

D

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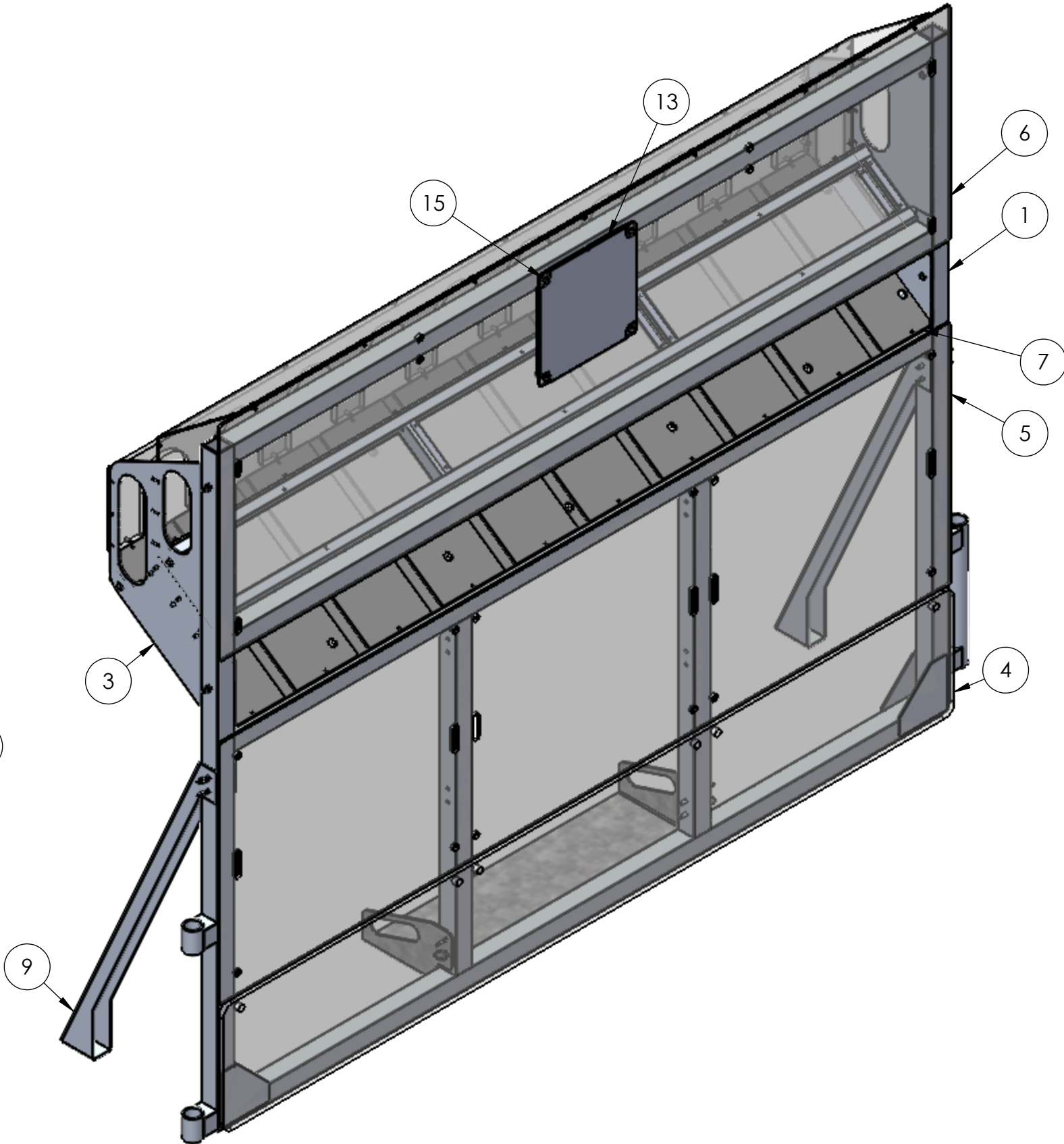
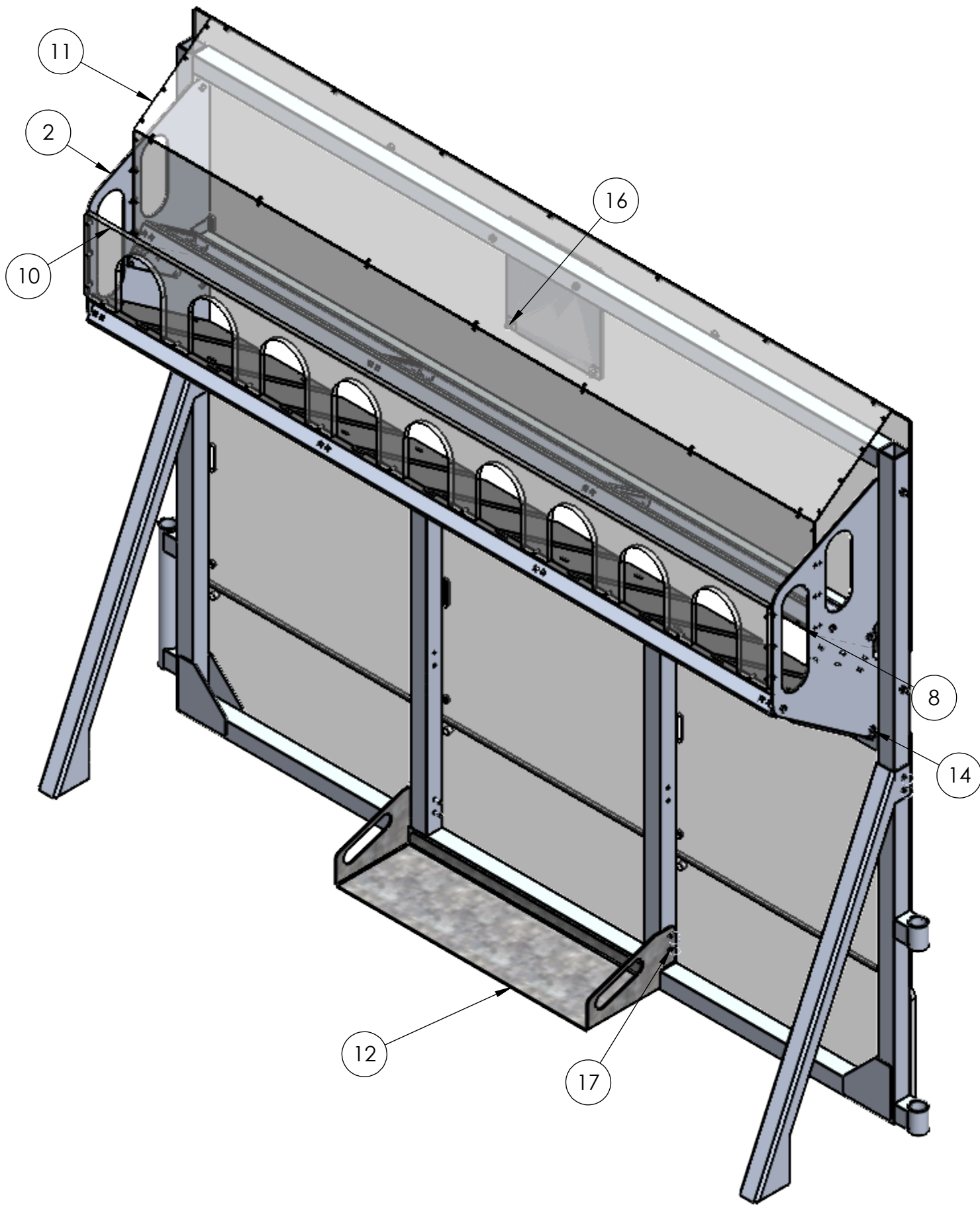
A

