

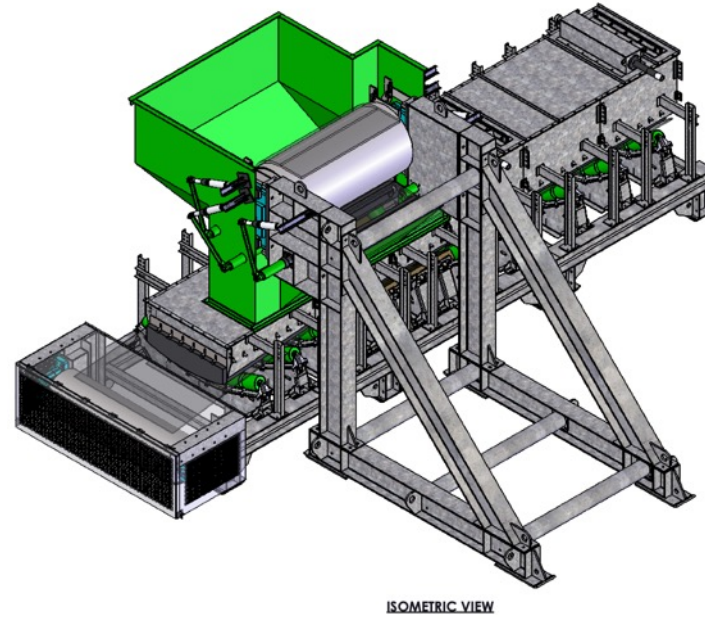
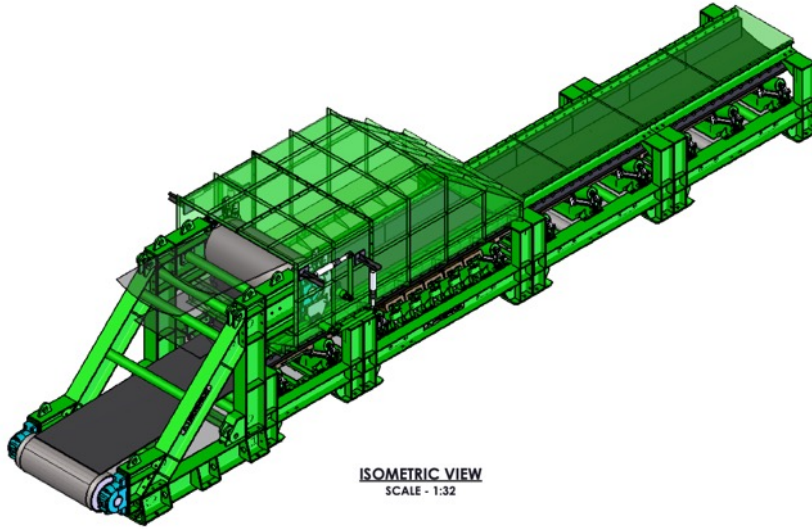


Proven Solutions. Expert Advice.

Belt Cleaning Systems / Impact Protection Systems / Pulley Lagging / Material Containment Systems / Wear Liners / Belt Tracking Systems

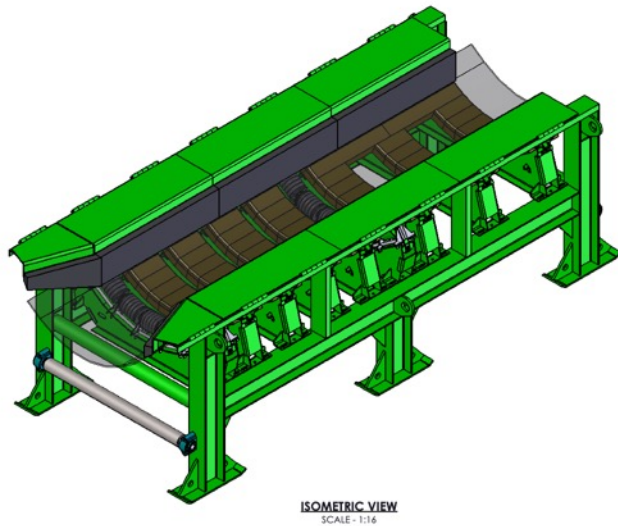


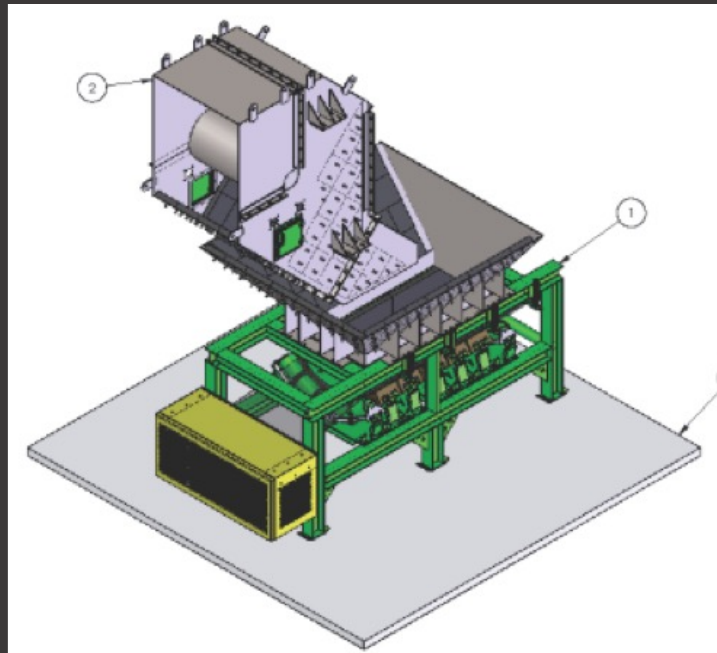
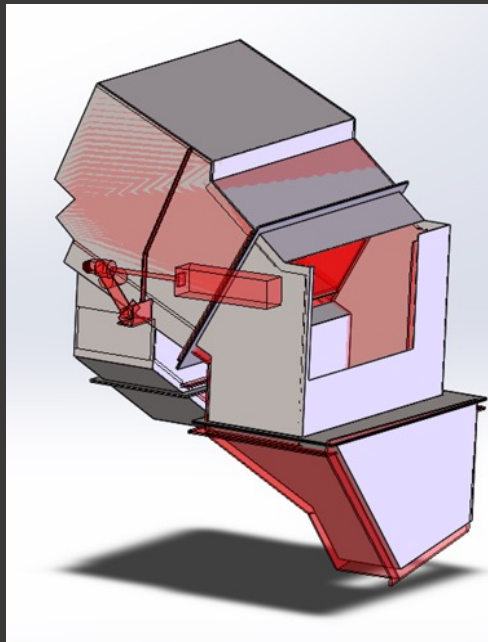
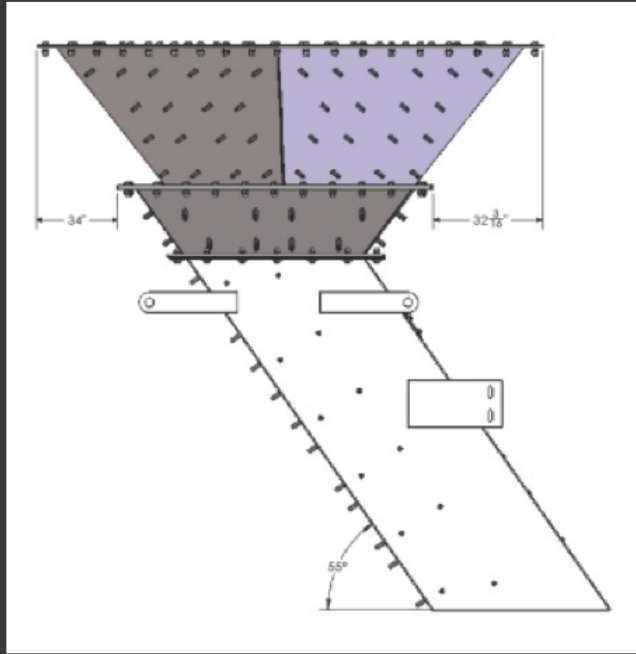
Transfer Projects and Liner Packages



Integrated Transfers and Chute Packages

- Chutes and transfers are designed with ease of maintenance as a priority
- This contributes to safety and efficiency
- Complete systems include site-specific engineering for best performance





