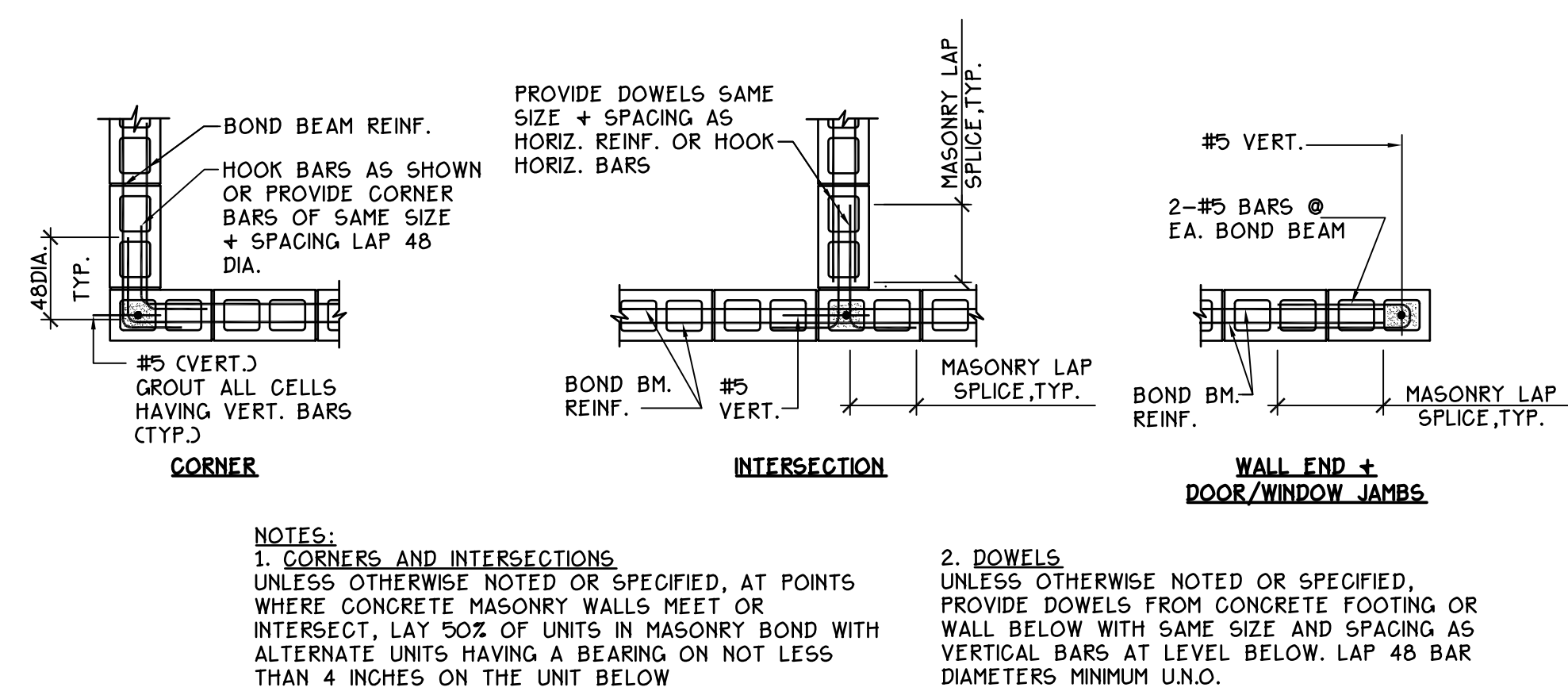
