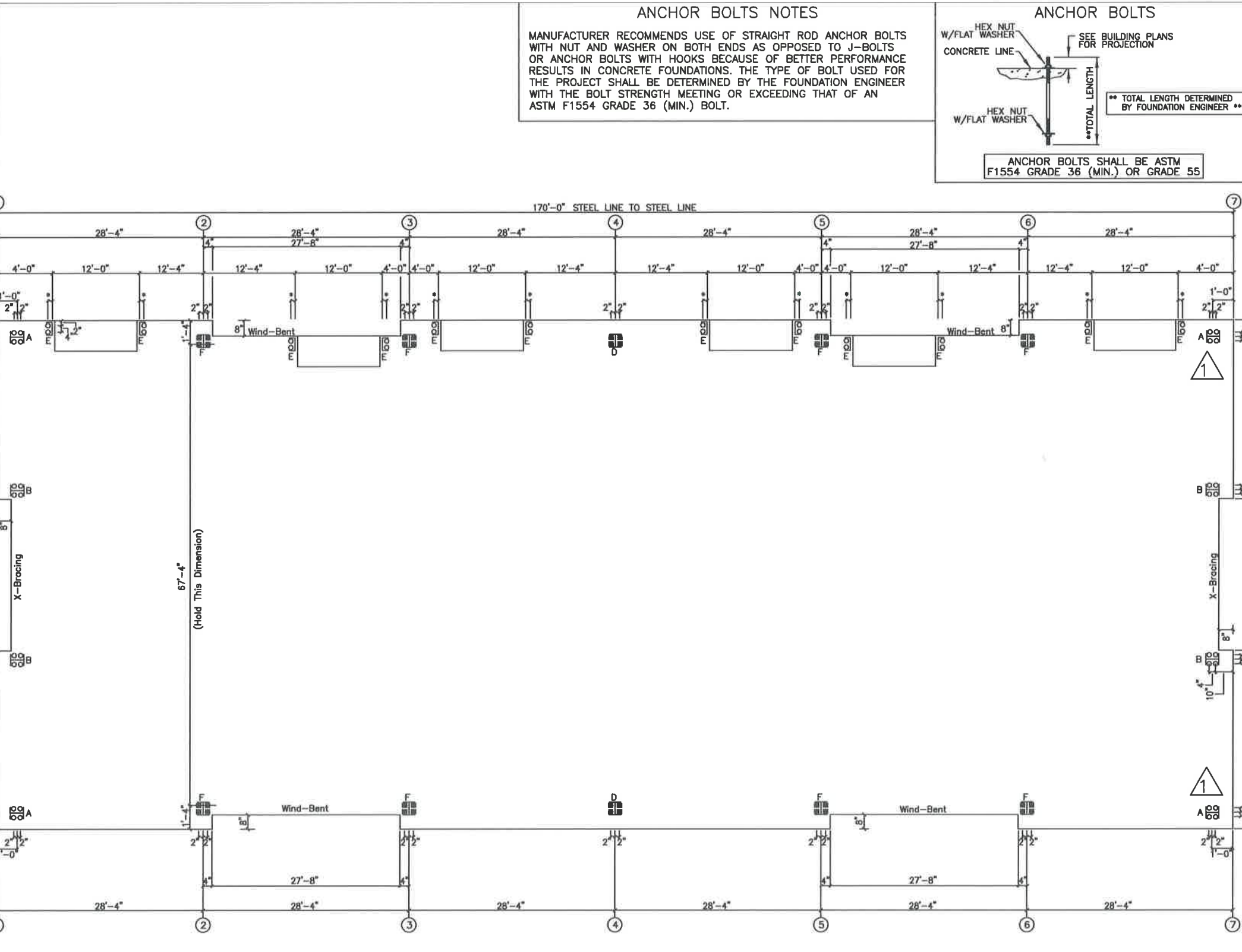
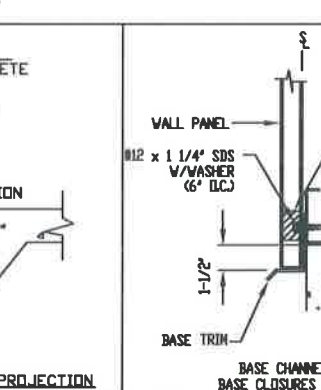
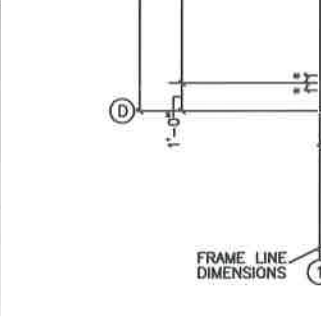
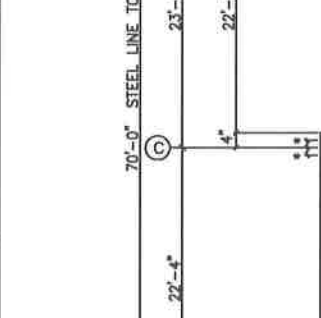
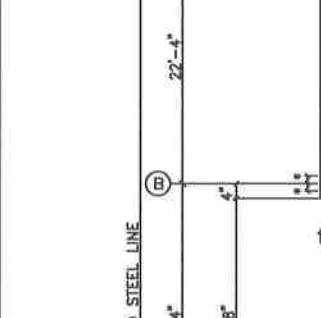
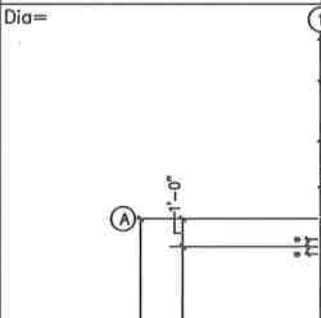
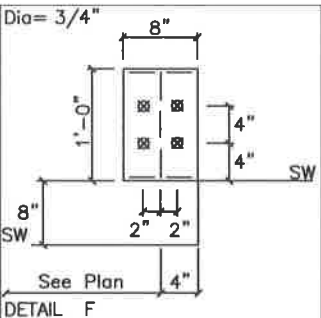
