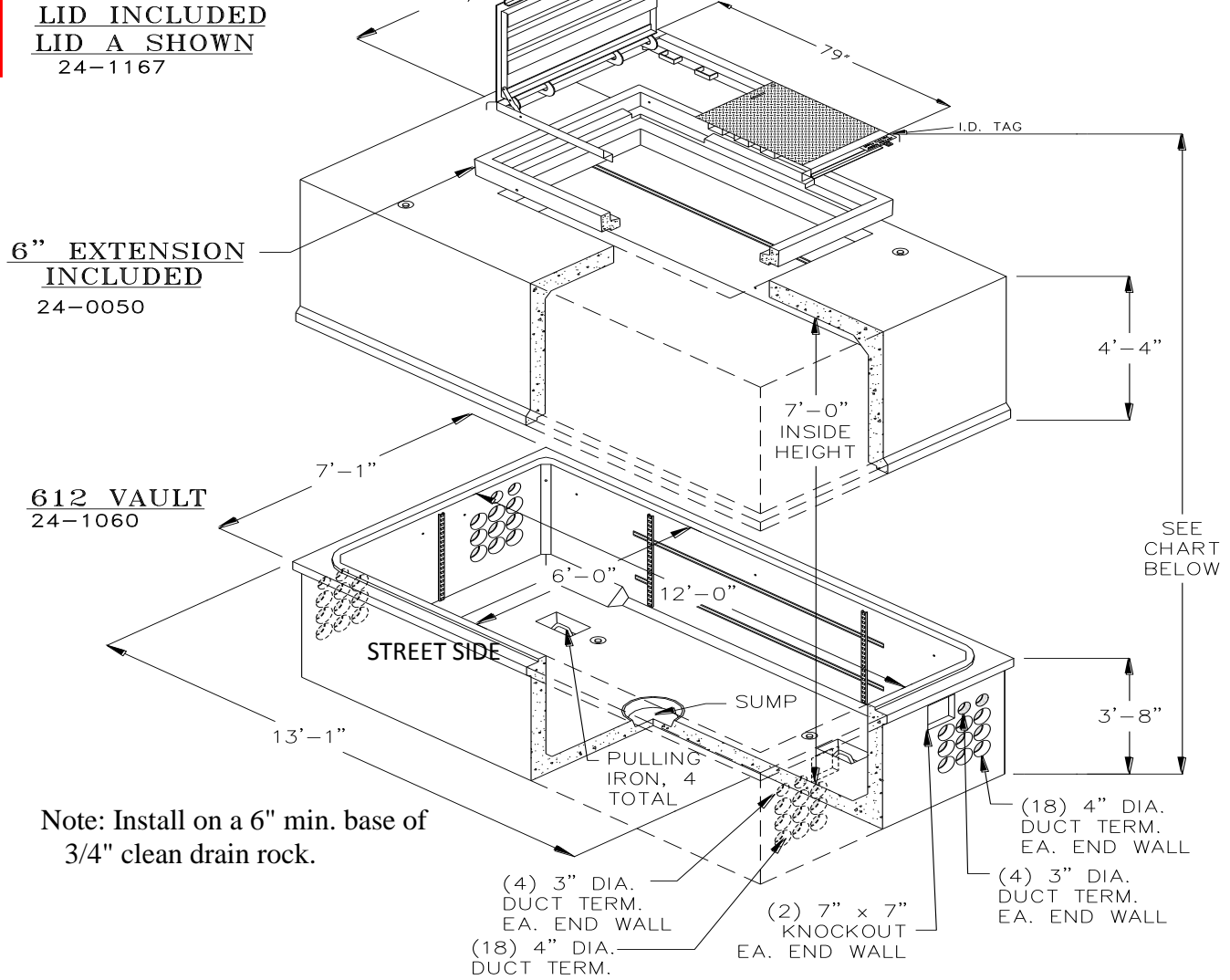


**612 VAULT ISOMETRIC DETAIL**

**NOTE: LID IS NOT CENTERED  
COORDINATE POSITIONING  
WITH INSPECTOR**



Note: Install on a 6" min. base of 3/4" clean drain rock.