Limestone Quarry Project 2024

Replacement of
Transfer Chute

and Install MCS
w/ Belt support

Material

4"–

Limestone

TPH 750

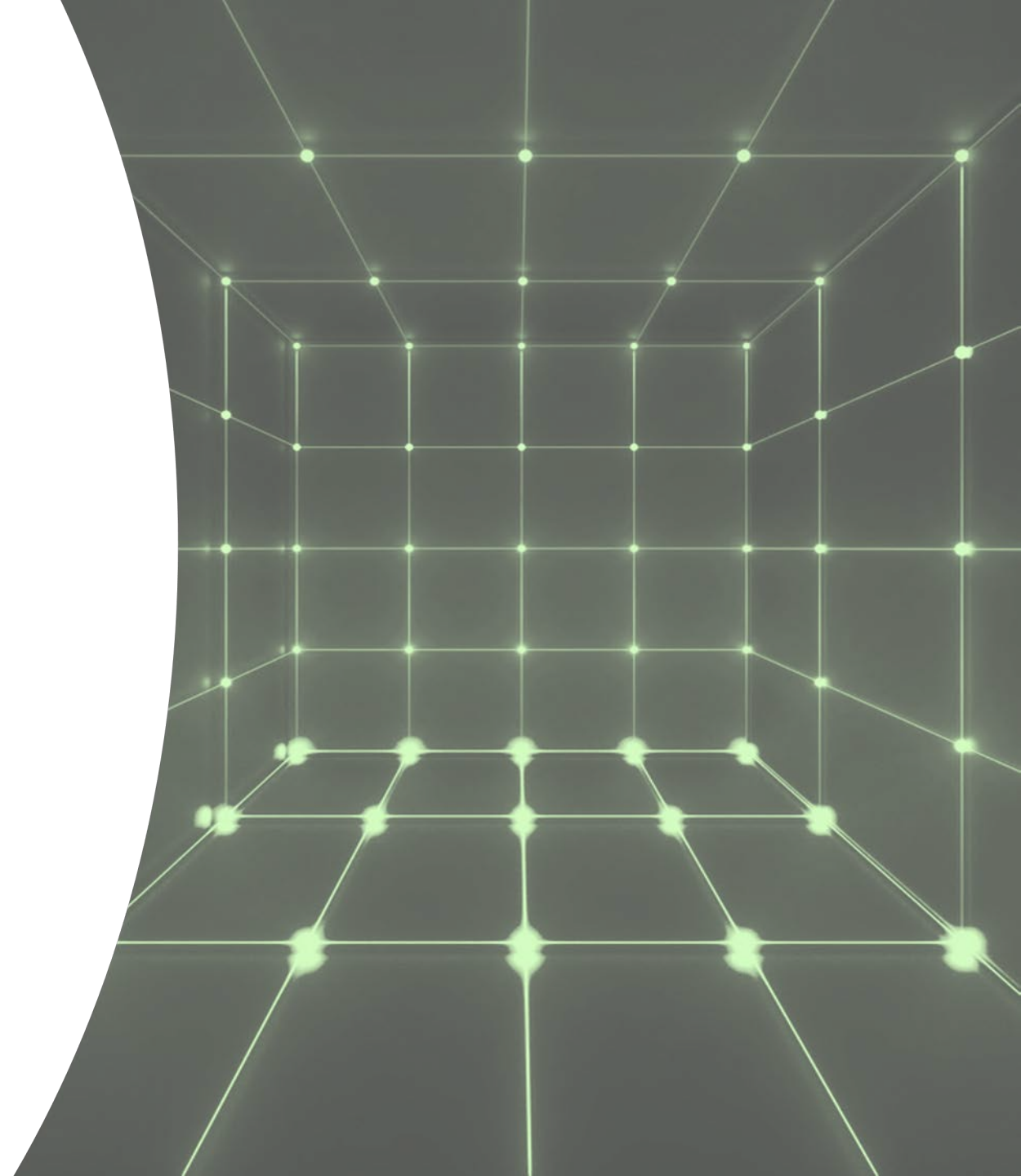
Belt Speed

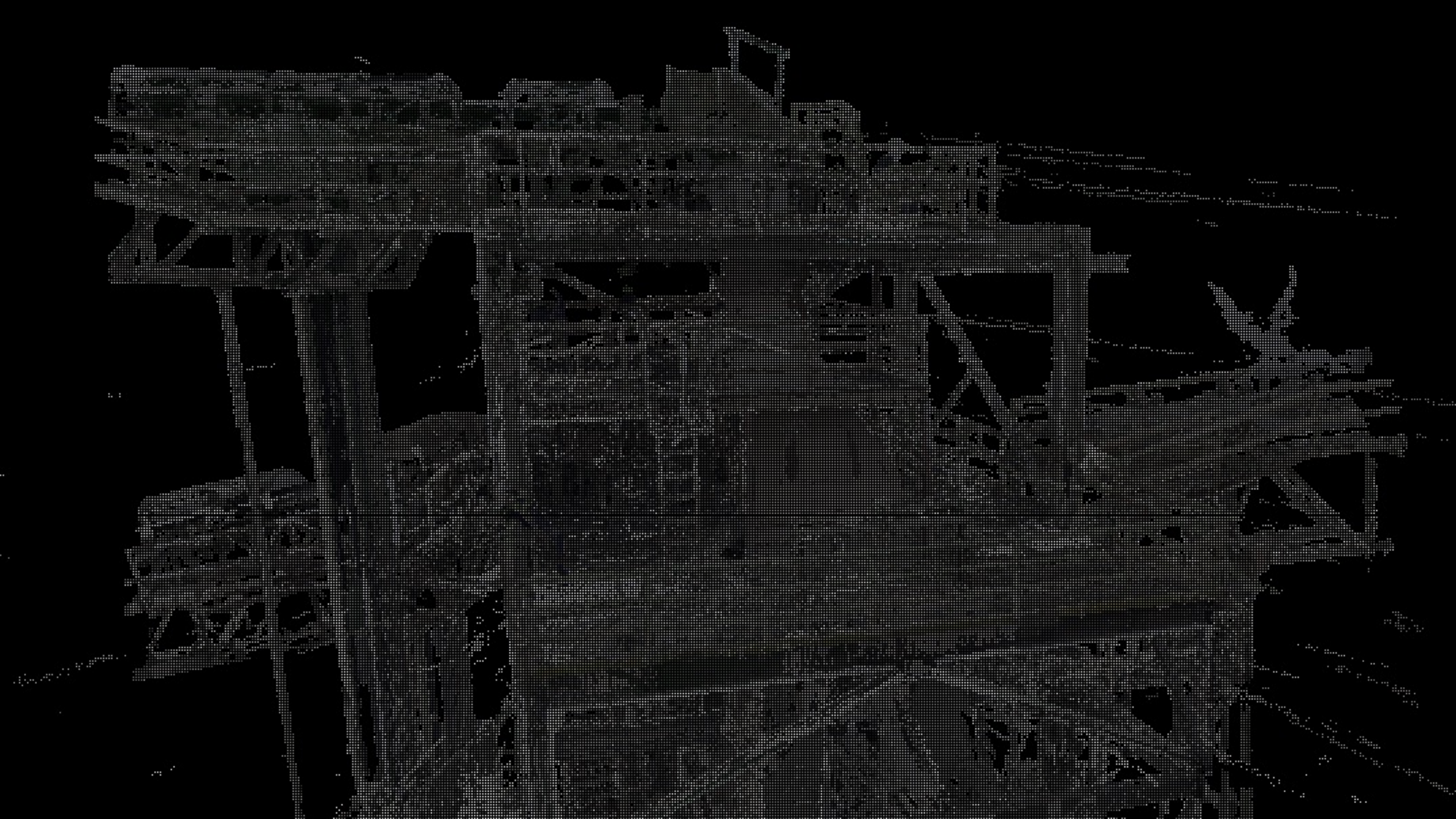
350 fpm



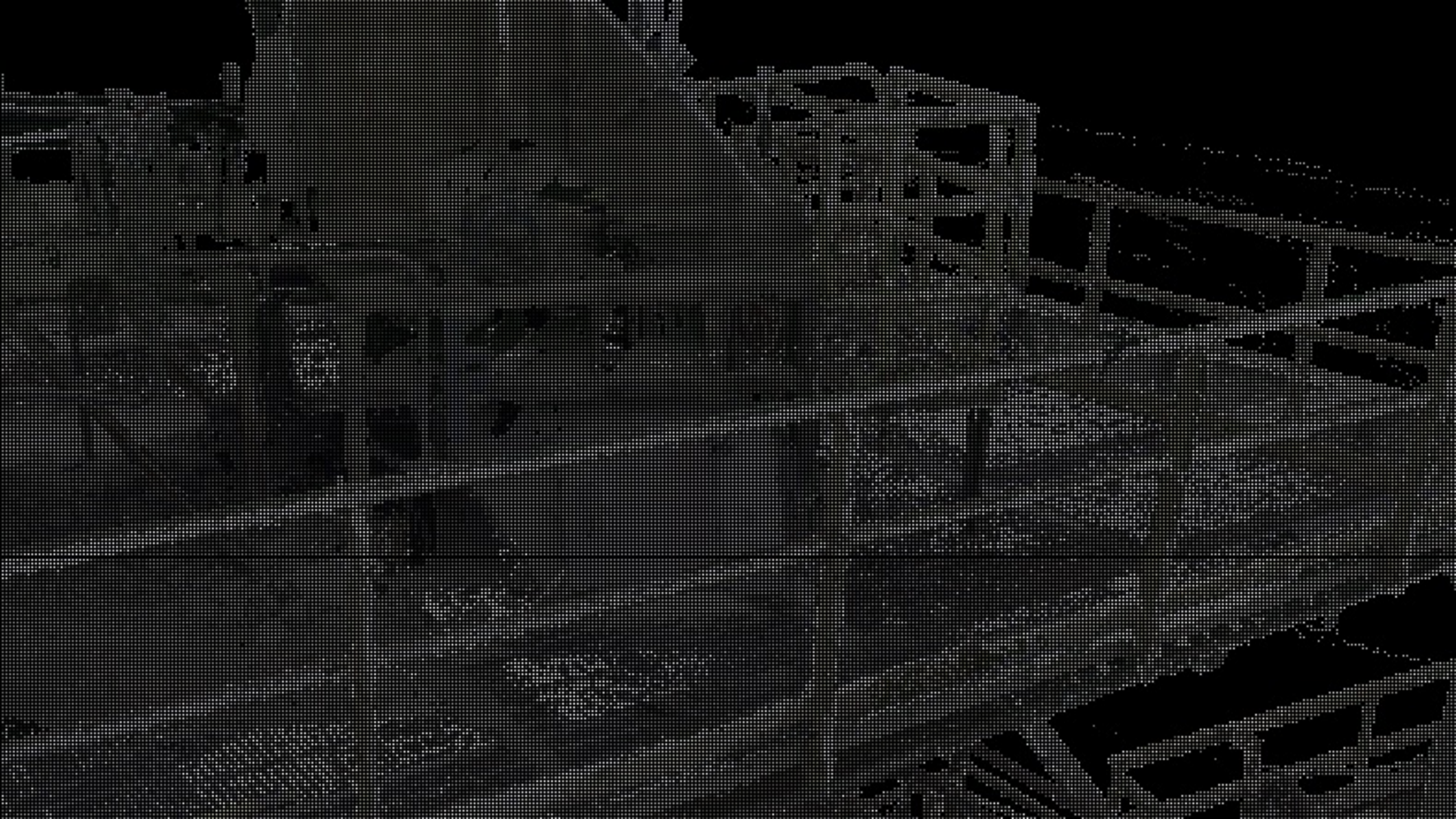


3D Laser Scan

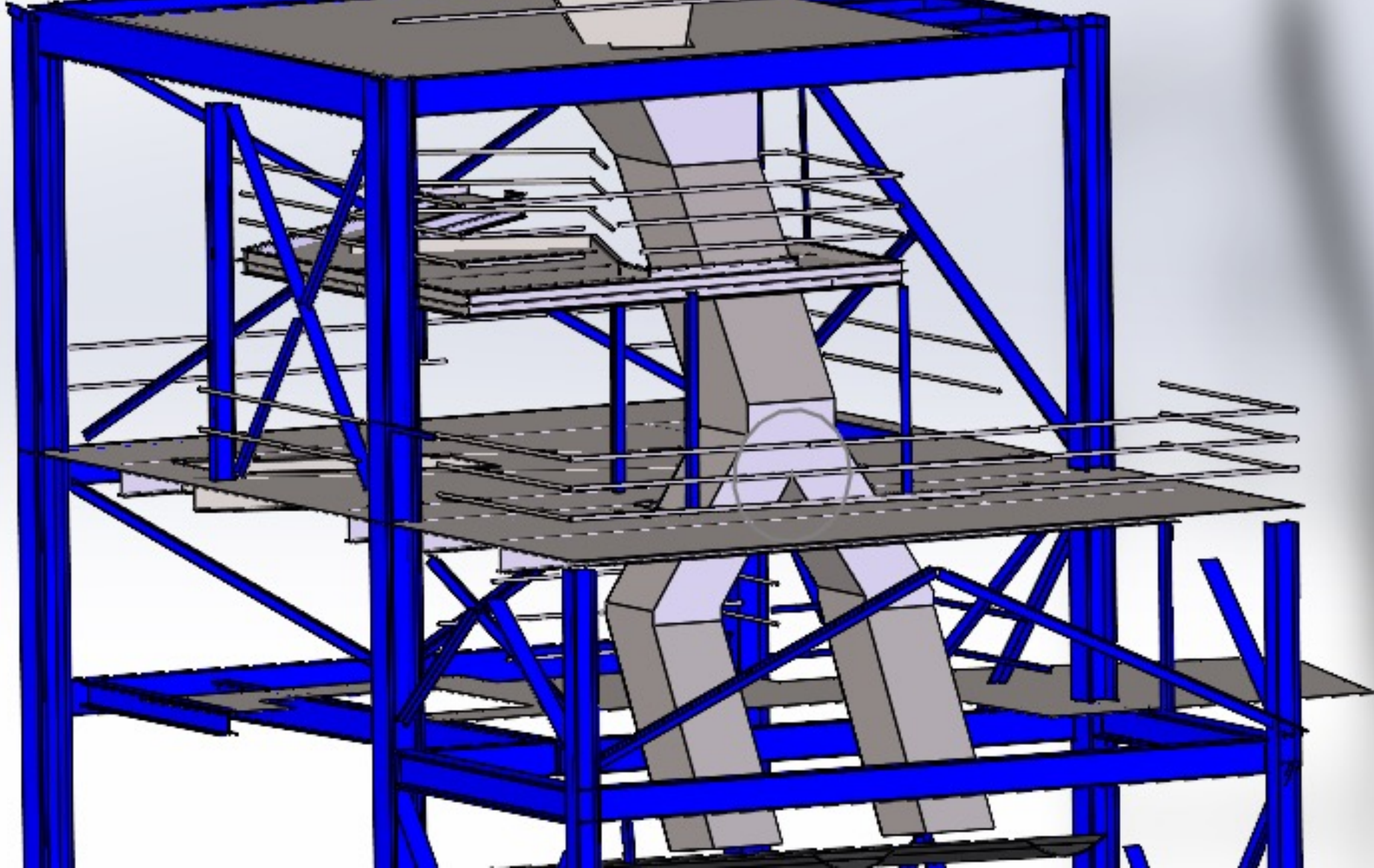


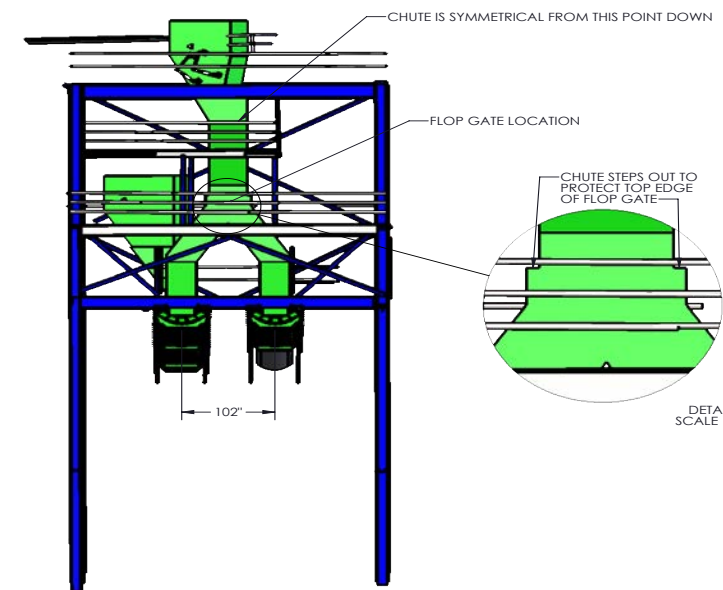
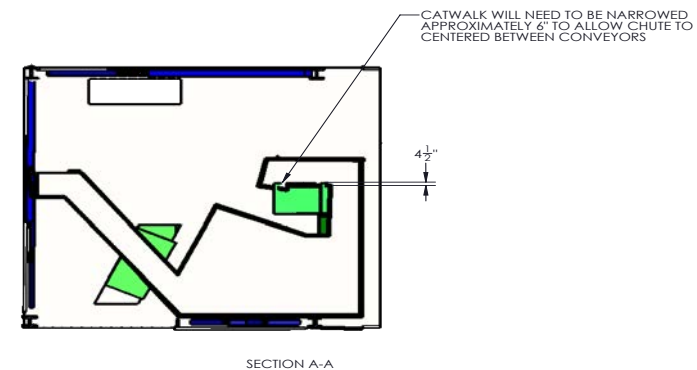




