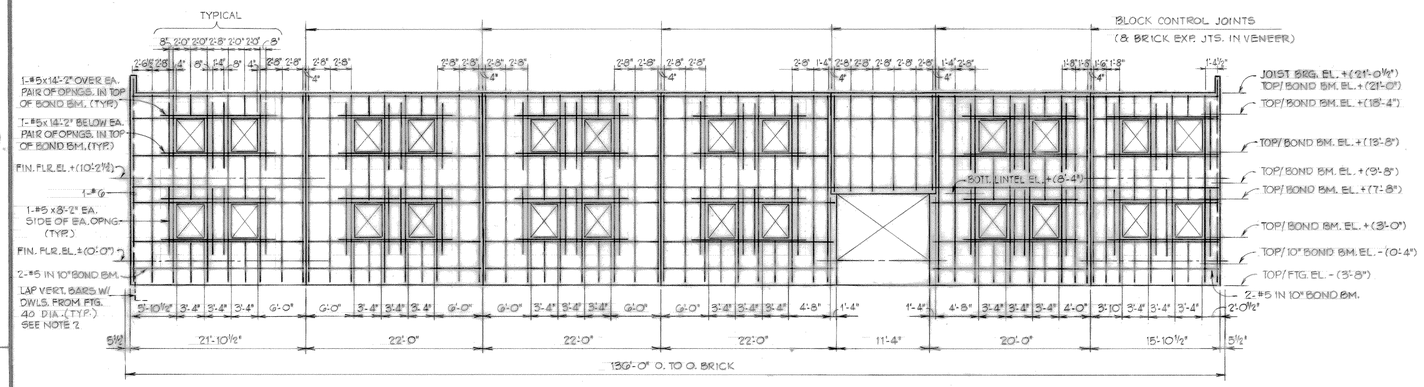
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A-B4	AB-9	0
50-6	50-6	

REVISED BY LOU. DIST CORPS OF ENGRS TO "AS BUILT" CONDITIONS

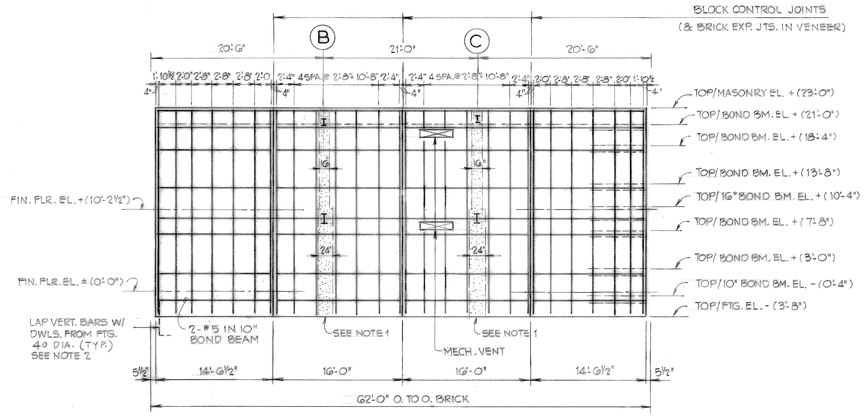
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IN016-0015 56069

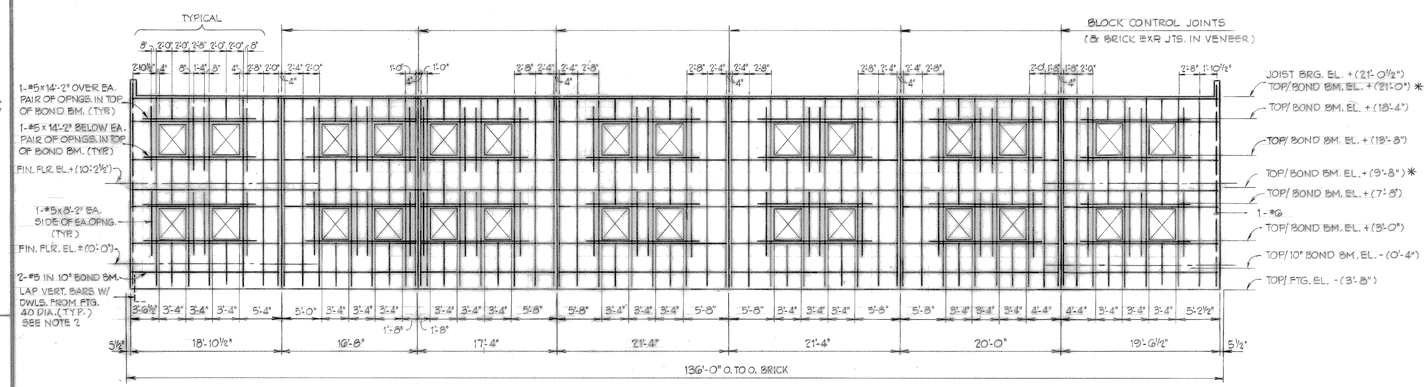
DAE-11836-35



ELEVATION (4D S-2)
SCALE: 1/8"=1'-0"

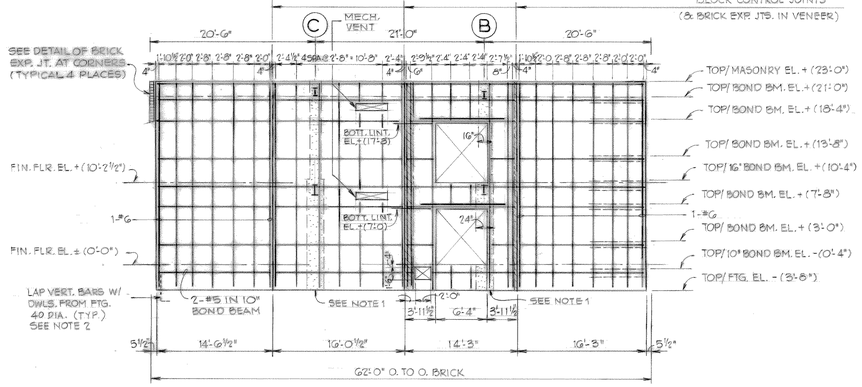


ELEVATION (2D S-2)
SCALE: 1/8"=1'-0"

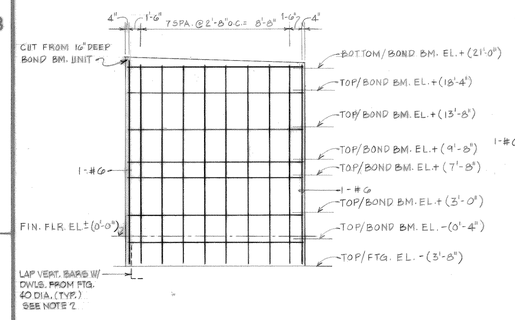


ELEVATION (4C S-2)
SCALE: 1/8"=1'-0"

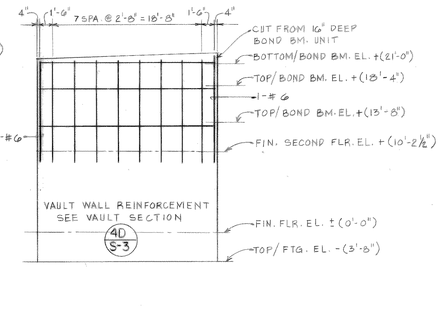
* BOND BEAMS AT THE SECOND FLOOR AND ROOF LEVELS ARE TO BE CONTINOUS ACROSS THE BLOCK CONTROL JOINTS ALL OTHER BOND BEAMS ARE DISCONTINUOUS AT THE BLOCK CONTROL JOINTS.



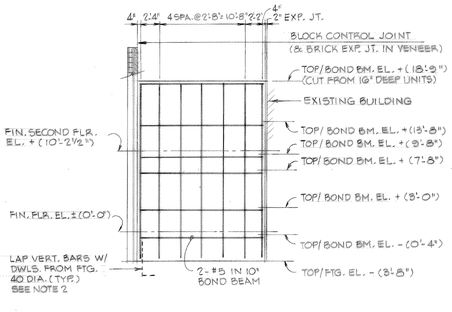
ELEVATION (2C S-2)
SCALE: 1/8"=1'-0"



ELEVATION (5B S-2)
SCALE: 1/8"=1'-0"



ELEVATION (4B S-2)
SCALE: 1/8"=1'-0"

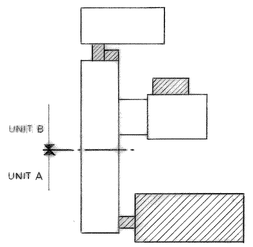


ELEVATION (3B S-2)
SCALE: 1/8"=1'-0"

NOTE 1:
PROVIDE FULL HEIGHT GROUTED BLOCK BY WIDTH INDICATED ON ELEVATIONS AND CENTERED ON BEAM LINES.

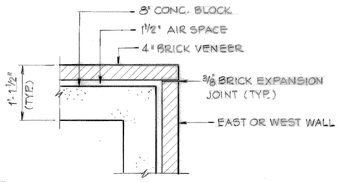
NOTE 2:
DOWELS FROM FOOTING TO MATCH BAR SIZE AND SPACING OF VERTICAL BARS IN WALL.

NOTE 3:
LAP BARS AS REQUIRED AT SPLICES - 40 BAR DIAMETERS OR 2 FEET (WHICHEVER IS LARGER)



KEY PLAN
NO SCALE
NEW CONSTRUCTION

REINFORCING NOTE:
VERT. REINFORCING: 1-#5 U.N.O.
HORIZ. REINFORCING: 2-#4 IN 8" BOND BEAM U.N.O.



DETAIL BRICK EXPANSION JOINT AT CORNERS (4 THUS)

Revisions			
Symbol	Descriptions	Date	Approved

JAMES ASSOCIATES
ARCHITECTS AND ENGINEERS
2828 EAST 45TH STREET
INDIANAPOLIS, IN 46205

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
LOUISVILLE, KENTUCKY

Designed by: NB
Drawn by: R N
Checked by: K P, N B
Reviewed by:
Approved by:

US Army Corps of Engineers

USAR CENTER, INDIANAPOLIS, INDIANA
EXPAND AND MODERNIZE USARC
MRD-84-MCAR-5A

SHEAR WALL ELEVATION

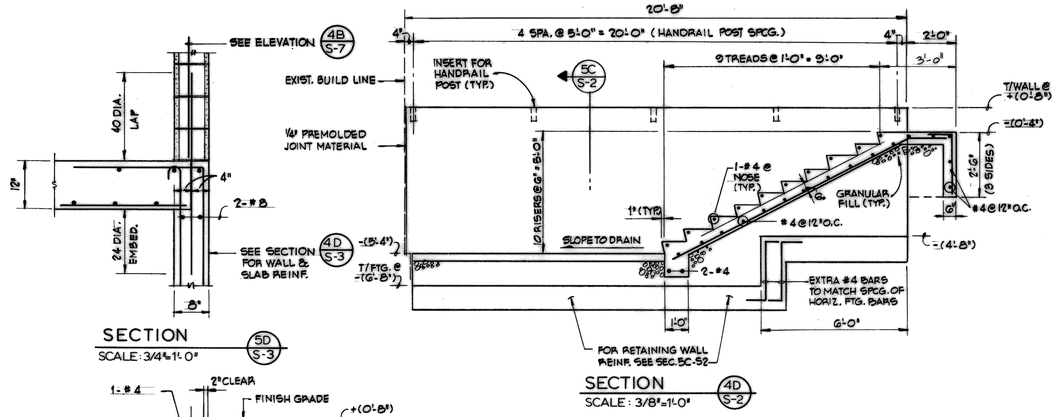
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Date: 20 JANUARY 84
Drawing Code: DEF-29-06-
Sheet reference number: S-7
Sheet 36 of 67

83011
50-7
50-7

RECORD DRAWING-"AS BUILT"

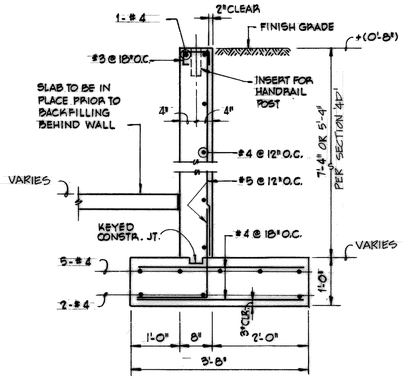
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DEF-1836-36

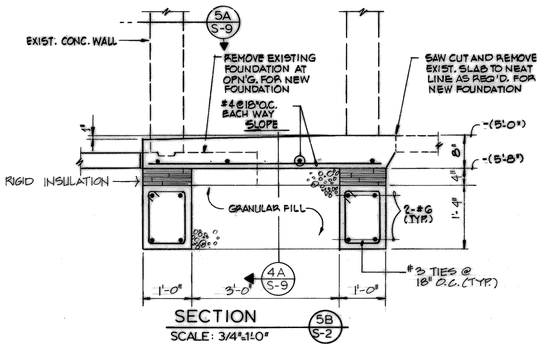


SECTION 5D S-3
SCALE: 3/4"=1'-0"

SECTION 4D S-2
SCALE: 3/8"=1'-0"

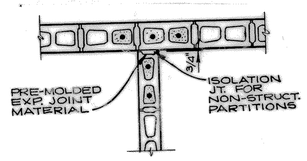


SECTION 5C S-2
SCALE: 3/4"=1'-0"

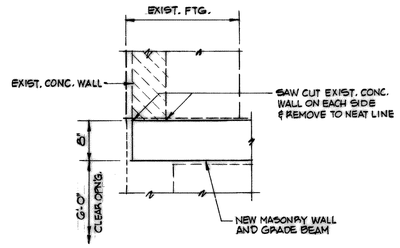


SECTION 5B S-2
SCALE: 3/4"=1'-0"

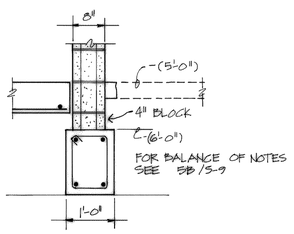
INTERSECTION OF STRUCTURAL BOND BEAMS



PARTITIONS ABUTTING STRUCTURAL WALLS



SECTION 5A S-9
SCALE: 3/4"=1'-0"



SECTION 4A S-9
SCALE: 3/4"=1'-0"

GENERAL NOTES

GENERAL

1. Design live loads are as follows:
   a. Roof (snow and rain on snow) - 26 psf
   b. Wind (overall force on building) - 26 psf
   c. Floors (private office areas) - 65 psf + 20 psf partitions
      (open office areas) - 80 psf
   d. Seismic Zone - 2
2. Elevations on plans and details to tops of footings, grade beams, slabs, and steel, etc., are given as dimensions above (+) or below (-) finish ground floor elevation. 745.05 = + (0'-0").
3. Provisions for future expansion:
   a. Vertical - None
   b. Lateral - None
4. Locations and sizes of all openings, and weight and location of all mechanical units on roof, shall be verified with the mechanical contractor prior to construction.
5. Verify all existing conditions prior to any construction or fabrication. If different than shown, notify the Contracting Officer so required detail may be modified.

SOIL

1. Design soil pressures are as follows: 2,500 psf for isolated column footings and 2,000 psf for wall footings.
2. Placing and compaction of suitable engineered fill shall be overseen by the Contracting Officer's Representative. Inspection and testing of bearing soils at each foundation, shall be made by the contractor to assure the adequate bearing capacity for which the footings were designed. If unsuitable material is found, the proposed footing elevation shall be reestablished by localized undercutting and using an approved fill or a very lean concrete. See specifications regarding fill, compaction, etc.
3. The bottoms of all foundations shall be protected from moisture damage if foundation cannot be cast immediately.

CONCRETE

1. The minimum 28 day compressive strength of concrete shall be 3,000 psi for footings and 4,000 psi for slabs and all other concrete work. Maximum slump shall be 4" for footings and walls and 3" for slabs. All concrete shall be normal weight (145 lbs/cu. ft.).
2. All concrete exposed to weather shall be air-entrained.
3. Every interior slab on grade shall have continuous 1/4" preformed joint material between the slab and the wall.
4. Provide appropriate depressions in slabs for quarry tile, ceramic tile, etc. Maintain full 4" slab below these depressions. See architectural finish schedules, floor plans, and details for locations and details of required depressions.
5. Provide 3/4" chamfers on all exposed edges of concrete and exposed corners unless otherwise shown or noted. For special finish on exposed concrete, see specifications.
6. Unless shown otherwise. All slabs on grade shall be at least 4" thick. Construction joints or control joints shall be spaced as shown on the plans. See sheet S-1 for typical details for slab on grade.

REINFORCING STEEL

1. All reinforcing steel shall be ASTM A 615 Grade 60. All welded wire fabric shall be of cold drawn wire and shall meet all requirements of ASTM A 185.
2. All reinforcing details shall be in accordance with the "Building Code Requirements for Reinforced Concrete" (ACI 318-77).
3. Reinforcing steel placing drawings and bar lists shall conform to the ACI "Manual of Standard Practice for Detailing Reinforced Concrete Structures" (ACI 315-74). All bar and mesh supports must be clearly detailed.
4. Hooks and bends shall be ACI Standard unless otherwise indicated.
5. Unless shown otherwise, all slabs on grade will have one layer of 6 x 6 - W2 x W2 W.W.F.
6. Minimum concrete cover over main reinforcing steel shall be: 3" at foundations, 2" at all dirt faces of walls and walls exposed to the weather, and 3/4" at other wall faces and in structural slabs.
7. Welding, including tack welding, of reinforcing steel is prohibited unless explicitly indicated on the structural drawings or written approval from the structural engineers is obtained.
8. No reinforcing steel shall be field cut without approval of the Contracting Officer.
9. Provide 2 #5 (one each face) around all openings in concrete walls and slabs. The bars shall extend 1'-3" beyond opening limits where possible or be provided with 90° bend at ends.
10. See the architectural drawings and the specifications for the location and description of wedge inserts, welded headed studs, chamfers, expansion bolts and other details not shown on the structural drawings.

STRUCTURAL STEEL

1. All structural tubes shall be ASTM 500, Grade 'B' (Fy = 46 ksi). All other structural steel shall be ASTM A36.
2. All joists shall be manufactured, installed, bridged and anchored in accordance with current specifications of the Steel Joist Institute. Bottom chords of all joists on center line of column shall be clipped to column.
3. See specifications regarding painting of steel and joists.
4. All bolted connections shall be bearing type connections made with 3/4" diameter bolts and 13/16" diameter holes (unless noted otherwise) meeting requirements of ASTM A 325. Provide load indicator washers throughout.
5. Shop connections, unless otherwise shown, may be either bolted or welded. All field connections shall be bolted unless otherwise shown on the drawings.
6. Connections not shown shall be designed by the steel supplier in accordance with the AISC "Manual of Steel Construction".
7. Burning of holes in structural steel is not permitted without prior approval of the Contracting Officer.

METAL DECKING

1. Roof deck shall be as noted on plans.
2. Deck shall be provided in minimum 3-span lengths were possible.
3. Deck is used as a diaphragm. See plans forwelding patterns.
4. All welds shall be 5/8" diameter puddle weld. See specifications for additional information regarding deck and its installation.
5. Metal forms for second floor slab shall be 28 Ga x 9/16" deep x 2-1/2" pitch (galvanized).

MASONRY WALLS

1. See architectural drawings and/or specifications for control joint locations and horizontal reinforcement for masonry walls.
2. Reinforcing bars in masonry shall be laped in accordance with the ACI "Building Code Requirements for Reinforced Concrete" (ACI 318-77). Bars shall be either separated by one bar diameter or wired together.
3. Mortar:
   a. Type "S" mortar shall be used on all exterior masonry walls, shear walls, and load bearing walls as noted on plans.
   b. Type "N" mortar may be used for interior partition walls only.
4. Grout:
   a. Grout shall be proportioned by volume and shall have sufficient water added to produce consistency for pouring without segregation. Aggregate shall conform to the requirments set forth in U.B.C. Standard No. 24-23 (or requirements of ASTM C404, Standard Specification for Aggregates for Masonry Grout).
   b. Coarse grout shall be composed of one part Portland cement, to which may be added maximum one-tenth part (1/10) hydrated lime or lime putty, and two and one fourth (2-1/4) to three parts sand and not more than 2 parts gravel.
   c. Grout shall attain a minimum compressive strength of 2,500 pounds per square inch at 28 days.
   d. Reinforced grouted masonry shall conform to all of the requirements specified in Section 2413 and Sections 2414 and 2415 of Uniform Building Code.

Revisions			
Symbol	Descriptions	Date	Approved

JAMES ASSOCIATES
ARCHITECTS AND ENGINEERS
2828 EAST 45TH. STREET
INDIANAPOLIS, IN. 46205

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
LOUISVILLE, KENTUCKY

Designed by: NB
Drawn by: RN
Checked by: KP, NB
Reviewed by:
Approved by:

US Army Corps of Engineers

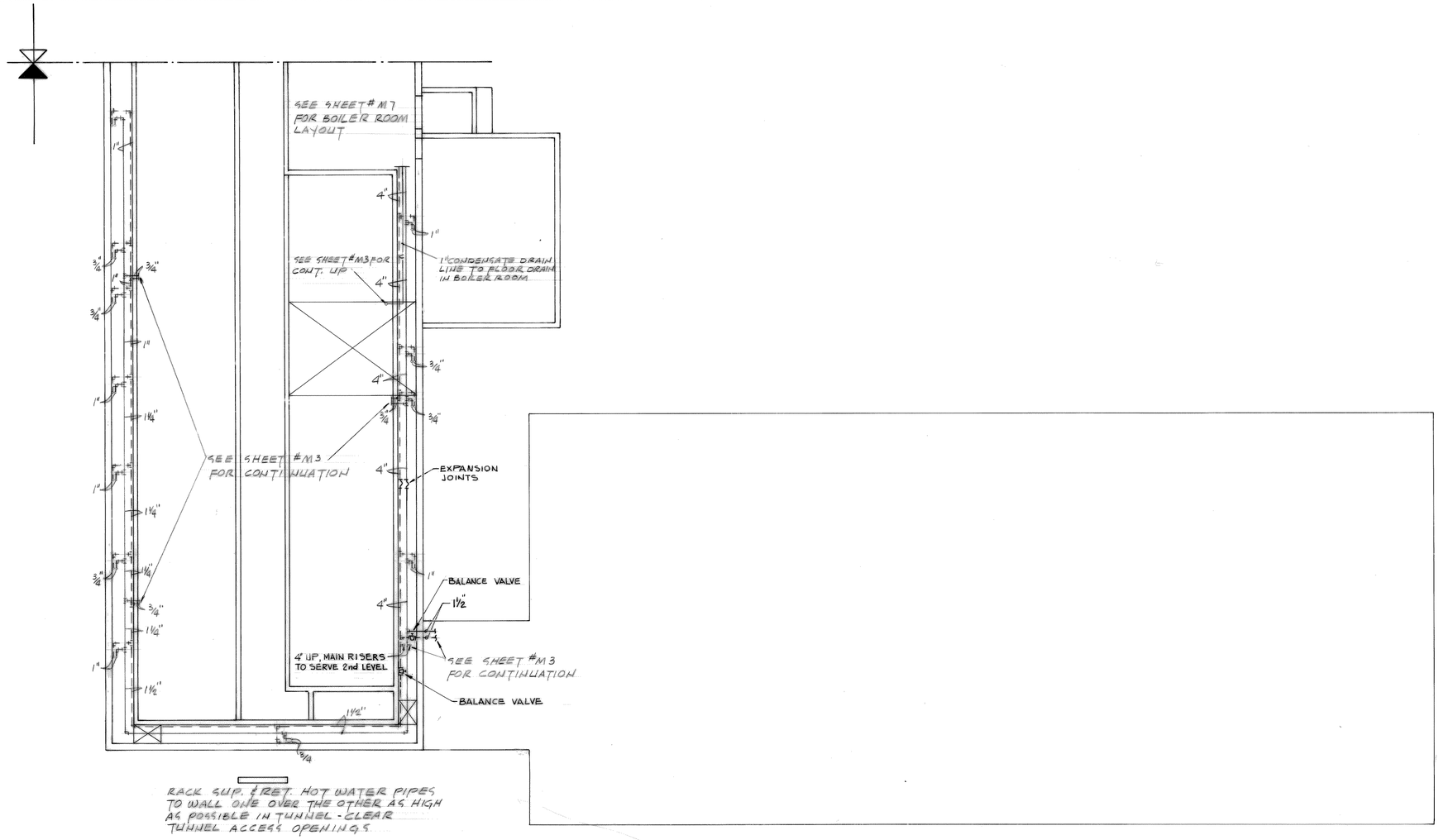
USAR CENTER, INDIANAPOLIS, INDIANA
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MRD-84-MCAR-5A

GENERAL NOTES AND DETAILS

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Date: 20 JANUARY 84
Drawing Code: DEF-29-06-
Sheet reference number: S-9
Sheet 38 of 67.