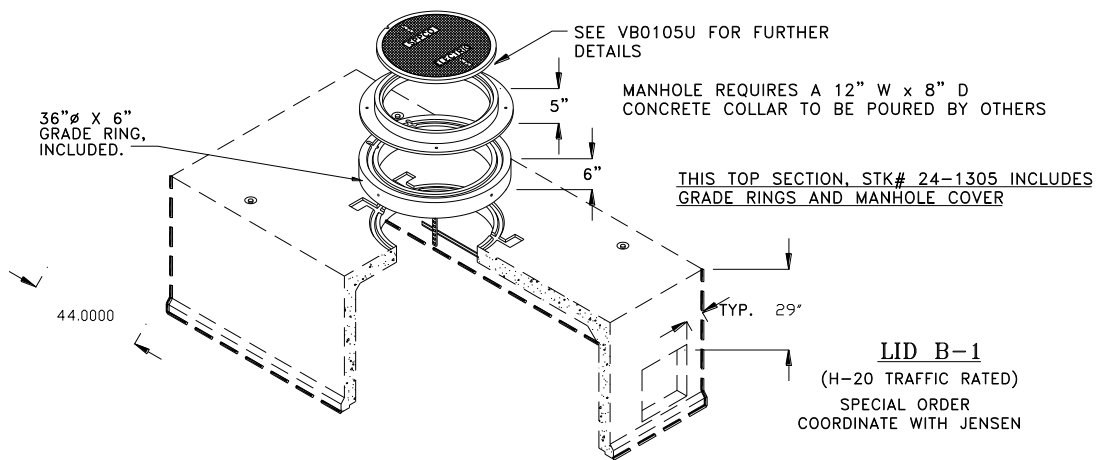
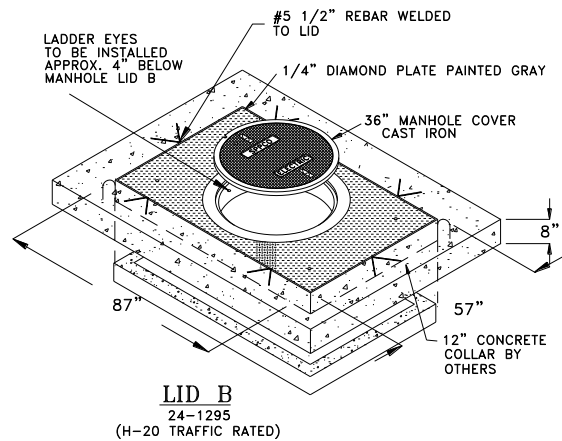
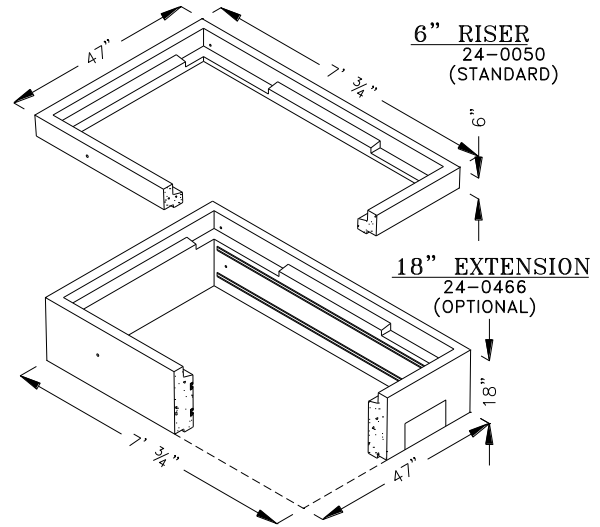
STK#	DESCRIPTION	WEIGHT (LBS)
24-1060	612 VAULT TWO SECTIONS	28,207
24-0050	6" EXTENSION STANDARD	193
24-0466	18" EXTENSION OPTIONAL	1407
24-1167	LID A H-10 SPRING ASSISTED	800
24-1295	LID B H-20	4086
24-1305	LID B-1 H20 W/VAULT SECTION 3' OPENING	16,000
NOTE: 24-1305 INCLUDES A 6" GRADE RING AND MANHOLE TOTAL WEIGHT 1,141 LBS		

