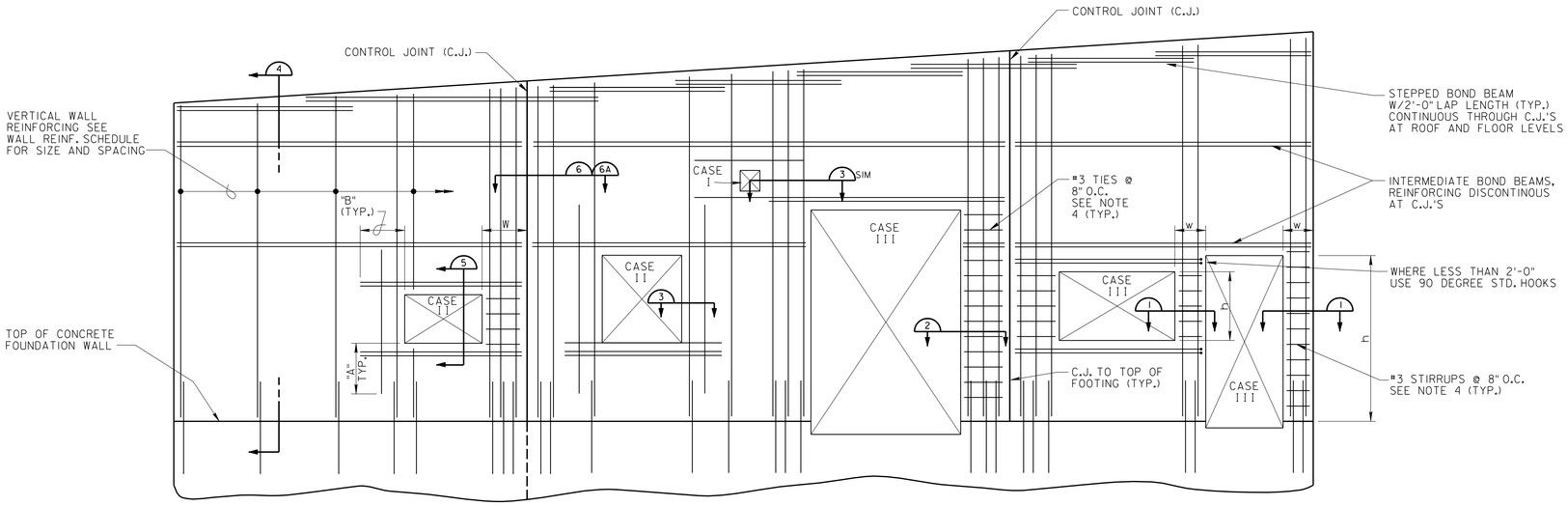


"A" & "B" DIMENSION= 48 BAR DIAMETERS OR 2'-0" WHICHEVER IS GREATER

SAMPLE CMU WALL ELEVATION

NO SCALE

NOTES:
1. THE CONTRACTOR SHALL PROVIDE ADEQUATE TEMPORARY BRACING FOR ALL MASONRY WALLS DURING CONSTRUCTION.
2. USE 8 INCH DEEP LINTELS, THE THICKNESS OF THE WALLS, REINFORCED WITH 2-#5 BARS, AT OPENINGS WHERE LINTELS ARE NOT DETAILED. LINTEL REINFORCING SHALL EXTEND 2'-0" BEYOND OPENING.
3. SAMPLE CMU WALL ELEVATION PROVIDES THE CONTRACTOR WITH TYPICAL REINFORCING REQUIREMENTS AT LOCATIONS OF CONTROLS JOINTS, BOND BEAMS, WALL OPENINGS, ETC.
4. STIRRUPS AND TIES SHALL EXTEND FROM THE CLOSEST HORIZONTAL COURSE JOINT ABOVE THE OPENING TO THE CLOSEST HORIZONTAL COURSE JOINT BELOW THE OPENING.
5. A PARTITION WALL IS DEFINED AS A MASONRY WALL CARRYING NO VERTICAL ROOF OR FLOOR LOAD.