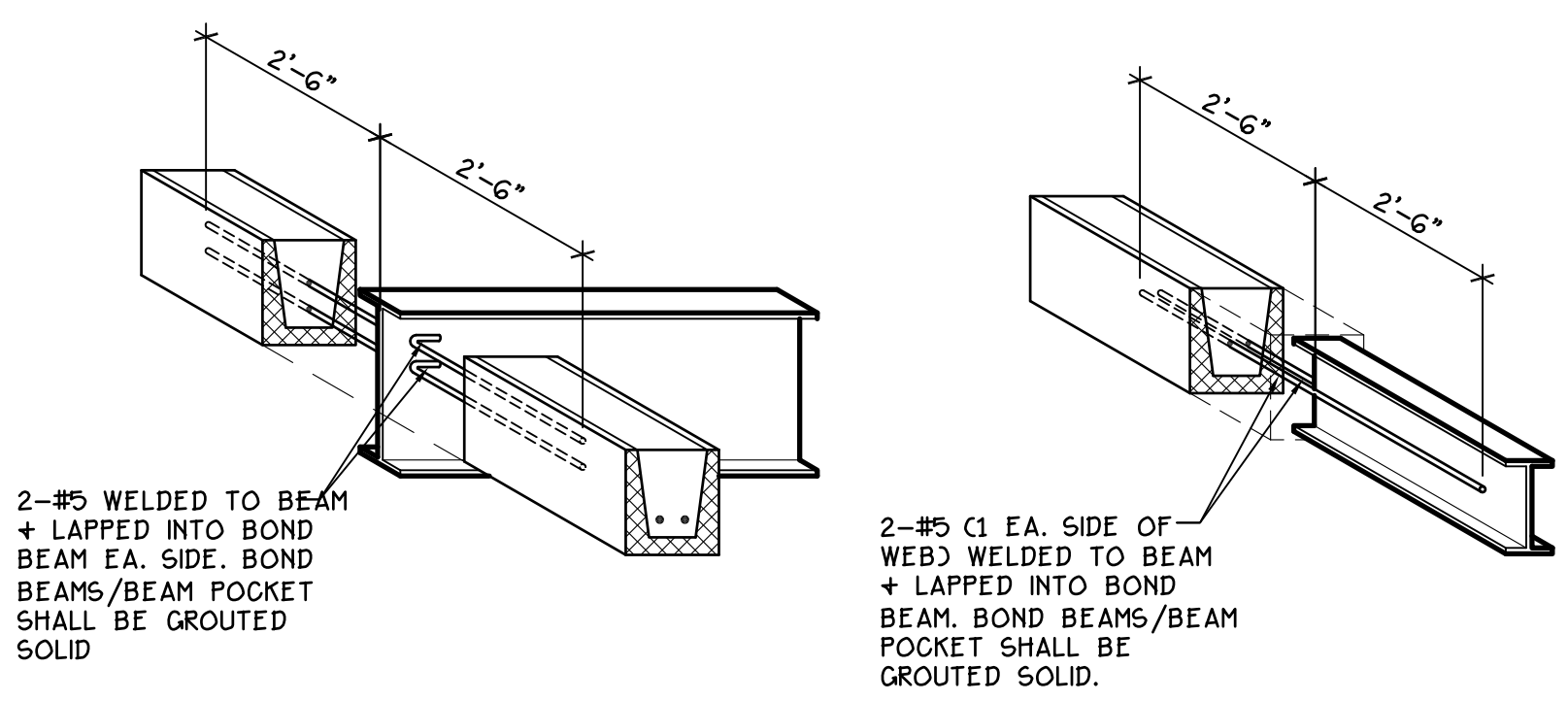