HEIGHT OF VAULT W/6" EXT & CORRESPONDING LIDS	LADDER LENGTH W/EXT
8'-9" WITH LID A	8'-6"
9'-8" WTH LID B	8'-6"
8'-11" WITH LID B-1	8'

	VOLUME 17 – ENGINEERING & CONSTRUCTION STANDARD	VB0085U								
	612 VAULT CONCRETE PRIMARY 6' X 12' X 7' I.D.									
<table border="1"> <tr> <th>Drawn:</th> <th>Eng:</th> <th>Appr:</th> <th>Date:</th> </tr> <tr> <td>JVV</td> <td>MB</td> <td>DA</td> <td>8/17</td> </tr> </table>	Drawn:	Eng:	Appr:	Date:	JVV	MB	DA	8/17		Revision: 7 Page 1 of 6
Drawn:	Eng:	Appr:	Date:							
JVV	MB	DA	8/17							

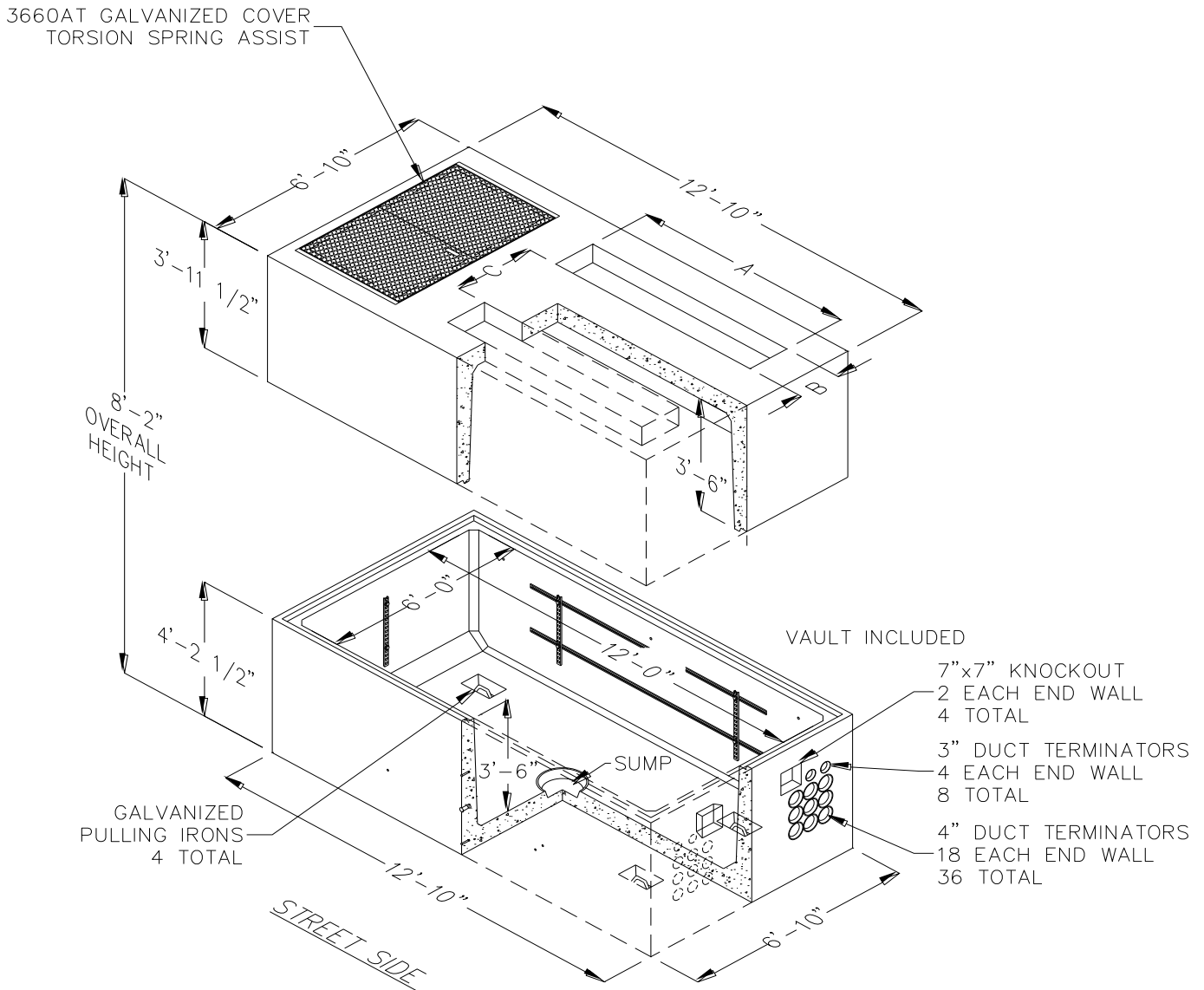
**612 VAULT CONSTRUCTION NOTES:**

- Vault to be used for H-20 traffic design loading. All live loads shall be for HS-20 - 44 (MS-18) as per AASHTO standard spec Div 1 Sec.3  
*Note: If lid B or B-1 is used, a minimum of 12 inches of vault cover is required.*
- Vault excavation and backfill to conform to NVE Specification SUB01X.
- Butyl rubber or neoprene gasket seal required between vault sections and/or extensions.
- A 6" extension is installed on all vaults for elevation and lid options.
- Unistrut (See detail A) or 1/2" inserts will be cast into vault.
- Lids to be marked "NVE"
- All weights to be clearly marked
- 12 -15" steps are supplied with vault.
- Grounding: See expanded view for grounding applications and inserts.
- 2/0 CU (# 17-0910) grounding grid is needed if equipment is placed in vault. Wire needs to be ordered separately (approx. 42')
- Ladder and ladder-up required. See NVE Standard VB105U.
- Ladder mounting eyes to be installed on lids A and B.
- Vault has different top sections and covers depending on the stock number and usage requested.