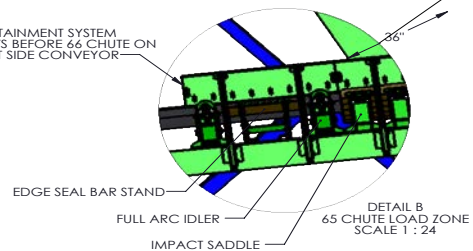


[illegible]

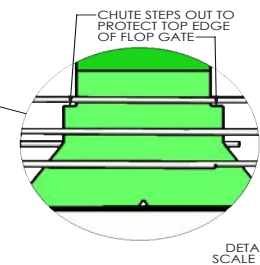
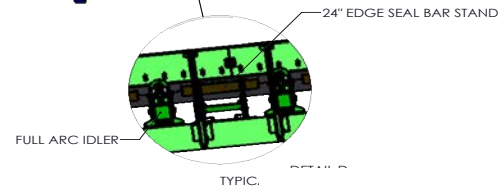
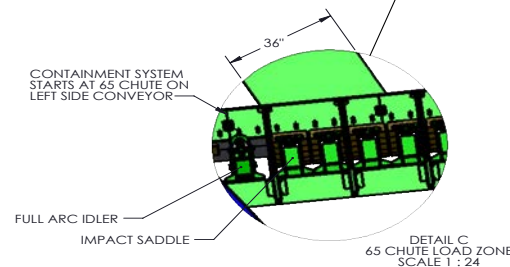


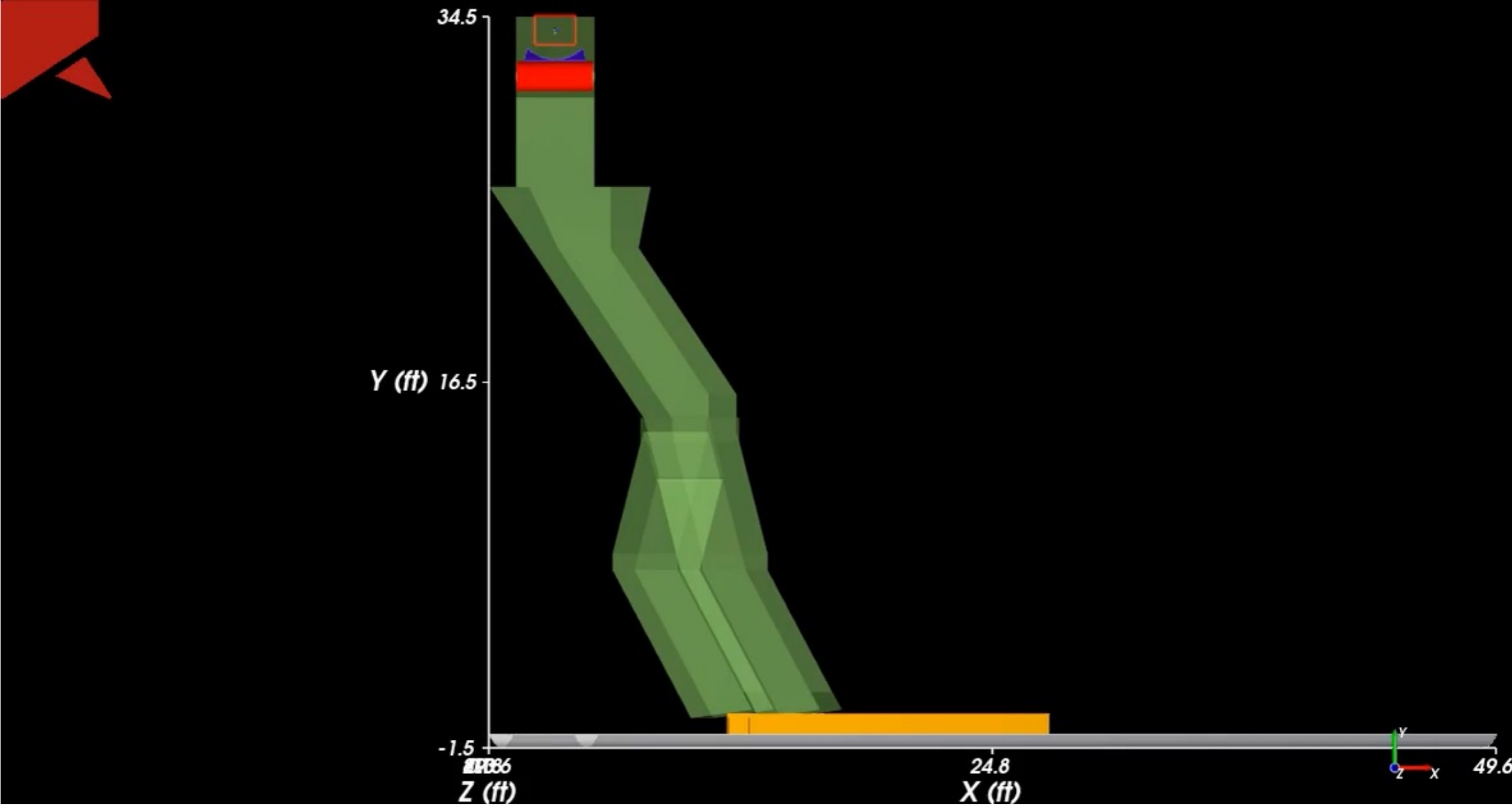


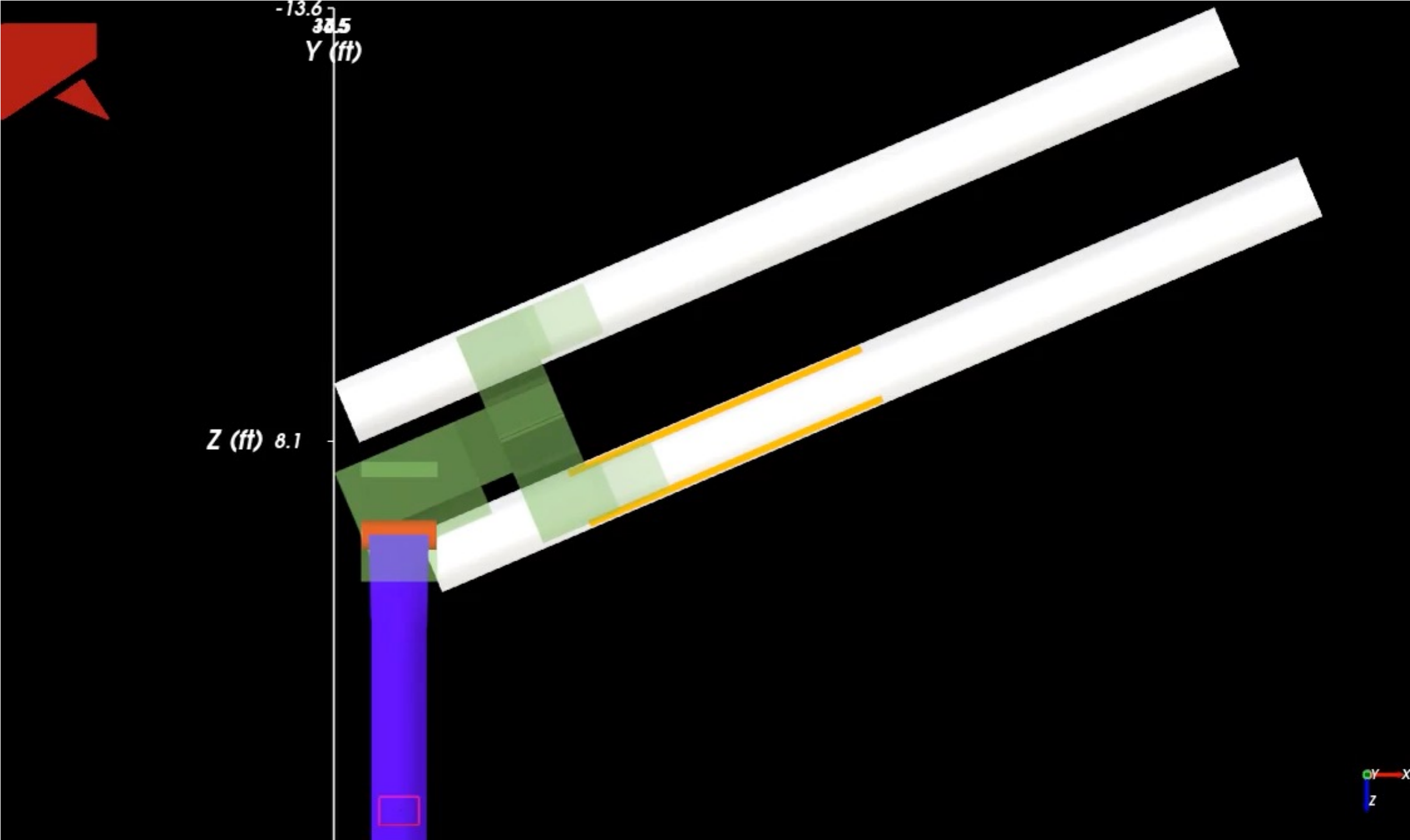
CONTAINMENT SYSTEM
STARTS BEFORE 66 CHUTE ON
RIGHT SIDE CONVEYOR

