WALL THICKNESS t	MAXIMUM WALL HEIGHT H	VERTICAL REINFORCEMENT (SEE NOTE 1)	
		INTERIOR WALL	EXTERIOR WALL
8"	17'-0"	#4 @ 48"	#5 @ 32"

VERTICAL REINFORCEMENT SCHEDULE

NOTES:

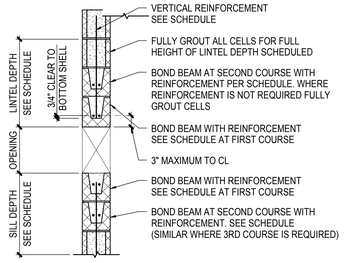
1. PROVIDE THE FOLLOWING TYPICAL MINIMUM HORIZONTAL REINFORCEMENT:
   -INTERIOR WALLS: 2 - 9 GAGE WIRES AT EVERY OTHER COURSE
   -EXTERIOR WALLS: 2 - 3/16" DIA WIRES AT EVERY OTHER COURSE

   -1-#4 @ 48" OC FOR 6" THICK WALL
   -2-#4 @ 48" OC FOR WALLS > 6" THICK
2. FOR LOCATION AND THICKNESS OF MASONRY WALLS SEE ARCHITECTURAL DRAWINGS
3. 'H' INDICATES HEIGHT OF WALL BETWEEN LATERAL SUPPORT POINTS
4. DESIGN OF MASONRY WALL IS BASED ON PARTIALLY GROUTED WALLS WITH REINFORCEMENT AS SCHEDULED
5. VERTICAL REINFORCEMENT SHALL BE SECURED WITH WIRE POSITIONERS ETC., AT INTERVALS NOT TO EXCEED 48," AND BE LOCATED AT THE CENTER OF THE WALL UON
6. SEE ELEVATIONS AND DETAILS FOR ADDITIONAL REINFORCEMENT AT OPENINGS AND JOINTS

1 TYPICAL CMU NON-BEARING WALL REINFORCEMENT SCHEDULE

NOT TO SCALE

	WALL LOCATION	MAXIMUM MASONRY OPENING 'L'	WALL THICKNESS		
			8" WALL		
			LINTEL OR SILL DEPTH	1ST COURSE REINF	2ND COURSE REINF
LINTEL SCHEDULE	INTERIOR	4'-0"	8	2 -#5	-
		7'-0"	16	2 -#4	-
		12'-0"	24	2 -#6	2 -#4
	EXTERIOR	4'-0"	8	2 -#5	-
		7'-0"	16	2 -#6	-
		12'-0"	40	2 -#6	2 -#6
SILL SCHEDULE	INTERIOR	12'-0"	8	2 -#4	-
	EXTERIOR	7'-0"	8	2 -#5	-
		12'-0"	16	2 -#6	2 -#6



TYPICAL MASONRY SECTION AT OPENING

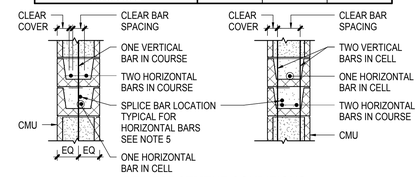
NOTES:

1. MASONRY LINTELS SHALL BE SHORED DURING CONSTRUCTION AND SHALL REMAIN SHORED UNTIL MASONRY HAS GAINED 100% OF FULL SPECIFIED STRENGTH (f'm)
2. SEE TYPICAL CMU NON-BEARING WALL ELEVATIONS FOR ADDITIONAL INFORMATION

2 TYPICAL CMU SILL AND LINTEL SCHEDULE (NON-BEARING WALL)

NOT TO SCALE

CMU LAP SPLICE AND TENSION EMBEDMENT LENGTH (f'm = 1500 psi & fy = 60 ksi)			
SCHEDULED REINFORCEMENT CONDITION	BAR SIZE		
	#4	#5	#6
ONE BAR IN CELL OR COURSE (NOTE 1)	24"	26"	40"
TWO BARS IN CELL OR COURSE	36"	45"	54"



REINFORCEMENT CONDITIONS

NOTES:

1. FOR 6" AND 8" WALLS WITH ONE HORIZONTAL BAR IN COURSE, USE SPLICE LENGTHS FOR TWO BARS IN CELL OR COURSE
2. SPLICES OF HORIZONTAL REINFORCEMENT IN WALLS CONTAINING TWO BARS PER COURSE SHALL BE STAGGERED
3. WHERE BARS OF DIFFERENT SIZES ARE TO BE SPLICED, THE SPLICE LENGTH SHALL BE THAT REQUIRED FOR THE LARGEST
4. SEE TYPICAL REBAR LAYOUT DETAIL FOR MINIMUM CLEAR COVER TO INSIDE OF FACESHELL
5. SPLICES OF HORIZONTAL REINFORCEMENT SHOULD BE PLACED VERTICALLY OVER MAIN BAR

3 CMU LAP SPLICE AND TENSION EMBEDMENT LENGTH SCHEDULE

NOT TO SCALE

WALL THICKNESS t	MAXIMUM WALL HEIGHT 'H'	MAX CLEAR MASONRY OPENING (SEE NOTE 4)	INTERIOR WALL			EXTERIOR WALL		
			JAMB ZONE WIDTH W1 OR W2	PIER ZONE LENGTH (NOTE 2)	WALL REINF EACH CELL	JAMB ZONE WIDTH W1 OR W2	PIER ZONE LENGTH (NOTE 2)	WALL REINF EACH CELL
8"	17'-0"	4'-0"	8"	16"	# 4	16"	32"	# 5
		7'-0"	8"	16"	# 4	24"	40"	# 5
		12'-0"	8"	16"/24"	# 4	40"	64"	# 5

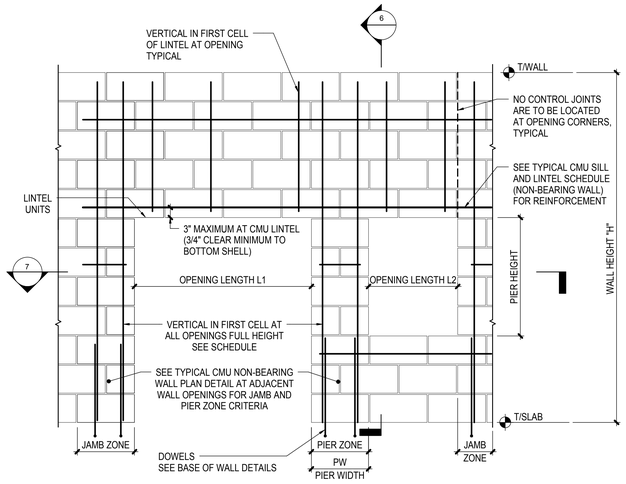
NOTES:

1. SINGLE NUMBER FOR PIER REFERS TO PIER ZONE LENGTH. WHEN PIER WIDTH IS DENOTED AS ##/##, PROVIDE PIER AS FOLLOWS:

   EX. 16"/24"
   - MINIMUM TOTAL PIER WIDTH, PW, INCLUDING ANY NON-CONTINUOUS CELLS INTERRUPTED BY LINTELS
   - MINIMUM PIER ZONE WIDTH WITH CONTINUOUS VERTICAL BARS FULL HEIGHT OF WALL
2. PROVIDE FULLY GROUTED JAMB AND PIER WITH VERTICAL BARS(S) IN EACH CELL OVER FULL WIDTH AS SCHEDULED. SEE TYPICAL CMU NON-BEARING WALL REINFORCEMENT SCHEDULE FOR REBAR LAYOUT
3. FOR PIER ZONE SCHEDULE USE MAXIMUM CLEAR MASONRY OPENING AT LEAST EQUAL TO AVERAGE WIDTH OF ADJACENT OPENINGS
4. SEE TYPICAL CMU NON-BEARING WALL PLAN DETAIL AT ADJACENT WALL OPENINGS FOR ADDITIONAL INFORMATION
5. NOTIFY ENGINEER OF RECORD IF JAMB AND/OR PIER WIDTH NOTED CANNOT BE SATISFIED
6. AT PIERS WIDER THAN REQUIRED PER SCHEDULE, IT IS ACCEPTABLE TO REINFORCE EDGES AS JAMB ZONES

4 TYPICAL CMU NON-BEARING WALL JAMB AND PIER ZONE SCHEDULE

NOT TO SCALE

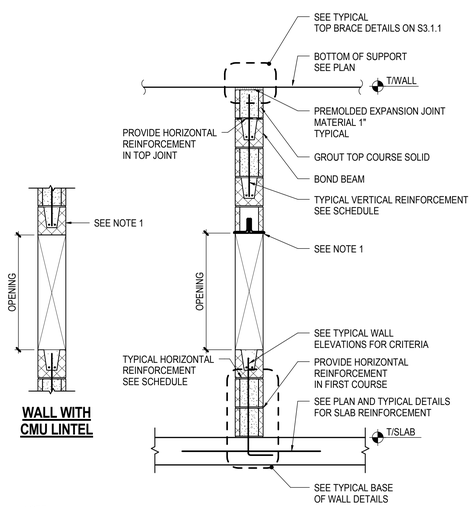


NOTES:

1. FOR WALL INFORMATION NOT SHOWN, SEE TYPICAL CMU NON-BEARING WALL ELEVATION WITH STEEL OR PRECAST LINTELS
2. SEE TYPICAL CMU SILL AND LINTEL SCHEDULE (NON-BEARING WALL) FOR ADDITIONAL INFORMATION

5 TYPICAL CMU NON-BEARING WALL ELEVATION WITH CMU LINTELS

3/4" = 1'-0"

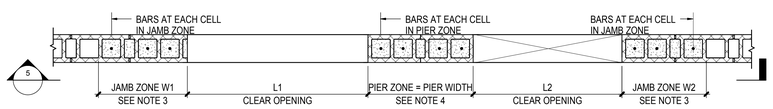


NOTE:

1. SEE TYPICAL CMU SILL AND LINTEL SCHEDULE (NON-BEARING WALL) AND/OR TYPICAL STEEL LINTEL SCHEDULE (NON-BEARING WALL) FOR ADDITIONAL INFORMATION

6 TYPICAL CMU NON-BEARING WALL SECTION

3/4" = 1'-0"



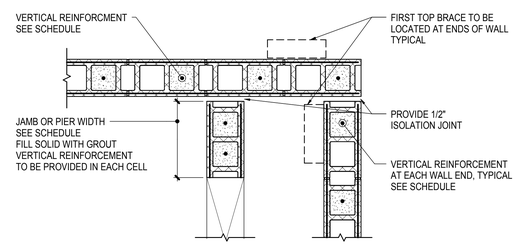
CMU WALL WITH CMU LINTEL

NOTES:

1. SEE ARCHITECTURAL DRAWINGS FOR THE EXACT LOCATION OF MASONRY WALL OPENINGS
2. SUM OF OPENING WIDTHS L1 PLUS L2 ON EITHER SIDE OF PIER SHALL NOT EXCEED 24'-0", AND ANY INDIVIDUAL OPENING SHALL NOT EXCEED 12'-0" IN WIDTH. FOR CONDITIONS EXCEEDING THIS CRITERIA, ENGINEER OF RECORD SHALL BE NOTIFIED PRIOR TO CONSTRUCTION
3. W1 AND W2 REFERS TO WIDTH OF JAMB ZONE BASED ON ADJACENT CLEAR OPENING L1 AND L2, RESPECTIVELY AS PER TYPICAL CMU NON-BEARING WALL JAMB AND PIER ZONE SCHEDULE
4. PIER ZONE REFERS TO MINIMUM WIDTH OF PIER AS SCHEDULED ON TYPICAL CMU NON-BEARING WALL JAMB AND PIER ZONE SCHEDULE
5. SEE TYPICAL CMU NON-BEARING WALL JAMB AND PIER ZONE SCHEDULE FOR REINFORCEMENT

7 TYPICAL CMU NON-BEARING WALL PLAN DETAIL AT ADJACENT WALL OPENINGS

3/4" = 1'-0"



8 TYPICAL PLAN DETAIL AT FULL HEIGHT MASONRY WALL JOINT INTERSECTION

1" = 1'-0"

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PROJECT NORTH

REV. NO.	DESCRIPTION	BY	APVD	DATE
	ISSUED FOR CONSTRUCTION			07/03/12

Argonne NATIONAL LABORATORY

FMS
Facilities Management Services

PROJECT TITLE: ADVANCED PROTEIN CRYSTALLIZATION FACILITY, ARGONNE NATIONAL LABORATORY

PROJECT NO: C10539.00

DRAWING TITLE: TYPICAL MASONRY NON-BEARING WALL DETAILS

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DRAWN Author	A/E DWG. NO. S3.1.0	
CHECKED Checker	CAD NO:	
PROJECT MANAGER ANL - JESSE ADAMS DATE - 08/31/11	DWG STATE	
	BIND ORDER	

FACILITY DOCUMENT NUMBER: J446-101-W- S3.1.0 REV. NO.

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