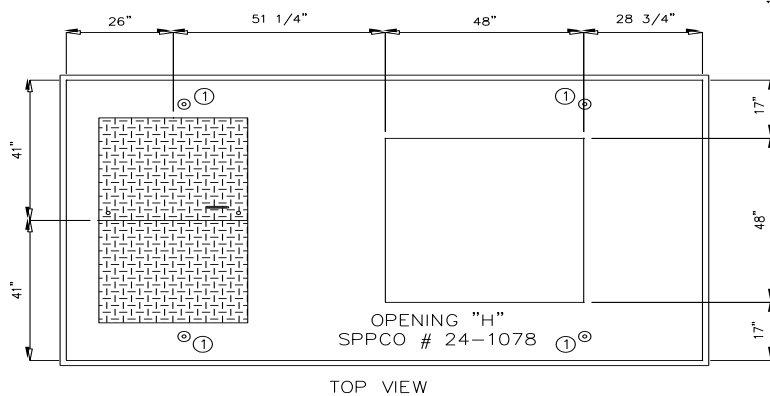
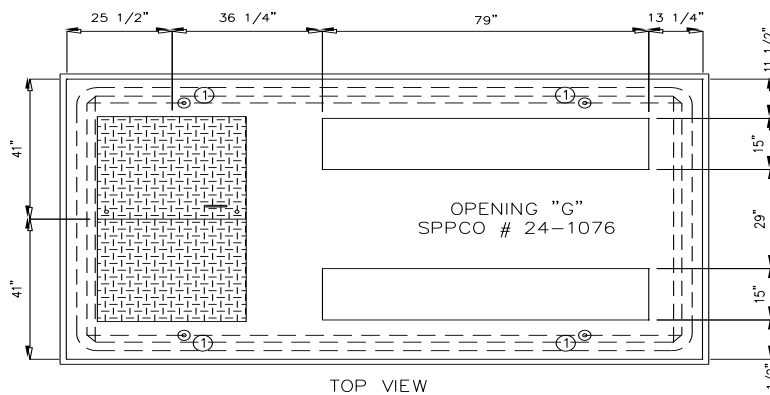
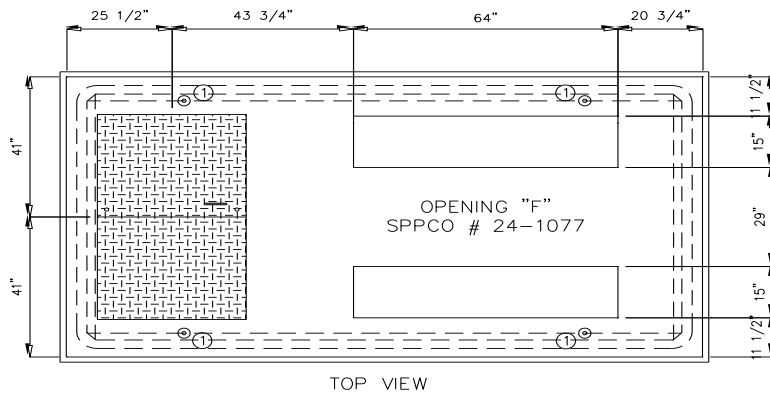
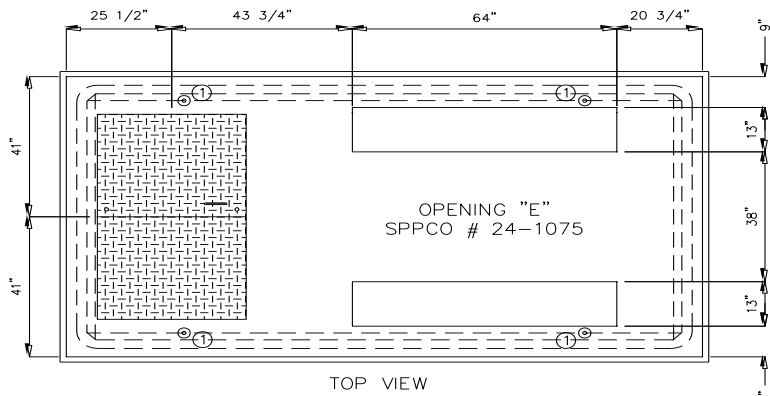
	VOLUME 17 – ENGINEERING & CONSTRUCTION STANDARD			VB0085U								
	612 VAULT CONCRETE PRIMARY 6' X 12' X 7' I.D.											
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Drawn:	Eng:	Appr:	Date:									
JVV	MB	DA	8/17									

**SWITCH VAULTS**



STK#	DESCRIPTION	WEIGHT (LBS)
24-1075	SWITCH OPENING "E" 5'4" X 13"	32,000
24-1077	SWITCH OPENING "F" 5'4" X 15"	32,000
24-1076	SWITCH OPENING "G" 6'7" X 15"	32,000
24-1078	SWITCH OPENING "H" 48' X 48"	32,000

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	612 VAULT CONCRETE PRIMARY 6' X 12' X 7' I.D.			
Drawn:	Eng:	Appr:	Date:	Revision: 7
JVV	MB	DA	8/17	Page 3 of 6

