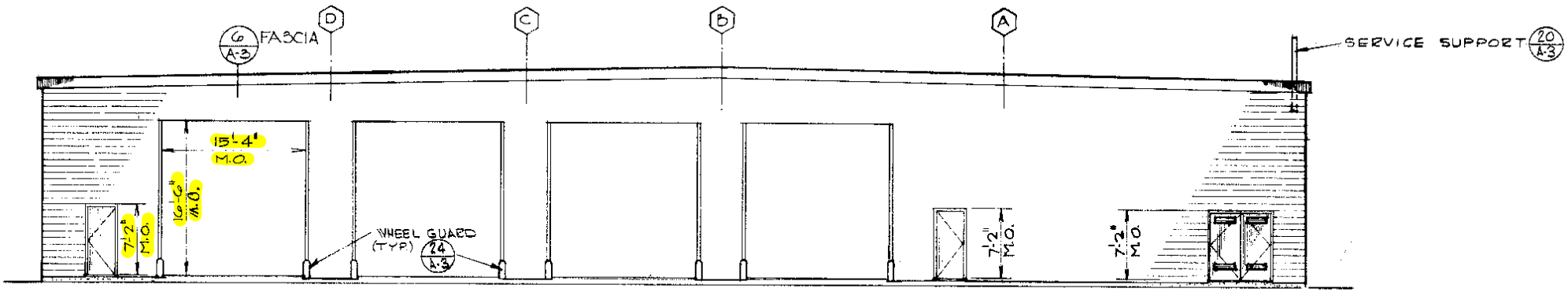


C / A-1 EAST ELEVATION (WEST ELEV. SIM.- OPP. HAND)

1/8" = 1'-0"

DOOR SCHEDULE

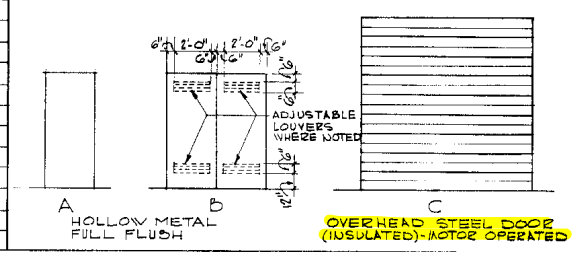
MARK	PAIR	WIDTH	HEIGHT	THICKNESS	TYPE	LOUVER	HDWE SET	DETAILS HEAD	DETAILS JAMB	DETAILS SILL	U.L. LABEL	REMARKS
101		2'-8"	7'-0"	1¾"	A		HW2	12/A3	12/A3	—		UNDERCUT 1"
102		3'-0"			A		HW6			—		
103		3'-0"			A		HW5			—		
104	o	6'-0"			B		HW4	12/A3	12/A3	—		
105		3'-0"			A		HW1	1/A3	10/A3	11/A3		
106							HW1					
107							HW1					
108							HW1					
109		3'-0"			A		HW1					
110	o	6'-4"	7'-0"	1¾"	B		HW3	1/A3	10/A3	11/A3		4-LOUVERS
111		15'-4"	16'-6"	2"	C		HW7	19/A3	23/A3	24/A3		
112							HW7					
113							HW7					
114							HW7					
115							HW7					
116							HW7					
117							HW7					
118		15'-4"	16'-6"	2"	C		HW7	19/A3	23/A3	24/A3		

ROOM FINISH SCHEDULE

MARK	DESCRIPTION	FLOOR CONC.	FLOOR CER. TILE	FLOOR	FLOOR	BASE CONC	BASE T.B. RUBBER	BASE CONC. BLK.	BASE	WALLS CONC. BLK.	WALLS GYP. BD.	WALLS	WALLS INSULATION	CEILING EXP. STRUC.	CEILING GYP. BD.	CEILING	CEILING HEIGHT	WAINSCOT CER. TILE (4'-0")	WAINSCOT GYP. BD. (8'-0")	WAINSCOT MFR. CERM. (6'-0")	REMARKS
101	TOILET	o	6				5				o				o		9'-6"	1			CLG. DET. = 21/A-3
102	OFFICE	o					4				o		2		o		9'-6"				CLG. DET. = 21/A-3
103	A.G.E STOR.	o				o		2			o		2	o			—			4	
104	MECH. RM.	o				o		2			o		2	o			—		2		
105	MAINT. AREA	o				o		2		o	o			o			—			4	