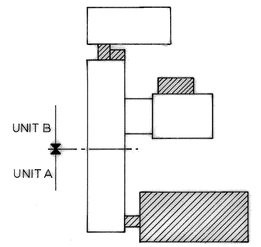
83011
6-05 6-06

RECORD DRAWING-"AS BUILT"
IN016-0015 S9&9
DAEN-11836-38



PIPE TUNNEL UNIT 'A' MECHANICAL PLAN

SCALE 1/8" = 1' - 0"



KEY PLAN

NO SCALE

NEW CONSTRUCTION

Revisions			
Symbol	Descriptions	Date	Approved

JAMES ASSOCIATES
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2828 EAST 45TH STREET
INDIANAPOLIS, IN. 46205

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
LOUISVILLE, KENTUCKY

Designed by: D. G.W.
Drawn by: M.S.M.
Checked by: D. G.W.
Reviewed by:
Approved by:

US Army Corps of Engineers

U.S.A.R. CENTER, INDIANAPOLIS, INDIANA
EXPAND AND MODERNIZE U.S.A.R.C.
MRD - 84- MCAR- 5A

MECHANICAL PLAN

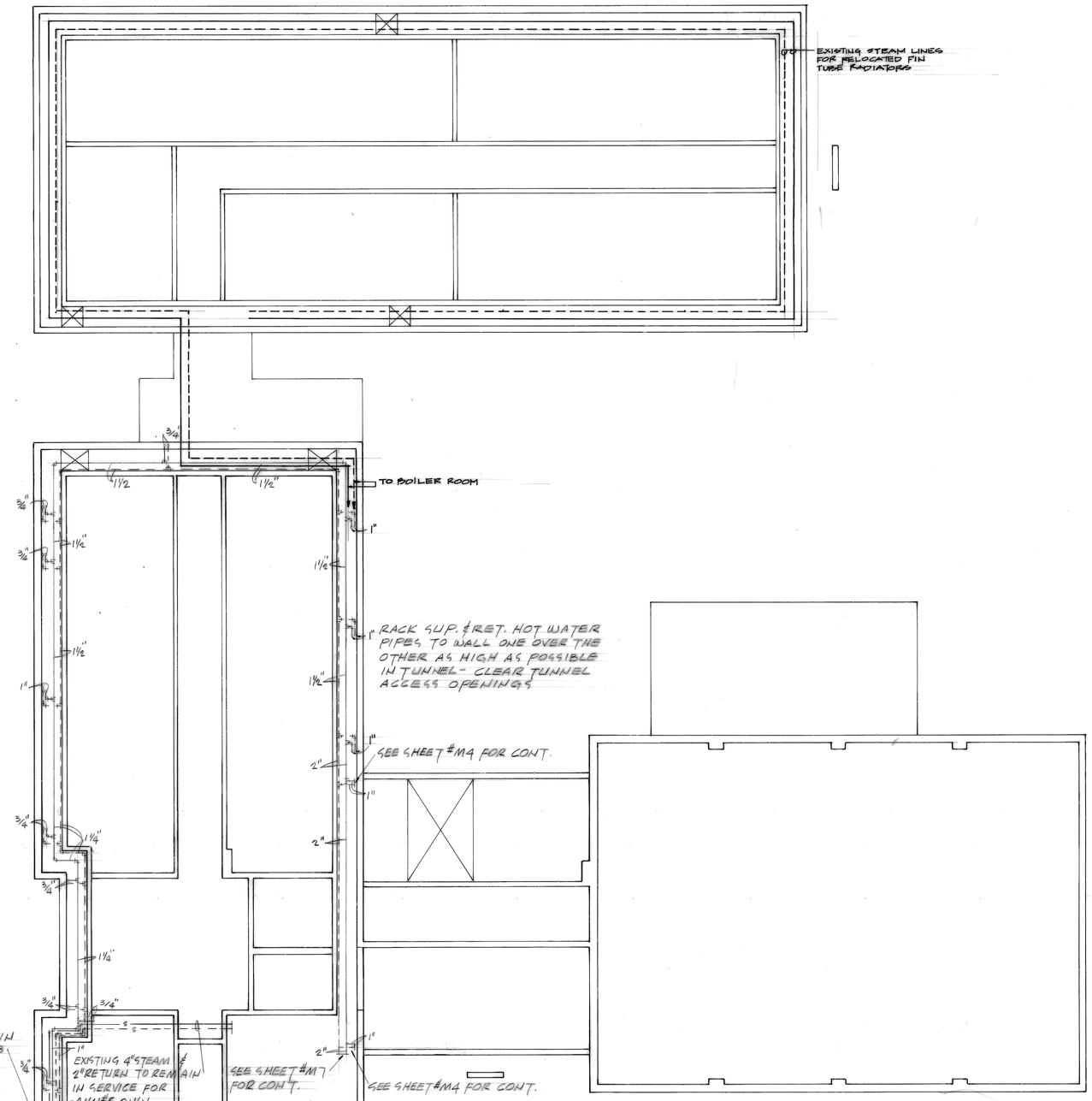
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Date: 20 JANUARY 84
Drawing Code: DEF-29-06
Sheet reference number: M-1
Sheet 39 of 67

83101

M-1

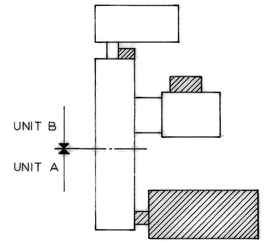
OPE-11836-39
IN016-0015 M1of9

RECORD DRAWING-"AS BUILT"



PIPE TUNNEL UNIT 'B' MECHANICAL PLAN

SCALE 1/8 " = 1' -0"



KEY PLAN

NO SCALE

NEW CONSTRUCTION

Revisions			
Symbol	Descriptions	Date	Approved

JAMES ASSOCIATES
ARCHITECTS AND ENGINEERS
2828 EAST 45TH STREET
INDIANAPOLIS, IN. 46205

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
LOUISVILLE, KENTUCKY

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Drawn by: M. S.M.
Checked by: D. G.W.
Reviewed by:
Approved by:

US Army Corps of Engineers

U.S.A.R. CENTER, INDIANAPOLIS, INDIANA
EXPAND AND MODERNIZE U.S.A.R.C.
MRD-84-MCAR-5A

MECHANICAL PLAN

Scale: 1/8" = 1'- 0"
Date: 20 JANUARY 84
Drawing Code: DEF-29-06-
Sheet reference number: M- 2
Sheet 40 of 67

REVISED BY LOU. DIST CORPS OF ENGRS TO "AS BUILT" CONDITIONS

RECORD DRAWING-"AS BUILT"

DE-11836-46
IN016-0015 M2069

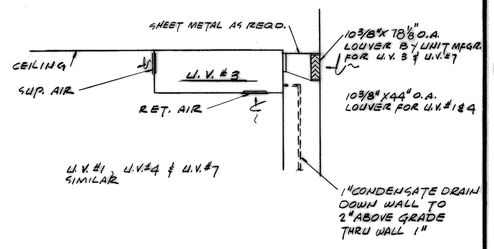
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M-2

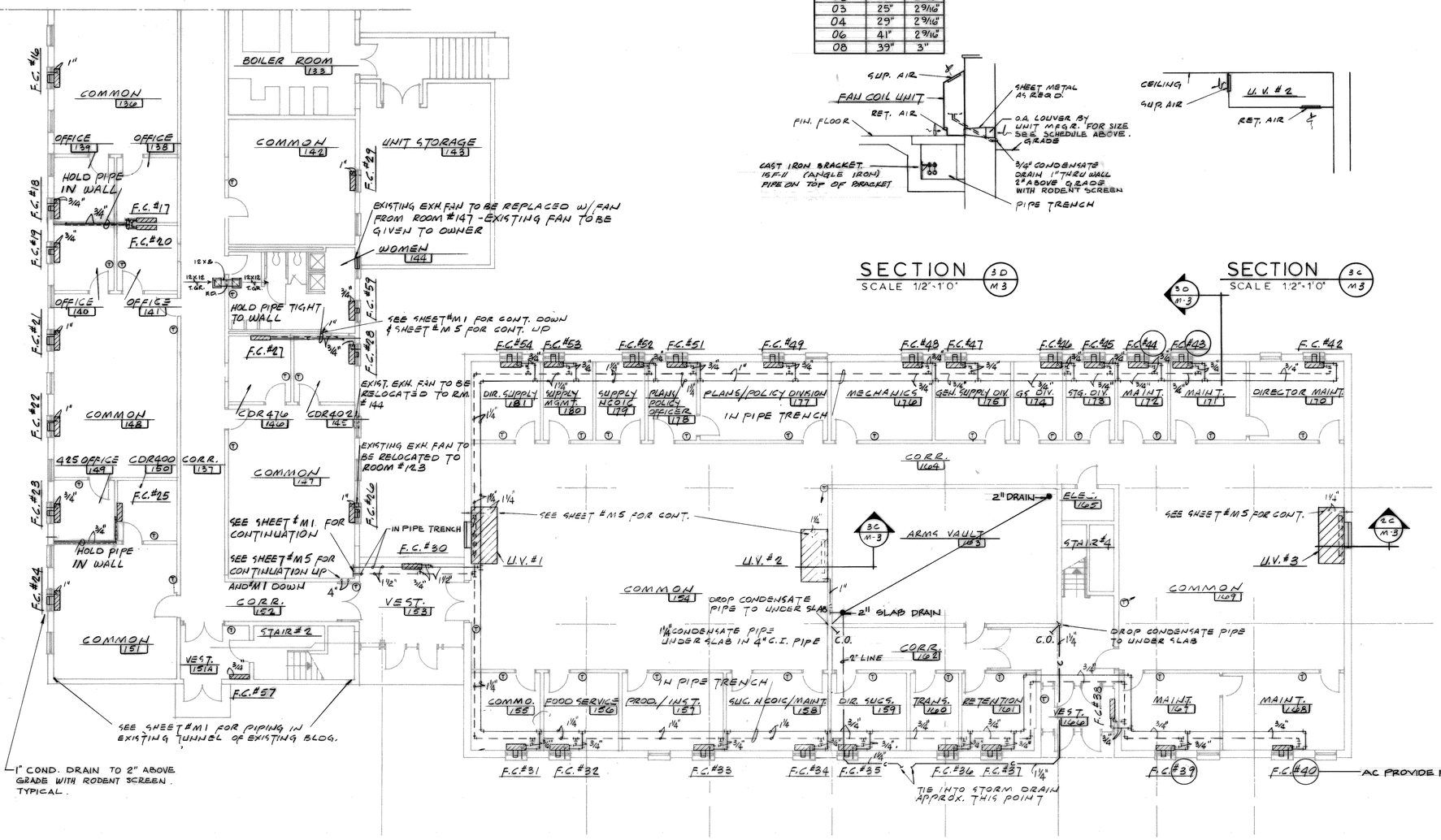
FAN COIL SCHEDULE		
SIZE	WIDTH	HEIGHT
02	17"	29⅛"
03	25"	29⅛"
04	29"	29⅛"
06	41"	29⅛"
08	39"	3"

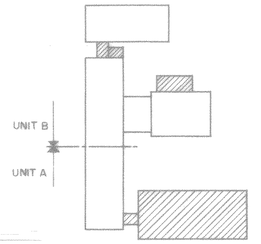
SECTION
SCALE 1/2"=1'0"
3D M3

SECTION
SCALE 1/2"=1'0"
3C M3



SECTION
SCALE 1/2"=1'0"
2C M3





KEY PLAN
NO SCALE
NEW CONSTRUCTION

N

FIRST LEVEL UNIT 'A' MECHANICAL PLAN
SCALE 1" = 1'-0"
12" 0 5' 10' 15'

NOTE:
ALL CONDENSATE DRAIN LINES TO BE COPPER

Revisions			
Symbol	Descriptions	Date	Approved

JAMES ASSOCIATES
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2828 EAST 45TH STREET
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U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
LOUISVILLE, KENTUCKY

Designed by: D. G.W.
Drawn by: M.S.M.
Checked by: D. G.W.
Reviewed by:
Approved by:

US Army Corps of Engineers

U.S.A.R. CENTER, INDIANAPOLIS, INDIANA
EXPAND AND MODERNIZE U.S.A.R.C.
MRD-84-MCAR-5A

MECHANICAL PLAN

Scale: 1/8" 1'-0"
Date: 20 JANUARY 84
Drawing Code: DEF-29-06-
Sheet reference number: M-3
Sheet 41 of 67

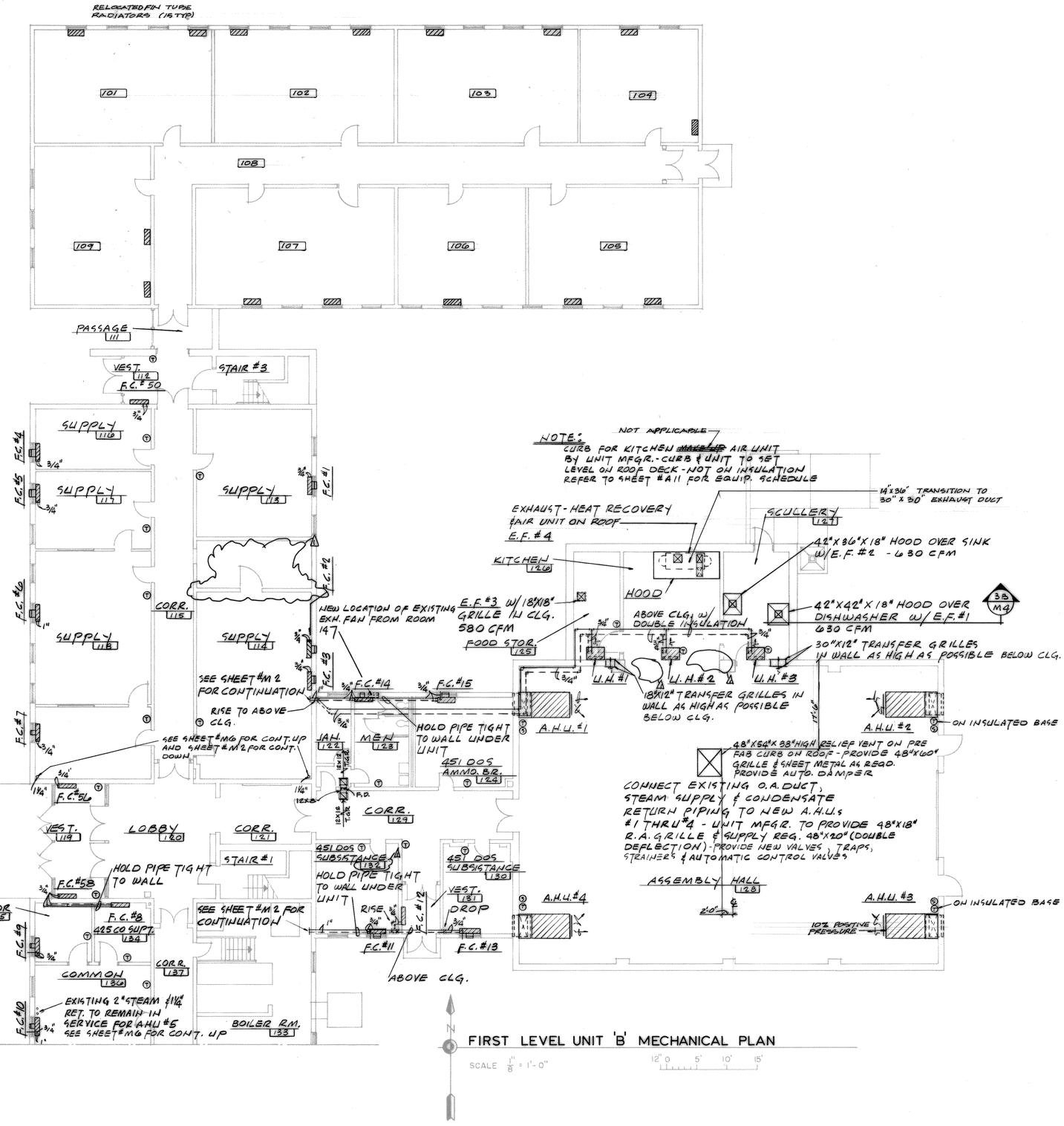
88101		
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M-3	M-3	

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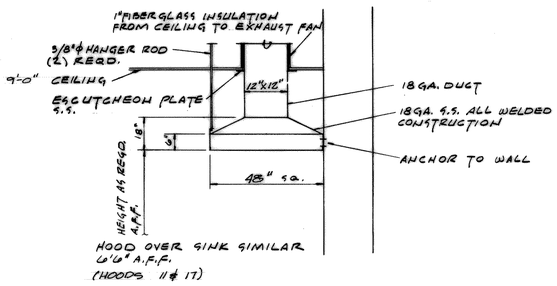
RECORD DRAWING-"AS BUILT"

IN016-0015 M3of9

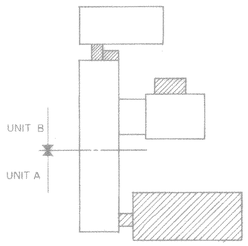
ORS-11836-41



FIRST LEVEL UNIT 'B' MECHANICAL PLAN



SECTION
SCALE 1/2"=1'0"
3B M4



KEY PLAN
NO SCALE
NEW CONSTRUCTION

Revisions			
Symbol	Descriptions	Date	Approved
1	AMENDMENT No. 1	4/19/85	

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INDIANAPOLIS, IN. 46205

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
LOUISVILLE, KENTUCKY

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Checked by: D.G.W.
Reviewed by:
Approved by:

US Army Corps of Engineers

U.S.A.R. CENTER INDIANAPOLIS, INDIANA
EXPAND AND MODERNIZE U.S.A.R.C.
MRD -84- MCAR- 5A

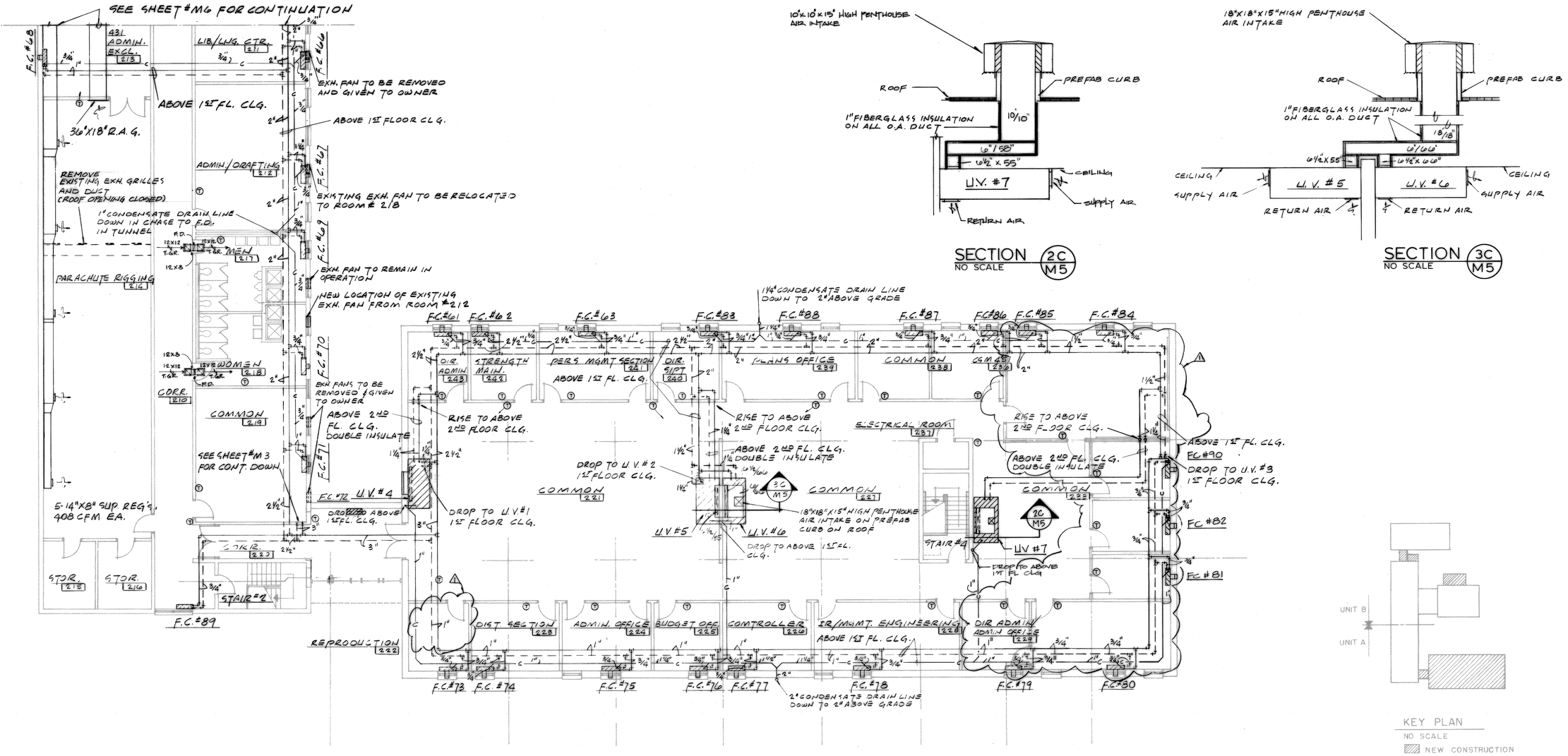
MECHANICAL PLAN

Scale: 1/8" = 1'-0"
Date:
Drawing Code: DEF-29-06-
Sheet reference number: M-4
Sheet 42 of 67

83101
M-4 AB-5 AB-4
M-4 A64 0
A63 0

REVISED BY LOU. DIST CORPS OF ENGRS TO "AS BUILT" CONDITIONS

DAEN-11876-42
IN016-0015 M4 of 9



SECOND LEVEL UNIT 'A' MECHANICAL PLAN

SCALE $\frac{1}{8}$" = 1'-0"

Revisions			
Symbol	Descriptions	Date	Approved
1	AMENDMENT No 1	4/19/85	

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ARCHITECTS AND ENGINEERS
2828 EAST 45TH STREET
INDIANAPOLIS, IN 46205

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
LOUISVILLE, KENTUCKY

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Drawn by: M. S. M.
Checked by: D. G. W.
Reviewed by:
Approved by:

U.S.A.R. CENTER, INDIANAPOLIS, INDIANA
EXPAND AND MODERNIZE U.S.A.R.C.
MRD-84-MCAR-5A

MECHANICAL PLAN

Scale: 1/8" = 1'-0"
Date:
Sheet reference number: M-5
Drawing Code: DEF-29-06-
Sheet 43 of 67

83101

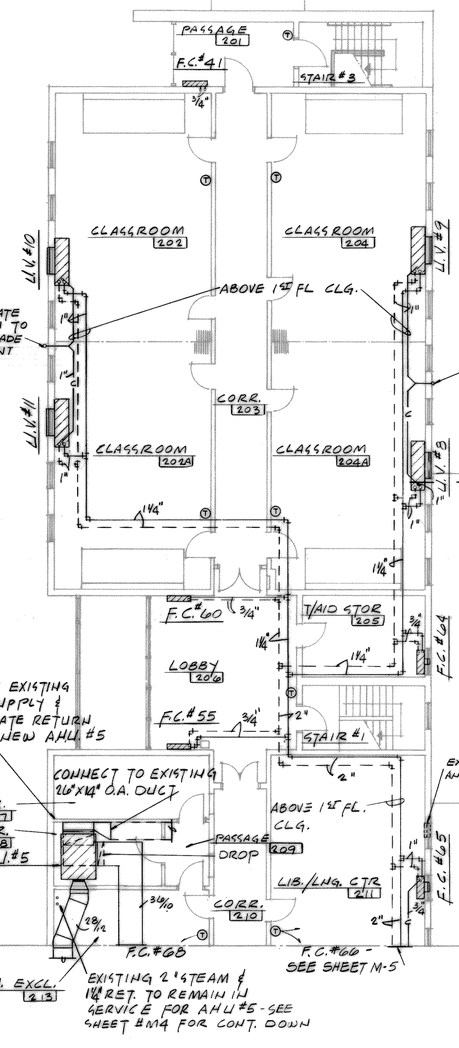
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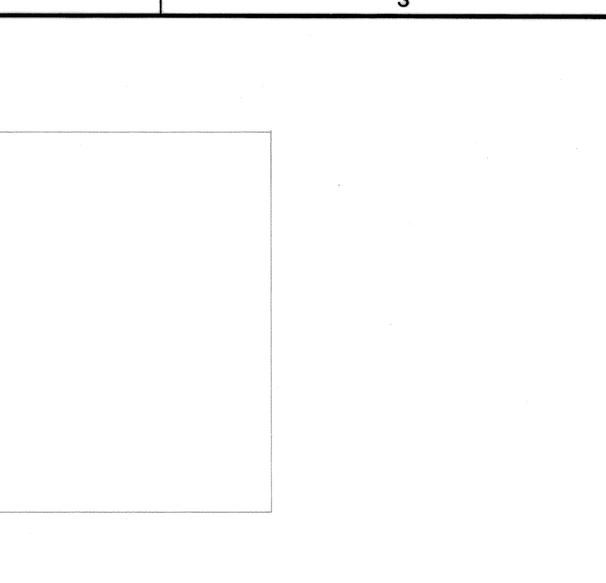
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RECORD DRAWING-"AS BUILT"

OPF-11836-43
IN016-0015 M5 of 9

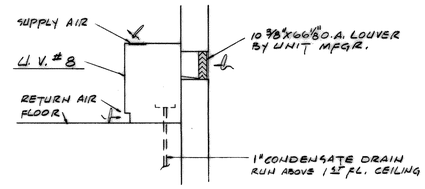






SECOND LEVEL UNIT 'B' MECHANICAL PLAN

SCALE 1/8" = 1'-0"

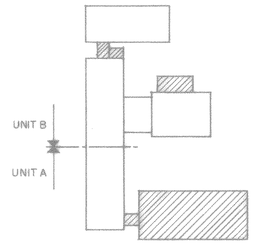


U.V. #9-10 & 11 SIMILAR

SECTION

SCALE 1/2" = 1'0"

4B M6



KEY PLAN

NO SCALE

NEW CONSTRUCTION

Revisions			
Symbol	Descriptions	Date	Approved

JAMES ASSOCIATES
ARCHITECTS AND ENGINEERS
2828 EAST 45TH STREET
INDIANAPOLIS, IN. 46205

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
LOUISVILLE, KENTUCKY

Designed by:	D. G.W.
Drawn by:	M.S.M.
Checked by:	D. G.W.
Reviewed by:	
Approved by:	

US Army Corps of Engineers

U.S.A.R. CENTER, INDIANAPOLIS, INDIANA
EXPAND AND MORDERNIZE U.S.A.R.C.
MRD-84-MCAR-5A

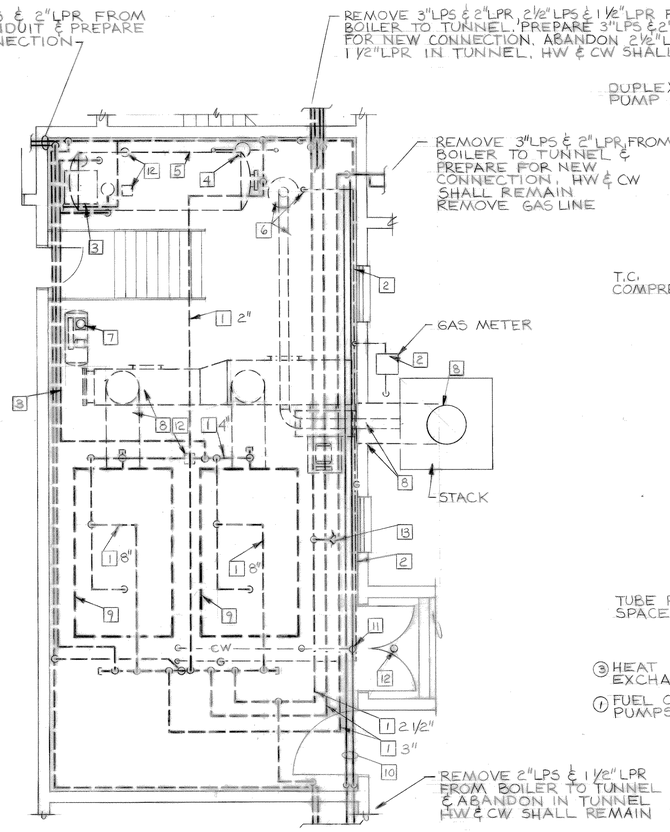
MECHANICAL PLAN

Scale:	1/8"= 1'- 0"
Date:	20 JANUARY 84
Drawing Code:	DEF. 29-06-
Sheet reference number:	M- 6
Sheet	44 of 67

83/101		
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AB-9	AB-9	0
M-6	M-6	

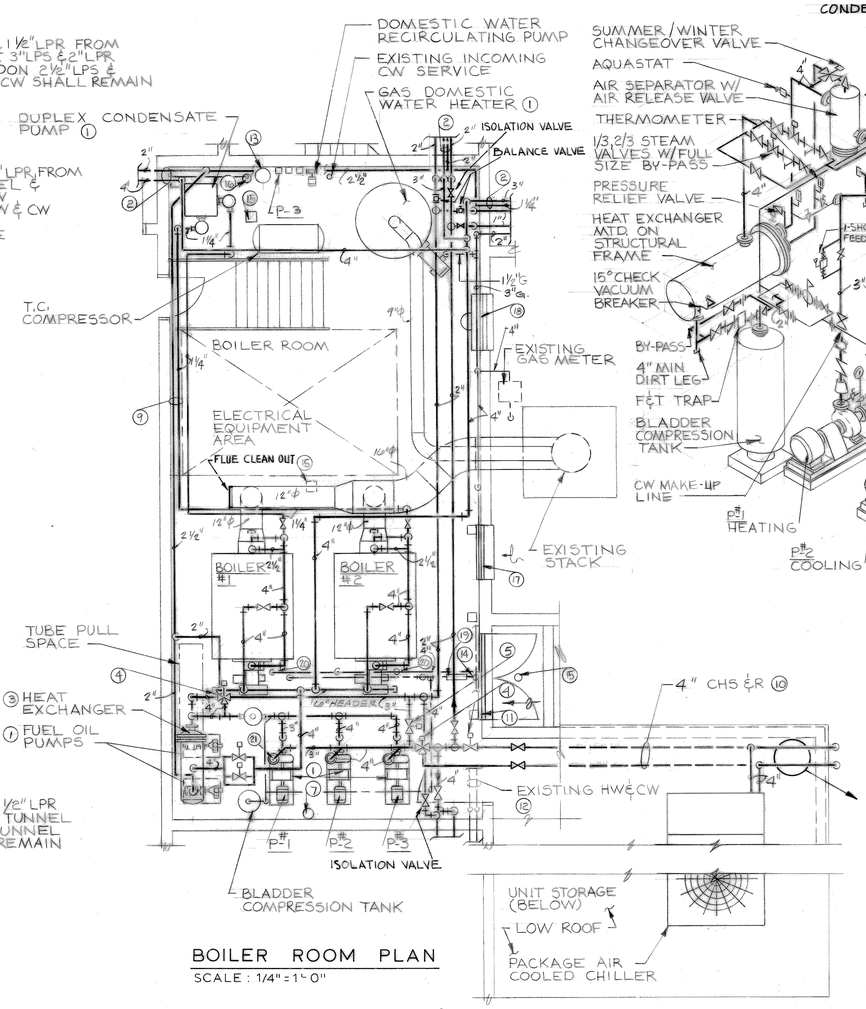
OPF-11836-44
IN016-0015 M6of9

RECORD DRAWING-"AS BUILT"