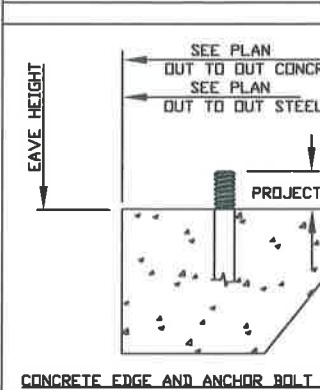
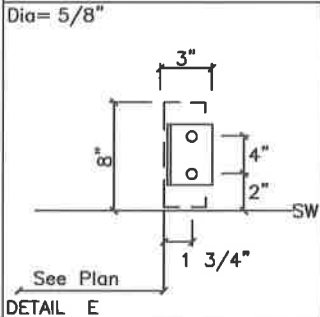
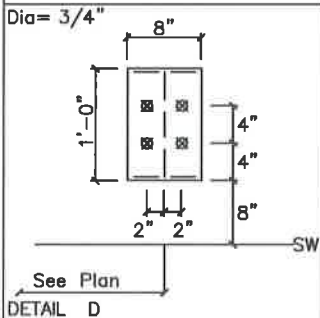
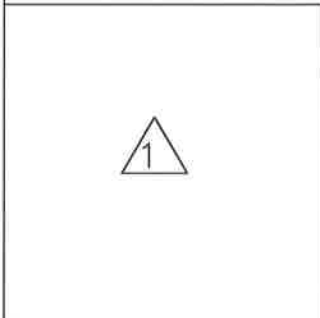
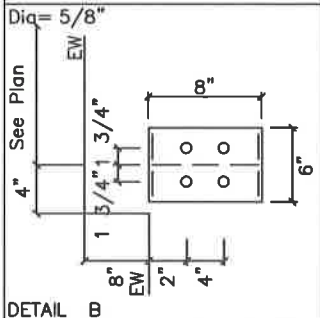
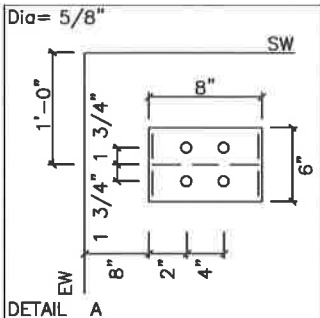
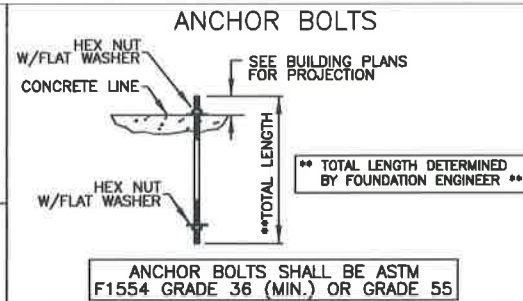