three inches = one foot
one and one half inch = one foot
one inch = one foot
three quarters inch = one foot
one half inch = one foot
three eighths inch = one foot
one quarter inch = one foot
one eighth inch = one foot

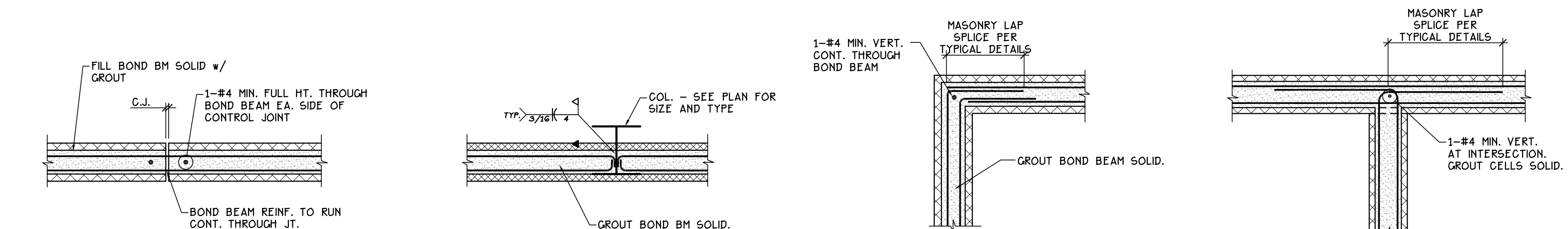


NOTES:
1. CORNERS AND INTERSECTIONS, UNLESS OTHERWISE NOTED OR SPECIFIED, AT POINTS WHERE CONCRETE MASONRY WALLS MEET OR INTERSECT, LAY 50% OF UNITS IN MASONRY BOND WITH ALTERNATE UNITS HAVING A BEARING ON NOT LESS THAN 4 INCHES ON THE UNIT BELOW
2. DOWELS, UNLESS OTHERWISE NOTED OR SPECIFIED, PROVIDE DOWELS FROM CONCRETE FOOTING OR WALL BELOW WITH SAME SIZE AND SPACING AS VERTICAL BARS AT LEVEL BELOW. LAP 48 BAR DIAMETERS MINIMUM UNDO.

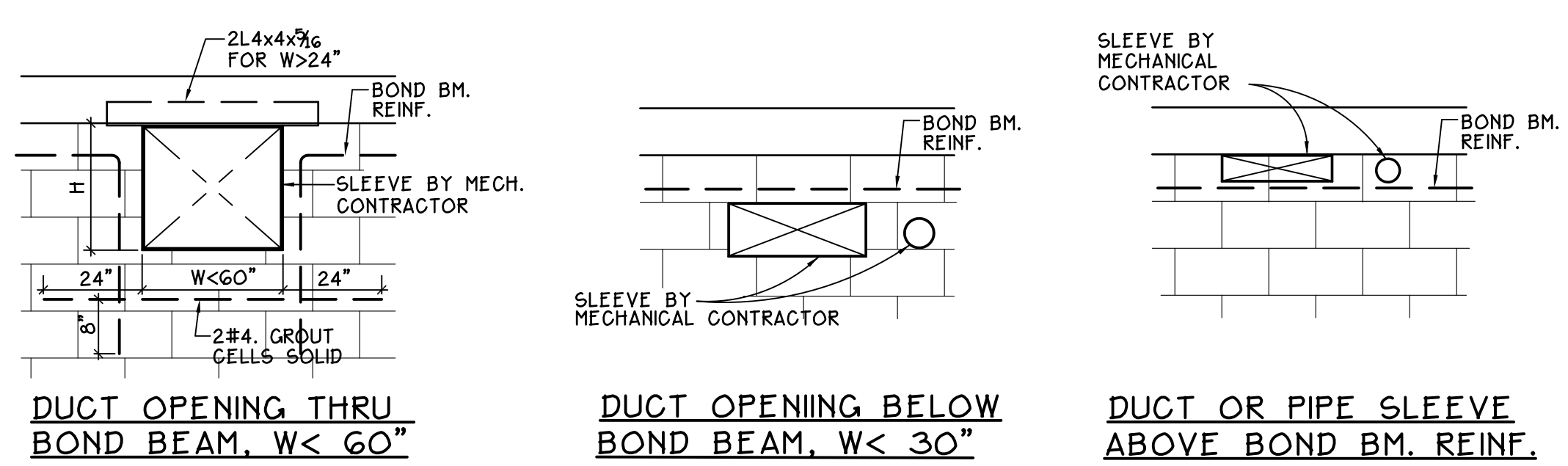
DETAIL
TYPICAL 8" MASONRY WALL DETAILS N.T.S.