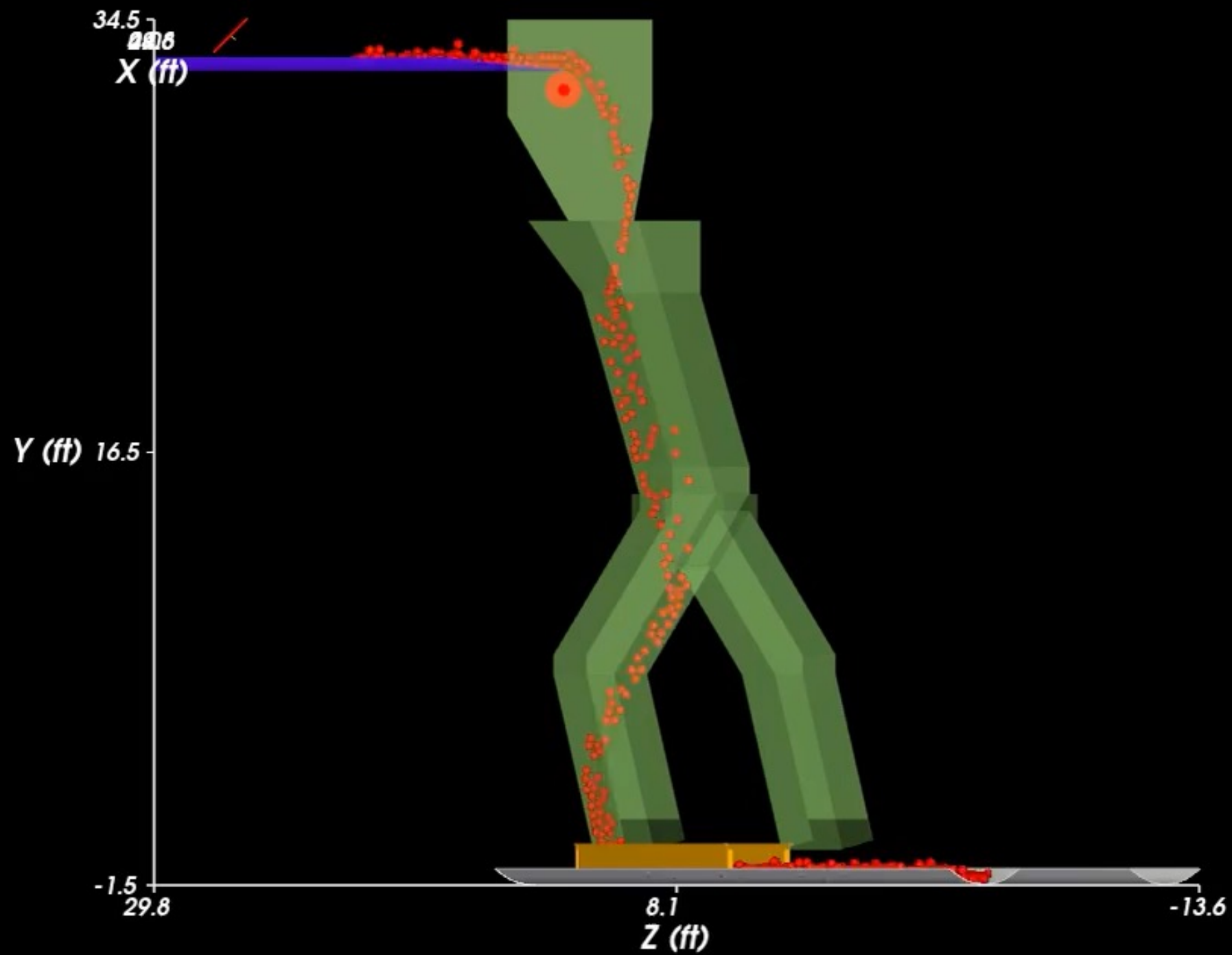


CONTAINMENT SYSTEM
STARTS AT 65 CHUTE ON
LEFT SIDE CONVEYOR—

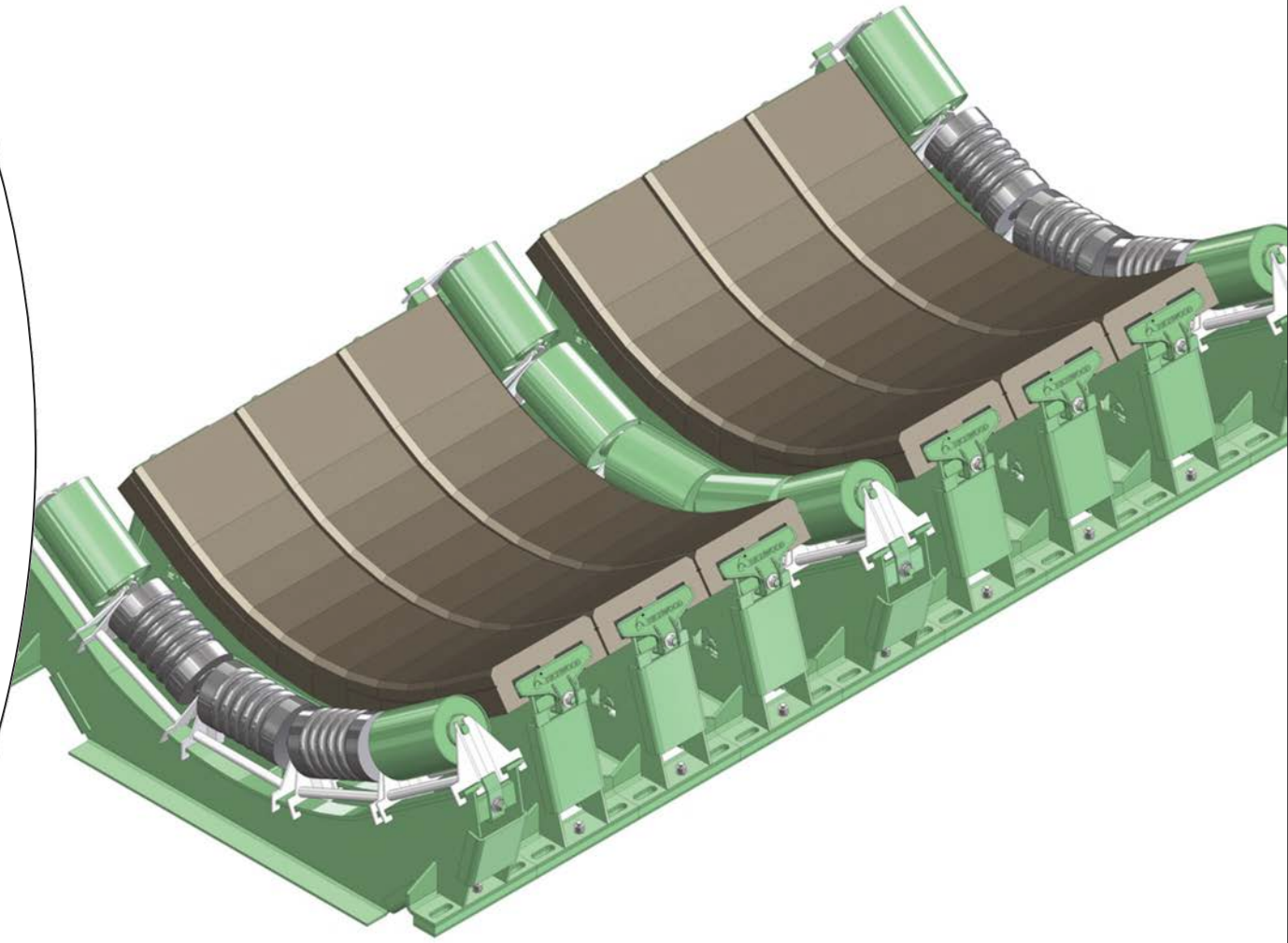








Installation of New Chute and MCS













Power Plant Project 2024

Material

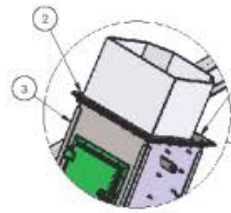
3"-Clean Coal

TPH

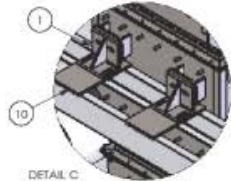
1800 TPH

Belt Speed

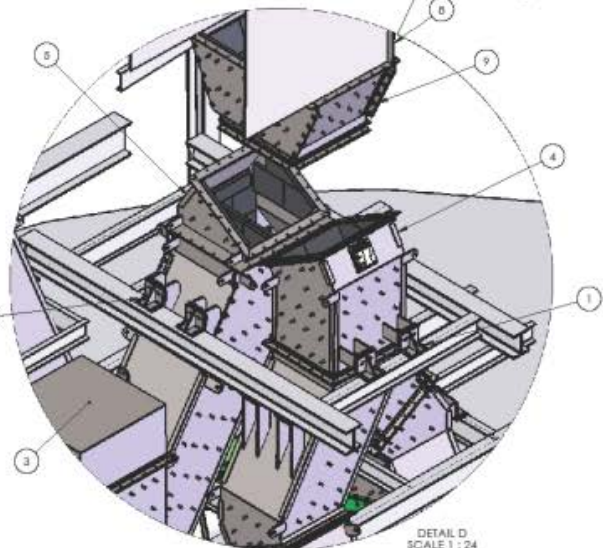
720 fpm



DETAIL E
SCALE 1 : 24



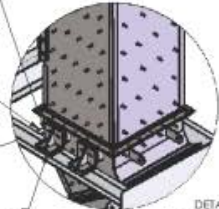
DETAIL C
SCALE 1 : 16



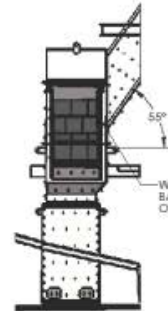
DETAIL D
SCALE 1 : 24

SET POSITION WITH BOLTS
WELD FLAT BAR TO CHUTE
ABOVE MOUNTING BRACKET
ONCE POSITION IS SET

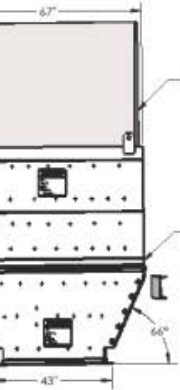
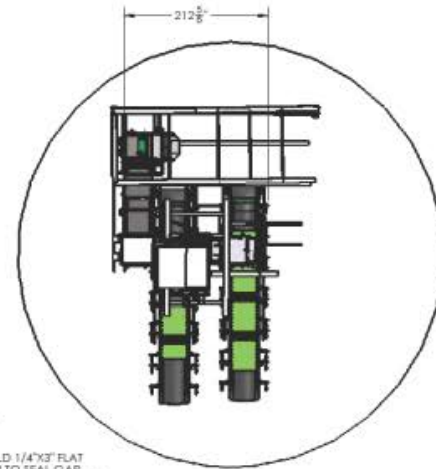
REMOVE THIS CHANNEL



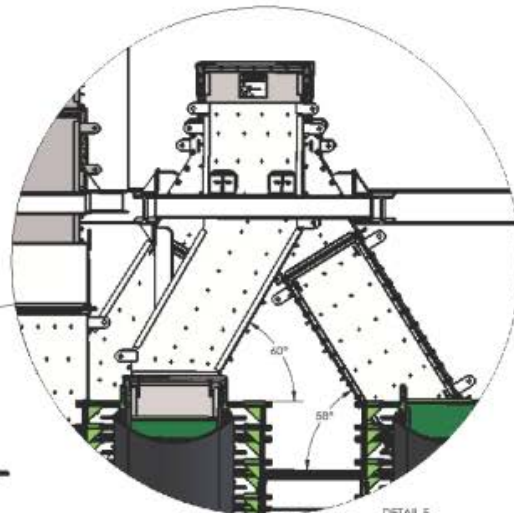
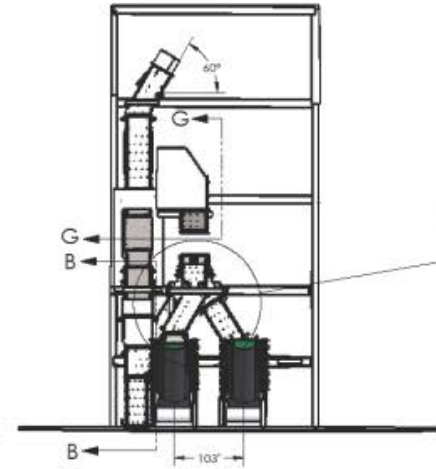
DETAIL A
SCALE 1 : 24



SECTION B-B
SCALE 1 : 48



SECTION G-G
SCALE 1 : 24



DETAIL F
SCALE 1 : 24

INCLUDED BUT NOT SHOWN:
-8EA. 102328-00 - LIFTING PAD EYE
-20EA. 1"X1" FLAT BAR - CUT TO 8" LONG
-2EA. 1/4"X3" FLAT BAR - CUT TO 66" LONG
-10EA. 1/2"X4"X6" ANGLE - CUT TO 10" LONG
-12EA. LCA11227-F - MCS MOUNTING BRACKET
-80 EA. F075HBC325C0300 - 3/4"-10 X3" BOLTS
-80 EA. F075FWC - 3/4" FLAT WASHERS
-80 EA. F075LWC - 3/4" LOCK WASHERS
-80 EA. F075HGM8C - 3/4" HEX NUTS

ITEM	QTY	INVENTORY NUMBER	DESCRIPTION
1	22	104800-38	Chute Support Assembly
2	1	105503-01	Silo 6 Chute Top Range
3	1	105504-00	Silo 6 Chute Assembly
4	1	105505-00	31W Chute Assembly
5	1	105506-00	31E Chute Assembly
6	1	105513-00	31E MCS Layout
7	1	105514-00	31W MCS Layout
8	1	105515-00	Head Chute Removable Panel Liner Layout
9	1	105517-00	Hopper Liner Layout
10	2	WHB060-1000	1/2"x10" Flat Bar - Cut to 18" Long