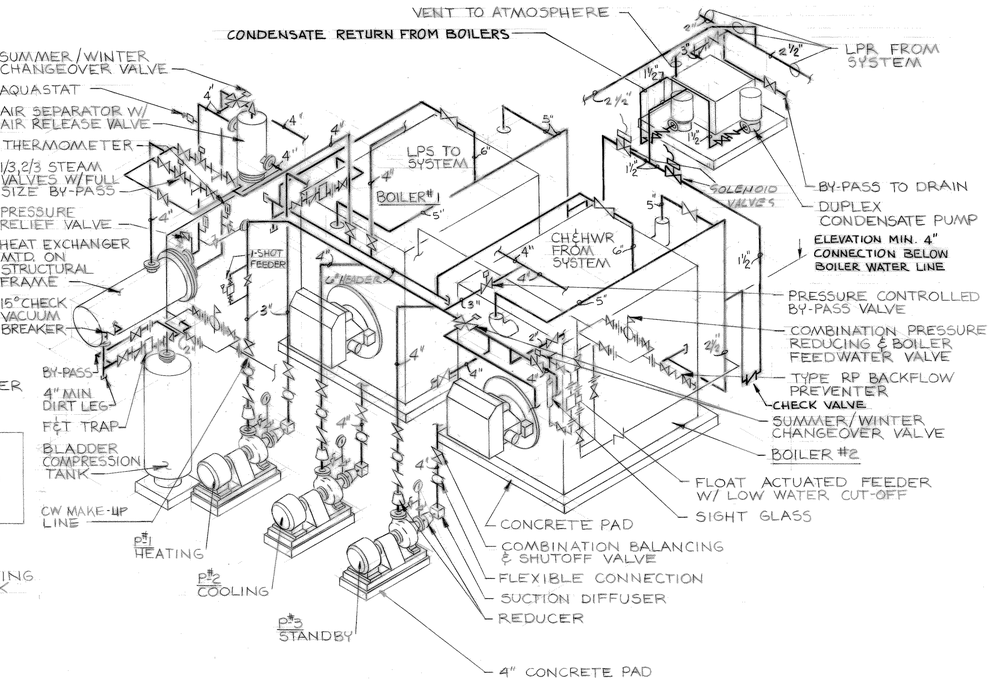
BOILER ROOM DEMOLITION PLAN

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



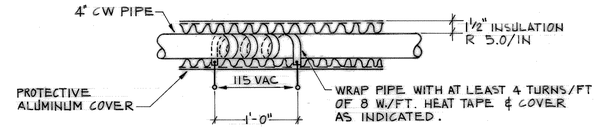
BOILER ROOM PLAN

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



BOILER ROOM ISOMETRIC

NOT TO SCALE



WEATHER EXPOSED CW PIPING

NOT TO SCALE

DEMOLITION PLAN NOTES

THESE NOTES APPLY TO THIS SHEET ONLY

1. REMOVE STEAM PIPING & HANGERS
2. REMOVE GAS PIPING & HANGERS TO THE METER
3. REMOVE CONDENSATE PUMP & PIPING
4. MODIFY INCOMING CW PIPING & METER AS SHOWN ON BOILER ROOM PLAN
5. REMOVE HOT WATER GENERATOR, SUPPORTS & PIPING. DISPOSE OF IN ITS ENTIRITY.
6. REMOVE GAS WATER HEATER, PIPING & VENT. SALVAGE FOR OWNER.
7. REMOVE T.C. COMPRESSOR, CONTROLLERS & RELATED ASSEMBLIES.
8. REMOVE BOILER BREECHING & FAN, W.H. VENT TO STACK PREPARE TO CONNECT NEW BREECHING & W.H VENT TO STACK THRU EXISTING OPENING
9. REMOVE BOILER, BURNER, CONTROLS & PIPING
10. REMOVE INSULATION FROM ALL PIPING REMAINING IN BOILER ROOM
11. REMOVE BOILER CW MAKEUP TO TEE AT CW MAIN & PREPARE FOR NEW CW PIPING CONNECTION
12. DRAIN SHALL REMAIN

PLAN NOTES

1. PROVIDE 4" CONCRETE PAD
2. CONNECT NEW LPS & R TO EXISTING PIPING, REPLACE STRAINER, TRAP, UNION & VALVES IN LPS DRIP. REPLACE GATE VALVES IN LPR.
3. PROVIDE STRUCTURAL SUPPORT FRAME FOR HEAT EXCHANGER
4. SYSTEM SUMMER/WINTER CHANGEOVER VALVES CONTROLLED BY O.A. T'STAT.
5. PRESSURE CONTROLLED BY-PASS VALVE
6. AIR SEPARATOR W/ AIR RELEASE VALVE
7. CHEMICAL SHOT FEEDER
8. ROUTE NEW BREECHING THRU EXISTING OPENINGS & PATCH MASONARY & STACK LINER
9. HOLD PIPING TIGHT AGAINST WALL
10. HOLD PIPING AS HIGH AS POSSIBLE
11. EXISTING COMBUSTION LOUVER TO REMAIN IN USE PROVIDE NEW AUTOMATIC DAMPER - INTERLOCK DAMPER WITH WATER HEATER BURNER
12. REINSULATE ALL EXISTING PIPING IN BOILER ROOM
13. RELOCATED WATER METER
14. CONNECT NEW CW TO EXISTING CW MAIN TEE
15. ALL EXISTING DRAINS SHALL BE CLEANED & RODDED
16. CLEAN & ROD EXISTING SITE DRAIN TERMINATE COND. PUMP BY-PASS, DOMESTIC HW RELIEF & COMPRESSOR DRAIN LINES OVER DRAIN
17. COMBUSTION AIR LOUVER BY G.C. TO REPLACE EXISTING WINDOW LOCATION SIZE 36"x44" (8 SQ. FT FREE AREA). PROVIDE AUTOMATIC DAMPERS THAT INTERLOCK WITH BOILER BURNERS
18. EXHAUST FAN #5 WITH WEATHER SHUTTER TO REPLACE EXISTING WINDOW
19. 2" APPROVED BACKFLOW PREVENTOR, REDUCED PRESSURE TYPE. APPROVED BY INDIANA STATE BOARD OF HEALTH
20. 3" GAS DOWN TO BOILER.
21. CHEMICAL FEEDER, 1-SHOT.

Revisions			
Symbol	Descriptions	Date	Approved

JAMES ASSOCIATES
ARCHITECTS AND ENGINEERS
2828 EAST 45TH STREET
INDIANAPOLIS, IN. 45205

U.S. ARMY ENGINEER DISTRICT
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LOUISVILLE, KENTUCKY

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Checked by: D.G.W.
Reviewed by:
Approved by:

US Army Corps of Engineers

USAR CENTER, INDIANAPOLIS, INDIANA
EXPAND AND MODERNIZE USARC
MRD-84-MCAR-5A

BOILER ROOM PLAN

Scale: 1/4" = 1'-0"
Date: 20 JANUARY 84
Drawing Code: DEF-29-06-
Sheet reference number: M-7
Sheet 45 of 67.

REVISED BY LOU. DIST CORPS OF ENGRS TO "AS BUILT" CONDITIONS

RECORD DRAWING-"AS BUILT"

ORE-11836-45
IN016-0015 M7of9

EXHAUST FAN SCHEDULE

FAN NO.	AREA SERVED	TYPE	C.F.M.	S.P. IN WATER	REMARKS	HP
E.F.#1	SCULLERY #127	CENT.	630	1/2"	BELT DRIVE (DISWASHER)	1/4
E.F.#2	SCULLERY #127	CENT.	630	1/2"	BELT DRIVE (SINK HOOD)	1/4
E.F.#3	FOOD STORAGE #125	CENT.	580	3/8"	BELT DRIVE	1/4
E.F.#4	KITCHEN #126	CENT.	4560	1/4"	BELT DRIVE (RANGE EXHAUST)	3/4
E.F.#5	BOILER ROOM #133	PROP.	4112	.1"	DIRECT DRIVE-W/WEATHER SHUTTER	1/2

UNIT HEATER SCHEDULE

UNIT HEATER DESIGNATION	AREA SERVED	NO. REQ'D.	CAPACITY @ 120°F BTU/HR EA.	ENTERING TEMP °F AIR	ENTERING TEMP °F WATER	G. P. M.	HP
U.H.#1	FOOD STORAGE #125	1	23,800	60	120	3.26	1/20
U.H.#2	KITCHEN #126	1	3,460	60	120	3.56	1/8
U.H.#3	SCULLERY #127	1	23,800	60	120	3.26	1/20

PUMP SCHEDULE

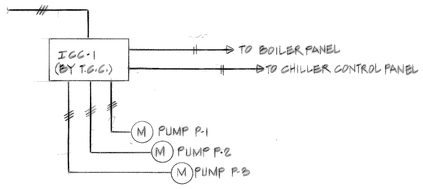
PUMP NO.	G.P.M.	TOTAL HEAD IN FEET	SERVICE	REMARKS
P-#1	116	30'	HEATING PRIMARY	3 HP., 208/60/3ϕ
P-#2	227	80'	COOLING PRIMARY	10 HP., 208/60/3ϕ
P-#3	227	80'	HEAT/COOL STANDBY	10 HP., 208/60/3ϕ

BOILER SCHEDULE

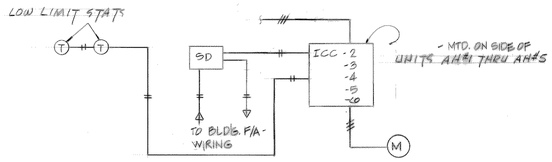
BOILER NO.	GROSS BTU OUTPUT	BOILER HP	TYPE	BURNER	REMARKS
B-1	16000000	50	STEAM	GAS/OIL	1½ HP BOILER MOTOR, 208/60/3ϕ
B-2	16000000	50	STEAM	GAS/OIL	

MISCELLANEOUS EQUIPMENT SCHEDULE

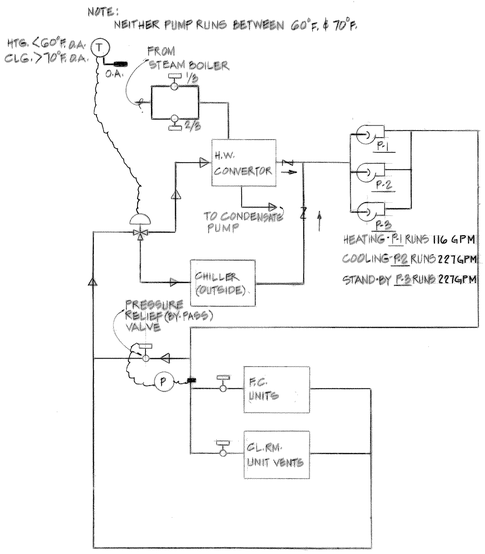
DESIGNATION	DESCRIPTION	REMARKS
COMPRESSION TANK	264 GAL. BLADDER TYPE	FLOOR MOUNTED
HEAT EXCHANGER	2 PASS, 1385# MBH., 116 GPM, 24° T.D., 2.7 FT. P.D.	PROVIDE SUPPORT FRAME 2# STEAM/107°-133° HOT WATER
CHEMICAL SHOT FEEDER		
T.C. COMPRESSOR	5 HP DUPLEX 120 GAL. RECEIVER	BY CONTROLS CONTRACTOR
AIR SEPARATOR	300 GPM	
DEHUMIDIFIER	15 PT. CAPACITY	OMAR FUNDED



WATER PUMP WIRING DIAGRAM



A.H.U. WIRING DIAGRAM



HEATING (< 60°F. O.A.) CHILLER-OFF
H.W. CONVERTOR-OPERATIVE
180°F. H.W. @ 10°F. O.A.
80°F. H.W. @ 60°F. O.A.
CH. WATER PUMP - OFF
H.W. PUMP - ON

COOLING (>70°F. O.A.) CHILLER-ON
H.W. CONVERTOR VALVES - CLOSED
CH. WATER PUMP - ON
H.W. PUMP - OFF

PRIMARY WATER CONTROL DIAGRAM

Revisions			
Symbol	Descriptions	Date	Approved

JAMES ASSOCIATES
ARCHITECTS AND ENGINEERS
2828 EAST 45TH STREET
INDIANAPOLIS, IN. 46205

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
LOUISVILLE, KENTUCKY

Designed by: D.G.W.
Drawn by: M.S.M.
Checked by: D.G.W.
Reviewed by:
Approved by:

US Army Corps of Engineers

U.S.A.R. CENTER, INDIANAPOLIS, INDIANA
EXPAND AND MODERNIZE U.S.A.R.C.
MRD-84-MCAR-5A

MECHANICAL SCHEDULES & DETAILS

Scale: NONE
Date: 20 JANUARY 84
Sheet reference number: M-8
Drawing Code: DEF-29-06-
Sheet 46 of 67

OPF. 11836-46
IN016-0015 M858

RECORD DRAWING-"AS BUILT"

FAN COIL UNIT SCHEDULE

	SYMBOL	C.F.M.	OUTSIDE AIR	ROOM No	**COOLING MAX. COIL FACE VEL./ F.P.M.	TOTAL SENSIBLE BTUH	TOTAL BTUH	ENTER'G. AIR D.B.	ENTER'G. AIR W.B.	LEAVING AIR D.B.	LEAVING AIR W.B.	CHILLED WATER G.P.M.	CHILLED WATER ΔT	CHILLED WATER ENT OF	***HEATING ENTER'G. AIR D.B.	MAX. COIL FACE VEL./ F.P.M.	NET COIL LOAD BTUH	G.P.M.	AVE. WATER TEMP.
	F.C.#1	560	130	113	—	11,866	23,233	81.2°	68.7°	65.0°	58.5°	4.65	10°	45°	51.3°	—	20,900	1.5	120°
	F.C.#2	420	125	114	—	10,063	20,993	82.2°	69.4°	65.0°	57.6°	4.2	10°	45°	51.8°	—	14,025	1.5	120°
	F.C.#3	420	125	114	—	10,063	20,993	82.2°	69.4°	65.0°	57.6°	4.2	10°	45°	51.8°	—	14,025	1.5	120°
	F.C.#4	220	22	116	—	2,483	3,627	79.4°	67.6°	65.0°	60.2°	.73	10°	45°	59.1°	—	6,600	0.5	120°
	F.C.#5	220	22	117	—	3,917	5,061	79.4°	67.6°	65.0°	61.5°	1.01	10°	45°	59.1°	—	6,600	0.5	120°
	F.C.#6	560	120	118	—	14,322	24,815	82.8°	68.4°	65.0°	61.4°	4.96	10°	45°	52.4°	—	24,035	2	120°
	F.C.#7	220	40	118A	—	4,774	8,212	80.5°	67.6°	65.0°	59.6°	1.65	10°	45°	54.3°	—	8,525	1	120°
	F.C.#8	220	22	134	—	856	1,675	80.6°	67.3°	65.0°	61.5°	0.3	10°	45°	59.1°	—	6,600	0.5	120°
	F.C.#9	220	22	135	—	2,171	2,690	80.6°	67.3°	65.0°	61.7°	0.3	10°	45°	59.1°	—	6,600	0.5	120°
	F.C.#10	420	110	136	—	10,790	20,409	81.7°	68.3°	65.0°	60.3°	4.08	10°	45°	49.5°	—	16,225	1.5	120°
	F.C.#11	220	22	132	—	4,035	5,179	80.6°	67.3°	65.0°	61.4°	1.03	10°	45°	59.1°	—	8,415	1	120°
*	F.C.#12	220	0	131	—	—	—	—	—	—	—	—	—	—	65.0°	—	6,600	0.5	120°
	F.C.#13	220	22	130	—	3,001	4,145	80.6°	67.3°	65.0°	61.3°	0.8	10°	45°	59.1°	—	8,415	1	120°
*	F.C.#14	220	0	123	—	—	—	—	—	—	—	—	—	—	65.0°	—	6,600	0.5	120°
	F.C.#15	220	22	124	—	1,991	3,135	80.6°	67.3°	65.0°	60.2°	0.6	10°	45°	59.1°	—	8,415	1	120°
	F.C.#16	420	110	136	—	10,790	20,409	81.7°	68.3°	65.0°	60.3°	4.08	10°	45°	49.5°	—	16,225	1.5	120°
	F.C.#17	220	22	138	—	856	1,617	80.6°	67.8°	65.0°	61.5°	0.3	10°	45°	59.1°	—	6,600	0.5	120°
	F.C.#18	220	22	139	—	2,155	2,974	80.6°	67.3°	65.0°	61.2°	0.6	10°	45°	59.1°	—	6,600	0.5	120°
	F.C.#19	220	22	140	—	2,155	2,974	80.6°	67.3°	65.0°	61.2°	0.6	10°	45°	59.1°	—	6,600	0.5	120°
	F.C.#20	220	22	141	—	856	1,675	80.6°	67.3°	65.0°	61.5°	0.3	10°	45°	59.1°	—	6,600	0.5	120°
	F.C.#21	420	85	148	—	8,962	16,613	80.8°	67.8°	65.0°	59.0°	3.32	10°	45°	53.1°	—	16,225	1.5	120°
	F.C.#22	420	85	148	—	8,962	16,613	80.8°	67.8°	65.0°	59.0°	3.32	10°	45°	53.1°	—	16,225	1.5	120°
	F.C.#23	220	22	149	—	2,146	2,965	80.6°	67.3°	65.0°	61.3°	0.6	10°	45°	59.1°	—	6,600	0.5	120°
	F.C.#24	560	125	151	—	14,110	25,040	81.1°	69.0°	65.0°	59.6°	5.01	10°	45°	51.8°	—	22,000	2	120°
	F.C.#25	220	22	150	—	856	1,675	80.6°	67.3°	65.0°	61.5°	0.3	10°	45°	59.1°	—	6,600	0.5	120°
	F.C.#26	560	170	147	—	15,153	30,018	82.2°	68.8°	65.0°	58.2°	6.0	10°	45°	47.1°	—	20,790	1.5	120°
	F.C.#27	220	22	146	—	856	1,675	80.6°	67.3°	65.0°	61.5°	0.3	10°	45°	59.1°	—	6,600	0.5	120°
	F.C.#28	220	22	145	—	1,372	2,191	80.6°	67.3°	65.0°	60.2°	0.4	10°	45°	59.1°	—	6,600	0.5	120°
	F.C.#29	420	120	142	—	9,763	20,256	82.0°	68.5°	65.0°	57.8°	4.05	10°	45°	65.0°	—	16,060	1.5	120°
*	F.C.#30	560	0	153	—	—	—	—	—	—	—	—	—	—	65.0°	—	20,790	1.5	120°
	F.C.#31	220	22	155	—	2,325	3,144	80.6°	67.3°	65.0°	61.3°	0.6	10°	45°	59.1°	—	6,600	0.5	120°
	F.C.#32	220	22	156	—	2,219	3,038	80.6°	67.3°	65.0°	61.2°	0.6	10°	45°	59.1°	—	6,600	0.5	120°
	F.C.#33	220	22	157	—	3,787	4,606	80.6°	67.3°	65.0°	60.9°	0.9	10°	45°	59.1°	—	6,600	0.5	120°
	F.C.#34	220	22	158	—	2,770	3,589	80.6°	67.3°	65.0°	60.5°	0.7	10°	45°	59.1°	—	6,600	0.5	120°
	F.C.#35	220	22	159	—	2,219	3,038	80.6°	67.3°	65.0°	61.2°	0.6	10°	45°	59.1°	—	6,600	0.5	120°
	F.C.#36	220	22	160	—	2,190	3,009	80.6°	67.3°	65.0°	61.2°	0.6	10°	45°	59.1°	—	6,600	0.5	120°
	F.C.#37	220	22	161	—	2,286	3,105	80.6°	67.3°	65.0°	61.1°	0.6	10°	45°	59.1°	—	6,600	0.5	120°
*	F.C.#38	150	0	166	—	—	—	—	—	—	—	—	—	—	65.0°	—	6,600	0.5	120°
*	F.C.#39	220	22	167	—	—	—	—	—	—	—	—	—	—	59.1°	—	6,600	0.5	120°
*	F.C.#40	220	22	168	—	—	—	—	—	—	—	—	—	—	59.1°	—	8,415	1	120°
*	F.C.#41	420	0	201	—	—	—	—	—	—	—	—	—	—	65.0°	—	17,490	2	120°
	F.C.#42	220	22	170	—	2,551	3,370	80.6°	67.3°	65.0°	61.4°	0.7	10°	45°	59.1°	—	6,600	0.5	120°
*	F.C.#43	220	22	171	—	—	—	—	—	—	—	—	—	—	59.1°	—	6,600	0.5	120°
*	F.C.#44	220	22	172	—	—	—	—	—	—	—	—	—	—	59.1°	—	6,600	0.5	120°
	F.C.#45	220	22	173	—	1,478	2,297	80.6°	67.3°	65.0°	60.4°	0.5	10°	45°	59.1°	—	6,600	0.5	120°
	F.C.#46	220	22	174	—	1,478	2,297	80.6°	67.3°	65.0°	60.4°	0.5	10°	45°	59.1°	—	6,600	0.5	120°
	F.C.#47	220	22	175	—	1,490	2,309	80.6°	67.3°	65.0°	60.2°	0.5	10°	45°	59.1°	—	6,600	0.5	120°
	F.C.#48	220	22	176	—	2,094	2,913	80.6°	67.3°	65.0°	61.2°	0.6	10°	45°	59.1°	—	6,600	0.5	120°
	F.C.#49	220	22	177	—	2,638	3,782	80.6°	67.3°	65.0°	61.0°	0.7	10°	45°	59.1°	—	8,415	1	120°
*	F.C.#50	560	0	112	—	—	—	—	—	—	—	—	—	—	65.0°	—	20,790	2	120°
	F.C.#51	220	22	178	—	1,478	2,297	80.6°	67.3°	65.0°	60.4°	0.5	10°	45°	59.1°	—	6,600		120°
	F.C.#52	220	22	179	—	1,478	2,297	80.6°	67.3°	65.0°	60.4°	0.5	10°	45°	59.1°	—	6,600	0.5	120°
	F.C.#53	220	22	180	—	1,478	2,297	80.6°	67.3°	65.0°	60.4°	0.5	10°	45°	59.1°	—	6,600	0.5	120°
	F.C.#54	220	22	181	—	1,592	2,411	80.6°	67.3°	65.0°	60.1°	0.5	10°	45°	59.1°	—	6,600	0.5	120°
*	F.C.#55	600	0	206	—	—	—	—	—	—	—	—	—	—	65.0°	—	20,790	1.5	120°
*	F.C.#56	300	0	119	—	—	—	—	—	—	—	—	—	—	65.0°	—	11,000	1	120°
*	F.C.#57	300	0	151A	—	—	—	—	—	—	—	—	—	—	65.0°	—	11,000	1	120°
*	F.C.#58	800	0	119	—	—	—	—	—	—	—	—	—	—	65.0°	—	26,290	2	120°
*	F.C.#59	305	0	144	—	—	—	—	—	—	—	—	—	—	65.0°	—	11,275	1	120°
*	F.C.#60	600	0	206	—	—	—	—	—	—	—	—	—	—	65.0°	—	20,790	1.5	120°
	F.C.#61	220	22	243	—	2,066	2,885	80.6°	67.3°	65.0°	61.0°	0.6	10°	45°	59.1°	—	6,600	0.5	120°
	F.C.#62	220	22	242	—	1,968	2,788	80.6°	67.3°	65.0°	60.9°	0.6	10°	45°	59.1°	—	6,600	0.5	120°
	F.C.#63	230	10	241	—	3,941	5,085	80.8°	67.3°	65.0°	61.5°	0.34	10°	45°	59.1°	—	6,600	0.5	120°
*	F.C.#64	220	22	205	—	—	—	—	—	—	—	—	—	—	59.1°	—	6,600	0.5	120°
	F.C.#65	420	110	211	—	11,146	20,546	81.6°	68.4°	65.0°	59.0°	4.1	10°	45°	49.5°	—	12,210	1.5	120°
	F.C.#66	420	110	211	—	11,146	20,546	81.6°	68.4°	65.0°	59.0°	4.1	10°	45°	49.5°	—	12,210	1.5	120°
	F.C.#67	880	170	212	—	18,661	33,526	80.7°	67.3°	65.0°	59.2°	6.7	10°	45°	53.6°	—	26,400	2	120°
	F.C.#68	420	125	213	—	11,521	22,451	82.2°	68.5°	65.0°	58.4°	4.5	10°	45°	51.8°	—	17,490	2	120°
*	F.C.#69	300	0	217	—	—	—	—	—	—	—	—	—	—	65.0°	—	11,000	1	120°
*	F.C.#70	300	0	218	—	—	—	—	—	—	—	—	—	—	65.0°	—	11,000	1	120°
	F.C.#71	560	150	219	—	13,648	26,764	81.7°	68.5°	65.0°	58.5°	5.35	10°	45°	49.2°	—	22,000	2	120°
*	F.C.#72	560	0	220	—	—	—	—	—	—	—	—	—	—	65.0°	—	20,790	1.5	120°
	F.C.#73	220	22	222	—	1,961	3,105	80.6°	67.3°	65.0°	60.0°	0.6	10°	45°	59.1°	—	6,600	0.5	120°
	F.C.#74	220	22	223	—	3,866	4,685	80.6°	67.3°	65.0°	61.9°	1.0	10°	45°	59.1°	—	6,600	0.5	120°
	F.C.#75	220	22	224	—	4,882	5,701	80.6°	67.3°	65.0°	62.0°	1.1	10°	45°	59.1°	—	6,600	0.5	120°
	F.C.#76	220	22	225	—	2,700	3,519	80.6°	67.3°	65.0°	61.3°	0.7	10°	45°	59.1°	—	6,600	0.5	120°
	F.C.#77	220	22	226	—	3,354	4,173	80.6°	67.3°	65.0°	61.6°	0.8	10°	45°	59.1°	—	6,600	0.5	120°
	F.C.#78	220	22	228	—	5,769	6,913	80.6°	67.3°	65.0°	60.9°	1.4	10°	45°	59.1°	—	8,525	1	120°
	F.C.#79	220	22	229	—	2,701	3,520	80.6°	67.3°	65.0°	61.2°	0.7	10°	45°	59.1°	—	6,600	0.5	120°
	F.C.#80	220	22	230	—	2,543	3,362	80.6°	67.3°	65.0°	61.5°	0.7	10°	45°	59.1°	—	8,525	1	120°
	F.C.#81	220	22	231	—	2,543	3,362	80.6°	67.3°	65.0°	61.5°	0.7	10°	45°	59.1°	—	6,600	0.5	120°
	F.C.#82	220	22	232	—	2,752	3,571	80.6°	67.3°	65.0°	61.4°	0.7	10°	45°	59.1°	—	6,600	0.5	120°
	F.C.#83	220	22	240	—	2,304	3,123	80.6°	67.3°	65.0°	61.1°	0.6	10°	45°	59.1°	—	6,600	0.5	120°
	F.C.#84	220	22	234	—	2,808	3,627	80.6°	67.3°	65.0°	61.5°	0.7	10°	45°	59.1°	—	6,600	0.5	120°
	F.C.#85	220	22	235	—	1,985	2,804	80.6°	67.3°	65.0°	61.0°	0.6	10°	45°	59.1°	—	6,600	0.5	120°
	F.C.#86	220	22	236	—	1,795	2,614	80.6°	67.3°	65.0°	60.7	0.5	10°	45°	59.1°	—	6,600	0.5	120°
	F.C.#87	220	22	238	—	3,941	5,085	80.6°	67.3°	65.0°	61.5°	1.01	10°	45°	59.1°	—	6,600	0.5	120°
	F.C.#88	220	22	239	—	4,115	5,295	80.6°	67.3°	65.0°	61.4°	1.06	10°	45°	59.1°	—	6,600	0.5	120°
*	F.C.#89	800	0	210	—	—	—	—	—	—	—	—	—	—	65.0°	—	26,400	2	120°
	F.C.#90	150	5		—	2,600	3000	80.6°	67.9°	65.0°	61.5°	0.5	10°	45°	67.1°	—	3,600	0.5	160°

* INDICATES HEATING ONLY UNITS.