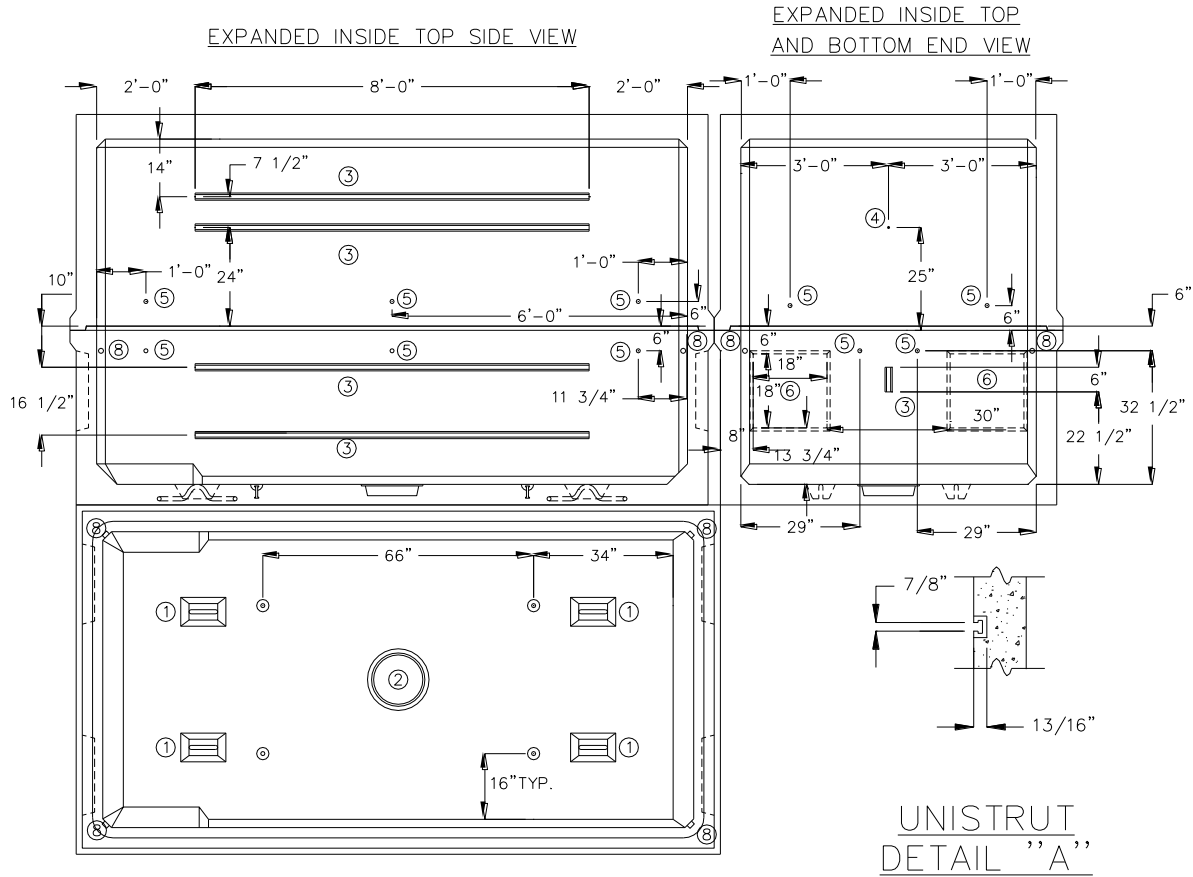


**SWITCH OPENING NOTES:**

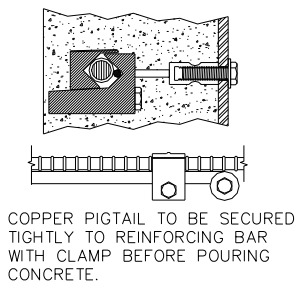
- Reference Padmaster in Volume 17, Page 5 for complete cross reference for switches and substructures.
- If J-bar or unitized bracket is used, application will be operated as non loadbreak. An alternate loadbreak application would be to use feed-thru bushings on the 200amp sections of switches, providing multiple taps.
- Top section of existing 612 vaults may be retrofitted with one of the top sections with openings E, F, G or H.
- All vaults designed or retrofitted with equipment will have a ground grid installed per Reference Page 5, grounding grid detail .