EXISTING HEAD CHUTE

SET BOTTOM FLUSH WITH
BOTTOM OF HEAD CHUTE
AND WELD PANEL IN PLACE

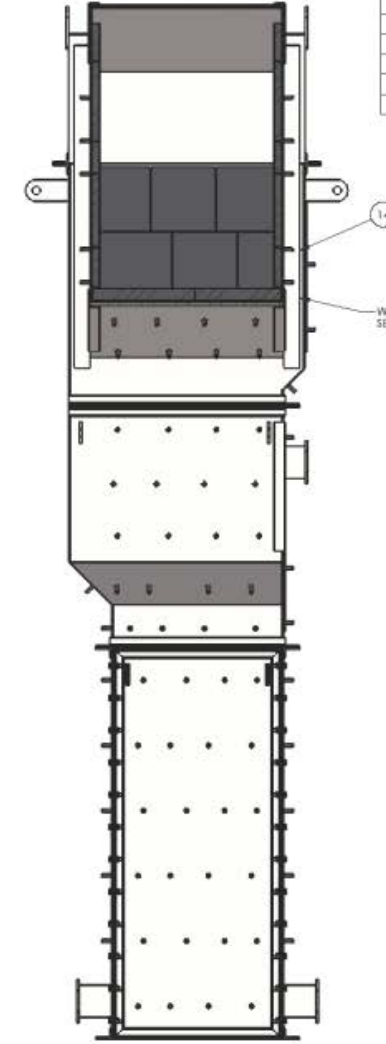
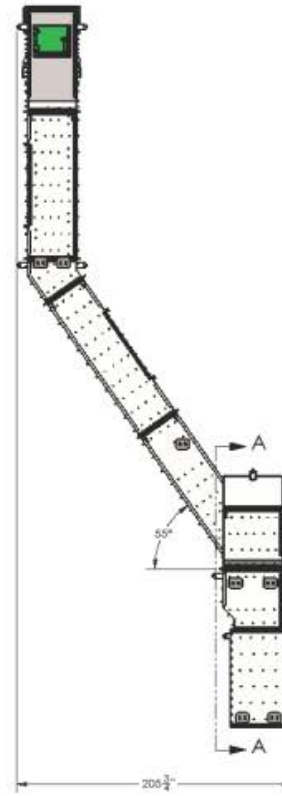
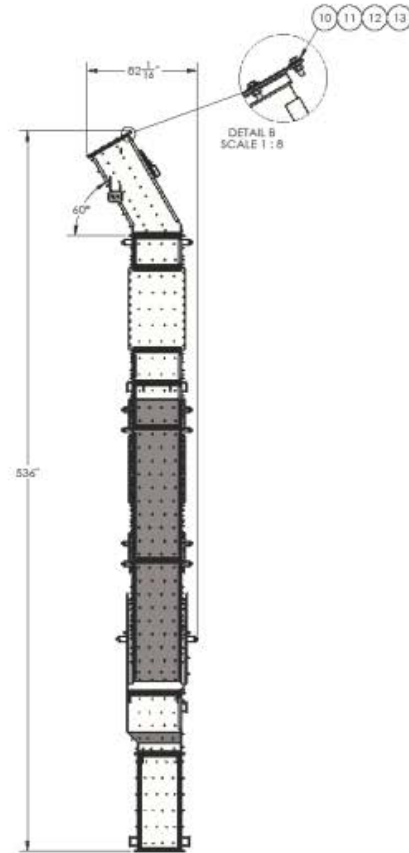
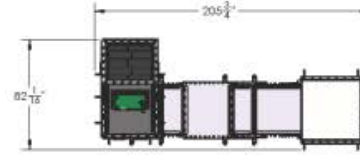
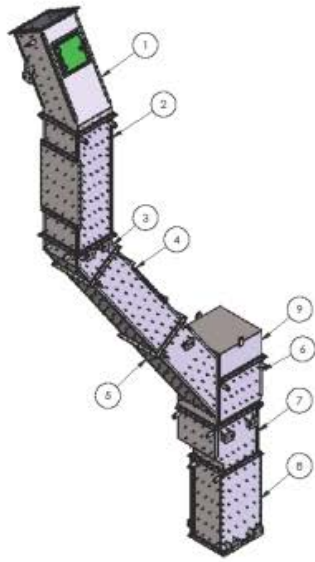
RICHWOOD
P.O. Box 1038, Huntington, WV 25704-1038
TOLL FREE: 800.321.4801
PHONE: 204.525.6544 • FAX: 204.525.6515
WWW.RICHWOOD.COM

This drawing is the property of RICHWOOD INDUSTRIES, INC. The drawing and section shall not be reproduced, copied, or used for any other purpose without the prior written permission of RICHWOOD INDUSTRIES, INC.

Silo 6 - Chute Replacement Layout

REVISIONS	BY	DATE	CHECKED	DATE
1	CW	PM	1:96	6/21/2023
2	CW	PM	1:96	6/21/2023

105503-00

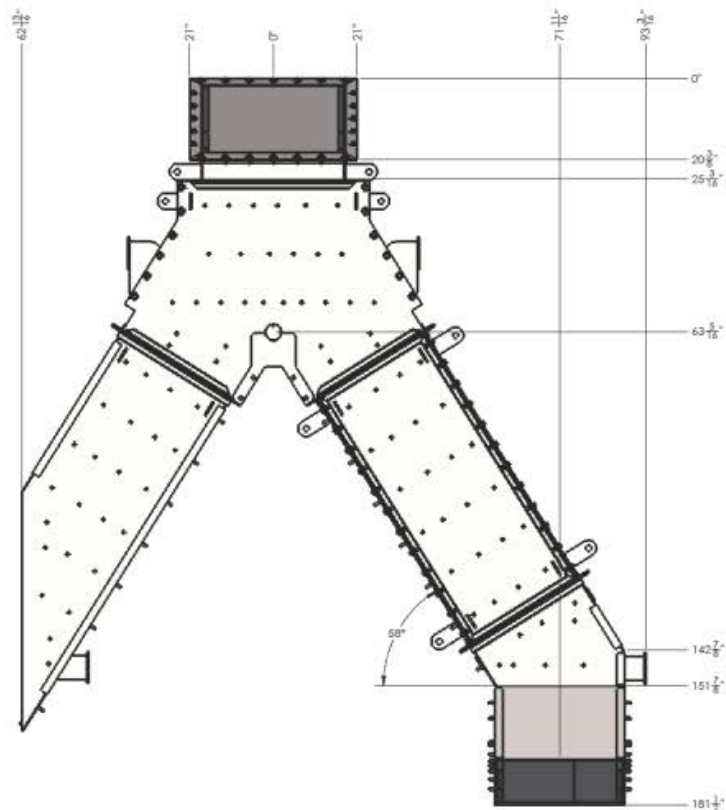
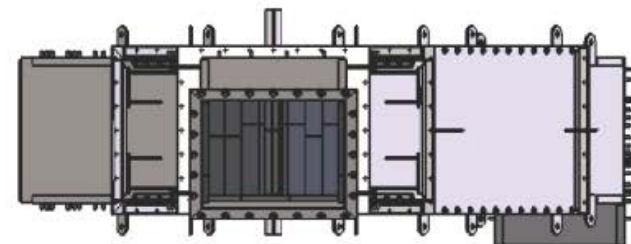
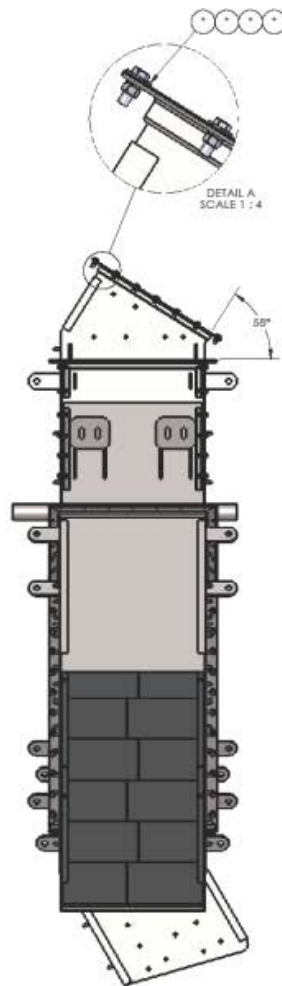
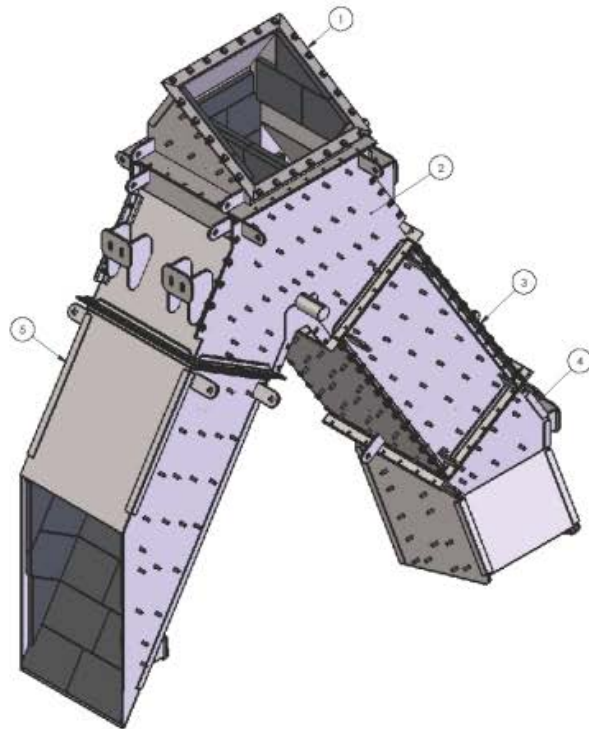


SECTION A-A
SCALE 1:12

ITEM	QTY	INVENTORY NUMBER	DESCRIPTION
1	1	105504-01	Silo 6 - Section 1 - Liner Layout
2	1	105504-02	Silo 6 Section 2 Liner Layout
3	1	105504-03	Silo 6 - Section 3 - Liner Layout
4	1	105504-04	Silo 6 - Section 4 - Liner Layout
5	1	105504-05	Silo 6 Section 5 Liner Layout
6	1	105504-07	Silo 6 Section 7 Liner Layout
7	1	105504-08	Silo 6 Section 8 Liner Layout
8	1	105504-09	Silo 6 Section 9 Liner Layout
9	1	105507-06	Silo 6 Section 6 Steel Assembly
10	198	FD63FWC	5/8" Flat Washer
11	198	FD63HBCSC0200	5/8"-11 x 2" Hex Bolt GR5
12	198	FD63HNCSC	5/8"-11 Hex Nut GR5
13	198	FD63LWC	5/8" Lock Washer
14	2	WHBF025-0300	1/4"x3" Flat Bar - Cut to 60" Long