D

C

B

A



Note: April Tag ID # changes depending on which Coral Station it is on. See the Field Layout and Marking Diagram for more details.

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	GE-25001	Field Border Frame	1
2	GE-25002	Left Side Plate Assembly	1
3	GE-25003	Right Side Plate Assembly	1
4	GE-25007	Bumper Plastic	1
5	GE-25008	Lower Front Plastic	1
6	GE-25009	Upper Front Plastic	1
7	GE-25010	Chute Ramp Assembly	1
8	GE-25015	Chute Cover Assembly	1
9	GE-25019	Frame Support Leg	2
10	GE-25020	Back Divider Plastic	1
11	GE-25021	Top Cover Plastic	2
12	GE-25022	Floor Support - 2025 Specific	1
13	FE-00083-ID2	AprilTag	1
14	Configurable Bolt	1" Long 1/4-20 Hex Head Bolt	10
15	Configurable Bolt	2.5" Long 1/4-20 Hex Head Bolt	6
16	nylock_.25_20	Steel Nylon-Insert Locknut, 1/4"-20	8
17	98320A143	Zinc-Plated Steel Ring-Grip Quick-Release Pin	8

UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN INCHES
TOLERANCES:
FRACTIONAL $\pm 1/2$
ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$
TWO PLACE DECIMAL $\pm .50$

MATERIAL/FINISH:

DO NOT SCALE DRAWING

FIELD

DRAWN

PROPRIETARY AND CONFIDENTIAL

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COMMENTS:

REMOVE ALL BURRS AND SHARP EDGES.

NAME

JO

DATE

10/28/2024



FIRST
ROBOTICS
COMPETITION



SOLIDWORKS
Modeling Solutions Partner

TITLE:

Coral Station

SIZE

C

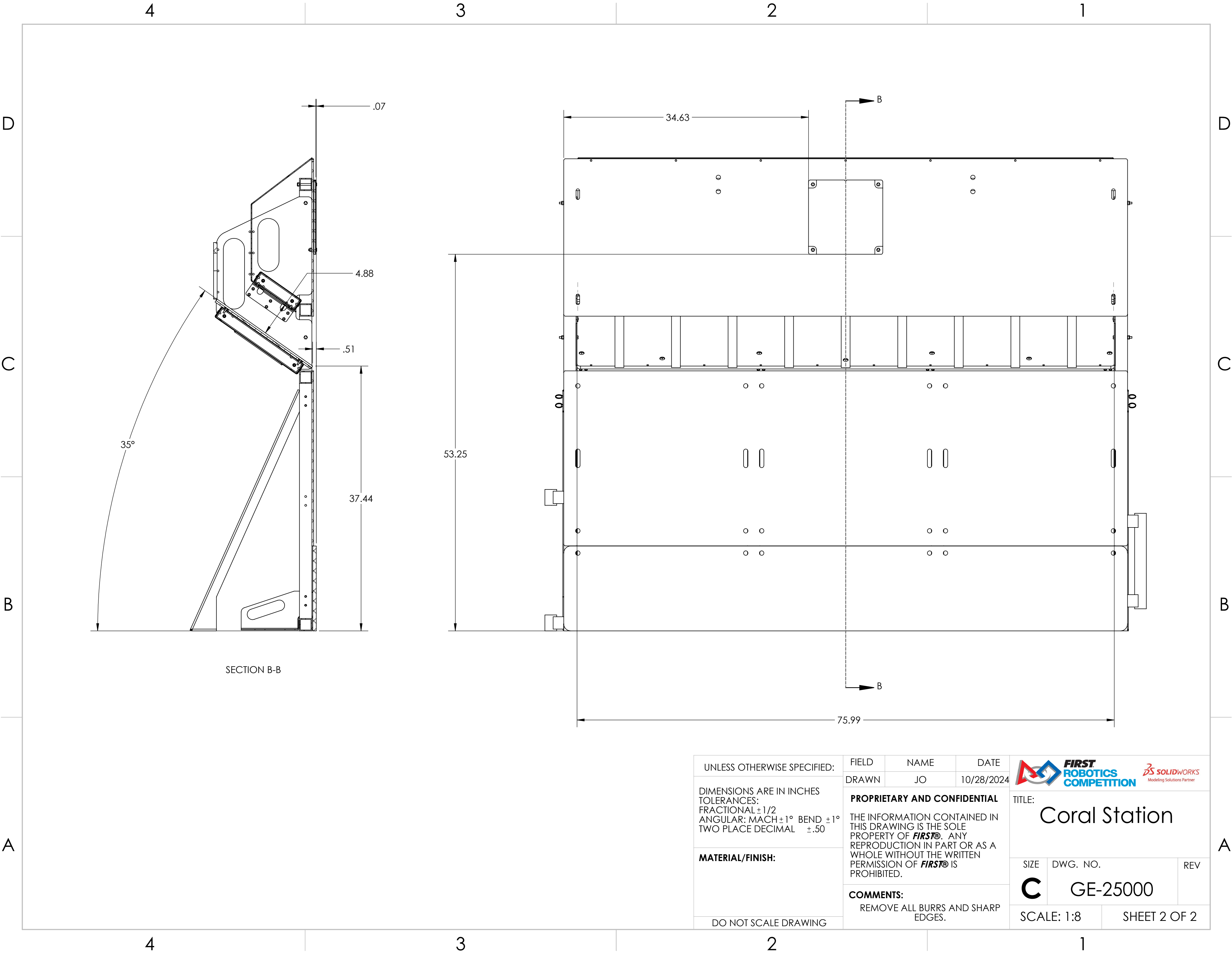
DWG. NO.