				VOLUME 17 – ENGINEERING & CONSTRUCTION STANDARD		VB0085U
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JVV	MB	DA	8/17			Page 4 of 6

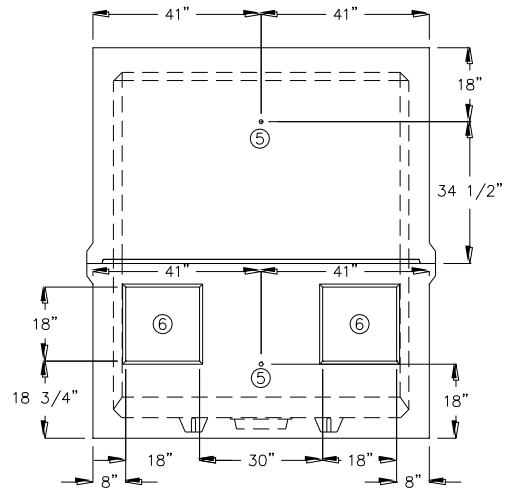
**612 VAULT EXPANDED VIEWS**



EXPANDED INSIDE BOTTOM SIDE VIEW

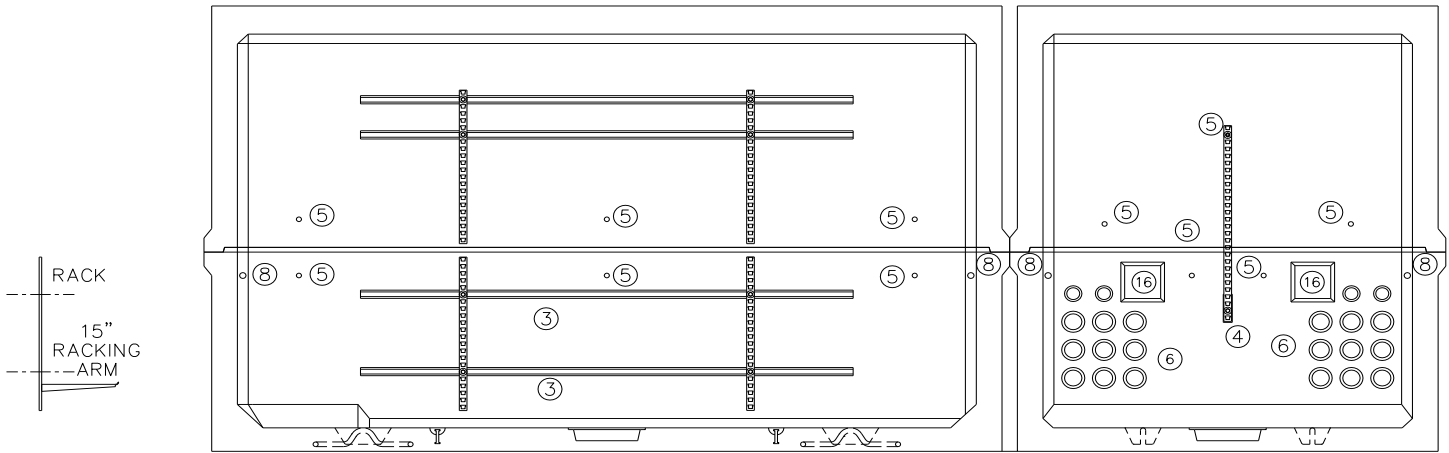


GROUND INSERT  
DETAIL "B"