REINFORCING FOR OPENINGS:

CASE I - REINFORCE PERIMETER WITH 1-#5 BAR (MIN) (a)

1) ALL OPENINGS IN PARTITION WALLS (SEE NOTE 5) OVER 100 SQUARE INCHES.
2) ALL OPENINGS IN CMU WALLS OTHER THAN PARTITION WALLS (SEE NOTE 5) WHICH ARE 2 FEET OR LESS BOTH DIRECTIONS BUT OVER 100 SQUARE INCHES.

CASE II - REINFORCE PERIMETER WITH 2-#5 BARS (MIN) (b)

ALL OPENINGS IN CMU WALLS OTHER THAN PARTITIONS (SEE NOTE 5) WHICH EXCEEDS 2 FEET BUT NOT OVER 4 FEET IN ANY DIRECTION.

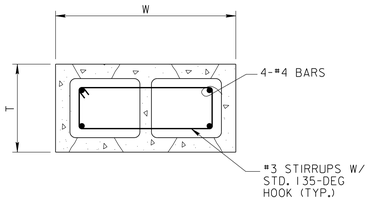
CASE III - REINFORCE PERIMETER WITH 2-#5 BARS (MIN) (b)

(a) CASE I, II, III APPLY TO WALL OPENINGS IDENTIFIED IN SAMPLE CMU WALL ELEVATION. THIS REINFORCING IS IN ADDITION TO OTHER REQUIRED WALL REINFORCING.
(b) SEE SECTIONS 3 AND 5 FOR DETAILS OF REINFORCING AROUND OPENINGS.

REINFORCING DETAIL FOR CMU ADJACENT TO OPENINGS			
CMU WALL THICKNESS ("t")	SEE SECTION 1 IF:	SEE SECTION 2 IF:	SEE SECTION 3 IF:
8" OR 12"	w < 2'-0" h > 2'-8"	2'-0" ≤ w ≤ 3'-4"	w > 3'-4"

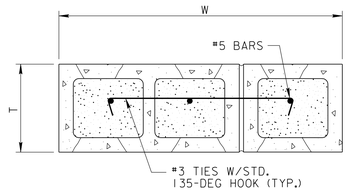
NOTE:
"w" = WIDTH OF CMU BETWEEN ADJACENT OPENINGS.
"h" = HEIGHT OF ADJACENT CMU OPENING.

SEE "SAMPLE CMU WALL ELEVATION" FOR EXAMPLES OF "w" AND "h".



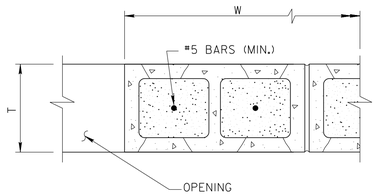
SECTION 1

NO SCALE



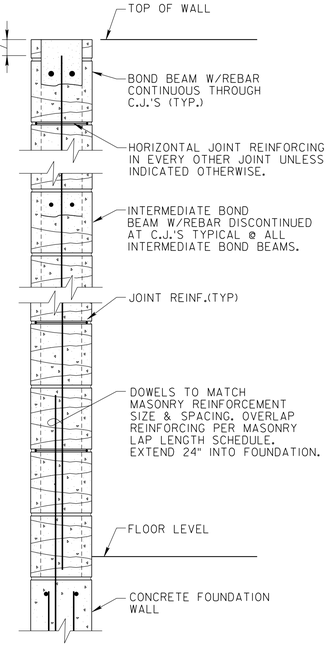
SECTION 2

NO SCALE



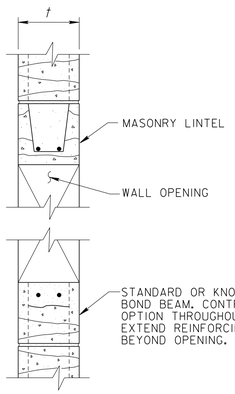
SECTION 3

NO SCALE



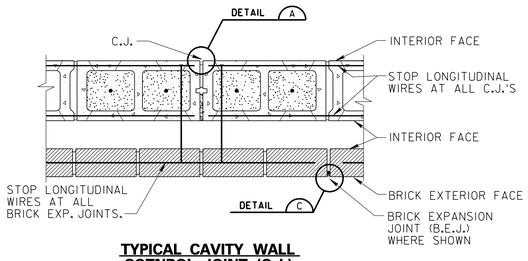
SECTION 4

NO SCALE



SECTION 5

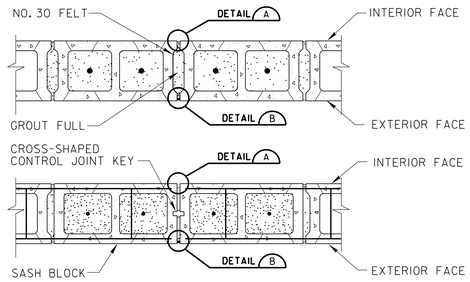
NO SCALE



TYPICAL CAVITY WALL COTNROL JOINT (C.J.)