GE-25000

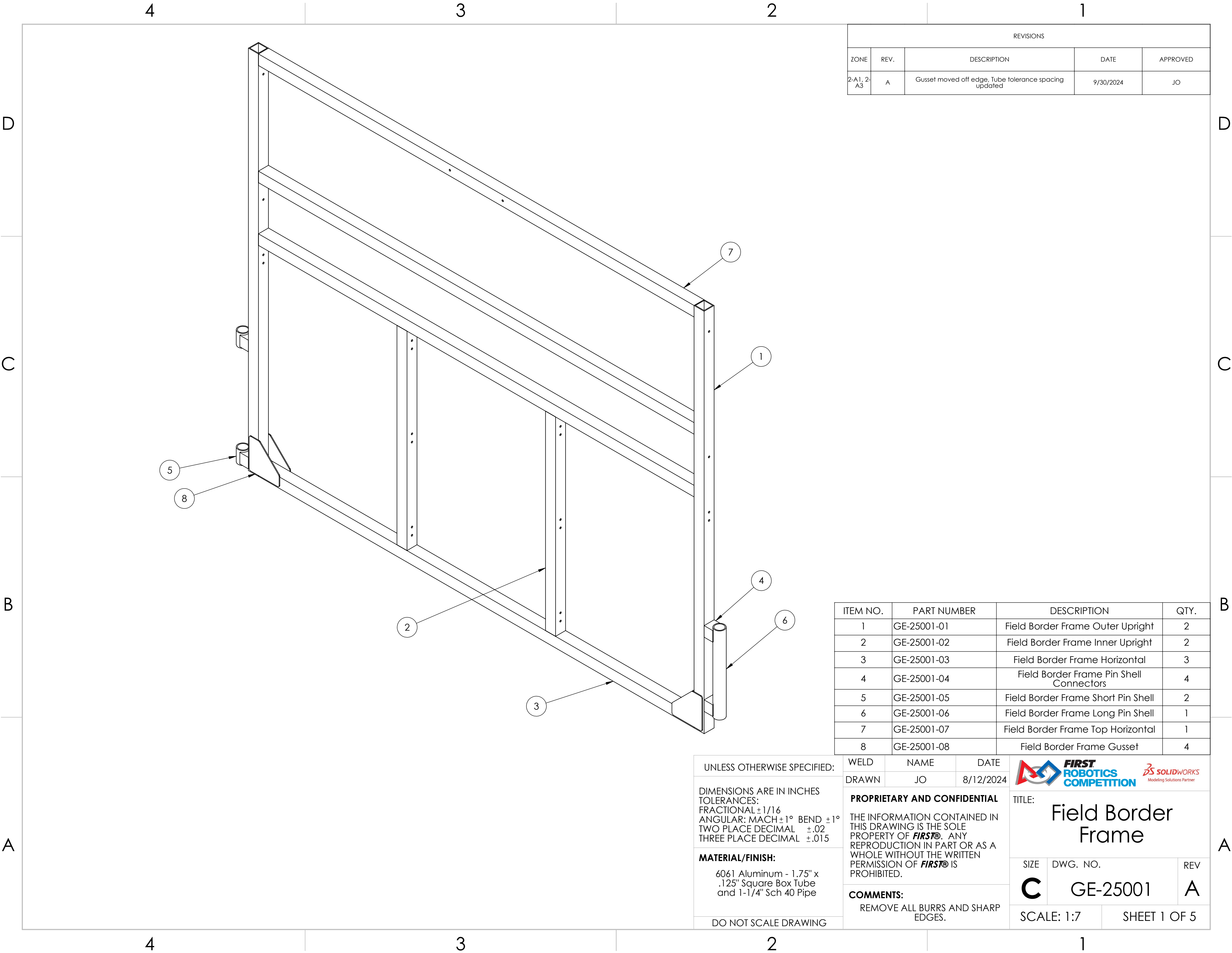
REV

SCALE: 1:10

SHEET 1 OF 2



UNLESS OTHERWISE SPECIFIED:	FIELD	NAME	DATE	<div></div>		
	DRAWN	JO	10/28/2024			
DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ±1/2 ANGULAR: MACH ±1° BEND ±1° TWO PLACE DECIMAL ±.50	PROPRIETARY AND CONFIDENTIAL			TITLE: Coral Station		
	THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF FIRST® . ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FIRST® IS PROHIBITED.					
MATERIAL/FINISH:	COMMENTS:			SIZE	DWG. NO.	REV
	REMOVE ALL BURRS AND SHARP EDGES.			C	GE-25000	
DO NOT SCALE DRAWING				SCALE: 1:8		SHEET 2 OF 2



REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
2-A1, 2-A3	A	Gusset moved off edge, Tube tolerance spacing updated	9/30/2024	JO

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	GE-25001-01	Field Border Frame Outer Upright	2
2	GE-25001-02	Field Border Frame Inner Upright	2
3	GE-25001-03	Field Border Frame Horizontal	3
4	GE-25001-04	Field Border Frame Pin Shell Connectors	4
5	GE-25001-05	Field Border Frame Short Pin Shell	2
6	GE-25001-06	Field Border Frame Long Pin Shell	1
7	GE-25001-07	Field Border Frame Top Horizontal	1
8	GE-25001-08	Field Border Frame Gusset	4

UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN INCHES
TOLERANCES:
FRACTIONAL $\pm 1/16$
ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$
TWO PLACE DECIMAL $\pm .02$
THREE PLACE DECIMAL $\pm .015$



MATERIAL/FINISH:
6061 Aluminum - 1.75" x
.125" Square Box Tube
and 1-1/4" Sch 40 Pipe