	VOLUME 17 – ENGINEERING & CONSTRUCTION STANDARD			VB0085U
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Drawn:	Eng:	Appr:	Date:	Revision: 7
JVV	MB	DA	8/17	Page 5 of 6

**GROUNDING GRID INSTALLATION DETAIL**

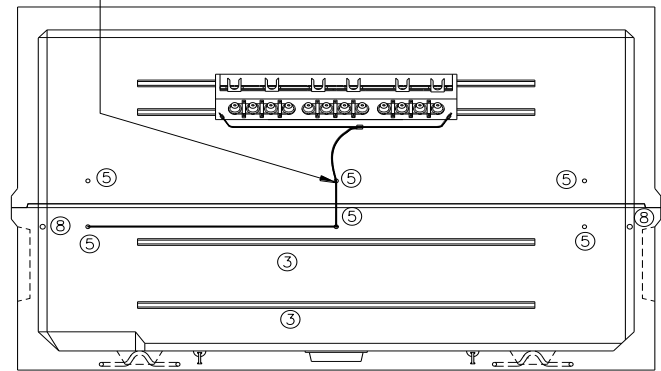


INSIDE EXPANDED SIDE & END WALLS  
RACK APPLICATIONS WITH ARMS

MATERIAL LIST supplied by Vault Manufacturer		
DESCRIPTION	QTY	
1 PULLING IRON	4	
2 12" DIAMETER SUMP	1	
3 96" LONG UNISTRUT SIDE WALLS	8	
6" LONG UNISTRUT END WALLS	2	
4 1/2" RACKING INSERT	2	
5 1/2" GROUNDING INSERT, 20 INSIDE - 2 OUTSIDE	22	
6 3" DUCT TERMINATOR 4 (EACH END) 4" DUCT TERMINATOR 18 (EACH END)	8 36	
7 22 HOLE RACK (32 3/4" LONG) SIDE TOP&BOTTOM	8	
28 HOLE RACK (41 3/4" LONG) END	2	
8 5/8" INSERTS FOR WIRE TRAINING CORNERS	4	
9 SPRING NUT	18	
10 1/2 X 1 1/2" BOLT	21	
11 1/2" WASHER	20	
12 1/2" BRASS GROUND WASHER, 1 TOP OUTSIDE	1	
13 15" ARM	12	
14 LADDER UP	1	
15 LADDER	1	
16 7" X 7" KNOCKOUT	4	

SPLICE ONLY: INSTALL A MINIMUM OF 14' OF 2/0 COPPER TO THREE GROUNDING LUGS ATTACHED TO THREE 1/2" GROUNDING INSERTS AND BUS TO CONCENTRIC NEUTRAL, J-BAR OR BRACKET.

EQUIPMENT INSTALLATION: INSTALL 45' OF 2/0 COPPER GROUND GRID, TIE TO ALL SECTIONS AND LOOP THROUGH 10 GROUNDING LUGS ATTACHED TO 1/2" GROUNDING INSERTS AROUND VAULT AND BUS TO TRANSFORMER, CONCENTRIC NEUTRAL, J-BAR OR BRACKET.



INSIDE EXPANDED SIDE WALLS  
GROUNDING APPLICATIONS AND INSERTS

MAXIMUM CONDUCTORS AND J-BARS					
VAULT	200 AMP PRIMARY	600 AMP PRIMARY	SECONDARY	EQUIPMENT	J BARS 3, 4 OR 5 WAY
612	18 12 0	0 6 12	2 RUNS < 750 QX OR TX	1-50 KVA PADMOUNTED SWITCH	3 TOTAL
NOTE: REFER TO CAB09U VOLUME 5 FOR COMPLETE APPLICATION					

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Drawn: JVV	Eng: MB	Appr: DA	Date: 8/17	Revision: 7
				Page 6 of 6