** COOLING LOADS INDICATED ARE MINIMUM FOR ROOM OR AREA SPECIFIED.

*** HEATING LOADS INDICATED ARE RATED CAPACITIES FOR COILS @ 120°F HOT WATER. HOT WATER HEAT EXCHANGER SIZED TO PROVIDE CAPACITY FOR COIL RATING ABOVE.

UNIT VENTILATOR SCHEDULE

SYMBOL	C.F.M.	OUTSIDE AIR	ROOM No	**COOLING MAX. COIL FACE VEL./ F.P.M.	TOTAL SENSIBLE BTUH	TOTAL BTUH	ENTER'G. AIR D.B.	ENTER'G. AIR W.B.	LEAVING AIR D.B.	LEAVING AIR W.B.	CHILLED WATER G.P.M.	CHILLED WATER ΔT	CHILLED WATER ENT. °F	***HEATING ENTER'G. AIR D.B. °F	MAX. COIL FACE VEL./F.P.M.	NET COIL LOAD BTUH	G.P.M.	AVE. WATER TEMP.
U.V.#1	1500	320	154	—	24,821	52,801	80.9°	68.4°	65.0°	58.5°	10.6	10°	45°	52.4	67.6	40,560	2	120°
U.V.#2	1500	320	154	—	24,821	52,801	80.9°	68.4°	65.0°	58.5°	10.6	10°	45°	52.4	67.6	40,560	2	120°
U.V.#3	2000	303	169	—	31,065	64,729	80.7°	68.3°	65.0°	58.4°	12.9	10°	45°	53.6	66.4	49,136	2	120°
U.V.#4	1500	310	221	—	26,338	53,445	80.9°	68.5°	65.0°	58.8°	10.7	10°	45°	52.8	67.2	40,320	2	120°
U.V.#5	1500	310	221	—	26,338	53,445	80.9°	68.5°	65.0°	58.8°	10.7	10°	45°	52.8	67.2	40,320	2	120°
U.V.#6	2000	405	227	—	34,887	70,300	80.8°	68.2°	65.0°	59.0°	14.1	10°	45°	53.1	66.9	49,506	2	120°
U.V.#7	2000	405	233	—	35,453	70,866	80.8°	68.4°	65.0°	59.0°	14.2	10°	45°	53.1	66.9	49,506	2	120°
U.V.#8	1250	195	204A	—	21,038	38,089	80.2°	67.8°	65.0°	59.7°	7.6	10°	45°	55.8	64.2	28,890	2	120°
U.V.#9	1250	195	204	—	21,038	38,089	80.2°	67.8°	65.0°	59.7°	7.6	10°	45°	55.8	64.2	28,890	2	120°
U.V.#10	1250	210	202	—	23,746	42,108	80.4°	67.9°	65.0°	59.9°	8.4	10°	45°	55.1	64.9	29,205	2	120°
U.V.#11	1250	210	202A	—	23,717	42,079	80.4°	67.9°	65.0°	59.9	8.4	10°	45°	55.1	64.9	29,205	2	120°

AIR HANDLING UNIT SCHEDULE

SYMBOL	C.F.M.	OUTSIDE AIR	S.P. EXT. TO UNIT IN H_2O	MAX. COIL FACE VEL. / F.P.M.	ENTER'G. AIR	E.D.R.	CONDENSATE # / HR.	ROOM No	P.S.I.G.	HP.	REMARKS
A.H.U.#1	2700	1620	3/4"	500	29.6°	518	130	128	2#	1	—
A.H.U.#2	2700	1620	3/4"	500	29.6°	518	130	128	2#	1	—
A.H.U.#3	2700	1620	3/4"	500	29.6°	518	130	128	2#	1	—
A.H.U.#4	2700	1620	3/4"	500	29.6°	518	130	128	2#	1	—
A.H.U.#5	2040	200	1 1/4"	500	59.2°	233	58	214	2#	1	—
											—

PACKAGE WATER CHILLERS

NO. REQ'D.	CAP'Y. EA., TONS REFRIGERATION	CHILLED WATER G.P.M.	CHILLED WATER IN	CHILLED WATER OUT	CONDENSER AIR C.F.M.	CONDENSER AIR IN	CONDENSER AIR OUT	REMARKS	STEPS OF UNLOADING
1	100 NOM.	240	55	45	76,900	98		2 COMPRESSOR	100-83-50-33

CONDENSATE PUMPING UNIT

TYPE	G.P.M. EA. PUMP	DISCHARGE PRESS. PSI.	MIN. RECEIVER CAPACITY/ GAL.
DUPLEX	20	20	36

Revisions			
Symbol	Descriptions	Date	Approved

JAMES ASSOCIATES
ARCHITECTS AND ENGINEERS
2828 EAST 45TH STREET
INDIANAPOLIS, IN. 46205

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
LOUISVILLE, KENTUCKY

Designed by: D. G.W.
Drawn by: M. S.M.
Checked by: D. G.W.
Reviewed by:
Approved by:

U.S. Army Corps of Engineers

U.S.A.R. CENTER, INDIANAPOLIS, INDIANA
EXPAND AND MODERNIZE U.S.A.R.C.
MRD-84-MCAR-5A

MECHANICAL SCHEDULES

Scale: NONE
Date: 20 JANUARY 84
Drawing Code: DEF-29-06-
Sheet reference number: M-9
Sheet 47 of 67

83101

REVISED BY LOU. DIST CORPS OF ENGRS TO "AS BUILT" CONDITIONS

RECORD DRAWING-"AS BUILT"

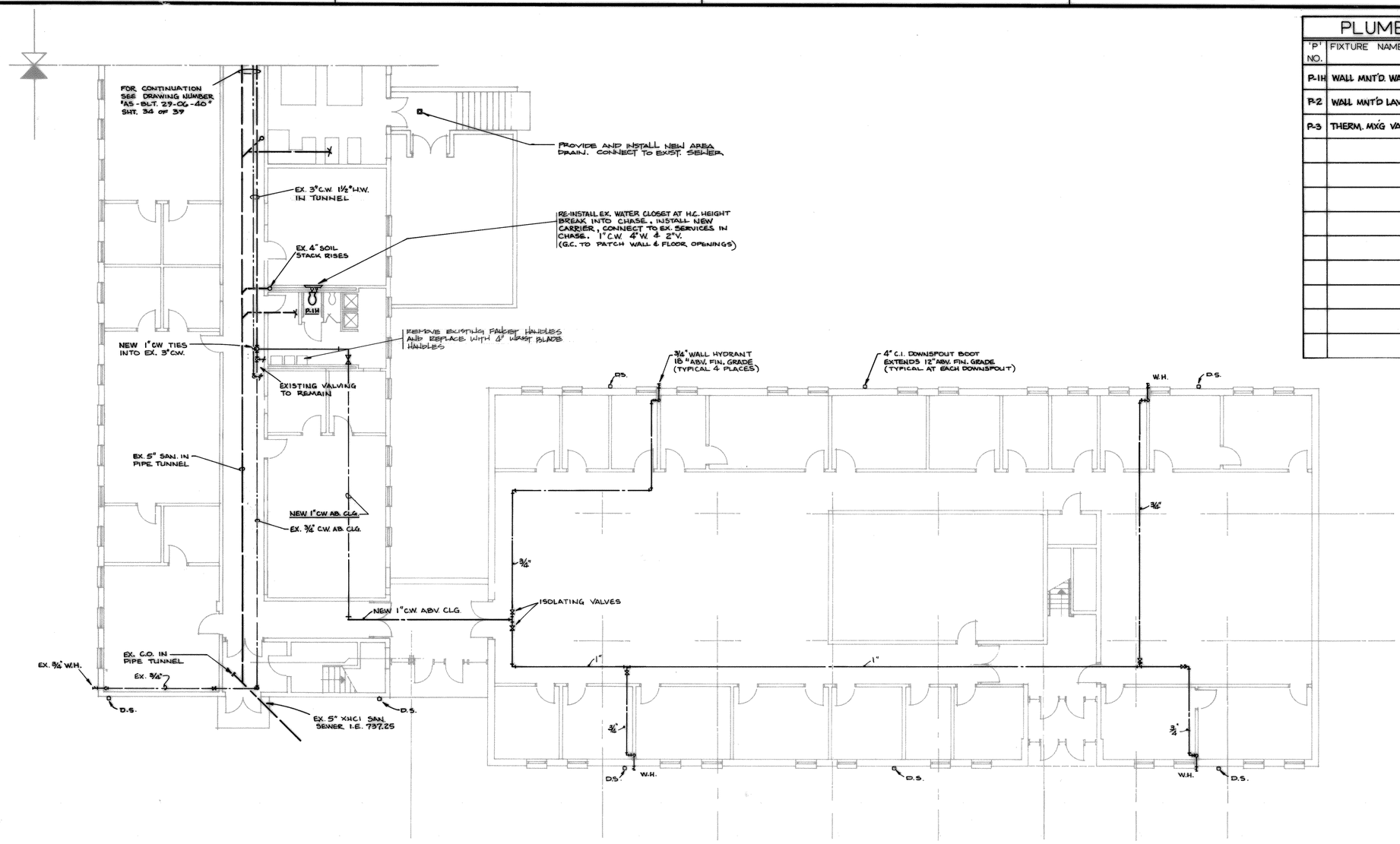
IN016-0015 M9of9

OPR-11836-47

5	4	3	2	1

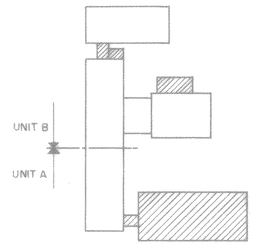
PLUMBING FIXTURE SCHEDULE

'P' NO.	FIXTURE NAME	ROUGH IN PIPE SIZE W	V	CW	HW	THW	MOUNTING HEIGHT	REMARKS
P-1H	WALL MNT'D. WATER CLOSET	4"	2"	1"	—	—	19"	REHANG EX. WATER CLOSET
P-2	WALL MNT'D LAVATORY	1½"	1¼"	½"	½"	—	31"	
P-3	THERM. MXG VALVE	—	—	¾"	¾"	1"	5'-0"	



FIRST LEVEL – UNIT 'A' – PLUMBING PLAN

SCALE 1/8" = 1'-0"



KEY PLAN

NO SCALE

▨ NEW CONSTRUCTION

Symbol	Revisions Descriptions	Date	Approved

JAMES ASSOCIATES
ARCHITECTS AND ENGINEERS
2828 EAST 45TH STREET
INDIANAPOLIS, IN 46205

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
LOUISVILLE, KENTUCKY

Designed by: T.T.B.
Drawn by: M.S.C.
Checked by: D.G.W.
Reviewed by:
Approved by:

US Army Corps of Engineers

USAR CENTER, IN DIANAPOLIS, INDIANA
EXPAND AND MODERNIZE USARC
MRD-84-MCAR-5A

PLUMBING PLAN

Scale: 1/8"-1'-0"
Date: 20 JANUARY 84
Drawing Code: DEF-29-06-
Sheet reference number: P-1
Sheet 48 of 67

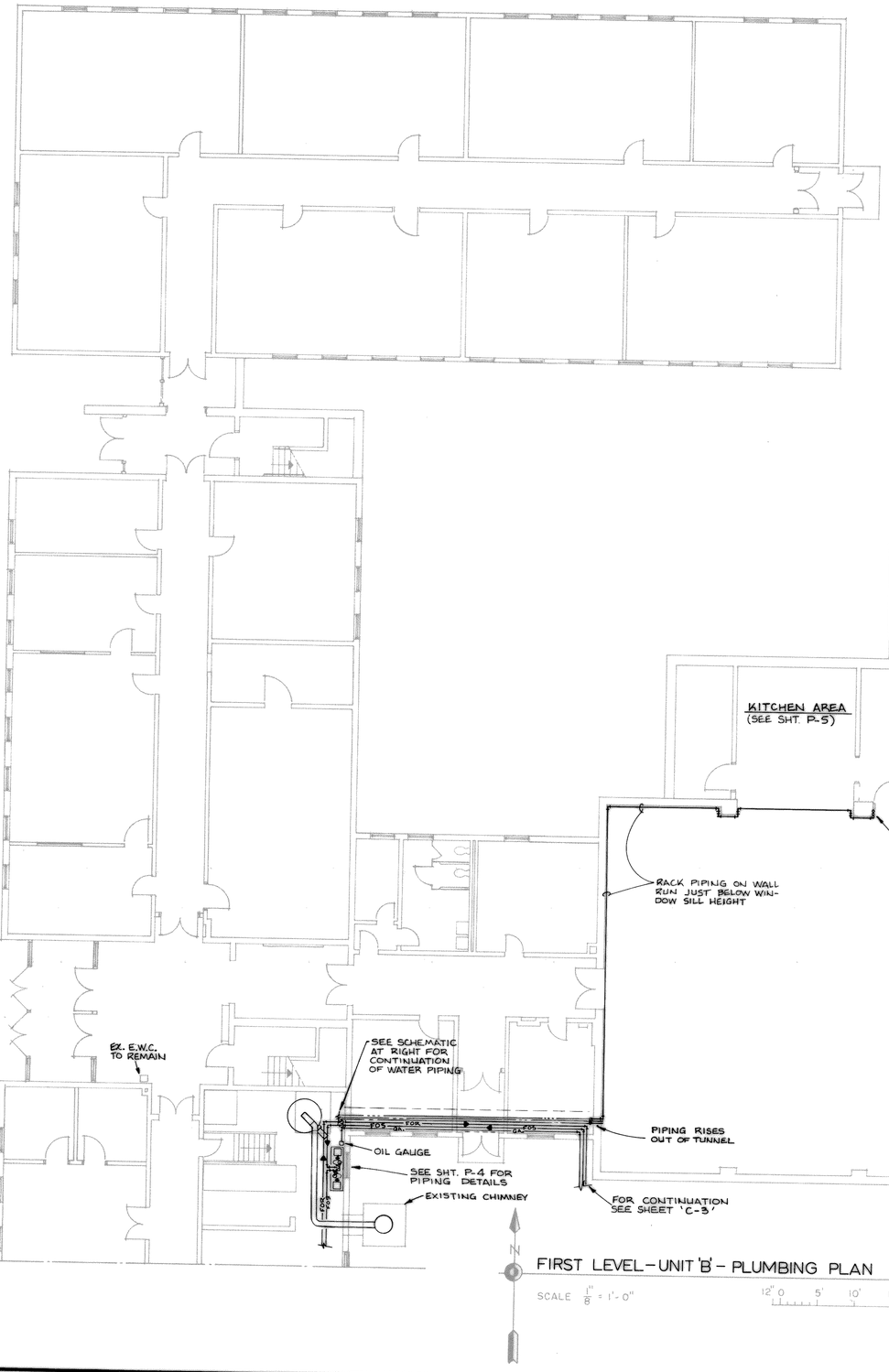
8301		
A-B2	A8-2	0
A-B3	A8-3	0
P-1	P8-1	

REVISED BY LOU. DIST CORPS OF ENGRS TO "AS BUILT" CONDITIONS

RECORD DRAWING-"AS BUILT"

IN016-0015 P1of5

OPE-11836-48



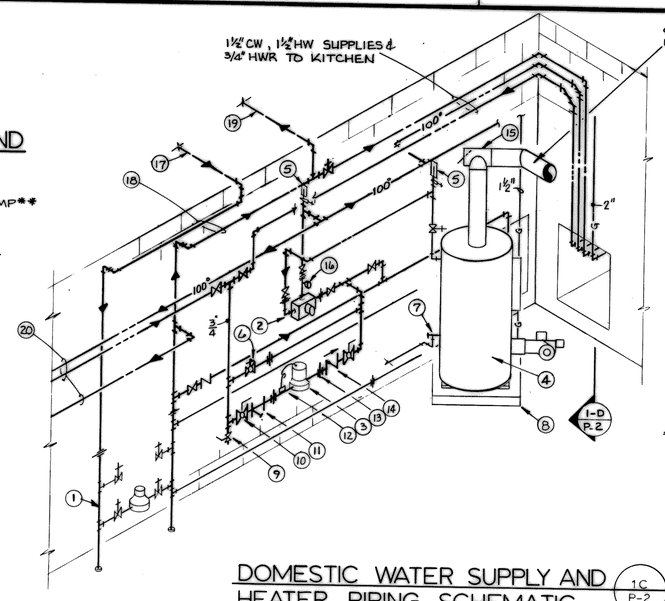
FIRST LEVEL – UNIT 'B' – PLUMBING PLAN

PIPING SCHEMATIC LEGEND

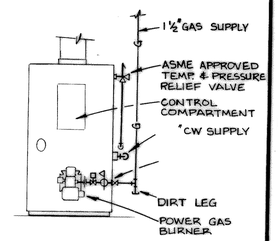
1. RELOCATED WATER METER STAND
2. THERMOSTATIC MIXING VALVE (P-3)*
3. DOMESTIC HOT WATER RECIRCULATING PUMP**
4. DOMESTIC HOT WATER HEATER
5. THERMOMETER (TYPICAL TWO PLACES)
6. BY-PASS – NORMALLY CLOSED – FULL SIZE
7. TANK DRAIN PIPED TO FLOOR DRAIN
8. 4" THK. CONCRETE PAD
9. 3/4" SYSTEM DRAIN
10. BALL VALVE (TYPICAL)
11. STRAINER
12. AQUASTAT
13. UNION (TYPICAL)
14. CHECK VALVE
15. BAROMETRIC DAMPER
16. DIAL THERMOMETER
17. EX. 3" DOMESTIC COLD WATER
18. EX. COLD WATER SUPPLY RELOCATED TO FACILITATE METER RELOCATION
19. EX. COLD WATER SUPPLY
20. EX. HOT, COLD, & HOT WATER RETURN TO CORRIDOR

*(P-3) THERMOSTATIC MIXING VALVE
SYMMONS MODEL S-400
35 GPM AT 18 P.S.I. PRESSURE DROP

** HOT WATER RECIRCULATING PUMP
BELL & GOSSET MODEL 1" PR
10 GPM AT 16 FT TDH – 1/6 HP 120V-1Φ

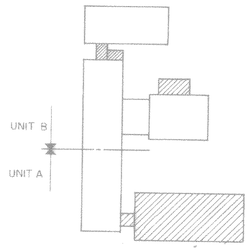


DOMESTIC WATER SUPPLY AND HEATER PIPING SCHEMATIC (1C P-2)
NO SCALE



WATER HEATER ELEVATION VIEW (1-D P-2)
NO SCALE

WATER HEATER SELECTION
A.O. SMITH MODEL BTP-400-600, 576 GPH AT 100°F TEMPERATURE RISE, 434 GAL STORAGE, 600 MBH, 1/2 HP BLOWER MOTOR



KEY PLAN
NO SCALE
NEW CONSTRUCTION

Revisions			
Symbol	Descriptions	Date	Approved
1	ADMENDMENT No1 REVISED ARCHITECTURAL SCREENED BASE	4-19-85	

JAMES ASSOCIATES
ARCHITECTS AND ENGINEERS
2828 EAST 45TH STREET
INDIANAPOLIS, IN 46205

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
LOUISVILLE, KENTUCKY

Designed by: T.T.B.
Drawn by: M.S.C.
Checked by: D.G.W.
Reviewed by:
Approved by:

US Army Corps of Engineers

USAR CENTER, INDIANAPOLIS, INDIANA
EXPAND AND MODERNIZE USARC
MRD-84-MCAR-5A

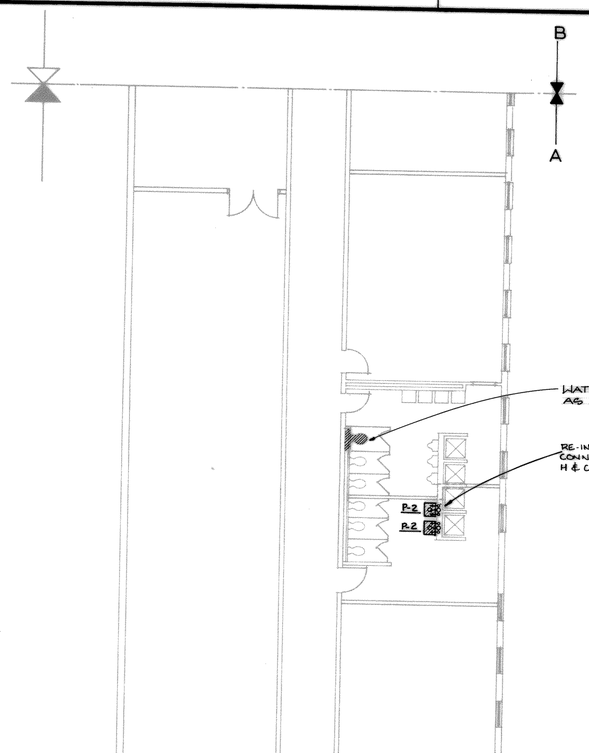
PLUMBING PLAN

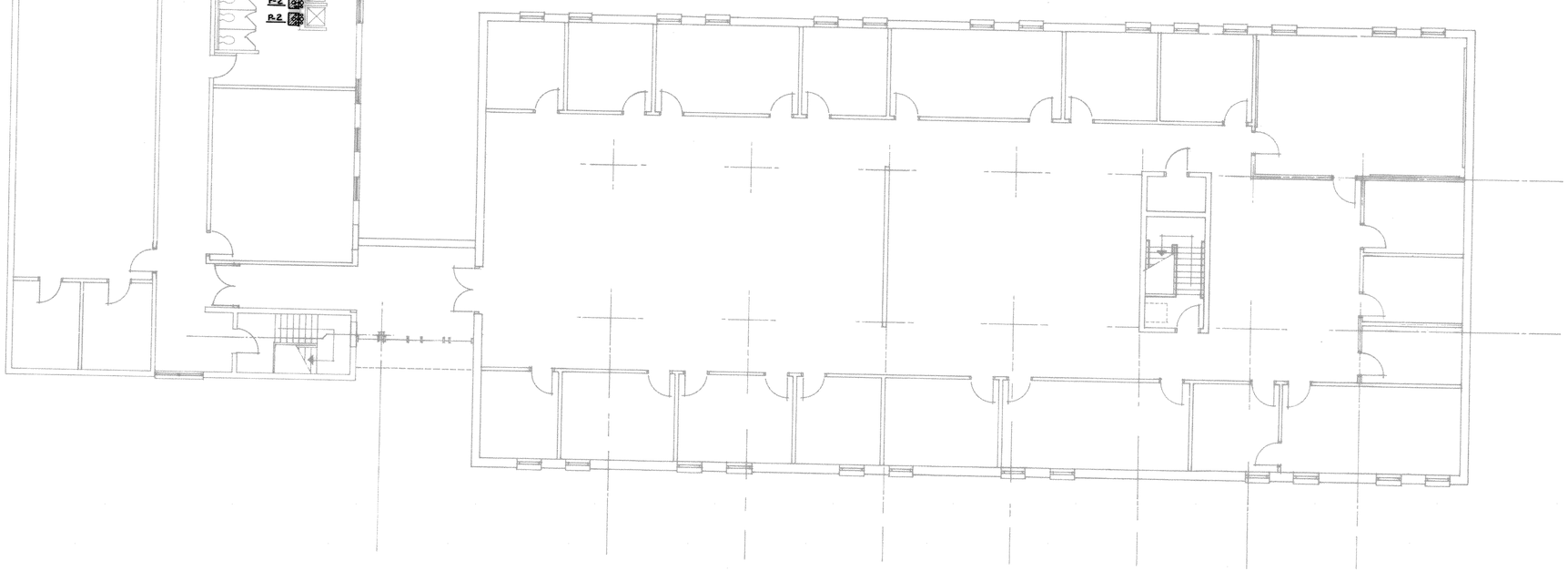
Scale: 1/8" = 1'-0"
Date: 21 MARCH 83
Drawing Code: DEF-29-06-P-2
Sheet reference number:
Sheet 49 of 67

83011
P-2 A-85 A-84 9
P-2 A-83 0

DAEN-CWE-11836-49
IN016-0015 P2of5

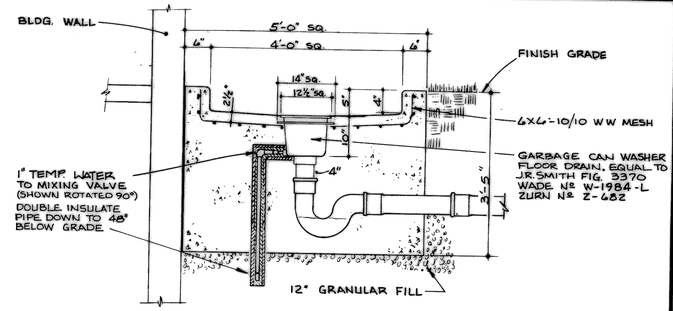
RECORD DRAWING-"AS BUILT"





SECOND LEVEL – UNIT 'A' – PLUMBING PLAN

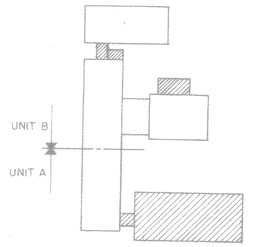
SCALE 1/8" = 1'-0"



GARBAGE CAN WASHER DETAIL

1D / P-5

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



KEY PLAN

NO SCALE

NEW CONSTRUCTION

Revisions			
Symbol	Descriptions	Date	Approved
1	ADMENDMENT No 1 REVISED ARCHITECTURAL SCREENED BASE	4-19-85	

JAMES ASSOCIATES
ARCHITECTS AND ENGINEERS
2828 EAST 45TH STREET
INDIANAPOLIS, IN 46205

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
LOUISVILLE, KENTUCKY

Designed by: T.T.B.
Drawn by: M.S.C.
Checked by: D.G.W.
Reviewed by:
Approved by:

US Army Corps of Engineers

USAR CENTER, INDIANAPOLIS, INDIANA
EXPAND AND MODERNIZE USARC
MRD-84-MCAR-5A

PLUMBING PLAN

Scale: 1/8" = 1'-0"
Date: 21 MARCH 83
Drawing Code: DEF-29-06-
Sheet reference number: P-3
Sheet 50 of 67