DETAIL
TYPICAL STEEL BEAM FRAMING INTO BOND BEAM
3/4" = 1'-0"

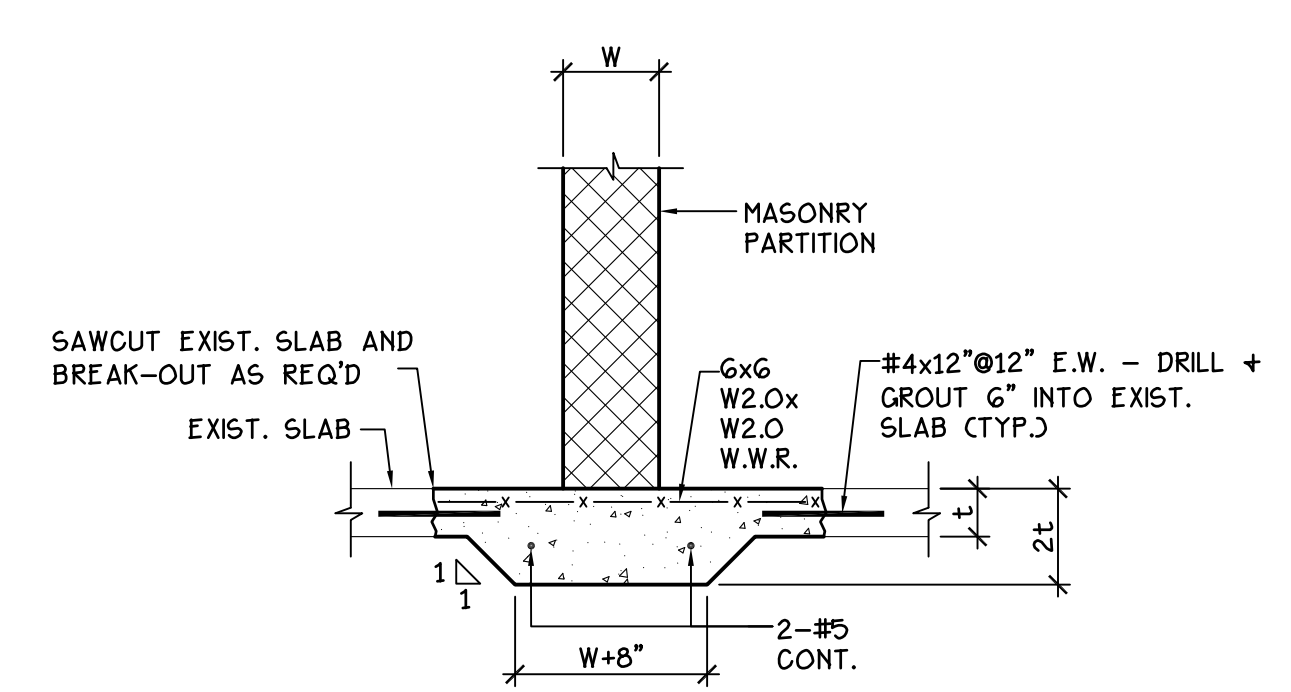


DETAIL
TYPICAL BOND BEAM DETAILS
3/4" = 1'-0"



PIPE + DUCT PENETRATIONS THRU MASONRY WALLS
NOTE:
1. PROVIDE 12" OF MASONRY BETWEEN ADJACENT DUCT PENETRATIONS
2. MECHANICAL OPENINGS IN MASONRY WALLS LARGER THAN 60" NOT SHOWN ON THE STRUCTURAL DRAWINGS, SHALL NOT BE PLACED WITHOUT WRITTEN PERMISSION/FRAMING RECOMMENDATIONS FROM THE PROFESSIONAL NOT SHOWN ON THE STRUCTURAL DRAWINGS.