ANCHOR BOLTS NOTES

MANUFACTURER RECOMMENDS USE OF STRAIGHT ROD ANCHOR BOLTS WITH NUT AND WASHER ON BOTH ENDS AS OPPOSED TO J-BOLTS OR ANCHOR BOLTS WITH HOOKS BECAUSE OF BETTER PERFORMANCE RESULTS IN CONCRETE FOUNDATIONS. THE TYPE OF BOLT USED FOR THE PROJECT SHALL BE DETERMINED BY THE FOUNDATION ENGINEER WITH THE BOLT STRENGTH MEETING OR EXCEEDING THAT OF AN ASTM F1554 GRADE 36 (MIN.) BOLT.



ANCHOR BOLT SUMMARY

Qty	Locate	Dia (in)	Type	Proj (in)
24	Jamb	5/8"	F1554	3.00
32	Endwall	5/8"	F1554	3.00
40	Frame	3/4"	F1554	3.00

ANCHOR BOLT PLAN

NOTE: All Base Plates @ 100'-0" (U.N.)

* = 1-3/4"

FIELD LOCATED OPENINGS :

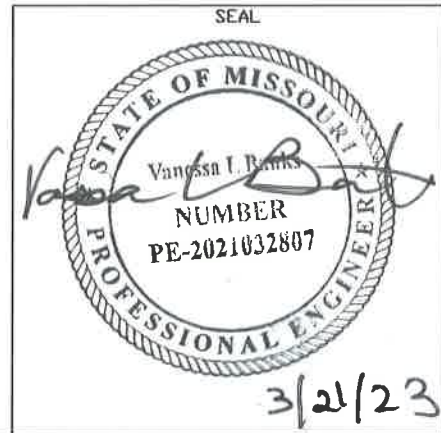
QTY	DESCRIPTION
6	3070 PRE-ASSEMBLED WALKDOOR W/SUB-JAMBS LOCATED IN LINER
6	5'-0 1/2"x5'-0 1/2" F.O. W/SILL @ 2'-2" A.F.F.
6	3'-4 1/2"x7'-2 1/2" F.O.

REVISIONS

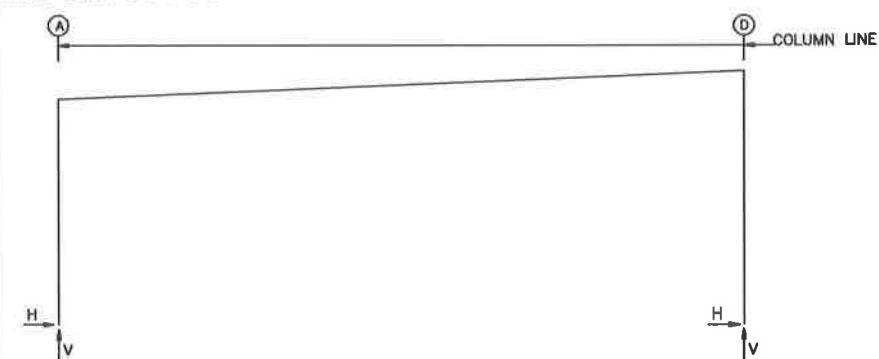
REV.	DESCRIPTION	DATE	DTLR	DATE	CHKR	APPD
1	GENERAL REVISION	03/17	KD	03/17	RM	