REMARKS:
1 FIXTURE WALL ONLY
2 EXTERIOR WALLS ONLY
3 DELETE
4 ALL WALLS
5 THREE WALLS
6 UNDER URINAL ONLY

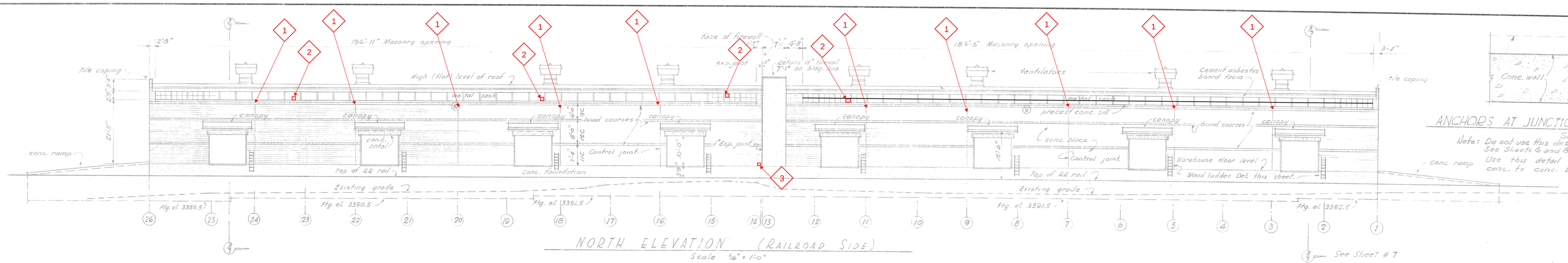
DOOR TYPES



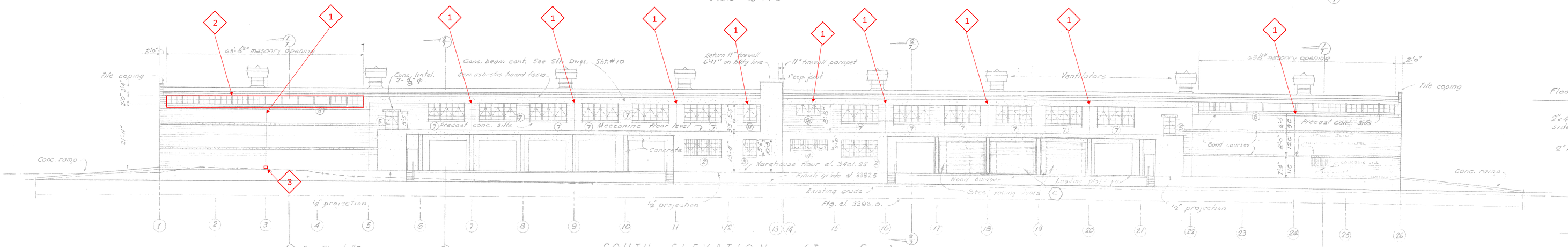
BLDG 1448

CORPS OF ENGINEERS

U. S. ARMY



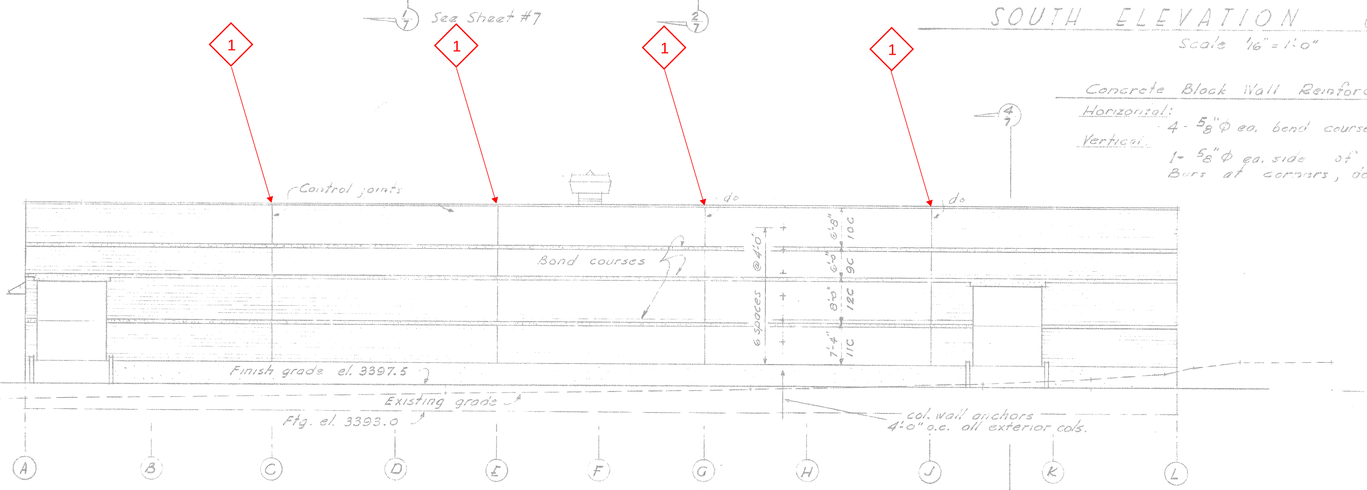
NORTH ELEVATION (RAILROAD SIDE)
Scale 1/16" = 1'-0"



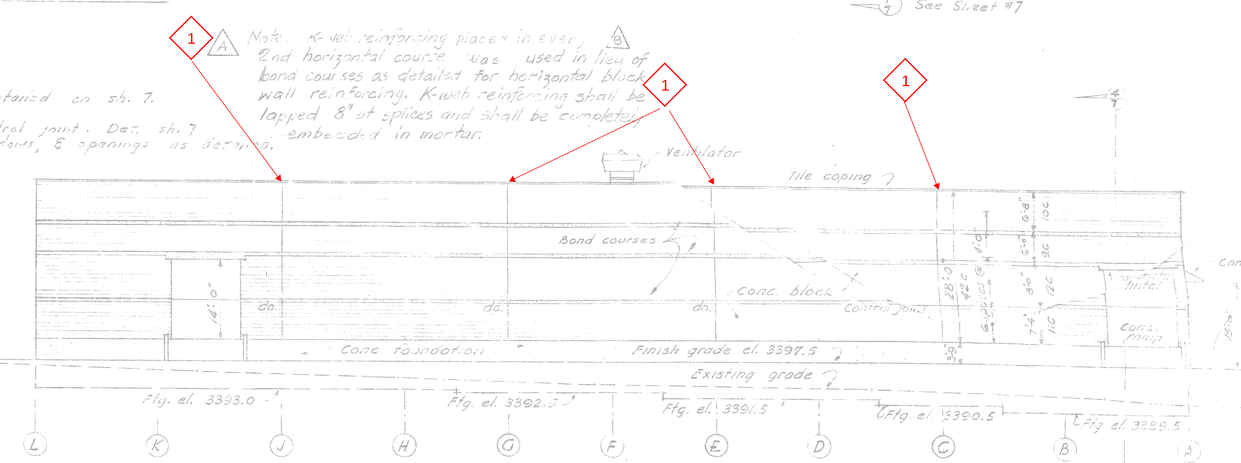
SOUTH ELEVATION (TRUCK SIDE)
Scale 1/16" = 1'-0"

Concrete Block Wall Reinforcing.
Horizontal:
4 - ⅝"Φ ea. bond course as detailed on sh. 7.
Vertical.
1 - ⅝"Φ ea. side of ea. control joint. Det. sh. 7
Bars at corners, doors, windows, & openings as detailed.

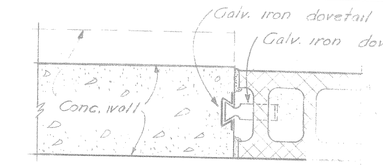
Note: K-web reinforcing placed in every 2nd horizontal course was used in lieu of bond courses as detailed for horizontal block wall reinforcing. K-web reinforcing shall be lapped 8" at splices and shall be completely embedded in mortar.



WEST END ELEVATION
Scale 1/16" = 1'-0"

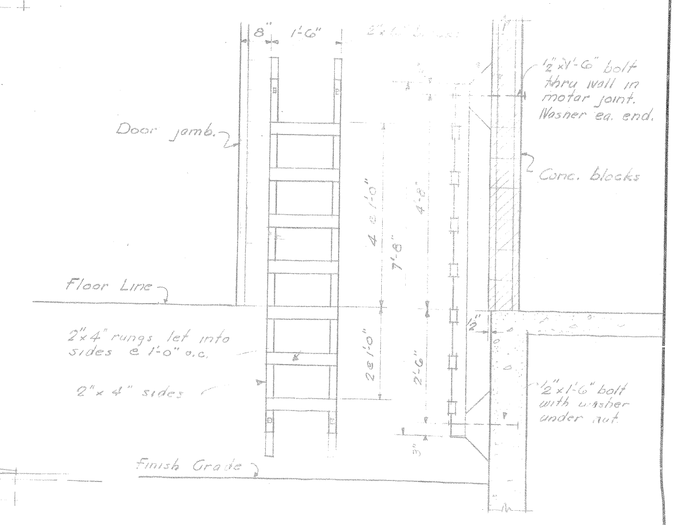


EAST END ELEVATION
Scale 1/16" = 1'-0"



ANCHORS AT JUNCTION OF CONC. & CONC. BLK. WALLS
Scale 1½" = 1'-0"

Note: Do not use this detail at 1" expansion joint or [illegible]
See Sheets 6 and 8 for condition at expansion joints.
Use this detail at junction of all interior conc. to conc. blk. walls except [illegible] joints.