SECTION 6

NO SCALE

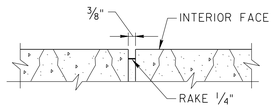


CMU COTNROL JOINT (M.C.J.)

NOTE:
THE USE OF STANDARD AND HALF UNITS WITH NO. 30 FELT OR SASH BLOCK UNITS WITH KEY IS A CONTRACTORS OPTION.

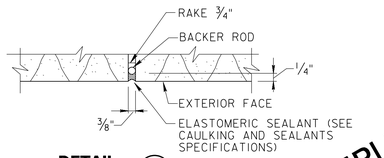
SECTION 6A

NO SCALE



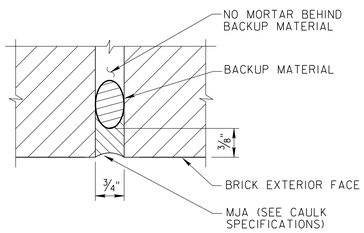
DETAIL A

NO SCALE



DETAIL B

NO SCALE



DETAIL C

NO SCALE

EXAMPLE
100% DESIGN

WALL REINFORCEMENT SCHEDULE			
MARK	WALL THICKNESS	VERT. REINF.	HORIZ REINF. (BTWN BOND BMS)
W1	8"	#5 @ 48"O.C.	2#9 @ 16"O.C.
W2	8/8-2-4	2 #5 @ 24"O.C.	2#9 @ 16"O.C.
W3	8-2-4	1 #5 @ 24"O.C.	2#9 @ 16"O.C.
W4	12-2-4	2 #6 @ 40"O.C. •	2#9 @ 16"O.C.

• LOCATE MIDWAY WHEN BTWN PIERS.

MASONRY LAP BAR SCHEDULE	
FOR 2000 PSI GROUT	
BAR	LAP SPLICE LENGTH
#4	24"
#5	30"
#6	36"

TYPICAL BOND BEAM ELEVATIONS	
LOW ROOF AREA:	TOP OF BEAM ELEV. = 103'-2" 107'-10" 113'-2"
HIGH ROOF AREA:	TOP OF BEAM ELEV. = 103'-2" 107'-10" 109'-10" @ MEZZANINE ONLY 113'-2" 117'-2" 121-10" 125'-10"

NOTES:
1. BOND BEAMS @ ROOF AND MEZZANINE ELEVATIONS SHALL BE CONTINUOUS THROUGH MASONRY CONTROL JOINTS, INTERMEDIATE BOND BEAMS SHALL BE DISCONTINUOUS.
2. BOND BEAMS INDICATED HERE ARE IN ADDITION TO ANY OTHER BOND BEAMS INDICATED ON OTHER SHEETS.
3. ALL BOND BEAMS SHALL BE REINFORCED, UNLESS NOTED OTHERWISE, WITH 2-#5 BARS CONTINUOUS FOR ALL THICKNESSES.

$$ – THINK VALUE ENGINEERING – $$

Revisions

Symbol	Descriptions	Date	Approved

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
OMAHA, NEBRASKA

Designed by: X.X.X
Drawn by: X.X.X.
Checked by: X.X.X.
Reviewed by: X.X.X.
Submitted by:
Chief: Section

SITE NAME: OMAHA DISTRICT DESIGN GUIDE
SITE LOCATION

TYPICAL MASONRY DETAILS WALL REINFORCEMENT SCHEDULE

Plot Scale Ratio: 1:1
Design File: DG10S502.DGN
Date: JUNE 2002
Spec. No.: DACA 45
Contract No.: DACA 45
Drawing Code: X
Sheet reference number: S5.02

COMPUTER AIDED DESIGN & DRAFTING

d:\oddg\struct\dg10s502.dgn 05/30/02 01:17:03 PM