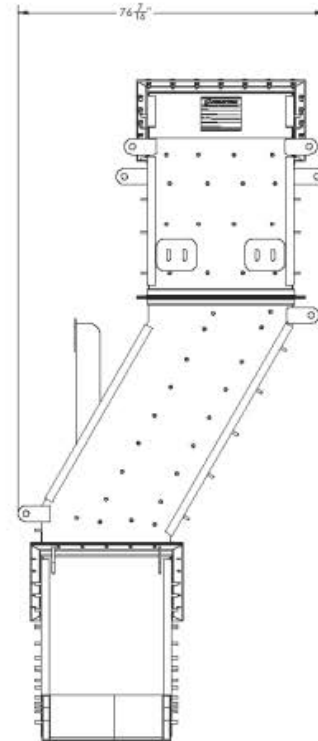
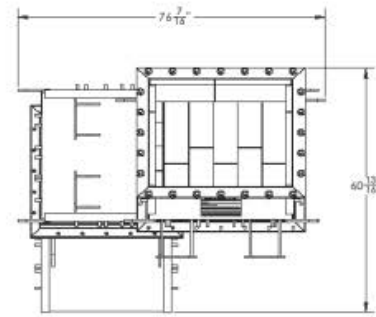
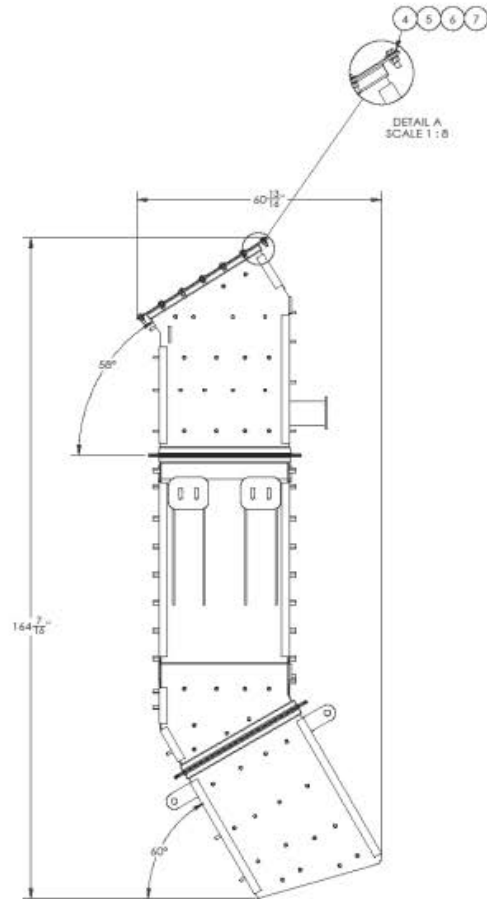
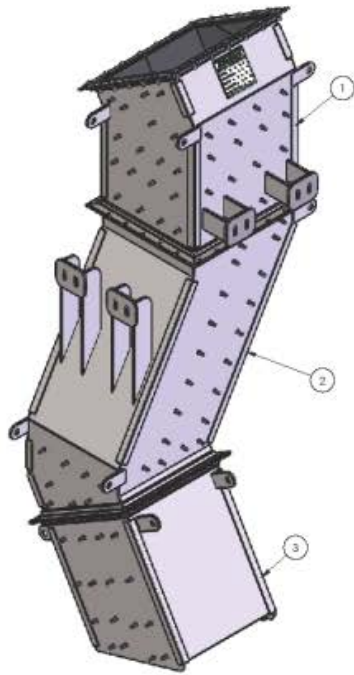
WELD FLAT BAR TO SECTIONS 5 & 7 TO SEAL GAP ONCE POSITION IS SET.

REVISIONS					
REV	DESCRIPTION	BY	DATE	CHECKED	DATE



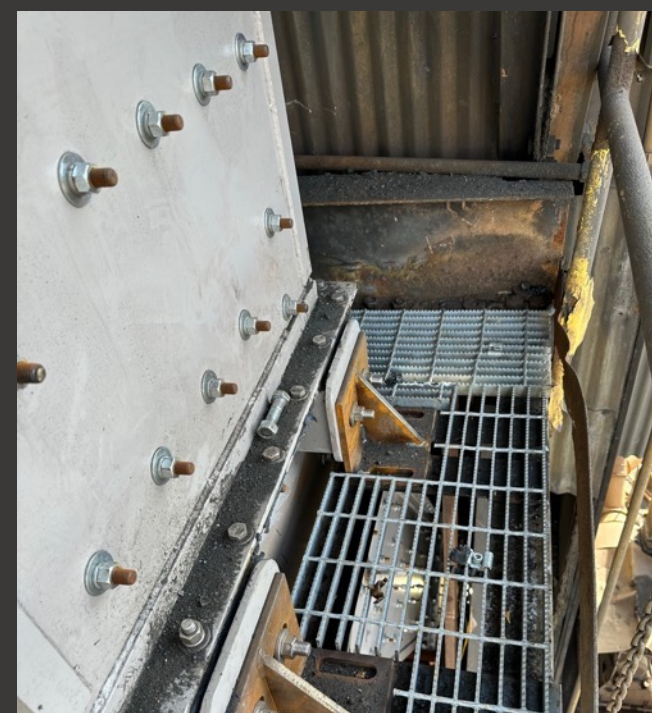
ITEM	QTY	INVENTORY NUMBER	DESCRIPTION
1	1	105506-01	31E Section 1 Liner Layout
2	1	105506-02	31E Section 2 Liner Layout
3	1	105506-03	31E Section 3 Liner Layout
4	1	105506-04	31E Section 4 Liner Layout
5	1	105506-05	31E Section 5 Liner Layout
6	112	FD63FWC	5/8" Flat Washer
7	112	FD63HHC8C0200	5/8"-11 x 2" Hex Bolt GR5
8	112	FD63HHC5C	5/8"-11 Hex Nut GR5
9	112	FD63LWC	5/8" Lock Washer

		P.O. Box 128, Huntington, WV 25714-128 TEL: (800) 853-1281 PHONE: (304) 525-6035 • FAX: (304) 525-6014 EMAIL: info@richwood.com	
		This drawing is the property of RICHWOOD INDUSTRIES, INC. The drawings and materials are not to be reproduced, copied, or used for any other purpose without the written permission of RICHWOOD INDUSTRIES, INC.	
31E Chute Assembly			
YOURS/ENGR'S CHECKED DATE	CW DATE	PM DATE	1:16 6/27/2023
REV DESCRIPTION		BY DATE	CHECKED DATE
105506-00		0 B	

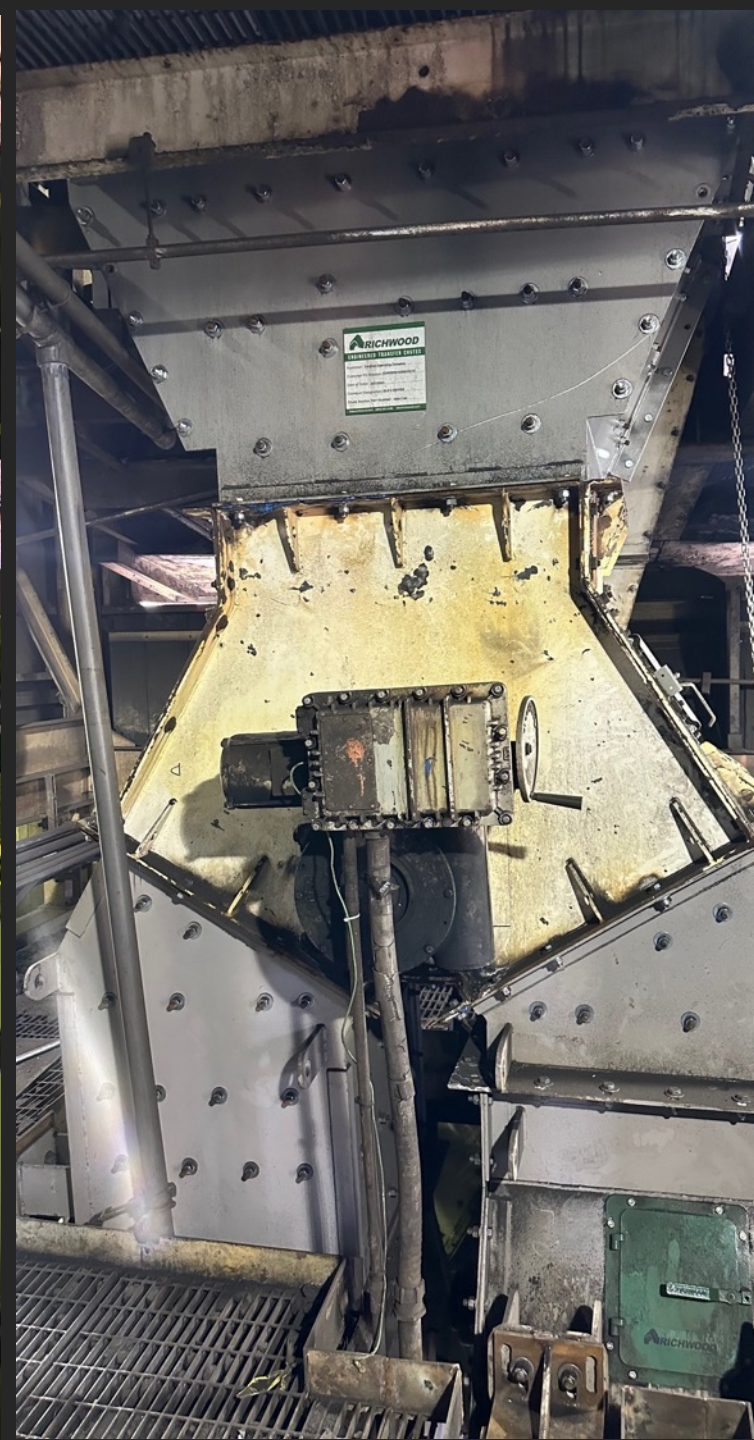


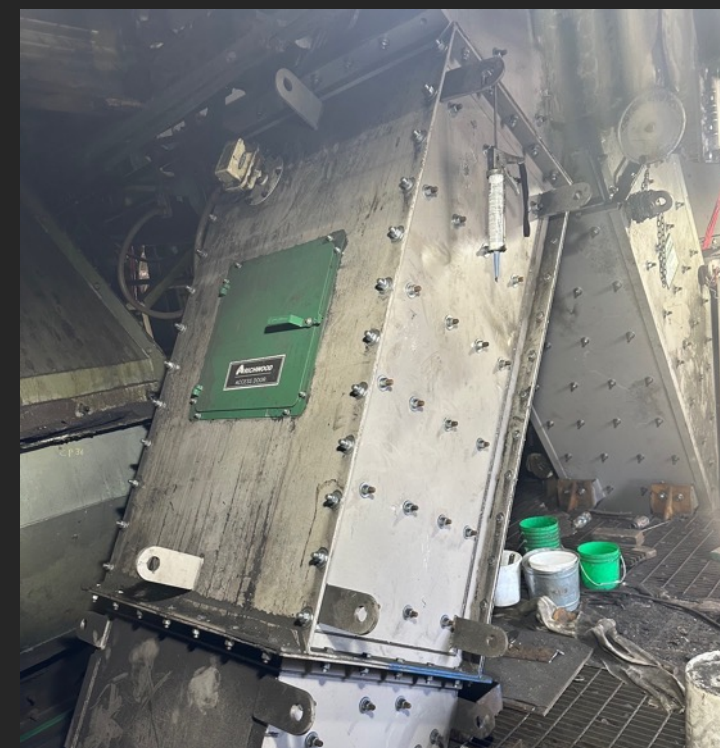
ITEM	QTY	INVENTORY NUMBER	DESCRIPTION
1	1	105505-01	31W Section 1 - Liner Layout
2	1	105505-02	31W Section 2 - Liner Layout
3	1	105505-03	31W Section 3 - Liner Layout
4	68	FD63FWC	5/8" Flat Washer
5	68	FD63HBC9C0200	5/8"-11 x 2" Hex Bolt GR5
6	68	FD63HNC5C	5/8"-11 Hex Nut GR5
7	68	FD63LWC	5/8" Lock Washer

REVISIONS					
REV	DESCRIPTION	BY	DATE	CHECKED	DATE











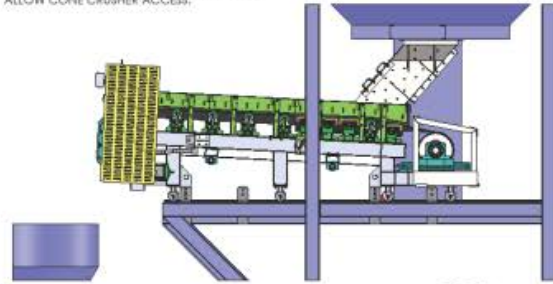
Granite Quarry Project 2024

*Replacement of Vibrating
Feeder with Richwood
Conveyor and Chutes*

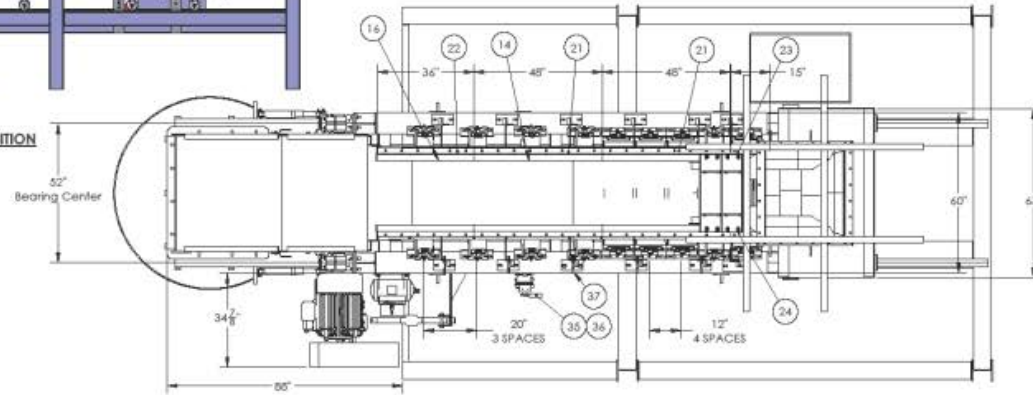
Material
TPH
Belt Speed

4"- Granite
900
475 fpm

*HEAD CHUTE WILL NEED TO BE REMOVED TO ALLOW CONE CRUSHER ACCESS.