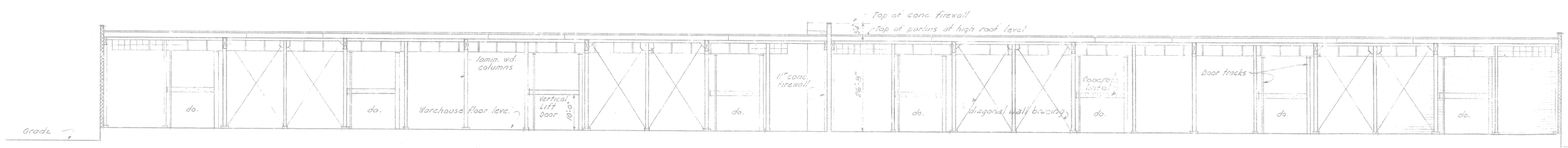


WOOD LADDER AT RAILROAD SIDE DOORS
Scale ½" = 1'-0"

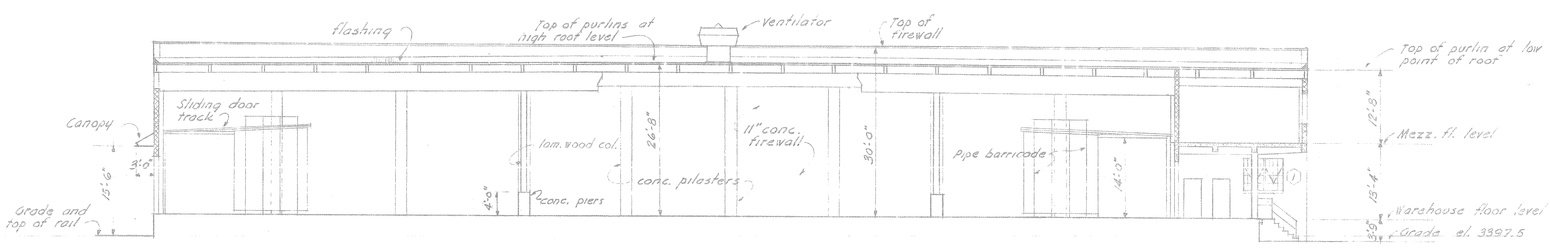
STEEL SASH SCHEDULE

MARK	NO. OF SASH	SASH SIZE	MASONRY OPENING	TYPE	GLAZING	REMARKS
1	1	5'-0⅝" x 5'-5"	5'-1" x 5'-5"	Security	SSB	See Elevations for [illegible]
2	3	3'-0⅝" x 5'-5"	11'-9" x 5'-5"	Security	SSB	" " " "
3	1	3'-0⅝" x 5'-5"	3'-1" x 5'-5"	Security	Obscure	" " " "
4	3	3'-0⅝" x 3'-3"	11'-9" x 3'-3"	Security	Obscure	" " " "
5	1	3'-0⅝" x 5'-5"	3'-1" x 5'-5"	Com. Projected	SSB	" " " "
6	2	3'-0⅝" x 3'-3"	7'-5" x 3'-3"	Com. Projected	Obscure	" " " "
7	3	3'-0⅝" x 5'-5"	11'-9" x 5'-5"	Com. Projected	SSB	" " " "
8	12	5'-0⅝" x 2'-6"	61'-8½" x 2'-6"	Industrial	SSB	Adjust metal to masonry
9	33	5'-0⅝" x 2'-3"	160'-5½" x 2'-3"	Industrial	SSB	Adjust metal to m.o.
10	3½	5'-0⅝" x 2'-6"	19'-11½" x 2'-6"	Industrial	SSB	Adjust metal to m.o.
11	1	3'-0⅝" x 5'-5"	3'-1" x 5'-5"	Com. Projected	Obscure	See Elevations for [illegible]

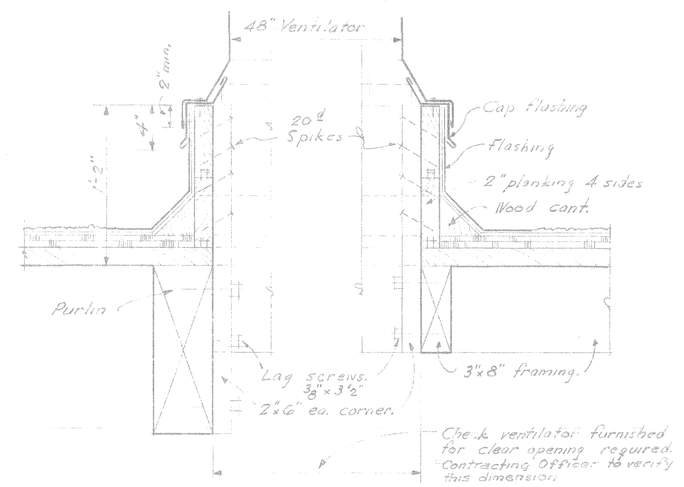
1. CMU CONTROL JOINTS
2. WINDOW FRAMES AND PANES
3. BROKEN CMU BLOCKS



SECTION "A-A"
Scale 1/16" = 1'-0"



SECTION "B-B"
Scale 1/16" = 1'-0"



ROOF CURB FOR GRAVITY VENTILATORS
Scale 1½" = 1'-0"

REVISION	DATE	DESCRIPTION	BY
3	14 Nov. 58	Steel rolling door. 1LM-3-57-53	
2	29 Nov. 53	Revised note concerning K-web. "As-built."	
1	24 Jul. 52	Note added for alternate block wall reinforcing using K-web or equal	