DRAWING STATUS

[X] FOR CONSTRUCTION	VULCAN STEEL STRUCTURES, INC	MIDWEST STEEL
[] FOR PERMIT ONLY	PROJECT LOT 7 EKCP	ANCHOR BOLT PLAN & DETAILS
[] NOT FINAL CONST.DWGS	ID 27967	DESIGN: ZJM DRAFT: KMG CHECK: PMS
[] FOR APPROVAL	PROJECT LEE'S SUMMIT, MO 64064	DATE: 02/27/23 SHEET 1 OF 2
[] OTHER, EXPLAIN	ADDRESS	



FRAME LINES: 2 3 4 5 6



RIGID FRAME: ANCHOR BOLTS & BASE PLATES

Frm Line	Col Line	Anc. Bolt Qty Dia	Base Plate (in) Width Length Thick	Elev. (in)
2*	A	4 0.750	8.000 12.00 0.500	0.0
2*	D	4 0.750	8.000 12.00 0.500	0.0

2* Frame lines: 2 3 4 5 6

GENERAL NOTES

- (1.) APPLICATION OF ENGINEERS SEAL IS FOR METAL BUILDING ONLY AND DOES NOT REPRESENT THE PROFESSIONAL OF RECORD.
- (2.) FOUNDATION DESIGN AND CONSTRUCTION ARE NOT THE RESPONSIBILITY OF THE METAL BUILDING MANUFACTURER.
- (3.) ANCHOR BOLTS SHALL BE ACCURATELY SET TO A TOLERANCE OF +/- 1/8" IN BOTH ELEVATION AND LOCATION.
- (4.) THE BUILDING REACTION DATA REPORTS THE LOADS WHICH THIS BUILDING PLACES ON THE FOUNDATION. THE FOUNDATION IS TO BE DESIGNED BY A QUALIFIED ENGINEER TO SUPPORT THE BUILDING REACTIONS IN ADDITION TO OTHER LOADS IMPOSED BY THE BUILDING USE OR OCCUPANCY WITH RESPECT TO JOB SITE CONDITIONS.
- (5.) ALL ANCHOR BOLTS TO BE ASTM F1554 GRADE 36 MIN. OR GRADE 55 (UNLESS NOTED)
- (6.) VALUES GIVEN FOR BENDS AND ANCHOR BOLT TOTAL LENGTHS ARE SUGESTED LENGTHS ONLY. IT IS THE RESPONSIBILITY OF THE FOUNDATION ENGINEER TO DETERMINE THESE VALUES SINCE THEY ARE A FUNCTION OF CONCRETE STRENGTH AS WELL AS OTHER FACTORS.
- (7.) WIND REACTIONS ARE BASED ON Vuit.

RIGID FRAME: BASIC COLUMN REACTIONS (k)

Frame Line	Column Line	Dead Horiz	Dead Vert	Collateral Horiz	Collateral Vert	Live Horiz	Live Vert	Snow Horiz	Snow Vert	Snow Drift Horiz	Snow Drift Vert	Slide Snow Horiz	Slide Snow Vert
2*	A	1.2	5.3	1.2	3.2	4.9	13.4	5.7	15.3	0.6	1.8	0.0	1.1
2*	D	-1.2	3.6	-1.2	3.0	-4.9	11.9	-5.7	13.9	-0.6	4.8	0.0	0.0

Frame Line	Column Line	Wind Left1 Horiz	Wind Right1 Horiz	Wind Left2 Horiz	Wind Right2 Horiz	Wind Long1 Horiz	Wind Long2 Horiz
2*	A	-16.6	-22.8	7.9	-4.3	-16.7	-16.4
2*	D	-4.7	-9.6	12.7	-15.6	-4.6	-3.2