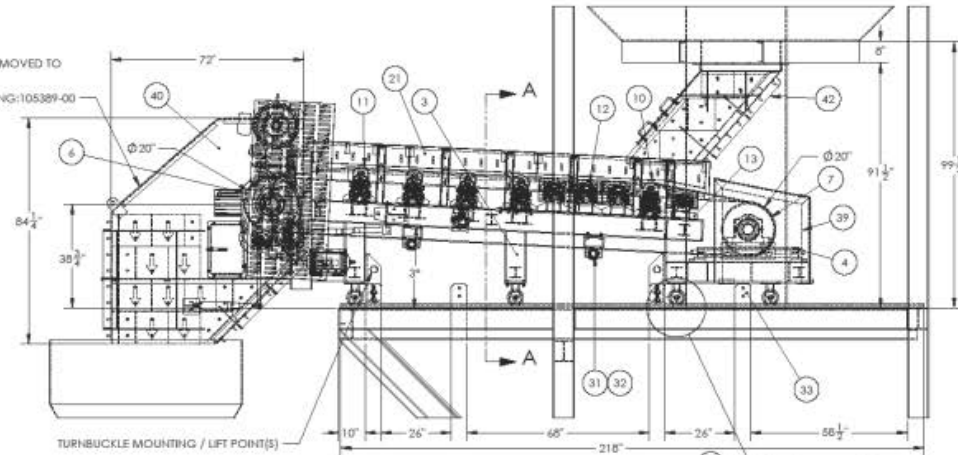


SIDE VIEW - RETRACTED POSITION
SCALE: 1:36

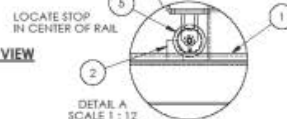


TOP VIEW

*HEAD CHUTE WILL NEED TO BE REMOVED TO ALLOW CONE CRUSHER ACCESS.
FOR CLEANER DETAILS SEE DRAWING: 105389-00



SIDE VIEW

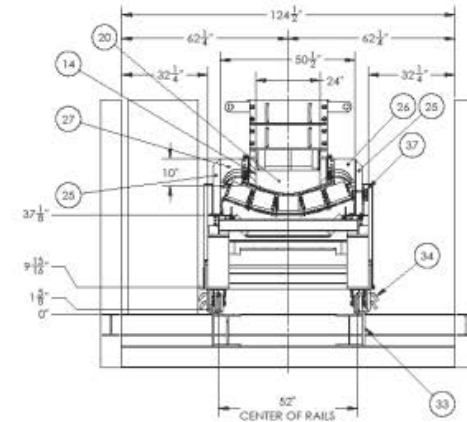


DETAIL A
SCALE 1:12

WEIGHTS:
HEAD CHUTE 2450 lbs. (105347-00)
TAIL CHUTE 800lbs. (105363-00)
FRAME ASSEMBLY 10,250 lbs. (104849-16)

*SOME COMPONENTS MAY BE HIDDEN TO IMPROVE CLARITY OF VIEWS.

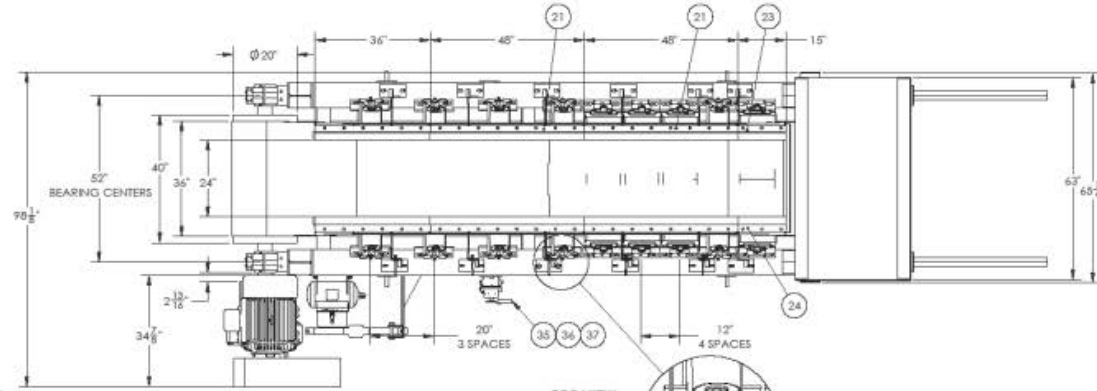
ITEM	QTY.	INVENTORY NUMBER	DESCRIPTION
1	4	104849-40	1/2x3/8 Roll
2	2	104849-39	Wheel Stop
3	1	104849-20	WB31 Conveyor Frame
4	2	104849-13	Dodge HD-400 Take-Up Frame - 12" Travel
5	8	104849-11	V-Groove Wheel Track Caster - Extra High Capacity (M-C Part No. 2453163)
6	1	104849-01	Head Pulley Assembly - 20" Dia. x 40" FW. x 4-7/16" Shaft w/ Dodge TAF 528 Bearings
7	1	104849-02	Spiral Wing Tail Pulley Assembly - 20" Dia. x 42" FW. x 3-15/16" Shaft w/ Dodge TAF 522 Bearings
8	1	104849-12	800/4 Ply Belt 36" Conveyor Belt
9	1	104849-04	Dodge V-Belt Drive w/ Shaft Mount Reducer and Belt Guard - 40HP
10	1	104849-42	Cushion Arc Idler - 20" TA 36" BW
11	4	104849-43	Full Arc Idler w/ All Steel Rolls - 20" TA 36" BW
12	3	104849-45	Richwood Impact Saddle - 20" TA 36" BW 47" Bolt Centers
13	1	104849-47	Impact Saddle - 12" TA 36" BW 47" Bolt Centers
14	4	100092-02	2.5'x10'x48" Rock Flex Canoe Liner with Studs
16	2	100089-02	2.5'x10'x36" Rock Flex Canoe Liner with Studs
18	1	104849-55	2.5'x10' Rock Flex Transition Canoe Liner with Studs (Right)
19	1	104849-57	2.5'x10' Rock Flex Transition Canoe Liner with Studs (Left)
20	1	104849-59	1-1/2" Contoured End Liner
21	4	104849-34	1/4'x6'x48" Slotted Skirt Board Assembly
22	2	104849-65	1/4' x 8' x 36" Slotted Skirt Board Assembly
23	1	104849-54	Transition Skirt Board (Right Side)
24	1	104849-53	Transition Skirt Board (Left Side)
25	12	104849-37	Skirt Board Support Assembly
26	6	103367-19	Skirt Board Support (Right Side)
27	6	103367-20	Skirt Board Support (Left Side)
30	1	1C-ITC-36	1C Belt Cleaner with ITC Blade - BW36 / Drawing 105389-00
31	2	WRAS-1761-A-05025	4" Live Shaft Roller w/ 2" Richwood Bearings
32	4	104849-61	Return Roller Mounting Bracket
33	8	104849-38	3/4" Steel Stop Bracket
34	8	104849-64	1" Bent-Pull Clevis Pin (M-C Part No. 90146A221)
35	1	103495-30	Safety Stop Switch (RS-1)
36	1	103495-32	Mounting Plate for Stop Switch
37	5	103495-34	Cable Support Eye Bolt 1/2"x6"x2-1/2" Long H.C. Thread (RS-27)
39	1	104849-33	Tail Pulley Cover Assembly
40	1	105347-00	Marlin Marietta - Retractable Conveyor - Head Chute Liner Layout
42	2	105363-00	Marlin Marietta - Junction City - Retractable Conveyor - Tail Chute



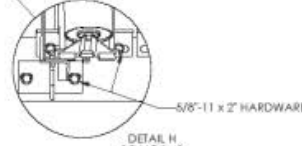
SECTION A-A

REVISIONS					
REV	DESCRIPTION	BY	DATE	CHECKED	DATE
1	REVISION FOR PRODUCTION	JDF	4/1/2023	OK	5/13/2023

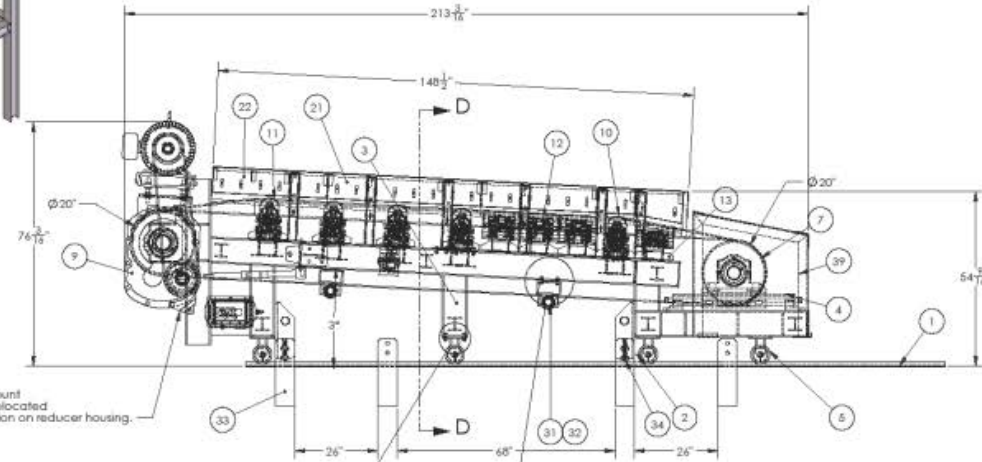
*SOME COMPONENTS MAY BE HIDDEN TO IMPROVE CLARITY OF VIEWS.



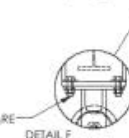
TOP VIEW



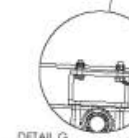
DETAIL H
SCALE 1:8



SIDE VIEW



DETAIL F
SCALE 1:8

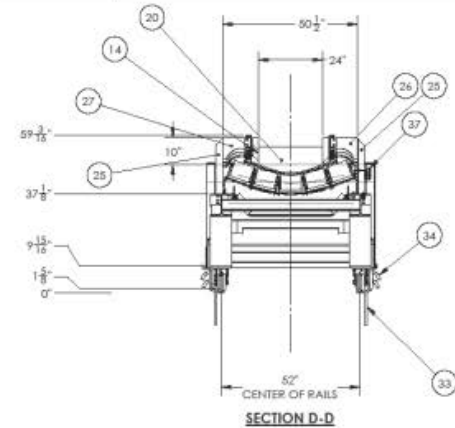


DETAIL G
SCALE 1:8

Tumbuckle Mount
needs to be relocated
to upper position on reducer housing.