83011

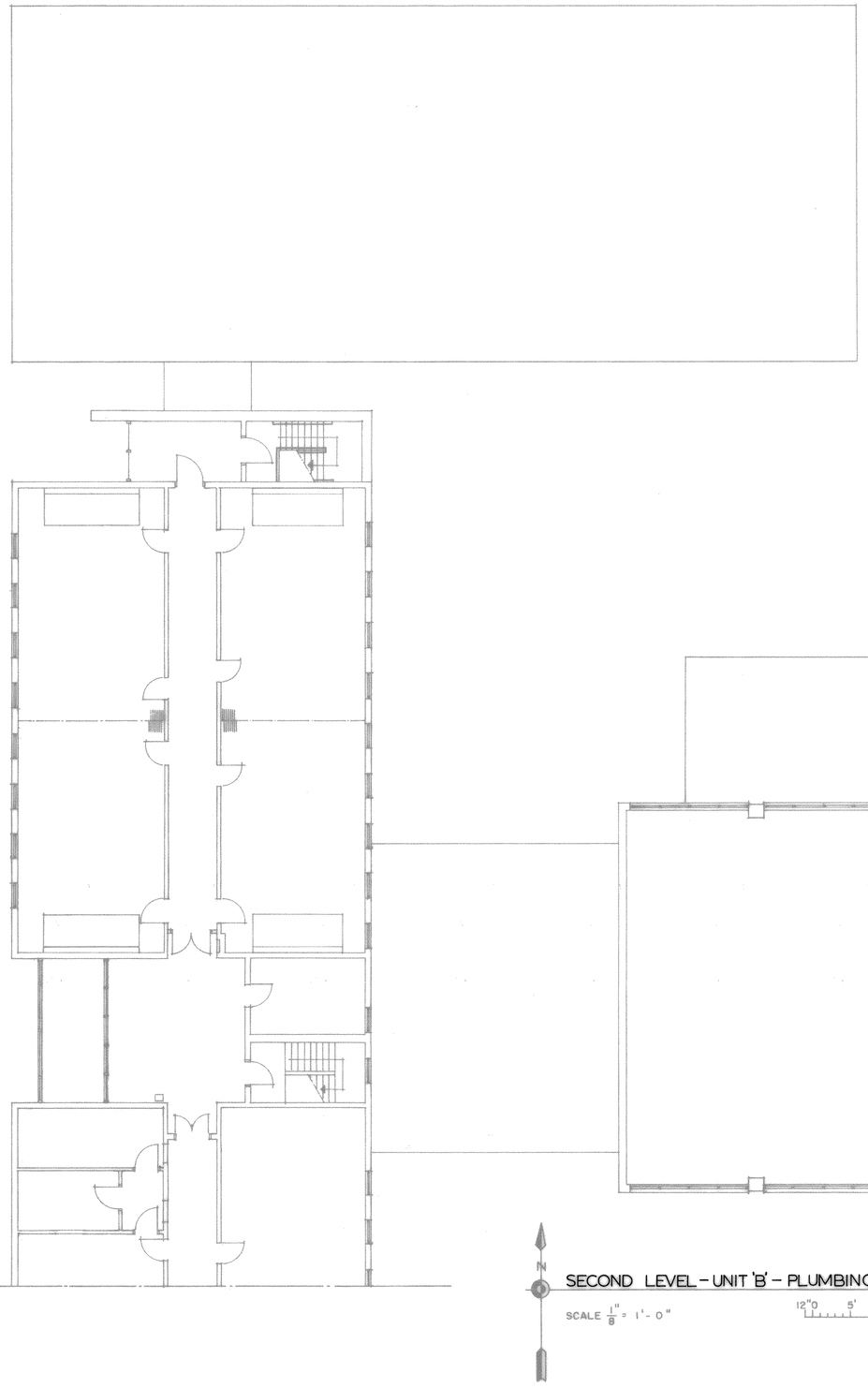
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P0-3	A-87	0
P0-3	A-88	0

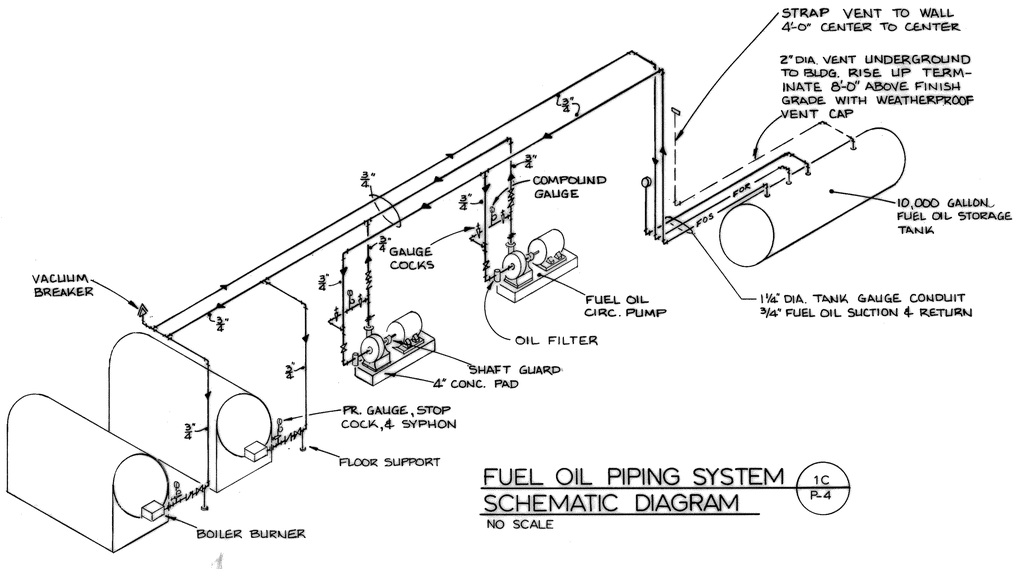
REVISED BY LOU. DIST CORPS OF ENGRS TO "AS BUILT" CONDITIONS

RECORD DRAWING-"AS BUILT"

IN016-0015 P3of5

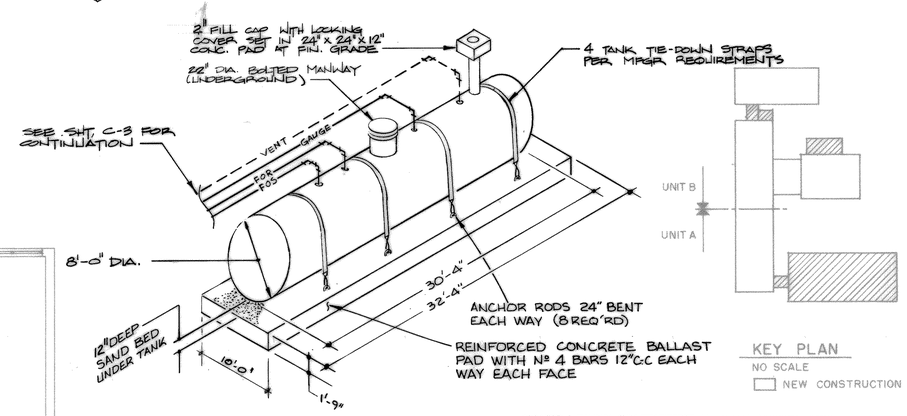
DACW27-83-C-0050





FUEL OIL PIPING SYSTEM SCHEMATIC DIAGRAM (1C / P-4)

NO SCALE



FUEL OIL STORAGE TANK DETAIL (2B / P-4)

NO SCALE

Revisions			
Symbol	Descriptions	Date	Approved

JAMES ASSOCIATES
ARCHITECTS AND ENGINEERS
2828 EAST 45TH STREET
INDIANAPOLIS, IN 46205

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
LOUISVILLE, KENTUCKY

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Drawn by: M.S.C.	EXPAND AND MODERNIZE USARC
Checked by: D.G.W.	MRD-84-MCAR-5A
Reviewed by:	PLUMBING PLAN
Approved by:	Scale: 1/8"= 1'-0"
	Date: 20 JANUARY 84
	Drawing Code: DEF-29-06-
	Sheet reference number: P-4
	Sheet 51 of 67

US Army Corps of Engineers

83011 (83011)

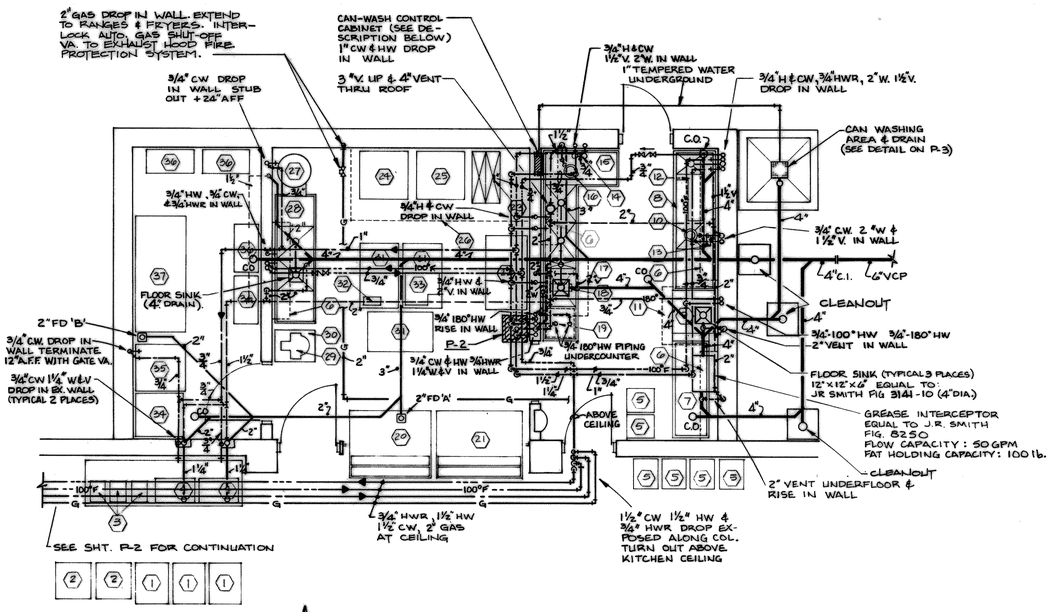
PD-4	P0-4	
A-89	AB-9	0
A-88	AB-8	0

REVISED BY LOU. DIST CORPS OF ENGRS TO "AS BUILT" CONDITIONS

RECORD DRAWING-"AS BUILT"

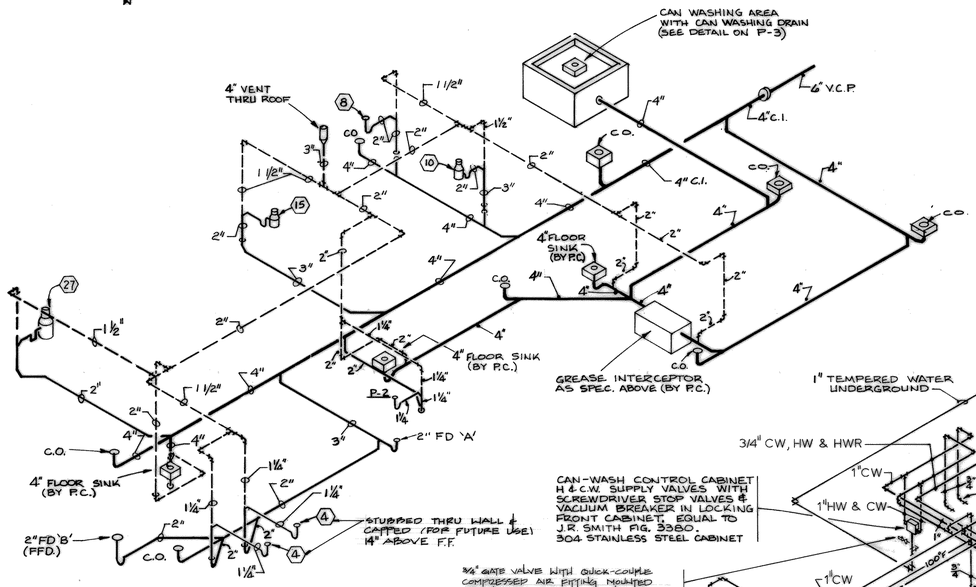
IN016-0015 P4of5

OPF-11836-51



KITCHEN PLUMBING PLAN

SCALE 1/4" = 1'-0" 12" 0 5' 10'



SCHEMATIC PIPING DIAGRAM
KITCHEN WASTE & VENTS
NO SCALE

SCHEMATIC PIPING DIAGRAM
KITCHEN DOMESTIC HOT & COLD WATER
NO SCALE

KITCHEN EQUIPMENT SCHEDULE

ITEM NO.	EQUIP IDENT. NO.	QUAN.	ITEM DESCRIPTION	DIMENSIONS (INCHES) W	D	H	ELECTRICAL VOLTS	PHASE	HORSEPOWER	KILOWATTS	AMPS	PLUMBING HOT WATER	COLD WATER	WASTE	VENT	C.F.M. EXHAUST	REMARKS
1	S-14-5	3	BEVERAGE/SALAD DISPENSER	24	30	36	–	–	–	–	–	–	–	–	–	–	
2	DR-9-1	2	TRAY RACK	26	27	62	–	–	–	–	–	–	–	–	–	–	
3	B-16-2	3	SILVERWARE DISPENSER	15	12	9	–	–	–	–	–	–	–	–	–	–	
4	B-3-1	2	AUTOMATIC COFFEE MAKER	29	18	21	208	1	–	6.0	28.9	–	3/4"	1 1/4"	1 1/4"	–	
5	D-12-5	6	TRAY BUSSING RACK	18	21	69	–	–	–	–	–	–	–	–	–	–	
6	D-13-2	4	WALL MOUNTED SHELF	–	13	–	–	–	–	–	–	–	–	–	–	–	
7	D-2-1	1	CLEAN DISHTABLE	–	26	37	–	–	–	–	–	–	–	–	–	–	
8	D-2-2	1	SOILED DISHTABLE	–	34	37	–	–	–	–	–	(2) 3/4	(2) 3/4 (1) 1"	(2) 2" (1) 3"	(1) 1 1/2 (1) 2"	–	
9	D-3-3	1	DISHWASHING MACHINE	26	30	66	208	3	1	18.0 5.0	57.9	3/4" 100° 3/4" 180°	–	4"	2"	–	FLOOR SINK
10	D-9-2	1	GARBAGE DISPOSAL	–	–	–	200	3	7 1/2	–	24.2	–	–	2"	1 1/2"	–	
11	———	1	EXHAUST HOOD	42	42	18	–	–	–	–	–	–	–	–	–	630	EXH. FAN #1
12	D-20-1	1	RECIRCULATING PUMP	8	12	15	115	1	1/3	7.2	–	–	–	–	–	–	
13	D-16-2	1	PRERINSE SPRAY ASSEMBLY	8	–	72	–	–	–	–	–	3/4"	3/4"	–	–	–	
14	D-16-1	1	PRERINSE SPRAY	4	–	60	–	–	–	–	–	3/4"	3/4"	–	–	–	
15	FW-4-2	1	SINK	–	28	44	–	–	–	–	–	3/4"	3/4"	2"	1 1/2"	–	FLOOR SINK
16	D-9-1	1	GARBAGE DISPOSAL	–	–	–	200	3	5	–	16.7	–	–	2"	1 1/2"	–	
17	D-10-2	1	EXHAUST HOOD	42	36	18	–	–	–	–	–	–	–	–	–	630	EXH. FAN #2
18	FW-1-1	1	HOT WATER HEATER (180°F)	8	18	13	208	3	–	9.0	25.0	3/4"	–	–	–	–	
19	FW-2-1	1	HOT WATER HEATER (180°F)	23	22	32	208	3	–	15.0	41.7	3/4"	–	–	–	–	
20	S-8-3	1	COLD FOOD COUNTER	60	28	36	115	1	1/4	–	5.8	–	–	–	–	–	
21	S-35-1	1	HOT FOOD TABLE	64	34	36	208	3	–	6.0	16.7	–	–	–	–	–	
22	K-55-1	1	STORAGE RACK	55	30	66	–	–	–	–	–	–	–	–	–	–	
23	K-17-6	1	FRYER	21	39	37	–	–	–	–	–	–	–	–	–	–	120,000 BTUH (GAS)
24	K-37-1	1	RANGE	36	42	36	–	–	–	–	–	–	–	–	–	–	132,000 BTUH (GAS)
25	K-37-2	1	RANGE	36	42	36	–	–	–	–	–	–	–	–	–	–	162,000 BTUH (GAS)
26	K-18-1	1	EXHAUST HOOD	132	48	24	–	–	–	–	–	–	–	–	–	4560	EXH. FAN #3
27	K-49-1	1	VEGETABLE PEELER	24	28	50	115	1	1/2	–	25.8	–	3/4"	1 1/2"	1 1/2"	–	
28	K-40-2	1	VEGETABLE PREP. SINK	96	30	44	–	–	–	–	–	3/4"	3/4"	2"	1 1/2"	–	FLOOR SINK
29	K-25-1	1	MIXING MACHINE	20	22	32	115	1	1/2	–	9.8	–	–	–	–	–	
30	K-42-1	1	MIXER STAND	24	30	24	–	–	–	–	–	–	–	–	–	–	
31	S-34-3	3	FOOD PREPARATION TABLE	48	30	36	–	–	–	–	–	–	–	–	–	–	
32	K-26-1	1	CAN OPENER	6	8	14	115	1	–	–	–	–	–	–	–	–	
33	K-24-1	1	MEAT SLICING MACHINE	24	27	30	115	1	1/3	–	7.2	–	–	–	–	–	
34	R-1-1	1	FROZEN FOOD CABINET	32	36	85	115	1	1/2	–	9.8	–	–	–	–	–	
35	B-22-1	1	ICE MAKING MACHINE	36	33	72	115	1	1	–	16.0	–	3/4"	2"	–	–	FLOOR DRAIN W/ FUNNEL
36	D-14-2	4	FOOD SERVICE SHELVING	36	18	80	–	–	–	–	–	–	–	–	–	–	
37	S-26-3	1	REFRIGERATOR	87	30	85	208	1	3/4	–	6.9	–	–	–	–	–	

Revisions Symbol	Descriptions	Date	Approved

JAMES ASSOCIATES
ARCHITECTS AND ENGINEERS
2828 EAST 45TH STREET
INDIANAPOLIS, IN 46205

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
LOUISVILLE, KENTUCKY

Designed by:	T.T.B.
Drawn by:	M.S.C.
Checked by:	D.G.W.
Reviewed by:	
Approved by:	

US Army Corps of Engineers

USAR CENTER, INDIANAPOLIS, INDIANA
EXPAND AND MODERNIZE USARC
MRD-84-MCAR-5A

KITCHEN PLUMBING PLAN

Scale: 1/4" = 1'-0"
Date: 20 JANUARY 84
Drawing Code: DEF-29-06-
Sheet reference number: P-5
Sheet 52 of 67

83011 AB-11 PO-5 PO-55

OPF-91836-52

REVISED BY LOU. DIST CORPS OF ENGRS TO "AS BUILT" CONDITIONS

RECORD DRAWING-"AS BUILT" IN016-0015 P5285

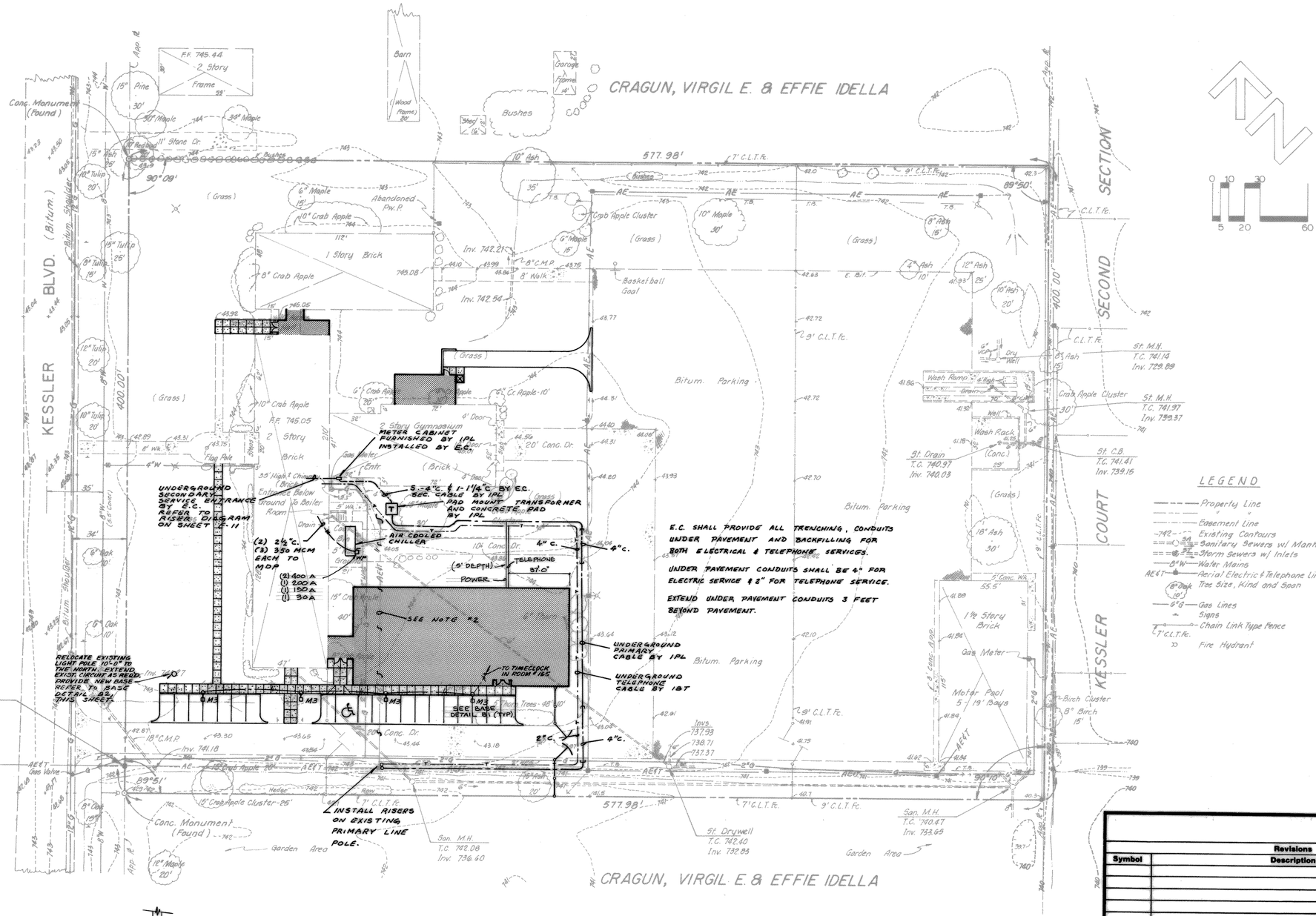
PUBLIC UTILITIES

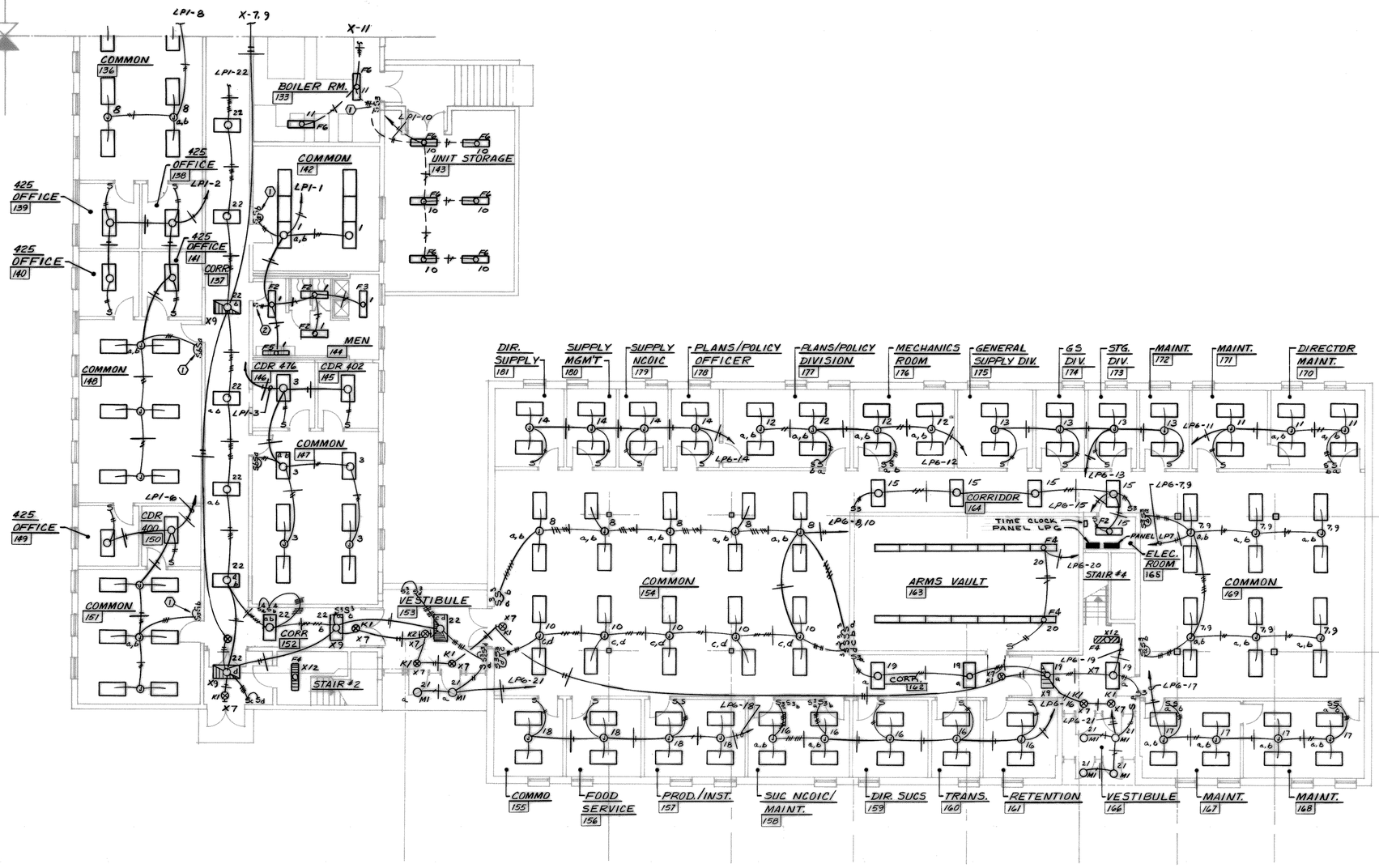
Electric	Indianapolis Power & Light Company P.O. Box 1595 B Indianapolis, Indiana 46206
Gas	Citizen's Gas & Coke Utility 2020 N. Meridian St. Indianapolis, Indiana 46202
Telephone	Indiana Bell Telephone Company 220 N. Meridian St. Room No. 875 Indianapolis, Indiana 46204
Water	Indianapolis Water Company P.O. Box 1220 Indianapolis, Indiana 46206
Sewers	Dept. of Public Works City - County Bldg. Indianapolis, Indiana 46204

NOTES:

Source Of Level Datum - Indiana Flood Control State Flood Board B.M. "MAR 62", A Bronze Disc @ 30th Street Bridge Over White River. Set in top S.W. Conc. Handrail, 43' S-SW of E of 30th St., 9' W-NW at the E-SE face of W-NW Abutment, 3.5' above sidewalk. Elev. 716.29

THE CONNECTED ELECTRICAL LOADS HAVE BEEN SUBMITTED TO INDIANAPOLIS POWER & LIGHT COMPANY ALONG WITH ESTIMATED DEMANDS. THE SIZE OF TRANSFORMER WILL BE DETERMINED BY I.P.&L.


CRAGUN, VIRGIL E. & EFFIE IDELLA
KESSLER BLVD. (Bitum.)
SECOND SECTION COURT
577.98'
400.00'
90°09'
89°50'
89°51'
F.F. 745.44
2 Story Frame
Barn (Wood Frame)
Garage Frame
Shed
Bushes
Abandoned Pw. P.
1 Story Brick
2 Story Gymnasium
2 Story Brick
Basketball Goal
Bitum. Parking
Wash Ramp
Wash Rack (Conc.)
1½ Story Brick
Gas Meter
Meter Pool 5 / 19" Bays
Dry Well
Flag Pole
Inv. 742.21
Inv. 742.54
R.F. 745.05
R.F. 745.06
Inv. 741.18
Inv. 740.97
Inv. 740.03
Inv. 741.14
Inv. 739.89
Inv. 741.97
Inv. 739.37
Inv. 741.41
Inv. 739.15
Inv. 740.47
Inv. 733.65
Inv. 737.93
Inv. 738.71
Inv. 737.37
Inv. 742.40
Inv. 732.83
Inv. 742.08
Inv. 736.60
Inv. 744.37
Inv. 744.87
Inv. 744.87
Inv. 744.87



FIRST LEVEL UNIT "A" LIGHTING PLAN

SCALE 1" = 1'-0"

PLAN NOTES

1. REMOVE EXISTING SWITCHES. INSTALL NEW SWITCH OR SWITCHES IN EXISTING BOX AND CONNECT AS SHOWN.
2. REMOVE EXISTING SWITCHES AND PROVIDE NEW SWITCH AS SHOWN. PROVIDE 1-GANG COVER PLATE WITH SWITCH HOLE ON ONE SIDE AND OTHER SIDE BLANK.