DO NOT SCALE DRAWING

WELD	NAME	DATE
DRAWN	JO	8/12/2024

PROPRIETARY AND CONFIDENTIAL
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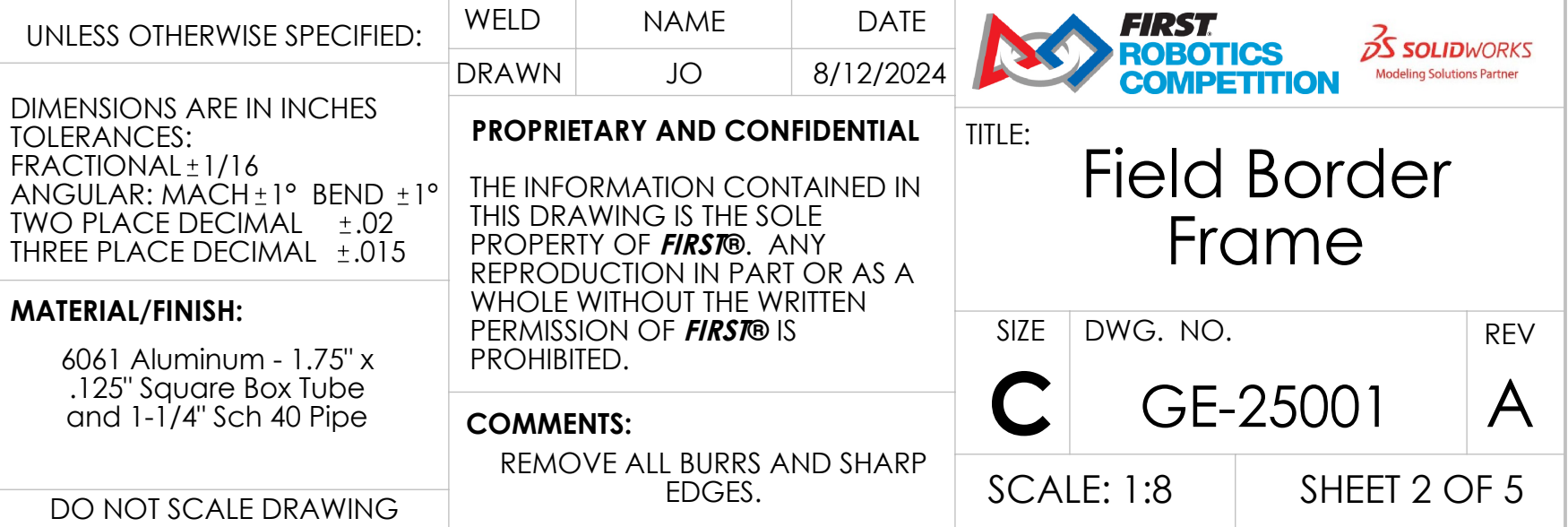
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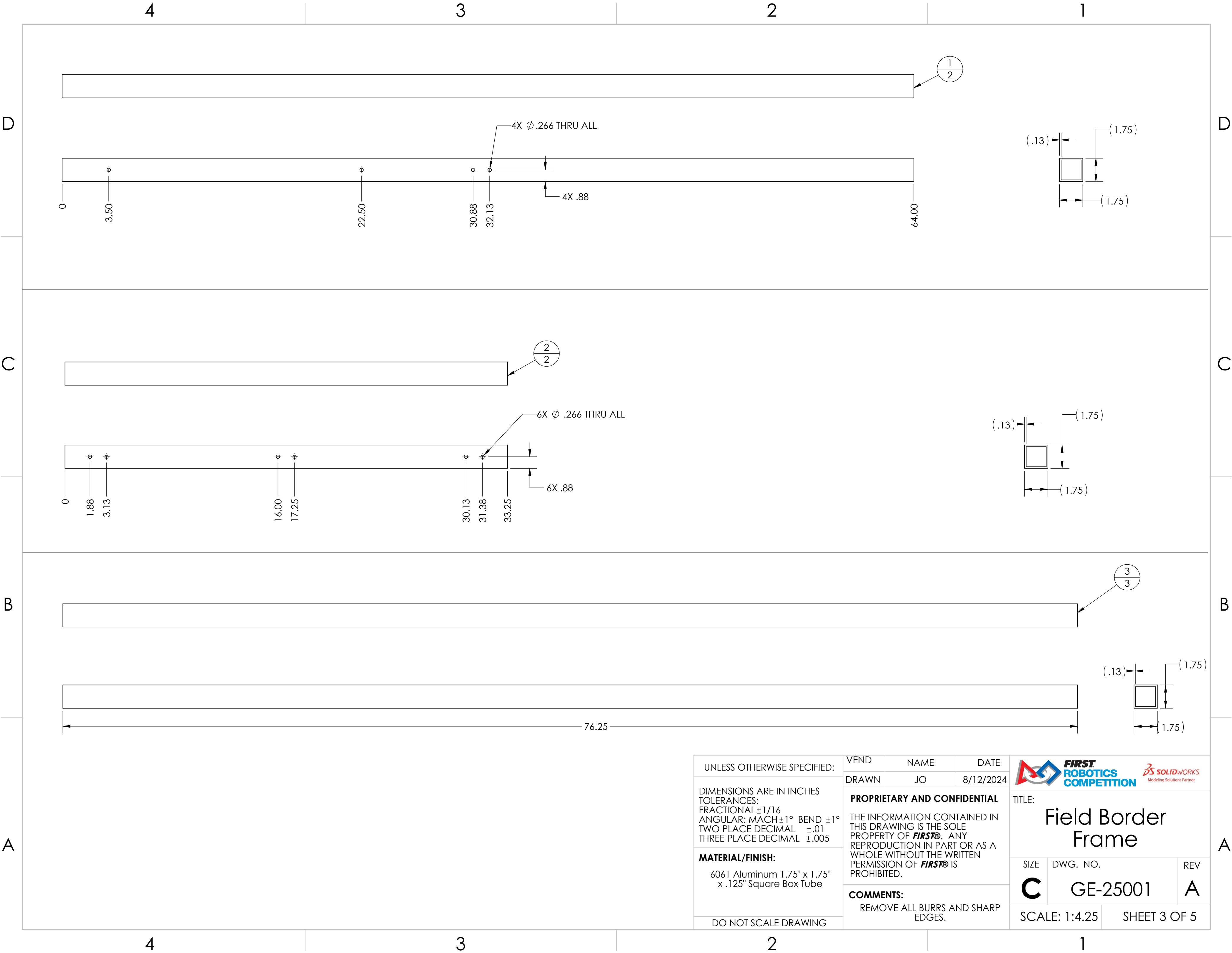