ORR PICKERING & ASSOCIATES
ARCHITECTS & ENGINEERS
BILLINGS, MONTANA

CORPS OF ENGINEERS U. S. ARMY
OFFICE OF THE DISTRICT ENGINEER
WALLA WALLA, WASHINGTON

DRAWN BY:
TRACED BY:
CHECKED BY:
SUBMITTED: Orr Pickering

GREAT FALLS AIR FORCE BASE
GREAT FALLS, MONTANA
WAREHOUSE, GENERAL PURPOSE WITH MEZZANINE OFFICES
ELEVATIONS & SECTIONS

APPROVED: Chas. A. Lewis — CHIEF DESIGN BRANCH
APPROVED: E. C. Frazier — CHIEF ENGINEERING DIVISION
DATE: 15 Feb 1952

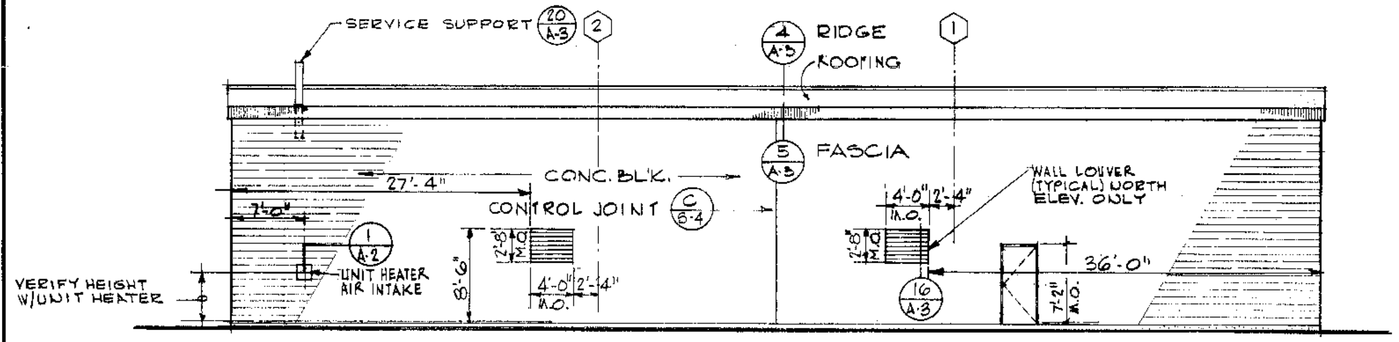
APPROVED: R. W. Anderson
COLONEL, C. E., DISTRICT ENGINEER, Pres. OFR
DATE: 15 Feb. 1952

SCALE AS SHOWN | SPEC. NO.
DRAWING NUMBER
SHEET 5 OF 17 — 33-02-01 4.00

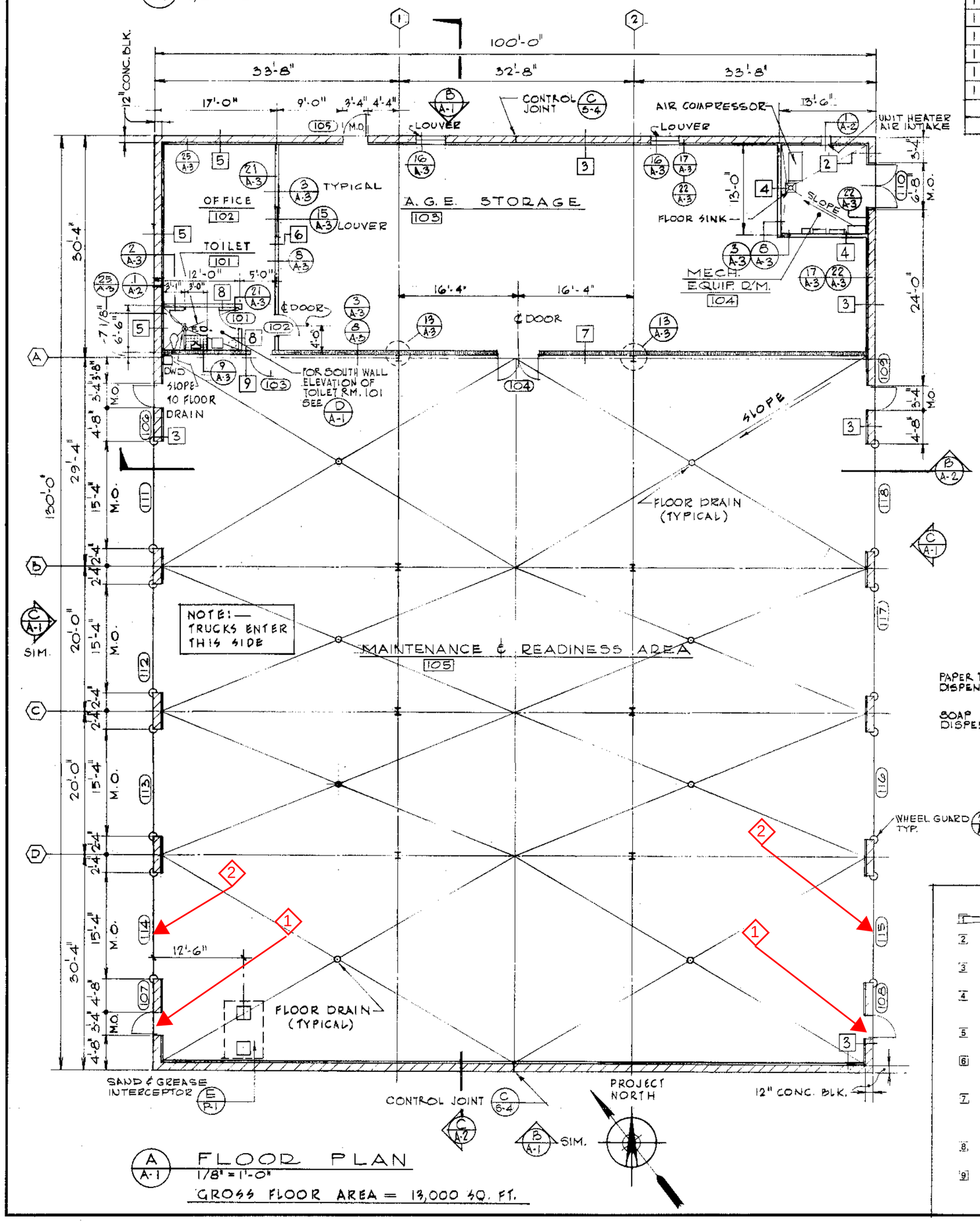
75 33 02 01 0 5

DWK 64 B 400 SH 13

CONTRACT DRAWING - AS BUILT



B A-1 NORTH ELEVATION (SOUTH ELEV. SIMILAR)
1/8" = 1'-0"



A A-1 FLOOR PLAN
1/8" = 1'-0"
GROSS FLOOR AREA = 13,000 SQ. FT.