Frame Line	Column Line	Seismic Left Horiz	Seismic Right Horiz	MIN SNOW Horiz
2*	A	-0.3	-0.2	0.3
2*	D	-0.3	0.2	-0.2

2* Frame lines: 2 3 4 5 6

ENDWALL COLUMN: ANCHOR BOLTS & BASE PLATES

Frm Line	Col Line	Anc. Bolt Qty Dia	Base Plate (in) Width Length Thick	Elev. (in)
1	A	4 0.625	6.000 8.000 0.500	0.0
1	B	4 0.625	6.000 8.000 0.500	0.0
1	C	4 0.625	6.000 8.000 0.500	0.0
1	D	4 0.625	6.000 8.000 0.500	0.0
7	D	4 0.625	6.000 8.000 0.500	0.0
7	C	4 0.625	6.000 8.000 0.500	0.0
7	B	4 0.625	6.000 8.000 0.500	0.0
7	A	4 0.625	6.000 8.000 0.500	0.0

BUILDING BRACING REACTIONS

Wall Loc	Col Line	± Reactions(k) Wind Horiz Seismic Horiz	Panel Shear (lb/ft) Wind Sels	Note
L_EW	1	B,C 6.4 6.5 0.4 0.4		(b)
F_SW	D	2,3 3.6 6.1 0.4 0.7		(b)
		5,6 3.6 6.1 0.4 0.7		
R_EW	7	C,B 6.4 6.4 0.4 0.4		(b)
B_SW	A	5,6 4.1 6.3 0.4 0.7		(b)
		2,3 4.1 6.3 0.4 0.7		

(b) Wind bent in bay, base above finish floor

ENDWALL COLUMN: BASIC COLUMN REACTIONS (k)

Frm Line	Col Line	Dead Vert	Collat Vert	Live Vert	Snow Vert	Snow Drift Vert	Slide Snow Vert	Wind Left1 Vert	Wind Right1 Vert	Wind Left2 Vert	Wind Right2 Vert	Wind Press Horiz	Wind Suct Horiz
1	A	1.5	0.5	3.2	2.7	2.9	0.5	-2.6	-1.6	-1.7	-0.7	0.8	-0.5
1	B	1.4	1.1	6.5	5.2	6.9	0.0	-7.0	-3.9	-1.7	-3.1	3.5	3.5
1	C	1.4	1.1	6.5	5.2	7.2	0.0	-7.5	-3.7	-5.3	-1.5	-3.4	3.8
1	D	0.7	0.4	2.5	2.0	4.4	0.0	-2.3	-2.1	-1.5	-1.3	0.4	-0.2

Frm Line	Col Line	Wind Long1 Vert	Wind Long2 Vert	Seis Left Vert	Seis Right Vert	MIN SNOW Horiz	E1PAT_SL_1-1 Horiz	E1PAT_SL_2-1 Horiz	E1PAT_SL_3-1 Horiz
1	A	-2.8	-1.6	0.0	0.0	2.8	0.0	1.1	0.0
1	B	-7.0	-4.1	0.0	0.0	7.4	0.0	1.5	0.0
1	C	-7.0	-4.1	0.0	0.0	7.4	0.0	-0.2	0.0
1	D	-2.6	-1.5	0.0	0.0	2.9	0.0	0.0	1.1

Frm Line	Col Line	E1PAT_SL_4-1 Horiz	E1PAT_LL_1-1 Horiz	E1PAT_LL_2-1 Horiz	E1PAT_LL_3-1 Horiz	E1PAT_LL_4-1 Horiz
1	A	0.0	-0.1	0.0	2.4	0.0
1	B	0.0	1.1	0.0	7.0	0.0
1	C	0.0	2.8	0.0	7.0	0.0
1	D	0.0	1.0	0.0	-0.2	0.0