DETAIL
TYPICAL BEAM BEARING ON MASONRY WALL
3/4" = 1'-0"



NOTES:
1. CONTRACTOR FIELD VERIFY EXISTING SLAB THICKNESS "t".

SECTION
THICKENED SLAB AT MASONRY PARTITION AT EXISTING SLAB
3/4" = 1'-0"

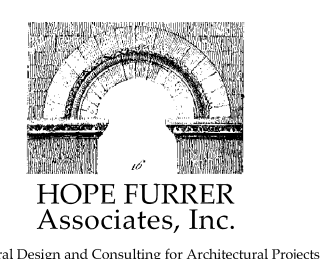
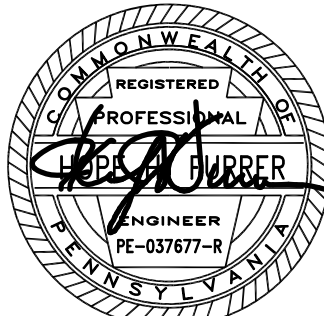
MASONRY LAP SPLICE LENGTH (in.)								
Fy = 60,000 psi IBC 2107								
BAR SIZE	NOMINAL CMU SIZE							
	6"		8"		10"		12"	
	CEN.	I.F.	CEN.	I.F.	CEN.	I.F.	CEN.	I.F.
3	16	19	16	19	16	19	16	19
4	21	34	21	34	21	34	21	34
5	32	53	26	53	16	53	26	53
6	M.S.	M.S.	43	M.S.	40	M.S.	40	M.S.
7	N/A	N/A	M.S.	M.S.	M.S.	M.S.	M.S.	M.S.
8	N/A	N/A	M.S.	M.S.	M.S.	M.S.	M.S.	M.S.
9	N/A	N/A	N/A	N/A	M.S.	M.S.	M.S.	M.S.

NOTES:
CEN. = BARS CENTERED IN THE WALL.
I.F. = BARS ON INSIDE OR OUTSIDE FACE OF WALL.
M.S. = MECHANICAL SPLICE.
1. MECHANICAL SPLICES MAY BE SUBSTITUTED FOR THE ABOVE, PROVIDED BARS ARE CONNECTED TO DEVELOP TENSION OR COMPRESSION, AS REQUIRED, AT LEAST 125% OF THE SPECIFIED YIELD STRENGTH.
2. MASONRY LAP SPLICE LENGTHS INDICATED IN THE SCHEDULE ARE BASED ON THE FOLLOWING:
A. 2008 INTERNATIONAL BUILDING CODE.
B. ACI 530 "BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES".
C. ASTM C-90 CONCRETE MASONRY DIMENSIONS, MINIMUM FACE SHELL, AND MINIMUM WEB THICKNESS.
D. MAXIMUM OF ONE BAR PER CELL, AND CELLS GROUTED AT REINFORCEMENT LOCATIONS ONLY.
3. COMPLY WITH ACI 530 "BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES" FOR REINFORCING PLACEMENT, COVER, AND GROUTING REQUIREMENTS.
4. LAP LENGTH SHALL BE BASED ON THE LARGER BAR DIAMETER BEING LAPPED.