GENERAL NOTES

1. ALL LIGHT FIXTURES ON THIS DRAWING SHALL BE TYPE "F1" UNLESS OTHERWISE NOTED.
2. EXIT LIGHT AND EMERGENCY LIGHT WIRING NOT SHOWN. ALL BRANCH CIRCUIT WIRING TO THESE FIXTURES SHALL BE IN SEPARATE CONDUIT WITH MINIMUM WIRE SIZE #10 THW COPPER.
3. BRANCH CIRCUIT CONDUCTORS #12 AND #10 SHALL BE TYPE THW SOLID COPPER IN EMT TYPE CONDUIT.
4. ALL OFFICES AND AREAS WITH 2 SWITCHES SHALL HAVE ALL INSIDE LAMPS (3 LIGHT FIXTURES) ON ONE SWITCH AND ALL OUTSIDE LAMPS ON SECOND SWITCH.

KEY PLAN
NO SCALE
NEW CONSTRUCTION

Revisions			
Symbol	Descriptions	Date	Approved

JAMES ASSOCIATES
ARCHITECTS AND ENGINEERS
2828 EAST 45 TH STREET
INDIANAPOLIS, IN 46205

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
LOUISVILLE, KENTUCKY

Designed by: T. BUTLER
Drawn by: T. BUTLER
Checked by: M.H.E.
Reviewed by:
Approved by:

US Army Corps of Engineers

USAR CENTER, INDIANAPOLIS, INDIANA
EXPAND AND MODERNIZE USARC
MRD-84-MCAR-5A

LIGHTING PLAN

Scale: 1/8"= 1'-0"
Date: 20 JANUARY 84
Drawing Code: DEF-29-06-
Sheet reference number: E-2
Sheet 54 of 67

1 6PF-11896-54

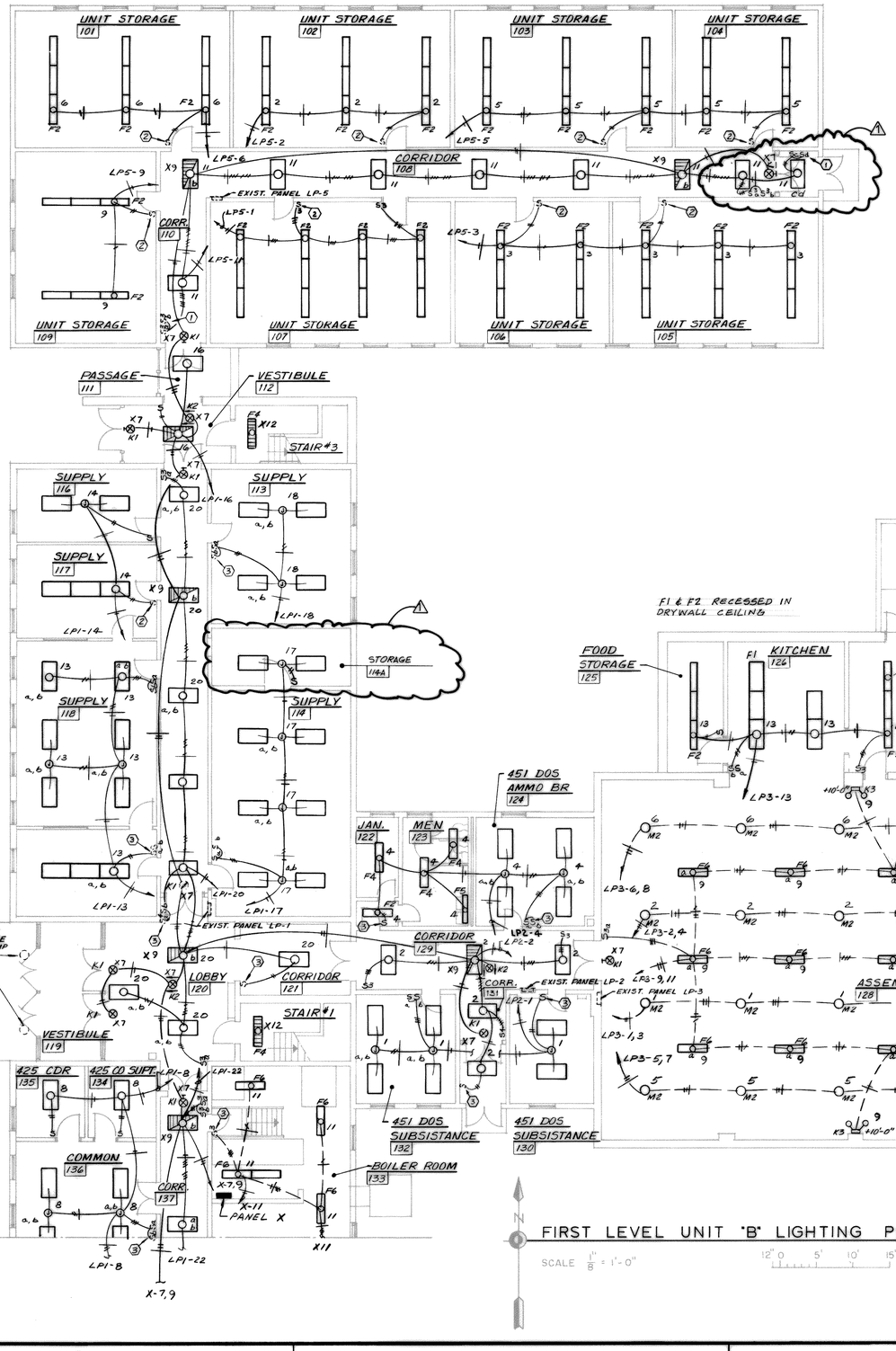
REVISED BY LOU. DIST CORPS OF ENGRS TO "AS BUILT" CONDITIONS

RECORD DRAWING-"AS BUILT"

IN016-0015 E2815

7-15-83

Bsoil			
A-82	A82-2	0	
A-83	A83	0	
E-2	E-2		



FIRST LEVEL UNIT "B" LIGHTING PLAN

SCALE 1/8" = 1'-0"

KEY PLAN

NO SCALE

NEW CONSTRUCTION

PLAN NOTES

1. REMOVE EXISTING SWITCH AND INSTALL NEW SWITCHES AS SHOWN. CUT OUT WALL AS REQUIRED TO PROVIDE ADDITIONAL BOX.
2. REMOVE EXISTING SWITCHES AND PROVIDE NEW SWITCH AS SHOWN. PROVIDE 2-GANG COVER PLATE WITH SWITCH HOLE ON ONE SIDE AND OTHER SIDE BLANK.
3. REMOVE EXISTING SWITCH. INSTALL NEW SWITCH OR SWITCHES IN EXISTING BOX AND CONNECT AS SHOWN.

GENERAL NOTES

1. ALL LIGHT FIXTURES ON THIS DRAWING SHALL BE TYPE "F1" UNLESS OTHERWISE NOTED.
2. EXIT LIGHT AND EMERGENCY LIGHT WIRING NOT SHOWN. ALL BRANCH CIRCUIT WIRING TO THESE FIXTURES SHALL BE IN SEPARATE CONDUIT WITH MINIMUM WIRE SIZE #10 THW COPPER.
3. BRANCH CIRCUIT CONDUCTORS SIZES #12 AND #10 SHALL BE TYPE THW, SOLID COPPER IN EMT TYPE CONDUIT.
4. ALL OFFICES AND AREAS WITH 2 SWITCHES SHALL HAVE ALL INSIDE LAMPS (3 LIGHT FIXTURES) ON ONE SWITCH AND ALL OUTSIDE LAMPS ON SECOND SWITCH.

Revisions			
Symbol	Descriptions	Date	Approved
1	AMMENDMENT NO. 1	4/19/85	

JAMES ASSOCIATES
ARCHITECTS AND ENGINEERS
2828 EAST 45 TH STREET
INDIANAPOLIS, IN 46205

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
LOUISVILLE, KENTUCKY

Designed by: T. BUTLER
Drawn by: T. BUTLER
Checked by: M.H.E.
Reviewed by:
Approved by:

US Army Corps of Engineers

USAR CENTER INDIANAPOLIS INDIANA
EXPAND AND MODERNIZE USARC
MRD-84-MCAR-5A

LIGHTING PLAN

Scale: 1/8"= 1'-0"
Date:
Drawing Code: DEF-29-06
Sheet reference number: E-3
Sheet 55 of 67

REVISED BY LOU. DIST CORPS OF ENGRS TO "AS BUILT" CONDITIONS

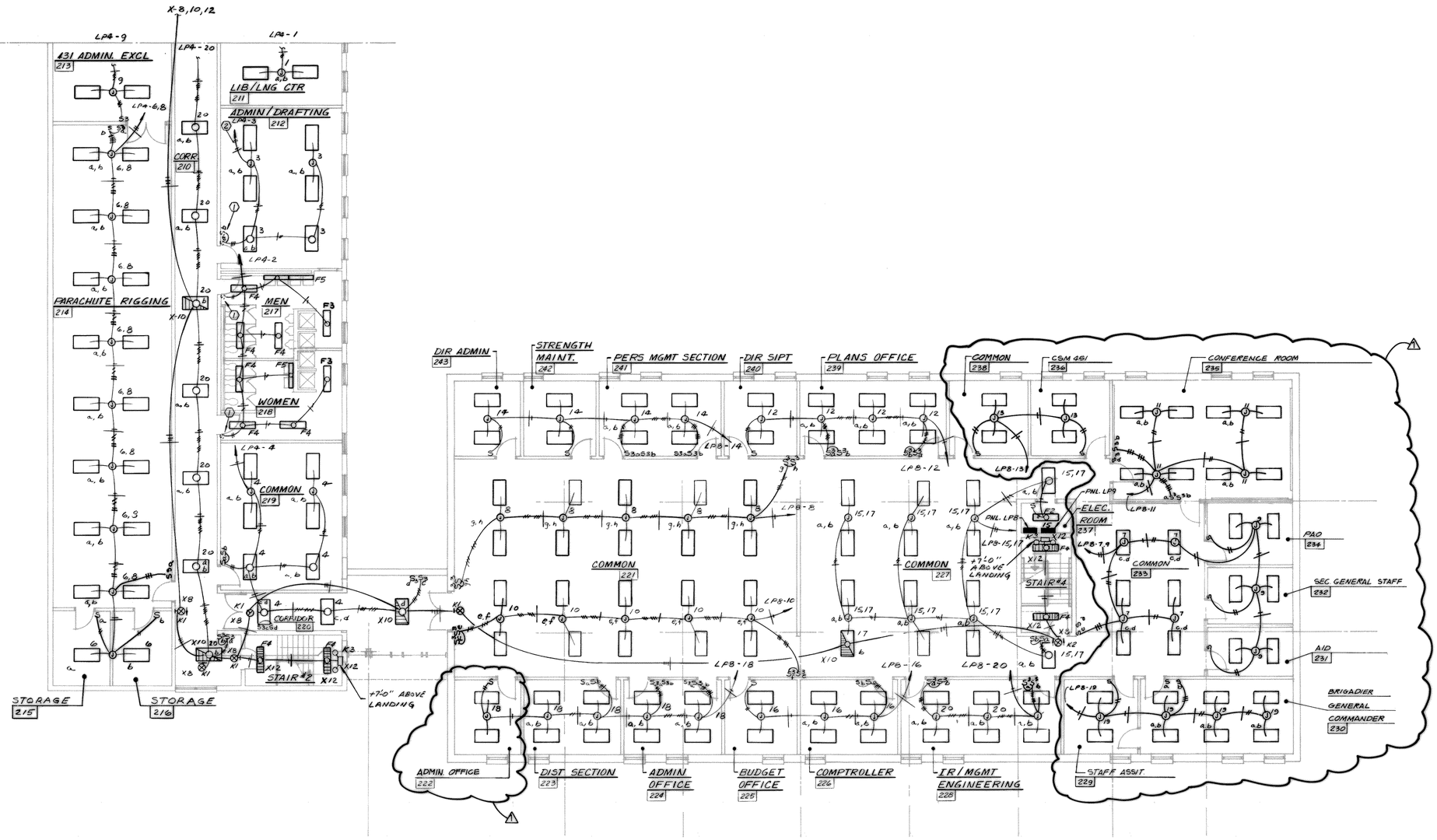
RECORD DRAWING-"AS BUILT"

IN016-0015 E3of15

OPF-4836-55

7-12-83

83011			
E-3	A-84	A84	0
E-3	A-85	A85	0



KEY PLAN
NO SCALE
NEW CONSTRUCTION

SECOND LEVEL UNIT "A" LIGHTING PLAN

SCALE 1/8" = 1'-0"

PLAN NOTES

(1) REMOVE EXISTING SWITCH. INSTALL NEW SWITCH OR SWITCHES IN EXISTING BOX AND CONNECT AS SHOWN.

(2) TO EXISTING PANEL. CONNECT TO EXISTING 1P-20A. BKR NOT IN USE OR PROVIDE NEW 1P-20A. BKR. AS REQUIRED TO MATCH EXISTING.

GENERAL NOTES

1. ALL LIGHT FIXTURES SHOWN ON THIS DRAWING SHALL BE TYPE "F1" UNLESS OTHERWISE NOTED.
2. EXIT LIGHT AND EMERGENCY LIGHT WIRING NOT SHOWN. ALL BRANCH CIRCUIT WIRING TO THESE FIXTURES SHALL BE IN SEPARATE CONDUIT WITH MINIMUM WIRE SIZE #10 THW COPPER.
3. BRANCH CIRCUIT CONDUCTORS #12 AND #10 SHALL BE TYPE THW SOLID COPPER IN EMT TYPE CONDUIT.
4. ALL OFFICES AND AREAS WITH 2 SWITCHES SHALL HAVE ALL INSIDE LAMPS (3 LIGHT FIXTURES) ON ONE SWITCH AND ALL OUTSIDE LAMPS ON SECOND SWITCH.

Revisions			
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1	AMMENDMENT NO. 1	4/19/85	

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2828 EAST 45TH STREET
INDIANAPOLIS, IN 46205

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
LOUISVILLE, KENTUCKY

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Drawn by: T. BUTLER
Checked by: M.H.E.
Reviewed by:
Approved by:

US Army Corps of Engineers

USAR CENTER, INDIANAPOLIS, INDIANA
EXPAND AND MODERNIZE USARC
MRD-84-MCAR-5A

LIGHTING PLAN

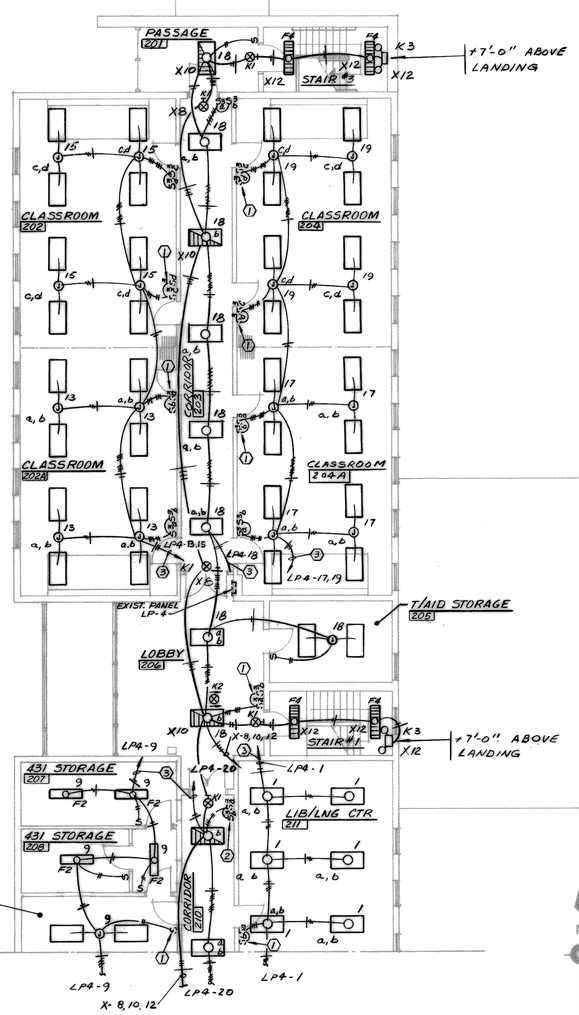
Scale: 1/8"= 1'-0"
Date:
Drawing Code: DEF-29-06-
Sheet reference number: E-4
Sheet 56 of 67

83011			
E-4	A-86	AB-6	0
E-4	A-87	AD-7	0

REVISED BY LOU. DIST CORPS OF ENGRS TO "AS BUILT" CONDITIONS

RECORD DRAWING-"AS BUILT"

IN016-0015 E4 of 15
OPF-11836-56



ASSEMBLY HALL (BELOW)
SEE DRAWING # E-3 FOR LIGHTING LAYOUT

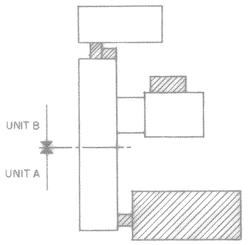
SECOND LEVEL UNIT "B" LIGHTING PLAN
SCALE 1/8" = 1'-0"

PLAN NOTES

1. REMOVE EXISTING SWITCHES AND INSTALL NEW SWITCH OR SWITCHES IN EXISTING BOX AND CONNECT AS SHOWN.
2. REMOVE EXISTING SWITCH AND PROVIDE NEW SWITCHES AS SHOWN. CUT OUT WALL TO PROVIDE ADDITIONAL BOX.
3. TO EXISTING PANEL. CONNECT TO EXISTING 1P-20A. BKR. NOT IN USE OR PROVIDE NEW 1P-20A. BKR. AS REQUIRED TO MATCH EXISTING.

GENERAL NOTES

1. ALL LIGHT FIXTURES SHOWN ON THIS DRAWING SHALL BE TYPE "F1" UNLESS OTHERWISE NOTED.
2. EXIT LIGHT AND EMERGENCY LIGHT WIRING NOT SHOWN. ALL BRANCH CIRCUIT WIRING TO THESE FIXTURES SHALL BE IN SEPARATE CONDUIT WITH MINIMUM WIRE SIZE #10 THW COPPER.
3. BRANCH CIRCUIT CONDUCTORS #12 AND #10 SHALL BE TYPE THW SOLID COPPER IN EMT TYPE CONDUIT.
4. ALL OFFICES AND AREAS WITH 3 SWITCHES SHALL HAVE ALL INSIDE LAMPS (3 LIGHT FIXTURES) ON ONE SWITCH AND ALL OUTSIDE LAMPS ON SECOND SWITCH.



KEY PLAN
NO SCALE
NEW CONSTRUCTION

Revisions			
Symbol	Descriptions	Date	Approved

JAMES ASSOCIATES
ARCHITECTS AND ENGINEERS
2828 EAST 45 TH STREET
INDIANAPOLIS, IN 46205

U.S. ARMY ENGINEER DISTRICT
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LOUISVILLE, KENTUCKY

Designed by: T. BUTLER
Drawn by: T. BUTLER
Checked by: M.H.E.
Reviewed by:
Approved by:

US Army Corps of Engineers

USAR CENTER, INDIANAPOLIS, INDIANA
EXPAND AND MODERNIZE USARC
MRD-84-MCAR-5A

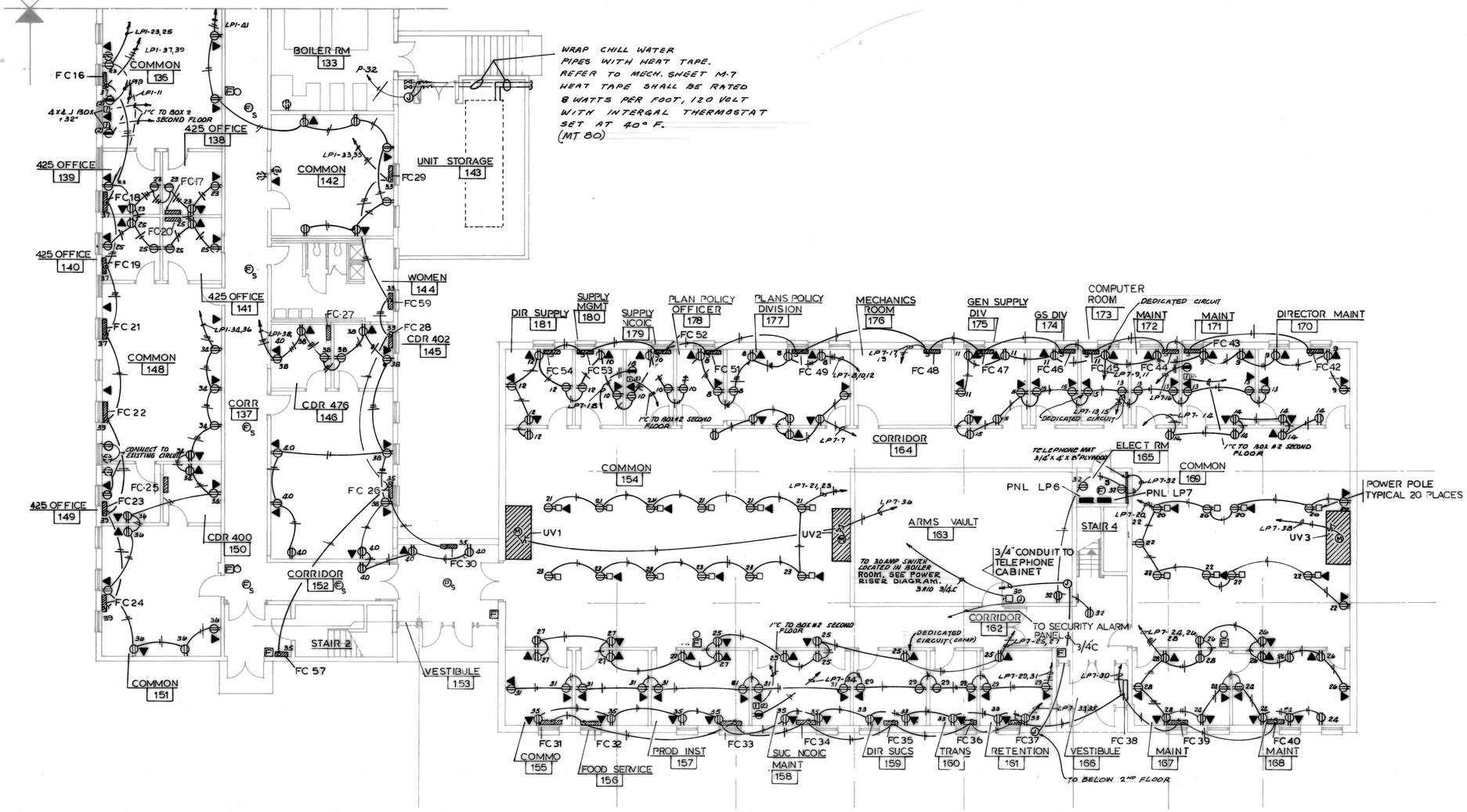
LIGHTING PLAN

Scale: 1/8" = 1'-0"
Date: 20 JANUARY 84
Drawing Code: DEF-29-06-
Sheet reference number: E-5
Sheet 57 of 67

83011			
E-5	A-B9	A-B8	0
E-5	A-B9	13-9	0

RECORD DRAWING-"AS BUILT"

IN016-0015 ES015
OPF-11836-57



FIRST LEVEL UNIT A POWER PLAN

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

KEY PLAN

NO SCALE

NEW CONSTRUCTION

GENERAL NOTES

1 BRANCH CIRCUIT CONDUCTORS SIZES 12 & 10 SHALL BE TYPE THW SOLID COPPER IN EMT TYPE CONDUIT

2 BRANCH CIRCUIT CONDUCTORS SIZES 8 AND LARGER SHALL BE TYPE THW STRANDED COPPER

3 (T)(E) 4X4 BOX WITH 1" CONDUIT TO BOX 2 SECOND FLOOR (32" AFF)

4. TELEPHONE AND FIRE ALARM CIRCUITS ARE NOT SHOWN. LOCATE DEVICES AS SHOWN ON POWER PLANS. CONNECT AS SHOWN ON TELEPHONE RISER AND FIRE ALARM RISER DIAGRAMS.