DOOR SCHEDULE

MARK	PAIR	WIDTH	HEIGHT	THICKNESS	TYPE	LOUVER	HDWE SET	DETAILS HEAD	DETAILS JAMB	DETAILS SILL	G.L. LABEL	REMARKS
101		2'-8"	7'-0"	1 3/4"	A		HW2	12/A3	12/A3	—		UNDERCUT 1"
102		3'-0"	↑	↑	A		HW6	↑	↑	—		
103		3'-0"			A		HW5			—		
104	○	6'-0"			B		HW4	12/A3	12/A3	—		
105		3'-0"			A		HW1	1/A3	10/A3	11/A3		
106		↑			↑		HW1	↑	↑	↑		
107							HW1					
108							HW1					
109		3'-0"			A		HW1					
110	○	6'-4"	7'-0"	1 3/4"	B		HW3	1/A3	10/A3	11/A3		4-LOUVERS
111		15'-4"	16'-6"	2"	C		HW7	19/A3	23/A3	24/A3		
112		↑					HW7	↑	↑	↑		
113							HW7					
114							HW7					
115							HW7					
116							HW7					
117							HW7					
118		15'-4"	16'-6"	2"	C		HW7	19/A3	23/A3	24/A3		

ROOM FINISH SCHEDULE

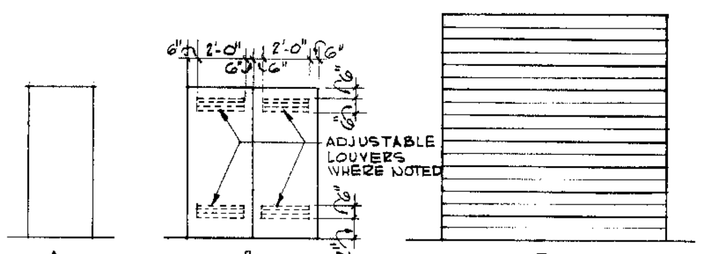
MARK	DESCRIPTION	FLOOR CONC.	FLOOR CER. TILE	FLOOR	FLOOR	BASE CONC	BASE T.S. RUBBER	BASE CONC. BLK.	WALLS CONC. BLK.	WALLS GYP. BD.	WALLS INSULATION	CEILING EXP. STRUC.	CEILING GYP. BD.	CEILING	HEIGHT	WAINSCOT CER. TILE (4'-0")	WAINSCOT GYP. BD. (8'-4")	WAINSCOT ASB. CEM. (8'-4")
101	TOILET	○	6				5			○			○		9'-6"	1		
102	OFFICE	○					4			○	2		○		9'-6"			
103	A.G.E STOR.	○				○		2		○	2	○		—			4	
104	MECH. RM.	○				○		2		○	2	○		—		2		
105	MAINT. AREA	○				○		2	○	○		○		—			4	

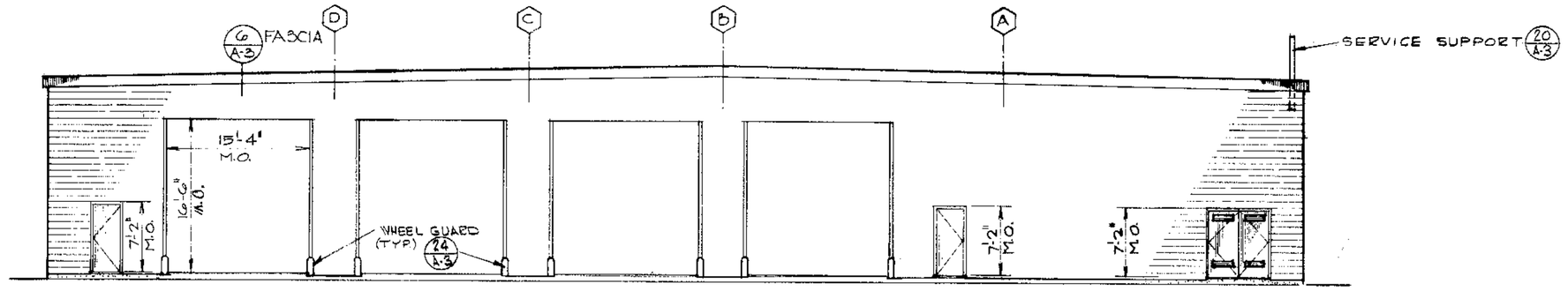
REMARKS:
1 FIXTURE WALL ONLY
2 EXTERIOR WALLS ONLY
3 DELETE
4 ALL WALLS
5 THREE WALLS

CLG. DET. = 21/A-3
CLG. DET. = 21/A-3

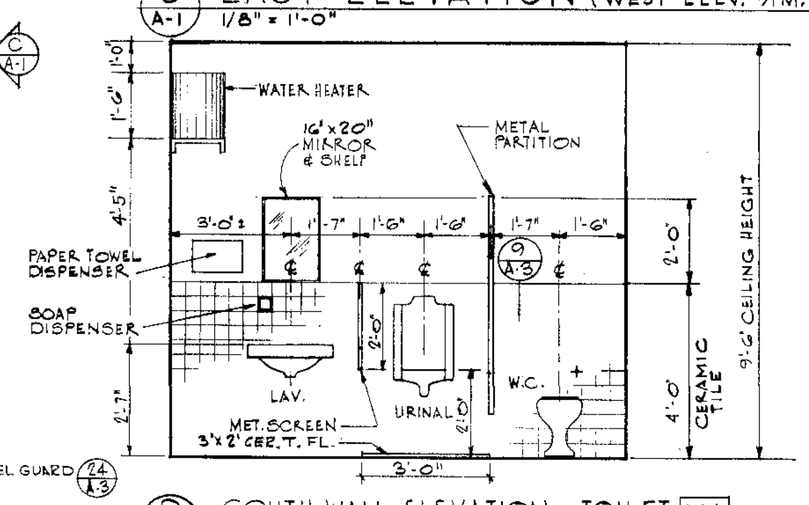
6 UNDER URINAL ONLY

DOOR TYPES





C A-1 EAST ELEVATION (WEST ELEV. SIM. - OPP. HAND)
1/8" = 1'-0"



D A-1 SOUTH WALL ELEVATION - TOILET 101
SCALE: 1/2" = 1'-0"

NOTES:

1. LOCATION OF MAN DOORS
2. LOCATION OF GARAGE DOORS

AS-BUILT

WALL TYPES

1. ~~12" CONCRETE BLOCK~~ OMIT
2. 12" CONCRETE BLOCK W/INSULATION ONE SIDE FULL HGT. & 1/2" GYP. BD. WAINSCOT 8'-4" HIGH ONE SIDE
3. 12" CONCRETE BLOCK W/INSULATION ONE SIDE FULL HGT. & 1/4" ASBESTOS-CEMENT BD. WAINSCOT 8'-4" HIGH ONE SIDE
4. 6" METAL STUDS @ 16" O.C. TO EXP. STRUCT. W/5/8" GYP. BD. BOTH SIDES FULL HGT. - 1 HR. FIRE RATED & 1/4" ASBESTOS-CEMENT BD. WAINSCOT 8'-4" HIGH ONE SIDE
5. 12" CONCRETE BLOCK W/INSULATION ONE SIDE FULL HGT. & 1/2" GYP. BD. WAINSCOT 10'-4" HIGH ONE SIDE
6. 6" METAL STUDS @ 16" O.C. TO EXP. STRUCT. W/1/2" GYP. BD. BOTH SIDES FULL HGT. & 1/4" ASBESTOS-CEMENT BD. WAINSCOT 8'-4" HIGH ONE SIDE
7. 6" METAL STUDS @ 16" O.C. TO EXP. STRUCT. W/1/2" GYP. BD. BOTH SIDES FULL HGT. W/INSULATION IN PARTITION CAVITY & 1/4" ASBESTOS-CEMENT BD. WAINSCOT 8'-4" HIGH TWO SIDES
8. 6" METAL STUDS @ 16" O.C. TO 9'-6" CLG. W/1/2" GYP. BD. BOTH SIDES TO 9'-6" CLG.
9. 6" METAL STUDS @ 16" O.C. TO EXP. STRUCT. W/1/2" GYP. BD. BOTH SIDES FULL HGT. W/INSULATION IN PARTITION CAVITY

5 0 10 20
1/8" = 1'-0" GRAPHIC SCALE
1 0 1 2 3 4 5
1/2" = 1'-0" GRAPHIC SCALE

REVISION NO.	DATE	DESCRIPTION	AGENCY	BY

DANIEL, MANN, JOHNSON, & MENDENHALL
PLANNING • ARCHITECTURE • ENGINEERING • SYSTEMS

DEPARTMENT OF AIR FORCE
SPACE & MISSILE SYSTEMS ORGANIZATIONS
NORTON AIR FORCE BASE, CALIFORNIA

DESIGNED BY L.L.G.
DRAWN BY E.A.M.
CHECKED BY D.S.
SUBMITTED BY DATE

A-E SHEET NO. A-1
A-E JOB NO. 201-11-1

MALMSTROM AIR FORCE BASE, MONTANA
PAYLOAD TRANSPORTER ALERT AND READINESS FACILITY

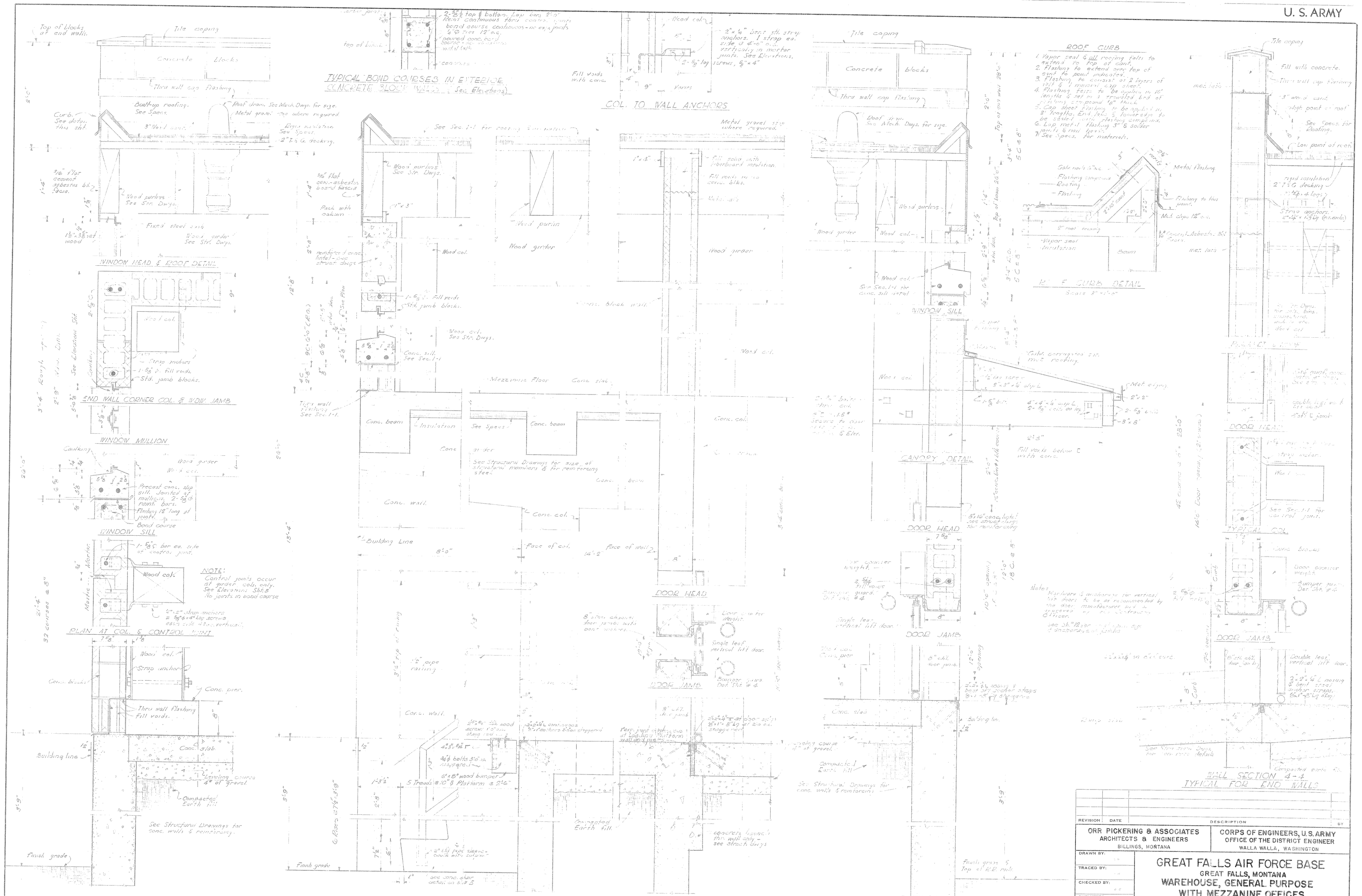
ARCHITECTURAL PLAN, ELEVATIONS & SCHEDULES

APPROVED: DATE
James Barry Proj Eng 10 Feb 70
William E. Pratt SMSD 18 Feb 70

SPECIFICATION NO. 3867
DATE 18 JUN 1970 SCALE AS NOTED
DRAWING NUMBER 33-39-10
SHEET 5

DIST. FILE No. 225-25-01 SHT. 5

1448



REVISION	DATE	DESCRIPTION	BY

ORR PICKERING & ASSOCIATES
ARCHITECTS & ENGINEERS
BILLINGS, MONTANA

CORPS OF ENGINEERS, U.S. ARMY
OFFICE OF THE DISTRICT ENGINEER
WALLA WALLA, WASHINGTON

DRAWN BY:
TRACED BY:
CHECKED BY:
SUBMITTED:

GREAT FALLS AIR FORCE BASE
GREAT FALLS, MONTANA
WAREHOUSE, GENERAL PURPOSE WITH MEZZANINE OFFICES
WALL SECTIONS - DETAILS

APPROVED: CHIEF, DESIGN BRANCH
APPROVED: CHIEF ENGINEERING DIVISION
DATE: 15 Feb 1952

APPROVED: Lt. COLONEL, C.E. DISTRICT ENGINEER Exec. Off.
DATE: 15 Feb 1952

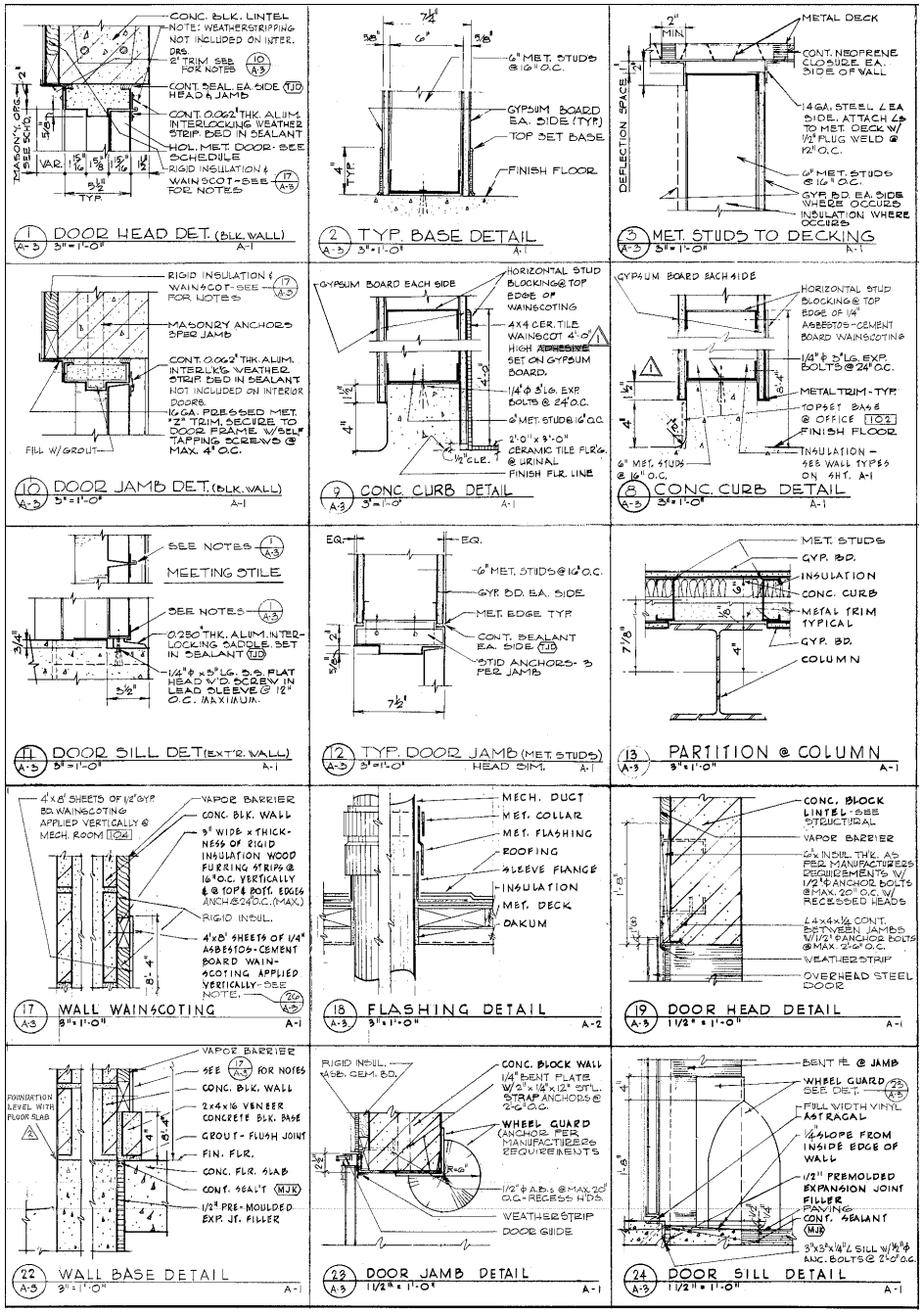
SCALE AS SHOWN | SPEC. NO.