NON LOAD-BEARING WALL MASONRY REINFORCING SCHEDULE					
HEIGHT	THICKNESS	REINFORCING			REMARKS
		INTERIOR	ZONE 4 (TYP. WALL)	ZONE 5 (CORNERS)	
< 9 ft.	6"	#4 @ 48"	NOT PERMITTED	NOT PERMITTED	
	8"	NONE REQ'D	#4 @ 48"	#4 @ 48"	
	12"	NONE REQ'D	#4 @ 48"	#4 @ 48"	
9 ft. to 12 ft.	6"	#4 @ 48"	NOT PERMITTED	NOT PERMITTED	
	8"	#4 @ 48"	#4 @ 48"	#4 @ 32"	
	12"	#4 @ 48"	#4 @ 48"	#4 @ 48"	
12 ft. to 16 ft.	6"	#4 @ 24"	NOT PERMITTED	NOT PERMITTED	
	8"	#5 @ 48"	#5 @ 32"	#5 @ 24"	
	12"	#4 @ 48"	#4 @ 48"	#4 @ 32"	
16 ft. to 20 ft.	6"	#4 @ 24"	NOT PERMITTED	NOT PERMITTED	
	12"	#5 @ 48"	#5 @ 48"	#5 @ 32"	
20 ft. to 24 ft.	8"	#5 @ 24"	NOT PERMITTED	NOT PERMITTED	
	12"	#4 @ 24"	#5 @ 24"	#5 @ 16"	

NOTES:
1. PROVIDE REINF. IN ALL MASONRY WALLS PER ABOVE SCHEDULE, UNLESS NOTED OTHERWISE IN PLAN OR SECTION. REINFORCING NOTED ON PLANS IS IN ADDITION TO MASONRY REINFORCING PER THE SCHEDULE UNLESS SPECIFICALLY NOTED OTHERWISE.
2. PROVIDE DOWELS TO FOOTING/FTDN. WALL OF SAME SIZE AND SPACING AS VERT. REINF. REFER TO "MASONRY LAP SPLICE LENGTH" SCHEDULE FOR LAP SPLICES.
3. REFER TO TYPICAL DETAILS FOR ADDITIONAL REINFORCING REQUIREMENTS, I.E. JAMB REINFORCING ADJACENT TO OPENINGS IN WALLS, ADDITIONAL CORNER REINFORCING, ETC.
4. GROUT CELLS WITH REINFORCING SOLID.
5. PROVIDE LAPS IN VERTICAL REINFORCING AS REQ'D. REFER TO "MASONRY LAP SPLICE LENGTH" SCHEDULE FOR REQ'D SPLICE LENGTH.
6. ALL REINFORCING INDICATED IS TO BE CENTERED IN MASONRY WALL UNLESS NOTED OTHERWISE.
7. HEIGHT OF MASONRY IN TABLE REFERS TO THE VERTICAL CENTER TO CENTER DIMENSION BETWEEN LATERAL SUPPORTS FOR THE MASONRY. REFER TO THE PLANS + SECTIONS FOR ADDITIONAL INFORMATION.
8. ZONE 4 AND ZONE 5 NOTED IN SCHEDULE REFER TO INTERIOR ZONE AND END ZONES OF EXTERIOR WALLS RESPECTIVELY AS DEFINED BY THE BUILDING CODE. SEE GENERAL NOTES FOR END ZONE'S DIMENSIONS, (ZONE 5) EXTENDS 15 FEET MINIMUM FROM BUILDING CORNERS, TYP.

FULLY SPRINKLERED BID DOCUMENTS

CONSULTANTS:		ARCHITECTS/ENGINEERS:		Drawing Title STRUCTURAL CMU DETAILS		Project Title BUILDING 9 - SECOND FLOOR RENOVATION		Project Number 542-13-105		Office of Construction and Facilities Management Department of Veterans Affairs	
 HOPE FURRIER Associates, Inc. Structural Design and Consulting for Architectural Projects 561 Harrison Avenue - P.O. Box 12126 Pittsburgh, PA 15226 PH: 412.287.7353 FAX: 412.287.7354 www.ae-works.com		 A E works 6587 HAMILTON AVENUE PITTSBURGH, PA 15206 PH: 412.287.7353 FAX: 412.287.7354 www.ae-works.com		Approved: Project Director		Location: 1400 Blackhorse Hill Road Coatesville, PA 19320		Building Number 9			
Revisions:		Date		Date		Checked SLS		Drawn MTH			
1		2		3		4		5			
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