Revisions			
Symbol	Descriptions	Date	Approved

JAMES ASSOCIATES
ARCHITECTS AND ENGINEERS
2828 EAST 45 TH STREET
INDIANAPOLIS, IN 46205

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
LOUISVILLE, KENTUCKY

Designed by: D.E.
Drawn by: D.E.
Checked by: M.H.E.
Reviewed by:
Approved by:

US Army Corps of Engineers

USAR CENTER INDIANAPOLIS, INDIANA
EXPAND AND MODERNIZE USARC
MRD-84-MCAR-5A

POWER PLAN

Scale: 1/8" = 1'-0"
Date: 20 JANUARY 84
Drawing Code: DEF-29-06-
Sheet reference number: E-6
Sheet 58 of 67

E-6	E-6	
AB-3	AB-3	0
AB-2	AB-2	0

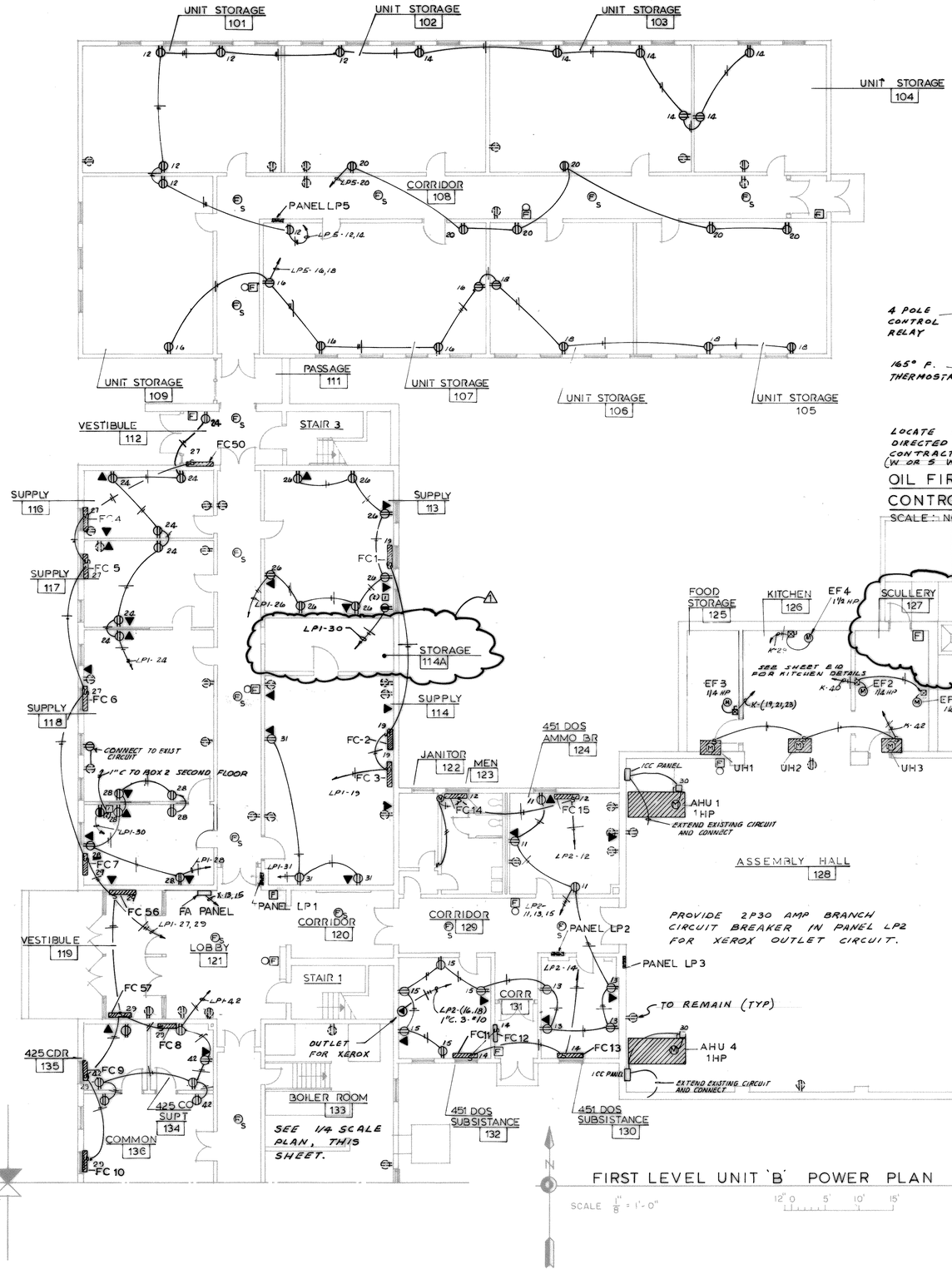
B3011

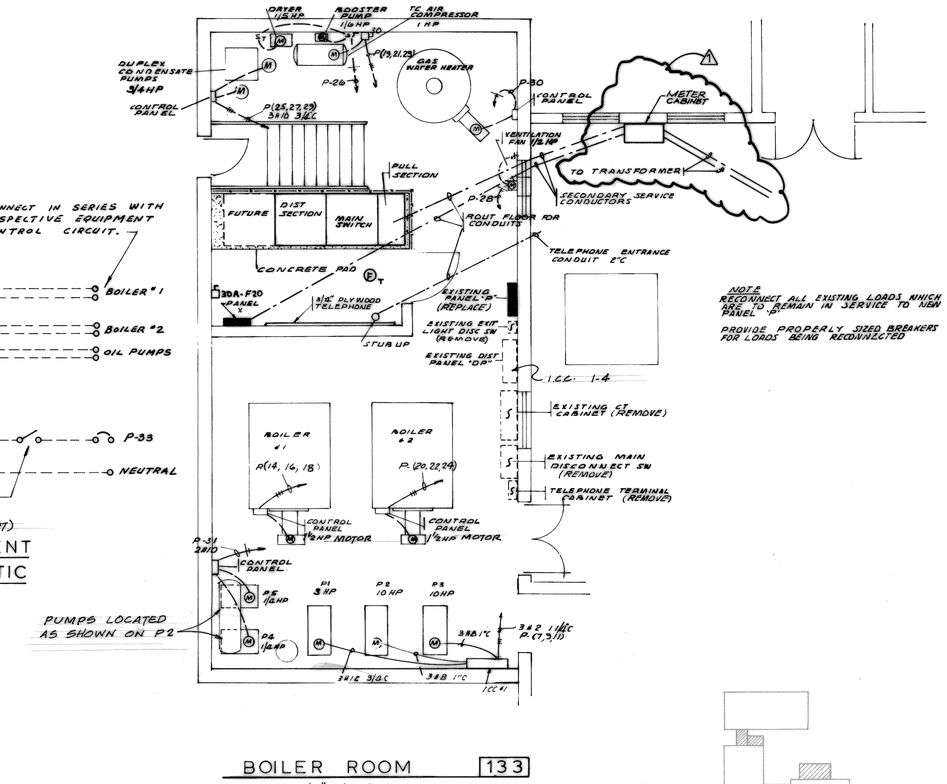
REVISED BY LOU. DIST CORPS OF ENGRS TO "AS BUILT" CONDITIONS

RECORD DRAWING-"AS BUILT"

IN016-0015 E6of15

OPF-11836-58



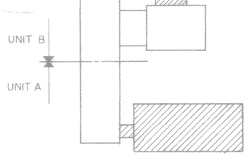


OIL FIRED EQUIPMENT CONTROL SCHEMATIC

SCALE : NONE

BOILER ROOM 133

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



KEY PLAN

NO SCALE

NEW CONSTRUCTION

Revisions			
Symbol	Descriptions	Date	Approved
1	AMMENDMENT NO. 1	4/19/85	

JAMES ASSOCIATES
ARCHITECTS AND ENGINEERS
2828 EAST 45 TH STREET
INDIANAPOLIS, IN 46205

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
LOUISVILLE, KENTUCKY

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Drawn by: D.E.
Checked by: M.H.E.
Reviewed by:
Approved by:

US Army Corps of Engineers

USAR CENTER INDIANAPOLIS INDIANA
EXPAND AND MODERNIZE USARC
MRD-84-MCAR-5A

POWER PLAN

Scale: 1/8" = 1'-0"
Date:
Drawing Code: DEF-29-06
Sheet reference number: E-7
Sheet 59 of 67

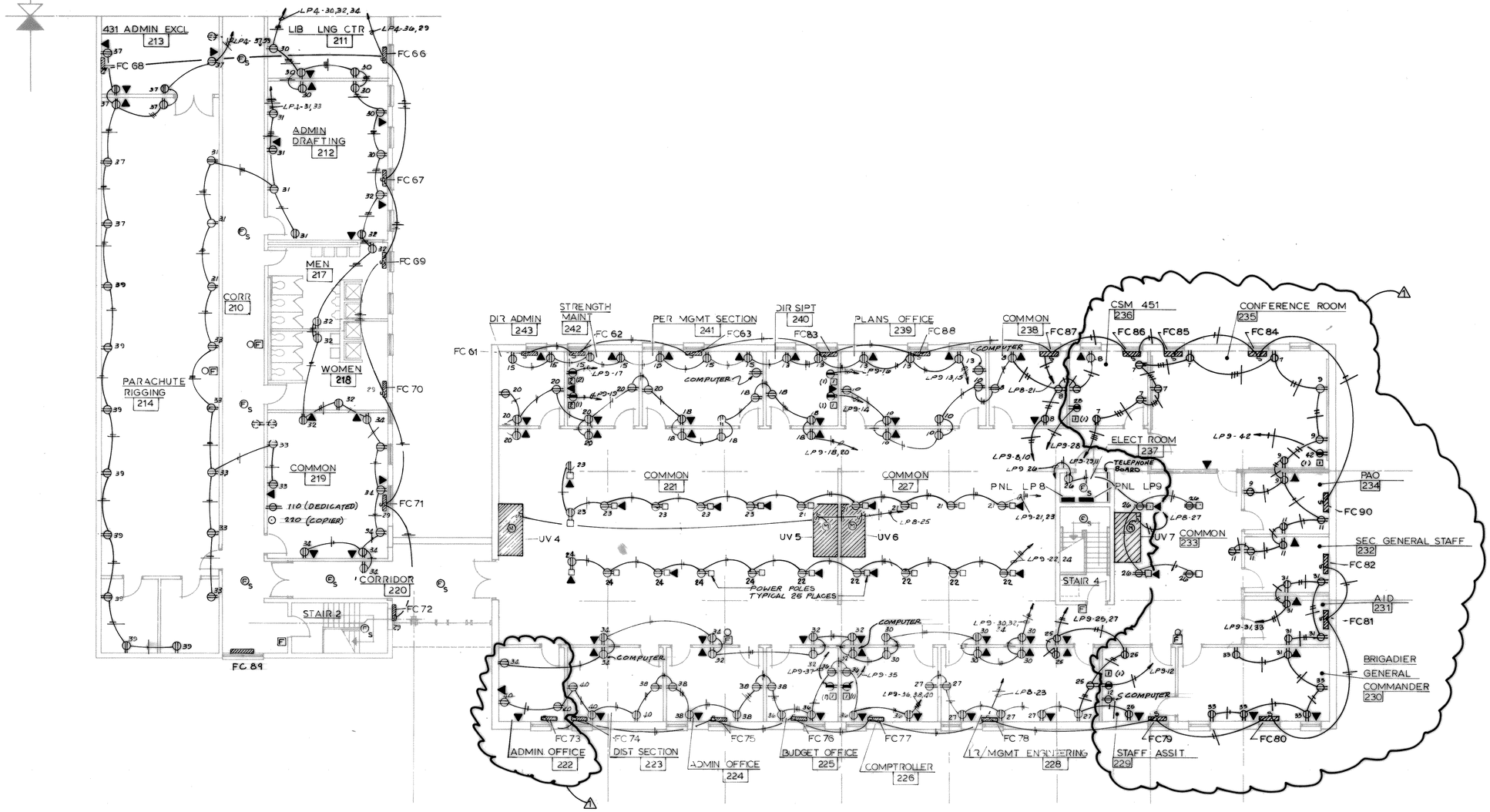
83011		
E-7	AB-5	0
AB-5	AB-4	0
AB-4	AB-4	0

REVISED BY LOU. DIST CORPS OF ENGRS TO "AS BUILT" CONDITIONS

RECORD DRAWING-"AS BUILT"

IN0116-0015 E-7 of 15

OPE-11836-59



KEY PLAN
NO SCALE
NEW CONSTRUCTION

SECOND LEVEL UNIT 'A' POWER PLAN
SCALE 1/8" = 1'-0"

NOTES

(2)(1) 6X6"BOX HOME RUN FOR 1" CONDUITS FROM (E)(1) (32"AFF)

(2)(2) 6X6 BOX HOME RUN FOR 1 CONDUITS FROM (E)(2) (32"AFF)

Revisions			
Symbol	Descriptions	Date	Approved
1	AMMENDMENT NO 1	4/19/85	

JAMES ASSOCIATES
ARCHITECTS AND ENGINEERS
2828 EAST 45TH STREET
INDIANAPOLIS, IN 46205

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
LOUISVILLE, KENTUCKY

Designed by: D.E.
Drawn by: D.E.
Checked by: M.H.E.
Reviewed by:
Approved by:

US Army Corps of Engineers

USAR CENTER INDIANAPOLIS, INDIANA
EXPAND AND MODERNIZE USARC
MRD-84-MCAR-5A

POWER PLAN

Scale: 1/8" = 1'-0"
Date:
Drawing Code: DEF-29-06-
Sheet reference number: E-8
Sheet 60 of 67

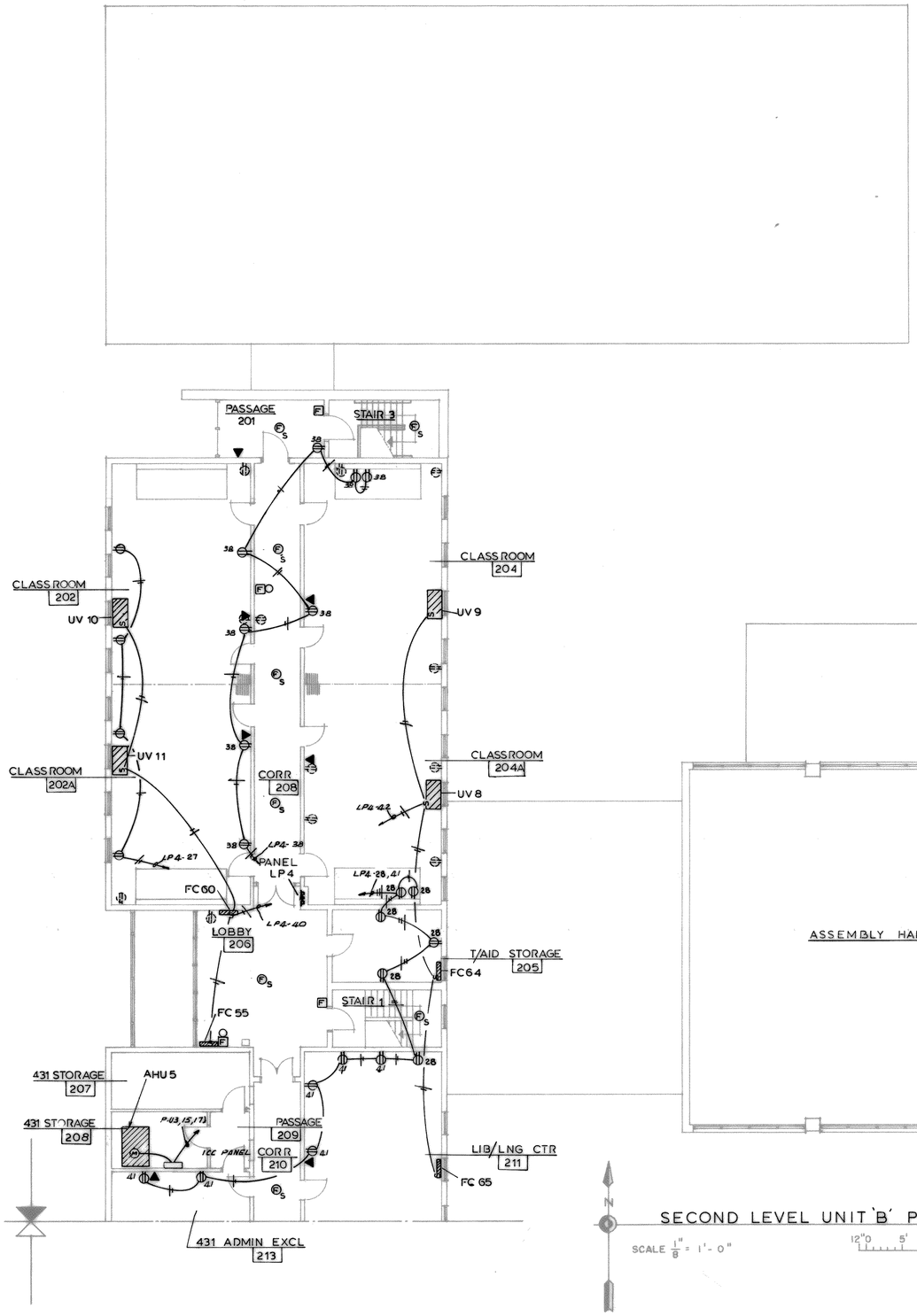
E-8	A8-7	A8-6	83011
E-8	A8-7	A8-6	0
			0

REVISED BY LOU. DIST CORPS OF ENGRS TO "AS BUILT" CONDITIONS

RECORD DRAWING-"AS BUILT"

IN016-0015 E8of15T

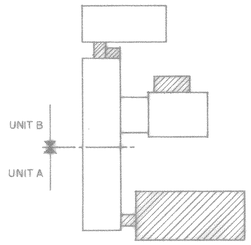
OPF-11836-60





SECOND LEVEL UNIT 'B' POWER PLAN

SCALE 1/8" = 1'-0"



KEY PLAN
NO SCALE
NEW CONSTRUCTION

Revisions			
Symbol	Descriptions	Date	Approved

JAMES ASSOCIATES
ARCHITECTS AND ENGINEERS
2828 EAST 45TH STREET
INDIANAPOLIS, IN 46205

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
LOUISVILLE, KENTUCKY

Designed by: D.E.
Drawn by: D.E.
Checked by: M.H.E.
Reviewed by:
Approved by:

US Army Corps of Engineers

USAR CENTER INDIANAPOLIS INDIANA
EXPAND AND MODERNIZE USARC
MRD-84-MCAR-5A

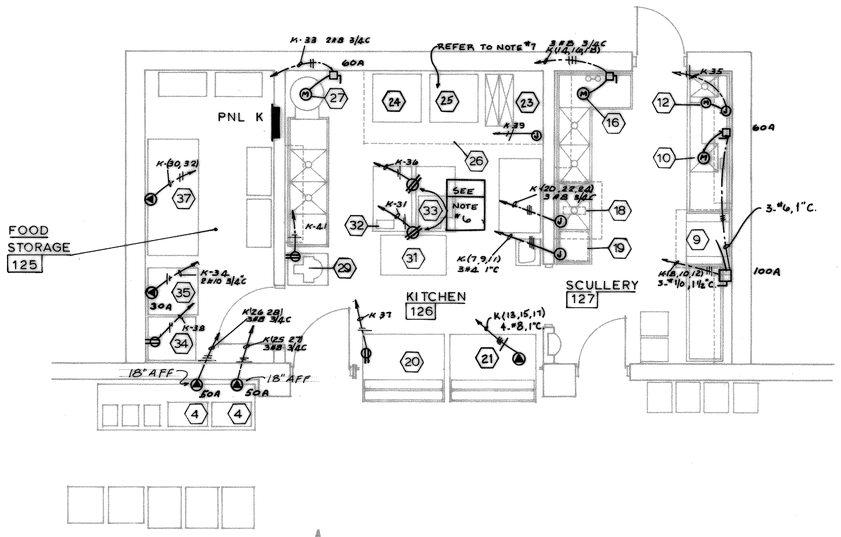
POWER PLAN

Scale: 1 8" = 1'-0"
Date: 20 JANUARY 84
Drawing Code: DEF-29-06-
Sheet reference number: E-9
Sheet 61 of 67

83011		
AB-8	AB-8	0
AB-9	AB-9	0
E-9	E-9	

DPF-11836-61
IN016-0015 E9of15

RECORD DRAWING-"AS BUILT"



KITCHEN POWER PLAN

SCALE 1/4" = 1'-0"

KITCHEN POWER PLAN NOTES

1. ELECTRICAL CONTRACTOR SHALL REFER TO KITCHEN EQUIPMENT PLAN AND SCHEDULE ON SHEET A-11 FOR ADDITIONAL ELECTRICAL INFORMATION AND WORK TO BE PROVIDED BY THE ELECTRICAL CONTRACTOR.
2. BEFORE ROUGH-IN OF OUTLETS, THE E.C. SHALL VERIFY WITH KITCHEN EQUIPMENT DRAWINGS ALL ROUGH-IN LOCATIONS AND MOUNTING HEIGHT DIMENSIONS AND INSTALL IN ACCORDANCE WITH ROUGH-IN INFORMATION.
3. E.C. SHALL VERIFY WITH KITCHEN EQUIPMENT THE TYPE OF DEVICE AND/OR TERMINATION REQUIRED FOR FINAL CONNECTION AND PROVIDE SAME AS REQUIRED.
4. FLEXIBLE CONDUIT INSTALLED IN KITCHEN AREAS SHALL BE LIQUID TIGHT WITH NEOPRENE JACKET.
5. THE COMPLETE ELECTRICAL INSTALLATION SHALL BE IN ACCORDANCE WITH ELECTRICAL SPECIFICATIONS REGARDLESS OF WHAT THE KITCHEN EQUIPMENT MANUFACTURER'S INSTRUCTIONS OR RECOMMENDATIONS MIGHT BE.
6. CEILING MOUNT OUTLET FOR ITEMS #32 AND 33.
7. CONNECT HOOD FIRE EXTINGUISHER SYSTEM TO LOCAL BUILDING FIRE ALARM SYSTEM TO ACTIVATE GENERAL ALARM WHEN EXTINGUISHER SYSTEM IS ACTIVATED.

PANEL P (NEW) — CONNECTED LOAD 40.3 KVA — TYPE SURFACE
VOLTAGE 120/208 — MAINS 225 MLO

DESIGNATION	BREAKER POLE	BREAKER AMP	VOLT AMPS	CIR Nº	VOLT AMPS ØA	VOLT AMPS ØB	VOLT AMPS ØC	CIR Nº	VOLT AMPS	BREAKER POLE	BREAKER AMP	DESIGNATION
				1				2				
SPARE	3	20		3				4		3	30	SPARE
				5				6				
				7	8.7			8				
I.C.C. #1 (120V)	3	125	26	9		8.7		10		3	50	SPARE
				11			8.7	12				
				13	1.4			14				
A.H. UNIT #5	3	20	1.5	15		1.4		16	2.8	3	20	BOILER #1
				17			1.4	18				
				19	1.4			20				
T.C. AIR COMPRESSOR	3	20	1.5	21		1.4		22	2.8	3	20	BOILER #2
				23			1.4	24				
				25	1.7			26	1.1	1	20	DRYER / BOOSTER PUMP
CONDENSATE PUMP	3	20	1.7	27		1.3		28	.7	1	20	EXHAUST FAN
				29			1.3	30	.7	1	20	INDUCE DRAFT FAN
FUEL OIL PUMPS	1	20	1.3	31	1.7			32	.4	1	20	HEAT TAPE
OIL FIRED EQUIPT CONTROL	1	20	.2	33		.2		34		1	20	"
SPARE	1	20		35				36		1	20	"
SPACE	1			37				38		1		SPACE
"	1			39				40		1		"
"	1			41				42		1		"

3 BREAKERS 25,27,29

Revisions			
Symbol	Descriptions	Date	Approved

JAMES ASSOCIATES
ARCHITECTS AND ENGINEERS
2828 EAST 45TH STREET
INDIANAPOLIS, IN. 46205

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
LOUISVILLE, KENTUCKY

Designed by: C.A.W.
Drawn by: C.A.W.
Checked by: M.H.E.
Reviewed by:
Approved by:

US Army Corps of Engineers

USAR CENTER INDIANAPOLIS, INDIANA
EXPAND AND MODERNIZE USARC
MRD-84-MCAR-5A

KITCHEN POWER PLAN

Scale: 1/4" = 1'-0"
Date: 20 JANUARY 84
Drawing Code: DEF-29-06-
Sheet reference number: E-10
Sheet 62 of 67

E-10 AS-10 83011
E-10 AS-10 AS-10 0

REVISED BY LOU. DIST CORPS OF ENGRS TO "AS BUILT" CONDITIONS

RECORD DRAWING-"AS BUILT"

OPE-11836-62
IN016-0015 E10of15

PANEL LP 6 — VOLTAGE 120/208 — CONNECTED LOAD 14.0 KVA — TYPE SURFACE — MAINS 200A MCB - TWIN LUGS

DESIGNATION	BKR POLE	BKR AMP	VOLT AMPS	CIR Nº	VOLT-AMPS ØA	ØB	ØC	CIR Nº	VOLT AMPS	BKR POLE	BKR AMP	DESIGNATION
SPARE	1	20		1				2		1	20	SPARE
"	1	20		3				4		1	20	"
"	1	20		5				6		1	20	"
LIGHTS - EAST COMMON	1	20	540	7	1.8			8	1250	1	20	LIGHTS - WEST COMMON
" - " "	1	20	960	9		2.2		10	1250	1	20	" - " "
" - OFFICES	1	20	750	11			1.8	12	1000	1	20	" - OFFICES
" - "	1	20	1000	13	2.0			14	1000	1	20	" - "
" - CORRIDOR	1	20	580	15		1.8		16	1250	1	20	" - "
" - OFFICES	1	20	1000	17			2.0	18	1000	1	20	" - "
" - CORRIDOR	1	20	455	19	1.6			20	1120	1	20	" - ARMS VAULT
" - VESTIBULE	1	20	750	21		.8		22		1	20	SPARE
SPARE	1	20		23				24		1	20	"
"	1	20		25				26		1	20	"
"	1	20		27				28		1	20	"
"	1	20		29				30		1	20	"
SPACE	1			31				32		1		SPACE
"	1			33				34		1		"
"	1			35				36		1		"
"	1			37				38		1		"
"	1			39				40		1		"
"	1			41				42		1		"

PANEL LP 7 — VOLTAGE 120/208 — CONNECTED LOAD 33.0 KVA — TYPE SURFACE — MAINS 200A MCB

DESIGNATION	BKR POLE	BKR AMP	VOLT AMPS	CIR Nº	VOLT-AMPS ØA	ØB	ØC	CIR Nº	VOLT AMPS	BKR POLE	BKR AMP	DESIGNATION
SPARE	1	20		1				2		1	20	SPARE
"	1	20		3				4		1	20	"
"	1	20		5				6		1	20	"
(6) RECEPT'S - OFFICES	1	20	1200	7	2.4			8	1200	1	20	(6) RECEPT'S - OFFICES
(5) " - "	1	20	1000	9		2.2		10	1200	1	20	(6) " - "
(5) " - "	1	20	1000	11			2.2	12	1200	1	20	(6) " - "
(7) " - "	1	20	1400	13	2.6			14	1200	1	20	(6) " - "
(6) " - "	1	20	1200	15		1.7		16	500	1	20	WORD PROCESSOR
(6) FAN COIL UNITS	1	20	1200	17			1.7	18	500	1	20	"
(6) " " "	1	20	1200	19	2.2			20	1000	1	20	(5) RECEPT'S - E. COMMON
(6) RECEPT'S - W. COMMON	1	20	1200	21		2.4		22	1200	1	20	(6) " - "
(6) " - "	1	20	1200	23			2.2	24	1000	1	20	(5) " - OFFICES
(6) " - OFFICES	1	20	1200	25	2.2			26	1000	1	20	(5) " - "
(6) " - "	1	20	1200	27		2.4		28	1200	1	20	(6) " - "
(7) " - "	1	20	1400	29			2.9	30	1530	1	20	(9) FAN COIL UNITS
(7) " - "	1	20	1400	31	2.2			32	800	1	20	(4) RECEPT'S
(6) " - "	1	20	1200	33		2.2		34	1000	1	20	UNIT VENT'R #1 & #2
(5) " - "	1	20	1000	35			1.5	36	500	1	20	UNIT VENT'R #3
SPARE	1	20		37				38		1	20	SPARE
"	1	20		39				40		1	20	"
"	1	20		41				42		1	20	"

PANEL LP 8 — VOLTAGE 120/208 — CONNECTED LOAD 17.7 KVA — TYPE SURFACE — MAINS 200A MCB — TWIN LUGS

DESIGNATION	BKR POLE	BKR AMP	VOLT AMPS	CIR Nº	VOLT-AMPS ØA	ØB	ØC	CIR Nº	VOLT AMPS	BKR POLE	BKR AMP	DESIGNATION
SPARE	1	20		1				2		1	20	SPARE
"	1	20		3				4		1	20	"
"	1	20		5				6		1	20	"
LIGHTS - EAST COMMON	1	20	750	7	2.0			8	1250	1	20	LIGHTS - WEST COMMON
" - " "	1	20	750	9		1.9		10	1125	1	20	" - " "
" - OFFICES	1	20	1000	11			1.8	12	1000	1	20	" - OFFICES
" - "	1	20	500	13	1.5			14	1000	1	20	" - "
" - CTR COMMON	1	20	665	15		1.4		16	750	1	20	" - "
" - " "	1	20	1040	17			2.3	18	1250	1	20	" - "
" - OFFICES	1	20	1000	19	1.8			20	750	1	20	" - "
(10) FAN COIL UNITS	1	20	1700	21		1.7		22		1	20	SPARE
(10) FAN COIL UNITS	1	20	1700	23			1.7	24		1	20	"
UNIT VENT'R #4, #5 & #6	1	20	1200	25	1.2			26		1	20	"
UNIT VENT'R #7	1	20	400	27		.4		28		1	20	"
SPARE	1	20		29				30		1	20	"
SPACE	1			31				32		1		SPACE
	1			33				34		1		"
	1			35				36		1		"
	1			37				38		1		"
	1			39				40		1		"
	1			41				42		1		"