DRAWING NUMBER ~~33-02-01~~ 400

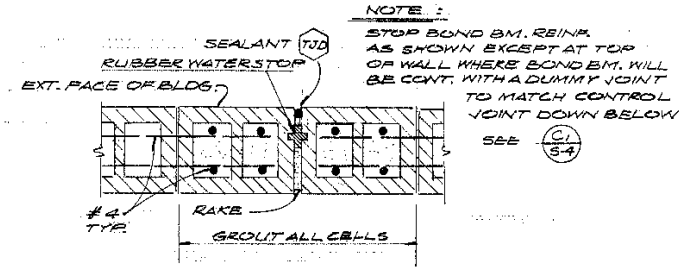
SHEET 7 OF 17

CONTRACT DRAWING - AS BUILT

Sht 11

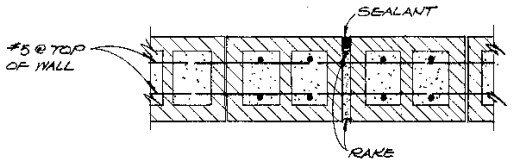

CONC. BLK. LINTEL
NOTE: WEATHERSTRIPPING NOT INCLUDED ON INTER. DRS.
2" TRIM SEE FOR NOTES 10 A-3
CONT. SEAL EA SIDE HEAD & JAMB TJD
CONT. 0.062" THK. ALUM. INTERLOCKING WEATHER STRIP BED IN SEALANT
HOL. MET. DOOR - SEE SCHEDULE
RIGID INSULATION & WAINSCOT - SEE FOR NOTES 17 A-3
MASONY OPG. SEE SCH.
VAR.
TYP.
1 A-3 DOOR HEAD DET. (BLK. WALL) 3" = 1'-0" A-1
6" MET. STUDS @ 16" O.C.
GYPSUM BOARD EA. SIDE (TYP.)
TOP SET BASE
FINISH FLOOR
TYP.
2 A-3 TYP. BASE DETAIL 3" = 1'-0" A-1
METAL DECK
CONT. NEOPRENE CLOSURE EA. SIDE OF WALL
DEFLECTION SPACE
14 GA. STEEL ∠ EA SIDE. ATTACH ∠s TO MET. DECK W/ 1/2" PLUG WELD @ 12" O.C.
6" MET. STUDS @ 16" O.C.
GYP. BD. EA. SIDE WHERE OCCURS
INSULATION WHERE OCCURS
3 A-3 MET. STUDS TO DECKING 3" = 1'-0" A-1
RIGID INSULATION & WAINSCOT - SEE FOR NOTES 17 A-3
MASONRY ANCHORS 3 PER JAMB
CONT. 0.062" THK. ALUM. INTERL'KG WEATHER STRIP BED IN SEALANT NOT INCLUDED ON INTERIOR DOORS.
16 GA. PRESSED MET. "Z" TRIM. SECURE TO DOOR FRAME W/ SELF TAPPING SCREWS @ MAX. 4" O.C.
FILL W/ GROUT
10 A-3 DOOR JAMB DET. (BLK. WALL) 3" = 1'-0" A-1
GYPSUM BOARD EACH SIDE
HORIZONTAL STUD BLOCKING @ TOP EDGE OF WAINSCOTING
4X4 CER. TILE WAINSCOT 4'-0" HIGH ADHESIVE SET ON GYPSUM BOARD.
1/4" ϕ 3" LG. EXP. BOLTS @ 24" O.C.
6" MET. STUDS @ 16" O.C.
2'-0" x 3'-0" CERAMIC TILE FLR'G. @ URINAL
FINISH FLR. LINE
1/2" CLE.
9 A-3 CONC. CURB DETAIL 3" = 1'-0" A-1
GYPSUM BOARD EACH SIDE
HORIZONTAL STUD BLOCKING @ TOP EDGE OF 1/4" ASBESTOS-CEMENT BOARD WAINSCOTING
1/4" ϕ 3" LG. EXP. BOLTS @ 24" O.C.
METAL TRIM - TYP.
TOPSET BASE @ OFFICE 102
FINISH FLOOR
INSULATION - SEE WALL TYPES ON SHT. A-1
6" MET. STUDS @ 16" O.C.
8 A-3 CONC. CURB DETAIL 3" = 1'-0" A-1
SEE NOTES 1 A-3
MEETING STILE
SEE NOTES 1 A-3
0.250" THK. ALUM. INTERLOCKING SADDLE. SET IN SEALANT TJD
1/4" ϕ x 3" LG. S.S. FLAT HEAD W'D SCREW IN LEAD SLEEVE @ 12" O.C. MAXIMUM.
11 A-3 DOOR SILL DET. (EXT'R. WALL) 3" = 1'-0" A-1
EQ.
6" MET. STUDS @ 16" O.C.
GYP. BD. EA. SIDE
MET. EDGE TYP.
CONT. SEALANT EA. SIDE TJD
STID ANCHORS - 3 PER JAMB
12 A-3 TYP. DOOR JAMB (MET. STUDS) 3" = 1'-0" HEAD SIM. A-1
MET. STUDS
GYP. BD.
INSULATION
CONC. CURB
METAL TRIM TYPICAL
GYP. BD.
COLUMN
13 A-3 PARTITION @ COLUMN 3" = 1'-0" A-1
4'x8' SHEETS OF 1/2" GYP. BD. WAINSCOTING APPLIED VERTICALLY @ MECH. ROOM 104
VAPOR BARRIER
CONC. BLK. WALL
3" WIDE x THICKNESS OF RIGID INSULATION WOOD FURRING STRIPS @ 16" O.C. VERTICALLY & @ TOP & BOTT. EDGES ANCH. @ 24" O.C. (MAX.)
RIGID INSUL.
4'x8' SHEETS OF 1/4" ASBESTOS-CEMENT BOARD WAINSCOTING APPLIED VERTICALLY - SEE NOTE. 20 A-3
17 A-3 WALL WAINSCOTING 3" = 1'-0" A-1
MECH. DUCT
MET. COLLAR
MET. FLASHING
ROOFING
SLEEVE FLANGE
INSULATION
MET. DECK
OAKUM
18 A-3 FLASHING DETAIL 3" = 1'-0" A-2
CONC. BLOCK LINTEL - SEE STRUCTURAL
VAPOR BARRIER
2" INSUL. THK. AS PER MANUFACTURERS REQUIREMENTS W/ 1/2" ϕ ANCHOR BOLTS @ MAX. 20" O.C. W/ RECESSED HEADS
∠ 4x4x1/2 CONT. BETWEEN JAMBS W/ 1/2" ϕ ANCHOR BOLTS @ MAX. 2'-0" O.C.
WEATHERSTRIP
OVERHEAD STEEL DOOR
19 A-3 DOOR HEAD DETAIL 1 1/2" = 1'-0" A-1
VAPOR BARRIER
SEE 17 A-3 FOR NOTES
CONC. BLK. WALL
2x4x16 VENEER CONCRETE BLK. BASE
GROUT - FLUSH JOINT
FIN. FLR.
CONC. FLR. SLAB
CONT. SEAL'T MJK
1/2" PRE-MOULDED EXP. JT. FILLER
FOUNDATION LEVEL WITH FLOOR SLAB
22 A-3 WALL BASE DETAIL 3" = 1'-0" A-1
RIGID INSUL.
ASB. CEM. BD.
CONC. BLOCK WALL
1/4" BENT PLATE W/ 2" x 1/4" x 12" STL. STRAP ANCHORS @ 2'-0" O.C.
WHEEL GUARD (ANCHOR PER MANUFACTURERS REQUIREMENTS
1/2" ϕ A.B.'s @ MAX. 20" O.C. - RECESS H'DS.
WEATHERSTRIP
DOOR GUIDE
23 A-3 DOOR JAMB DETAIL 1 1/2" = 1'-0" A-1
BENT PL. @ JAMB
WHEEL GUARD SEE DET. 22 A-3
FULL WIDTH VINYL ASTRAGAL
1/4" SLOPE FROM INSIDE EDGE OF WALL
1/2" PREMOLDED EXPANSION JOINT FILLER
PAVING
CONT. SEALANT MJK
3"x3"x1/4" ∠ SILL W/ 1/2" ϕ ANC. BOLTS @ 2'-0" O.C.
24 A-3 DOOR SILL DETAIL 1 1/2" = 1'-0" A-1

BLDG 1448



CONTROL JOINT

C / S-4 DETAIL
S-1 / S-4 1"=1'-0"



C1 / S-4 DUMMY JOINT DETAIL
1"=1'-0"

BLDG 400