ISOMETRIC VIEW
SCALE: 1:48

ITEM	QTY.	INVENTORY NUMBER	DESCRIPTION
1	4	104849-40	12x2x3/8 Rol
2	2	104849-39	Wheel Stop
3	1	104849-20	W8x31 Conveyor Frame
4	2	104849-13	Dodge HD-400 Take-Up Frame - 12" Travel
5	8	104849-11	V-Groove Wheel Track Caster - Extra High Capacity (M-C Part No. 2453T63)
6	1	104849-01	Head Pulley Assembly - 20" Dia. x 40" FW. x 4-7/16" Shaft w/ Dodge TAF 526 Bearings
7	1	104849-02	Spiral Wing Tail Pulley Assembly - 20" Dia. x 42" FW. x 3-15/16" Shaft w/ Dodge TAF 522 Bearings
8	1	104849-12	800/4 Ply Belt 36" Conveyor Belt
9	1	104849-04	Dodge V-Belt Drive w/ Shaft Mount Reducer and Belt Guard - 40HP
10	1	104849-42	Cushion Arc Idler - 20" TA 36" BW
11	4	104849-43	Full Arc Idler w/All Steel Rolls - 20" TA 36" BW
12	3	104849-45	Richwood Impact Saddle - 20" TA 36" BW 47" Bolt Centers
13	1	104849-47	Impact Saddle - 12" TA 36" BW 47" Bolt Centers
14	4	10092-02	2.5"x10"x48" Rock Flex Canoe Liner with Studs
17	1	104849-55	2.5"x10" Rock Flex Transition Canoe Liner with Studs (Right)
18	1	104849-57	2.5"x10" Rock Flex Transition Canoe Liner with Studs (Left)
19	1	104849-59	1-1/2" Contoured End Liner
20	4	104849-34	1/4"x8"x48" Slotted Skirt Board Assembly
21	2	104849-65	1/4" x 8" x 36" Slotted Skirt Board Assembly
22	1	104849-54	Transition Skirt Board (Right Side)
23	1	104849-53	Transition Skirt Board (Left Side)
24	12	104849-37	Skirt Board Support Assembly
25	6	103367-19	Skirt Board Support (Right Side)
26	6	103367-20	Skirt Board Support (Left Side)
29	1	1C-ITC-36	1C Belt Cleaner with ITC Blade - BW36
30	2	WRAS-1761-A-05025	4" Live Shaft Roller w/ 2" Richwood Bearings
31	4	104849-61	Return Roller Mounting Bracket
32	8	104849-38	3/4" Steel Stop Bracket
33	8	104849-64	1" Bent-Pull Clevis Pin (M-C Part No. 90146A221)
34	1	103495-30	Safety Stop Switch (RS-1)
35	1	103495-32	Mounting Plate for Stop Switch
36	5	103495-34	Cable Support Eye Bolt 1/2"x6"x2-1/2" Long L.C. Thread (RS-27)
38	1	104849-33	Tail Pulley Cover Assembly
39	1	105347-00	Marlin Marietta - Retractable Conveyor - Head Chute Liner Layout
41	2	105363-00	Marlin Marietta - Retractable Conveyor - Tail Chute



SECTION D-D

WEIGHTS:
HEAD CHUTE 2450 lbs. (105347-00)
TAIL CHUTE 800lbs. (105363-00)
FRAME ASSEMBLY 10,250 lbs. (104849-16)

REVISIONS					
REV	DESCRIPTION	BY	DATE	CHECKED	DATE
1	REDESIGNED FOR PRODUCTION	JOT	4/31/2023	GR	5/1/2023













RICHWOOD
525-5436 richwood.com

CAUTION
PRESS
PC





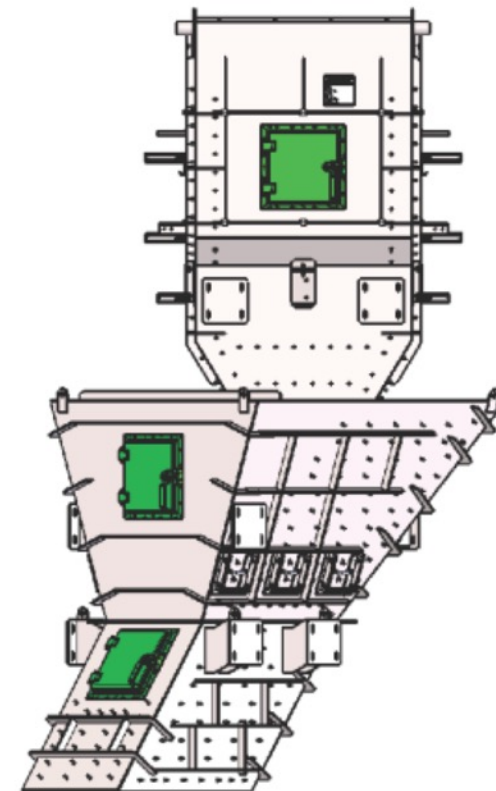
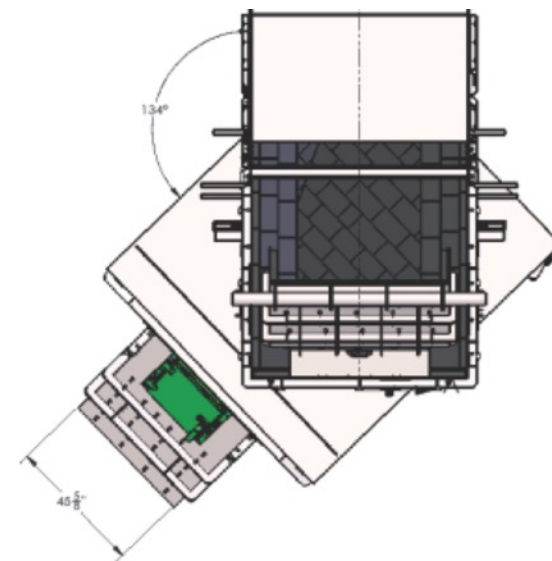
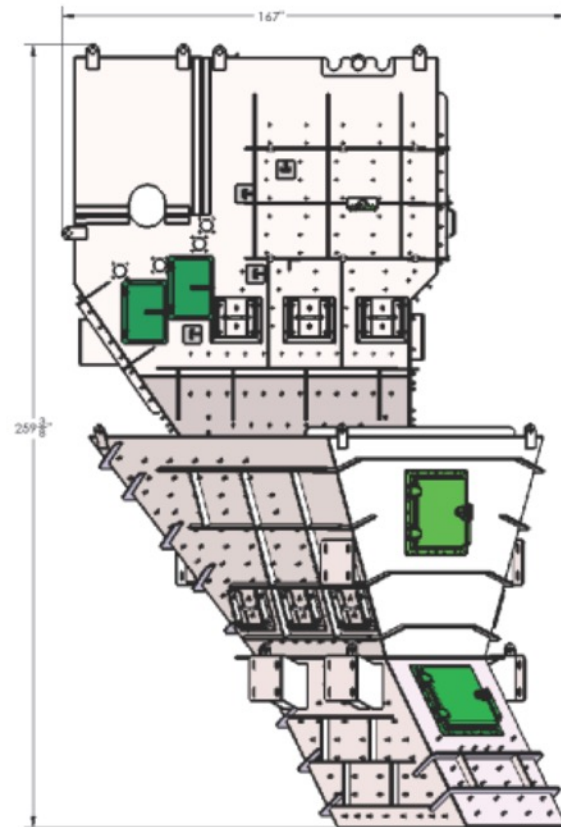
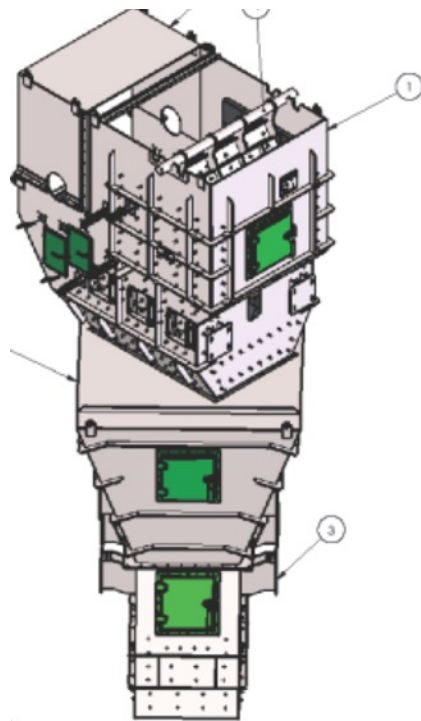


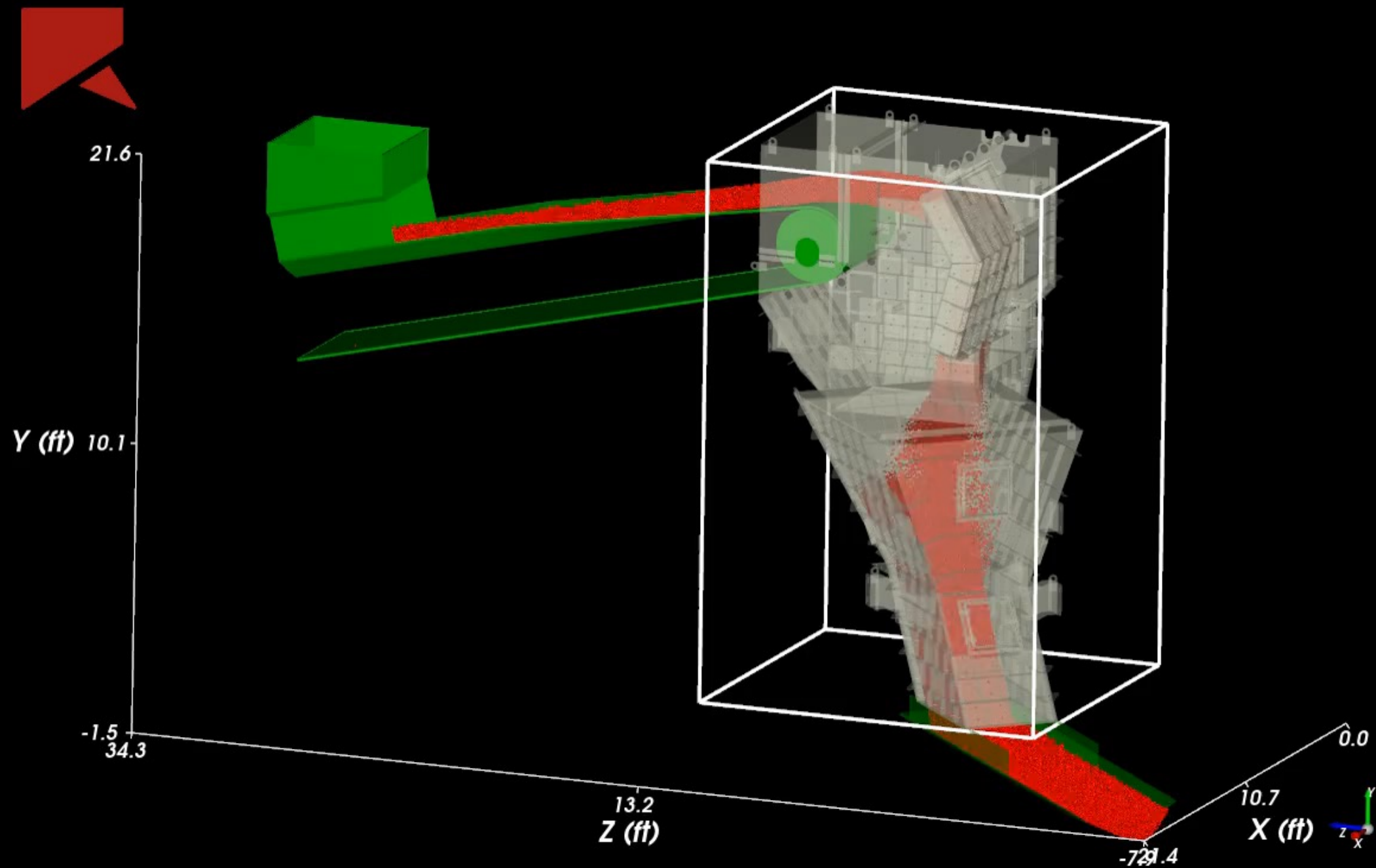


Copper Mine Project 2024

*Replacement of Transfer
Chute and Install MCS
w/ Belt support*

Material	Agglomerated Copper Ore
TPH	7200
Belt Speed	950fpm







Richwood Modular Wear Liners

- Protect chutes from wear from impact and abrasion.
- Reduce noise and dust levels.
- Modular wear panels make installation simple and easy.



RockPlate™ Wear Liners at Work

- 6" minus granite, tonnage of 600-800 TPH, height of fall 2'-6'
- Previously using 1" thick AR plate that lasted 3-4 months. Installation and repair required extensive cutting and welding.
- RockPlate™ Wear Liners were recommended, 2 ½" thick x 6" high and 24" wide.
- Modular wear panels, in easy-to-handle sizes, make installation safer and easier.
- RockPlate™ Wear Liners have provided a service life of four years at this location.
- RockPlate™ eliminated installation issues with a bolt-on installation option.





Wear Liner Packages

- Wear liner recommendations are based on material flow and wear properties of the application
- When needed, replace only the highest wear areas
- Magnetic, bolt-on or weld-on attachment options
- Proprietary rubber blends provide long service life

**Rely on Richwood for
worry-free transfer solutions!**