PANEL LP 9 — VOLTAGE 120/208 — CONNECTED LOAD 37.4 KVA — TYPE SURFACE — MAINS 200A MCB

DESIGNATION	BKR POLE	BKR AMP	VOLT AMPS	CIR Nº	VOLT-AMPS ØA	ØB	ØC	CIR Nº	VOLT AMPS	BKR POLE	BKR AMP	DESIGNATION
SPARE	1	20		1				2		1	20	SPARE
"	1	20		3				4		1	20	"
"	1	20		5				6		1	20	"
(6) RECEPT'S - OFFICES	1	20	1200	7	2.4			8	1200	1	20	(6) RECEPT'S - OFFICES
(5) " - "	1	20	1000	9		2.2		10	1200	1	20	(6) " - "
(5) " - "	1	20	1000	11			1.5	12	500	1	20	WORD PROCESSOR
(6) " - "	1	20	1200	13	1.7			14	500	1	20	WORD PROCESSOR
(6) " - "	1	20	1200	15		1.7		16	500	1	20	" "
WORD PROCESSOR	1	20	500	17			2.1	18	1600	1	20	(8) RECEPT'S - OFFICES
" "	1	20	500	19	2.1			20	1600	1	20	(8) " "
(5) RECEPT'S - COMMON	1	20	1000	21		2.0		22	1000	1	20	(5) " - COMMON
(6) " - "	1	20	1200	23			2.2	24	1000	1	20	(5) " - "
(5) " - OFFICES	1	20	1000	25	2.2			26	1200	1	20	(6) " - "
(6) " - "	1	20	1200	27		1.7		28	600	1	20	WORD PROCESSOR
WORD PROCESSOR	1	20	500	29			1.7	30	1200	1	20	(6) " - OFFICES
(6) RECEPT'S - OFFICES	1	20	1200	31	2.4			32	1200	1	20	(6) " - "
(5) " - "	1	20	1000	33		2.4		34	1200	1	20	(6) " - "
WORD PROCESSOR	1	20	500	35			1.7	36	1200	1	20	(6) " - "
" "	1	20	500	37	1.7			38	1200	1	20	(6) " - "
ZEROX MACHINE	2	30	2.000	39		3.2		40	1200	1	20	(6) " - "
	-	-	2.000	41			2.6	42	600	1	20	WORD PROCESSOR

PANEL PNL K — VOLTAGE 120/208 — CONNECTED LOAD 98.1 KVA — TYPE FLUSH — MAINS 400A MLO

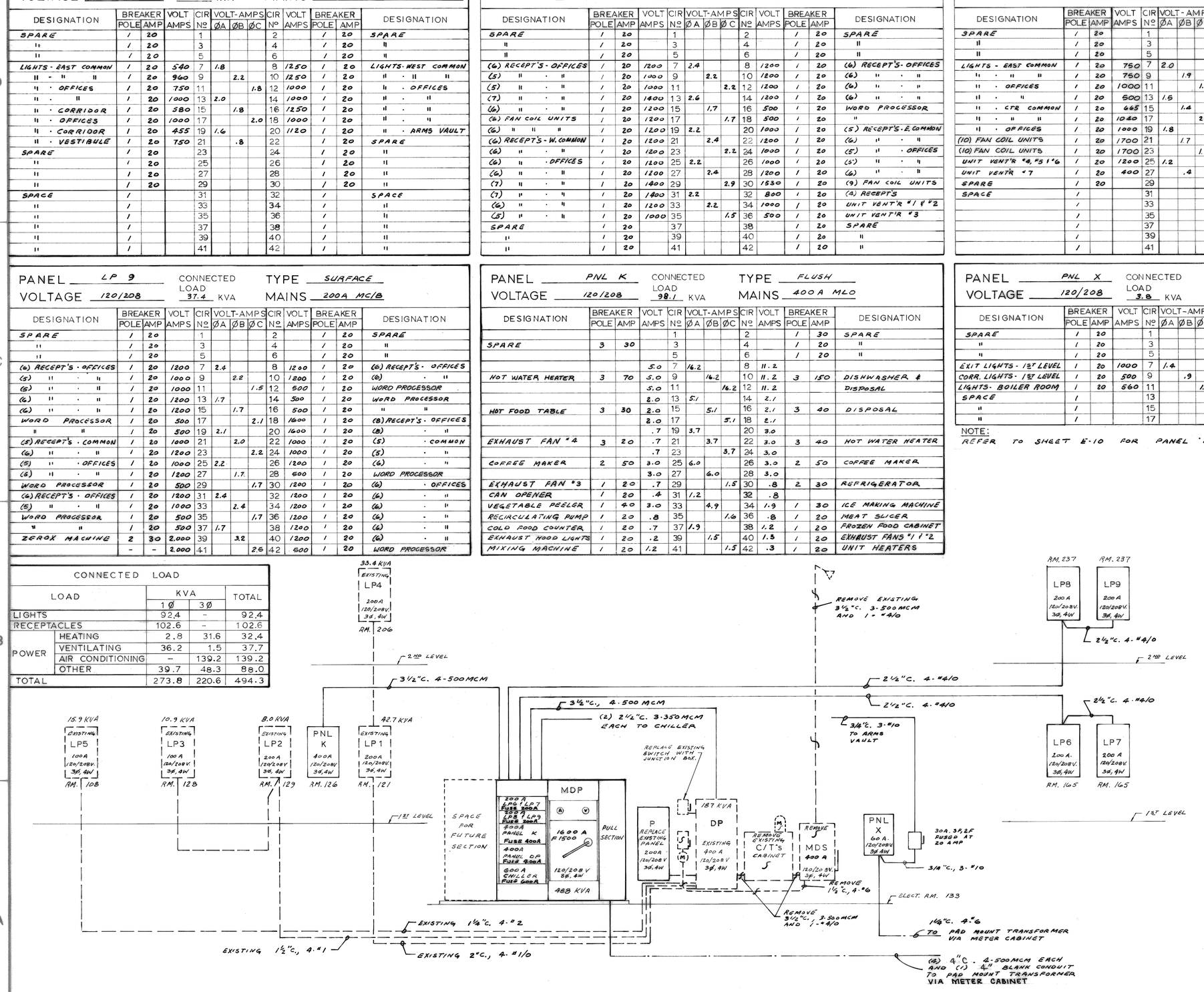
DESIGNATION	BKR POLE	BKR AMP	VOLT AMPS	CIR Nº	VOLT-AMPS ØA	ØB	ØC	CIR Nº	VOLT AMPS	BKR POLE	BKR AMP	DESIGNATION
SPARE	3	30		1				2		1	30	SPARE
				3				4		1	20	"
				5				6		1	20	"
			5.0	7	16.2			8	11.2			
HOT WATER HEATER	3	70	5.0	9		16.2		10	11.2	3	150	DISHWASHER &
			5.0	11			16.2	12	11.2			DISPOSAL
			2.0	13	5.1			14	2.1			
HOT FOOD TABLE	3	30	2.0	15		5.1		16	2.1	3	40	DISPOSAL
			2.0	17			5.1	18	2.1			
			.7	19	3.7			20	3.0			
EXHAUST FAN #4	3	20	.7	21		3.7		22	3.0	3	40	HOT WATER HEATER
			.7	23			3.7	24	3.0			
COFFEE MAKER	2	50	3.0	25	6.0			26	3.0	2	50	COFFEE MAKER
			3.0	27		6.0		28	3.0			
EXHAUST FAN #3	1	20	.7	29			1.5	30	.8	2	30	REFRIGERATOR
CAN OPENER	1	20	.4	31	1.2			32	.8			
VEGETABLE PEELER	1	40	3.0	33		4.9		34	1.9	1	30	ICE MAKING MACHINE
RECIRCULATING PUMP	1	20	.8	35			1.6	36	.8	1	20	MEAT SLICER
COLD FOOD COUNTER	1	20	.7	37	1.9			38	1.2	1	20	FROZEN FOOD CABINET
EXHAUST HOOD LIGHTS	1	20	.2	39		1.5		40	1.3	1	20	EXHAUST FANS #1 & 2
MIXING MACHINE	1	20	1.2	41			1.5	42	.3	1	20	UNIT HEATERS

PANEL PNL X — VOLTAGE 120/208 — CONNECTED LOAD 3.8 KVA — TYPE SURFACE — MAINS 60A MCB - 25,000 RMS

DESIGNATION	BKR POLE	BKR AMP	VOLT AMPS	CIR Nº	VOLT-AMPS ØA	ØB	ØC	CIR Nº	VOLT AMPS	BKR POLE	BKR AMP	DESIGNATION
SPARE	1	20		1				2		1	20	SPARE
"	1	20		3				4		1	20	"
"	1	20		5				6		1	20	"
EXIT LIGHTS - 1ST LEVEL	1	20	1000	7	1.4			8	400	1	20	EXIT LIGHTS - 2ND LEVEL
CORR. LIGHTS - 1ST LEVEL	1	20	500	9		.9		10	360	1	20	CORR. LIGHTS - 2ND LEVEL
LIGHTS - BOILER ROOM	1	20	560	11			1.5	12	960	1	20	STAIR LIGHTS
SPACE	1			13				14		1		SPACE
"	1			15				16		1		"
"	1			17				18		1		"

NOTE:
REFER TO SHEET E-10 FOR PANEL 'P' SCHEDULE.

CONNECTED LOAD				
LOAD		KVA 1Ø	KVA 3Ø	TOTAL
LIGHTS		92.4	-	92.4
RECEPTACLES		102.6	-	102.6
POWER	HEATING	2.8	31.6	32.4
	VENTILATING	36.2	1.5	37.7
	AIR CONDITIONING	-	139.2	139.2
	OTHER	39.7	48.3	88.0
TOTAL		273.8	220.6	494.3



PANEL FEEDER RISER DIAGRAM
NO SCALE

NOTES

1. DOTTED LINE WORK INDICATES EXISTING ITEM.
2. SOLID LINE WORK INDICATES NEW ITEM.
3. (S) INDICATES EXISTING ITEM TO BE REMOVED.
4. ALL FEEDER CONDUITS SHALL BE RIGID GALVANIZED STEEL CONDUIT.
5. ALL FEEDER CONDUCTORS SHALL BE THW COPPER, OR ALUM. AS SPECIFIED IN SECTION 16B, 8.7
6. SERVICE ENTRANCE CONDUCTORS SHALL BE THWN COPPER.
7. PROVIDE NEW BRANCH CIRCUIT BREAKERS IN ALL EXISTING PANELS FOR ALL NEW BRANCH CIRCUITS AND REPLACEMENTS FOR ALL DEFECTIVE EXISTING BREAKERS. CAPACITY SHALL BE AS REQUIRED FOR THE BRANCH CIRCUIT LOAD. MINIMUM AMPACITY SHALL BE 20 AMPERE.

Revisions			
Symbol	Descriptions	Date	Approved

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Designed by: C.A.W.
Drawn by: C.A.W.
Checked by: M.H.E.
Reviewed by:
Approved by:

US Army Corps of Engineers

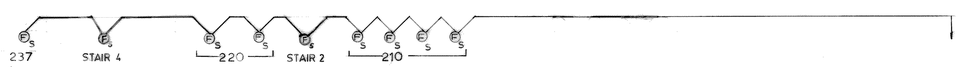
USAR CENTER, INDIANAPOLIS, INDIANA
EXPAND AND MODERNIZE USARC
MRD-84-MCAR-5A

RISER & PANEL SCHEDULES

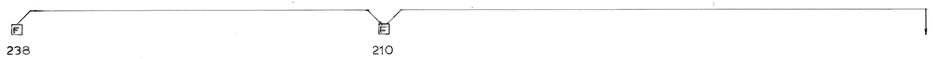
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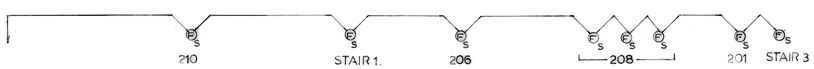
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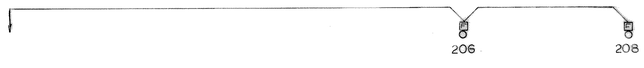


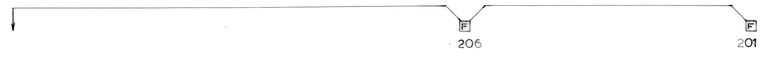




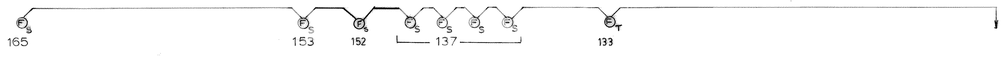
SECOND LEVEL UNIT 'A'

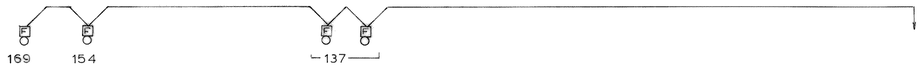


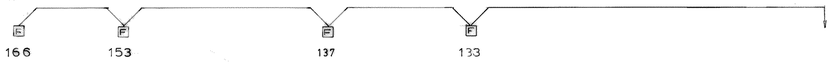




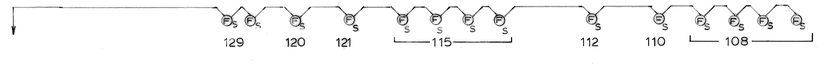
SECOND LEVEL UNIT 'B'

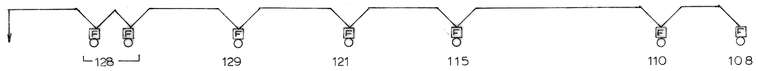






FIRST LEVEL UNIT 'A'







FIRE ALARM PANEL
RM 118A

FIRST LEVEL UNIT 'B'

FIRE ALARM RISER

NO SCALE

Revisions			
Symbol	Descriptions	Date	Approved

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Checked by: M.H.E.
Reviewed by:
Approved by:

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USAR CENTER INDIANAPOLIS INDIANA
EXPAND AND MODERNIZE USARC
MRD-84-MCAR-5A

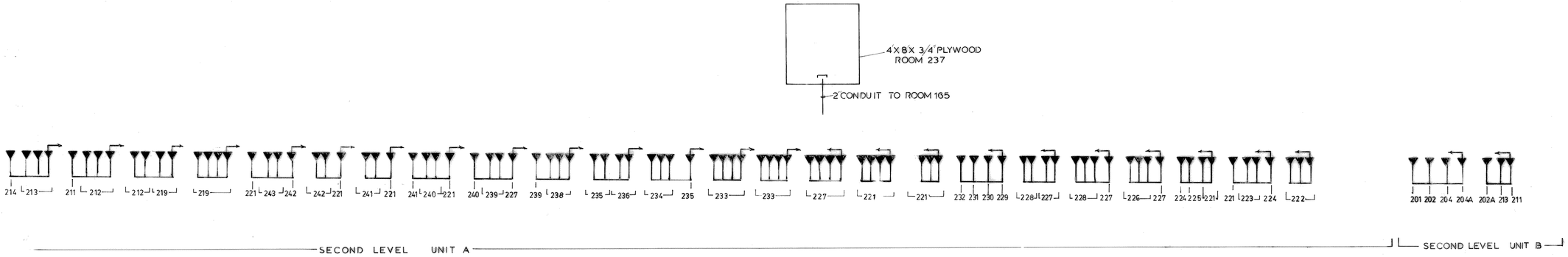
FIRE ALARM RISER

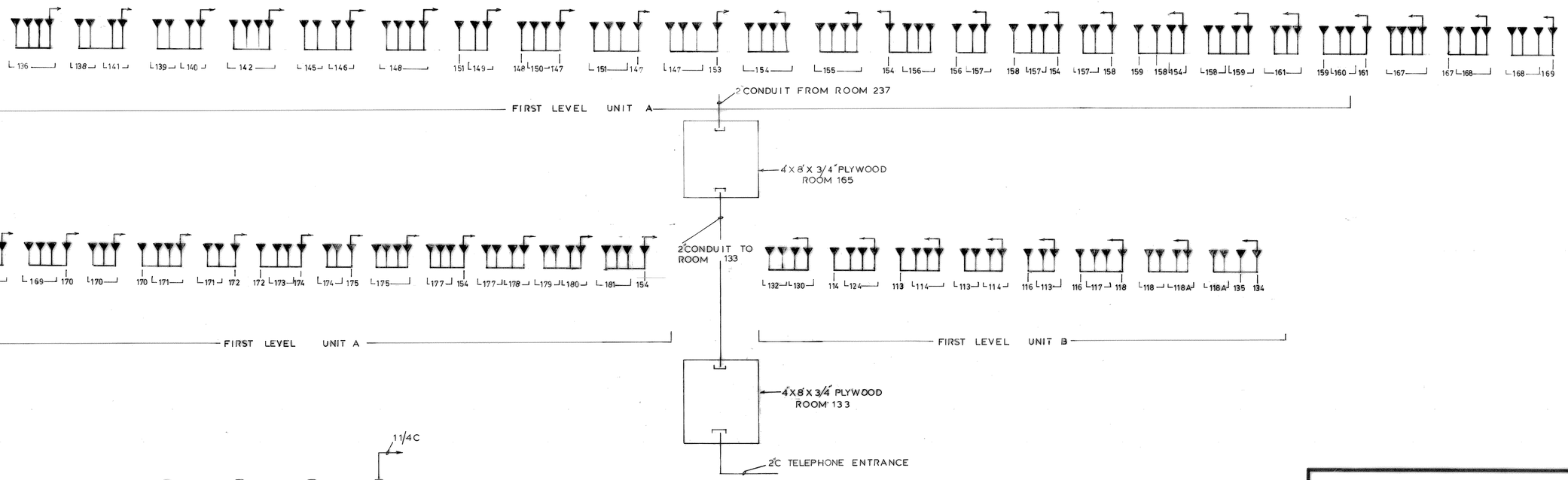
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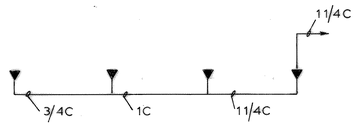
OPE-11826-64





TELEPHONE RISER

NO SCALE



TYPICAL TELEPHONE CONDUIT SIZE

NO SCALE

Revisions			
Symbol	Descriptions	Date	Approved

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Drawn by: D.E.
Checked by: M.H.E.
Reviewed by:
Approved by:

US Army Corps of Engineers

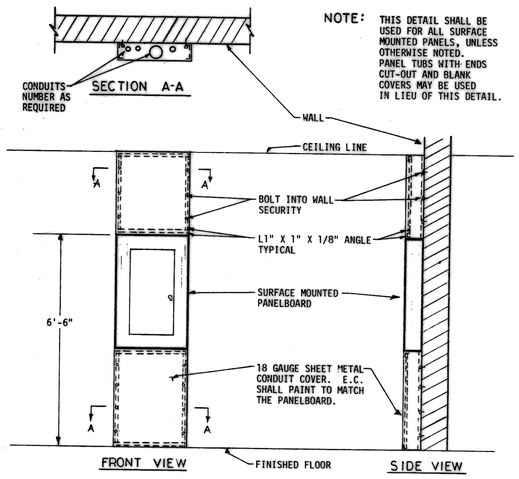
USAR CENTER, INDIANAPOLIS, INDIANA
EXPAND AND MODERNIZE USARC
MRD-84-MCAR-5A

TELEPHONE RISER

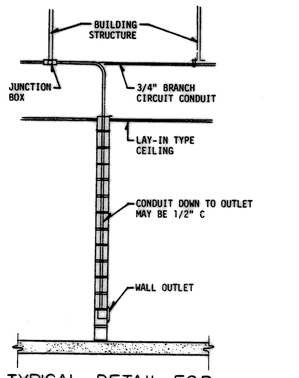
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IN016-0015 E13of15

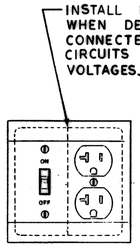
RECORD DRAWING-"AS BUILT"



TYPICAL SURFACE MOUNTED PANELBOARD DETAIL
NO SCALE

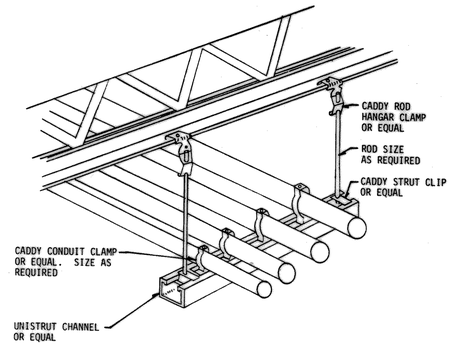


TYPICAL DETAIL FOR OVERHEAD FEED TO INTERIOR WALL OUTLETS
NO SCALE

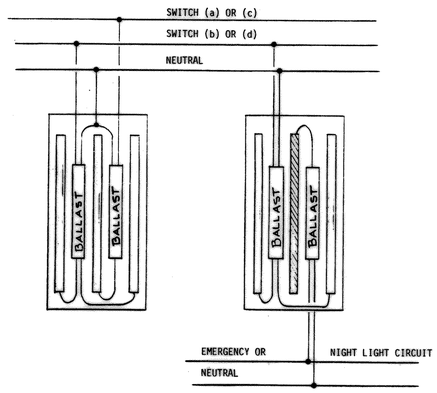


TYPICAL COMBINATION OF LIGHT SWITCH & RECEPTACLE OUTLET INSTALLATION
NO SCALE

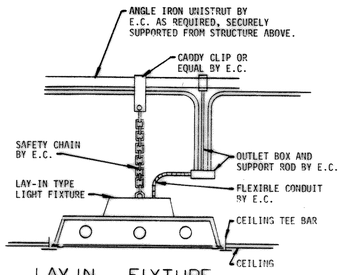
THIS INSTALLATION SHALL BE IN ALL JANITOR CLOSETS, STORAGE ROOMS, RESTROOMS, EQUIPMENT ROOMS AND SIMILAR SPACES WHERE RECEPTACLE IS SHOWN AT OR NEAR THE SWITCH LOCATION, UNLESS OTHERWISE NOTED.



2 1/2" AND LARGER CONDUIT SUPPORT DETAIL
NO SCALE

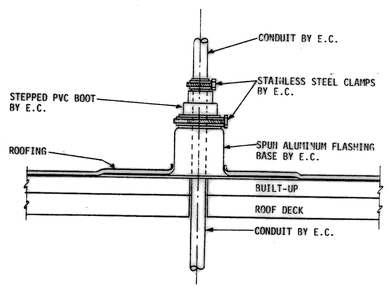


TYPICAL WIRING FOR 3 TUBE FIXTURE
NO SCALE



LAY IN FIXTURE SUPPORT DETAIL
NO SCALE

NOTE: LIGHTING FIXTURE MUST BE SUPPORTED INDEPENDENTLY OF CEILING SYSTEM. UPON WRITTEN REQUEST TO THE ENGINEER, OTHER MEANS OF SUPPORT WILL BE CONSIDERED FOR APPROVAL.



TYPICAL ROOF PENENETRATION

MOUNTING HEIGHTS TO CENTER OF DEVICE (A.F.F.) ABOVE FINISH FLOOR, UNLESS OTHERWISE NOTED.	
1. LIGHT SWITCHES:	+48"
2. RECEPTACLES:	+14"
3. RECEPTACLES IN STORAGE ROOMS, AND SIMILAR AREAS:	+48"
4. PANELBOARDS:	+6'-6" TO TOP OF PANEL
5. DISCONNECT SWITCHES:	+5'-0" TO TOP OF PANEL
6. STP MANUAL STARTERS:	+51
7. TELEPHONE OUTLETS:	+14
8. FIRE ALARM PULL STATIONS:	+48
9. FIRE ALARM HORNS:	12" BELOW FIN. CLG. OR +8'-0"

ELECTRICAL SYMBOL LEGEND

SYMBOL	DESCRIPTION
———	BRANCH CIRCUIT CONCEALED IN WALLS OR CEILING
—·—	BRANCH CIRCUIT CONCEALED IN FLOOR
– – – –	BRANCH CIRCUIT EXPOSED
——→	HOME RUN TO PANELBOARD NUMBER OF ARROWS INDICATES NUMBER OF CIRCUITS
—//	CROSS MARKS INDICATES NUMBER OF WIRES
	FLUORSCENT LIGHT FIXTURE
	NIGHT LIGHT
○	HID OR INCANDESCENT LIGHT FIXTURE CEILING MTD
H○	WALL MTD HID OR INCANDESCENT LIGHT FIXTURE
H⊗	EXIT LIGHT WALL MOUNTED
H⊜	DUPLEX OUTLET
=⊜	OUTLET OTHER THAN DUPLEX 1=SINGLE 3=TRIPLEX
$⊜_1$	SPECIAL PURPOSE OUTLET
⊙	FLOOR OUTLET
(D) OR [J]	JUNCTION BOX
Ⓜ	MOTOR
—L	GROUND CONDUCTOR
	LIGHTING PANEL
	POWER PANEL
=⊜	OUTLET CONNECTED TO SEPARATE GROUND WIRE
⊠	MOTOR CONTROLLER
⊠	COMBINATION STARTER
N□	DISCONNECT SWITCH NUMERAL INDICATES SIZE
S	SINGLE POLE SWITCH
S_4	FOUR WAY SWITCH
S_3	THREE WAY SWITCH
S_P	SWITCH AND PILOT LIGHT
S_T	SWITCH WITH THERMAL OVERLOAD PROTECTION
⊡	PUSHBUTTON SWITCH
(B)	FIRE ALARM BELL
F	FIRE ALARM STATION
$(S)_S$	FIRE ALARM SMOKE DETECTOR
$(S)_T$	FIRE ALARM THERMAL DETECTOR
◀	TELEPHONE
	TELEPHONE CABINET
⊖□	POWER POLE
WP	WEATHERPROOF

Revisions			
Symbol	Descriptions	Date	Approved

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US Army Corps of Engineers

USAR CENTER, INDIANA POLIS, INDIANA
EXPAND AND MODERNIZE USARC
MRD-84-MCAR-5A

DETAILS

Scale: NONE
Date: 20 JANUARY 84
Drawing Code: DEF-29-06-
Sheet reference number: E-14
Sheet 66 of 67

IN016-0015 E14015

RECORD DRAWING-"AS BUILT"

ODF-11836-66

LIGHT FIXTURE SCHEDULE

CONTR. DWG. MARK	STANDARD DWG. NO. 40-06-04	SHEET NO.	LAMPS PER FIXTURE QTY.	LAMPS PER FIXTURE TYPE	FIXTURE WATTS	VOLTS	MOUNTING	DESCRIPTION & REMARKS
F1	TYPE 206B	19	3	F40LW/RS/WM II	125	120	RECESS	2'X4' LAY-IN, STATIC TROFFER
F2	TYPE 204	19	2	F40LW/RS/WM II	85	120	RECESS	1'X4' LAY-IN STATIC TROFFER
F3	TYPE 232	32	2	F40LW/RS/WM II	85	120	SURFACE	ENCLOSED & GASKETED, VAPORTIGHT, 4'
F4	TYPE 213	22	2	F40LW/RS/WM II	85	120	SURFACE	1'X4' WITH METAL SIDES
F5	TYPE 225	28	2	F40LW/RS/WM II	85	120	WALL MOUNT +6" ABOVE MIRROR	4' ENCLOSED MIRROR LT. W/ACRYLIC LENS
F6	TYPE 230A	31	2	F40LW/RS/WM II	85	120	PENDANT MTD. AT BOTTOM OF STRUCT. STEEL	4' OPEN TYPE INDUSTRIAL REFLECTOR
K1	TYPE 604A	55	2	20T6½/IF LONG LIFE	40	120 AC 12 DC	SURF. CEILING, ON WALL +6"OR +6" ABOVE DOOR	SINGLE FACE EXIT SIGN W/SELF CONTAINED BATTERY
K2	TYPE 604B	55	2	20T6½/IF LONG LIFE	40	120 AC 12 DC	SAME AS K1	DOUBLE FACE EXIT SIGN W/SELF CONTAINED BATTERY
K3	TYPE 603	54	2	18 WATT SEALED BEAM	36	120 AC & DC	WALL MTD. +10'-0"	EMERGENCY BATTERY PACK UNIT
M1	TYPE 308A-2	40	1	H100DX38-4/A23 MERCURY VAPOR	125	120	RECESS	ROUND, GASKETED ENTRY LT.
M2	TYPE 302	34	1	MV250/C/U METAL HALIDE	280	120	PENDANT MTD. AT BOTTOM OF STRUCT. STEEL	ENCLOSED INDUSTRIAL LOW BAY
M3	TYPE 401-C-1	41	1	LU150/D HIGH PRESSURE SODIUM	200	120	POLE MTD. 12' POLE	ENCLOSED & GASKETED AREA LIGHT
M4	TYPE 501C	45	1	LU100/D HIGH PRESSURE SODIUM	125	120	WALL MTD. +8'-0"	ENCLOSED & GASKETED WALL PACK

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LIGHT FIXTURE SCHEDULE

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Sheet 67 of 67

DAE-11836-67
IN016-0015 E15of15

RECORD DRAWING-"AS BUILT"