Frm Line	Col Line	Wind Long1 Vert	Wind Long2 Vert	Seis Left Vert	Seis Right Vert	MIN SNOW Horiz	E2PAT_SL_1-1 Horiz	E2PAT_SL_2-1 Horiz	E2PAT_SL_3-1 Horiz
7	D	-2.6	-1.5	0.0	0.0	2.9	0.0	1.1	0.0
7	C	-7.0	-4.1	0.0	0.0	7.4	0.0	1.5	0.0
7	B	-7.0	-4.1	0.0	0.0	7.4	0.0	-0.2	0.0
7	A	-2.8	-1.6	0.0	0.0	2.8	0.0	0.0	1.1

Frm Line	Col Line	E2PAT_SL_4-1 Horiz	E2PAT_LL_1-1 Horiz	E2PAT_LL_2-1 Horiz	E2PAT_LL_3-1 Horiz	E2PAT_LL_4-1 Horiz
7	D	0.0	-0.1	0.0	2.4	0.0
7	C	0.0	1.1	0.0	7.0	0.0
7	B	0.0	2.8	0.0	7.0	0.0
7	A	0.0	1.0	0.0	-0.2	0.0

DESIGN LOAD DEFINITIONS

RIGID FRAME LOAD CASE DEFINITIONS

Wind_L1/Wind_R1 = Lateral wind load from the left/right with a negative internal pressure coefficient.
Wind_L2/Wind_R2 = Lateral wind load from the left/right with a positive internal pressure coefficient.
Wind_Ln1 = Longitudinal wind load with a negative internal pressure coefficient.
Wind_Ln2 = Longitudinal wind load with a positive internal pressure coefficient.
Seismic_L/Seismic_R = Lateral Seismic load from left/right.
LWIND#_L#E/ LWIND#_R#E = Longitudinal wind loads for edge zones.
F#UNB_SL_L/ F#UNB_SL_R = Unbalanced roof snow load with wind from the left/right.
F#PAT_LL # = Pattern live load for continuous beam systems.
Note: Bracing reactions are not already included in combination with any other load but must be added to basic reactions as desired by the foundation designer.

Endwall Load Case Definitions

Collat = Collateral Load
Rafter Wind_L/ Rafter Wind_R = Lateral wind load from the left/right.
Brace Wind_L/ Brace Wind_R = Lateral wind load from the left/right with the bracing loads added.
Wind_P/Wind_S = Wind Pressure/Suction due to longitudinal wind.
Wind_Ln# = Longitudinal wind load on the roof.
Seismic_L/Seismic_R = Lateral Seismic load from left/right.
E#UNB_SL_L/ E#UNB_SL_R = Unbalanced roof snow load with wind from the left/right.
E#PAT_LL # = Pattern live load for continuous beam systems.
LWIND#_L/LWIND#_R = Longitudinal wind loads for edge zones.

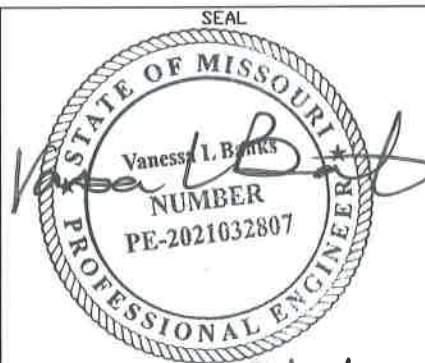
REVISIONS

REV.	DESCRIPTION	DATE	DTLR	DATE	CHKR	APPD

DRAWING STATUS
[X] FOR CONSTRUCTION
[] FOR PERMIT ONLY
NOT FINAL CONST.DWGS
[] FOR APPROVAL
[] OTHER, EXPLAIN

VULCAN STEEL STRUCTURES, INC
PROJECT LOT 7 EKCIP
ID 27967
PROJECT ADDRESS LEE'S SUMMIT, MD 64064

MIDWEST STEEL
ANCHOR BOLT DETAILS & REACTIONS
DESIGN: ZJM DRAFT: KMG CHECK: PMS
DATE: 02/27/23 SHEET 2



3/21/23