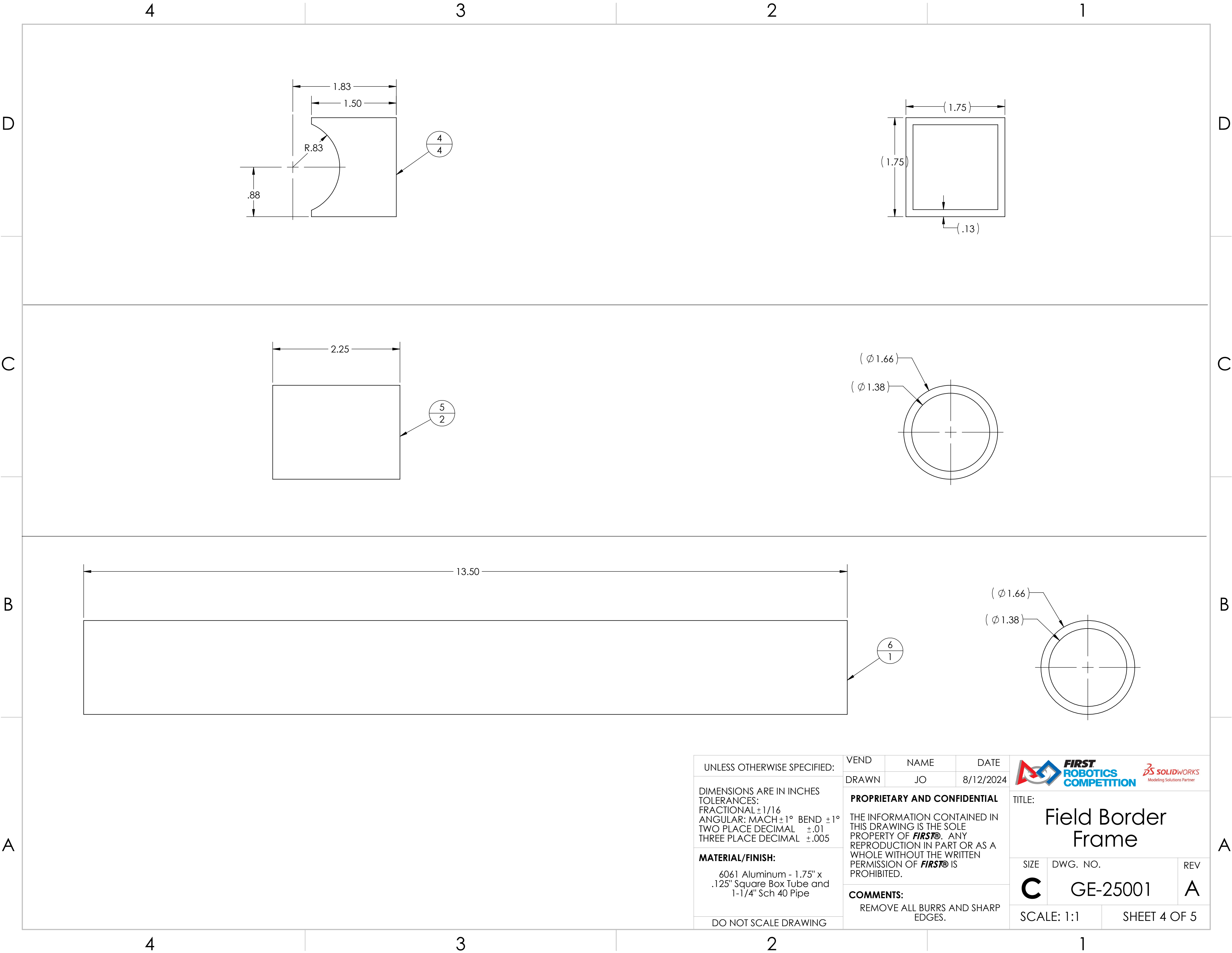
TITLE:
Field Border Frame



SIZE	DWG. NO.	REV
C	GE-25001	A

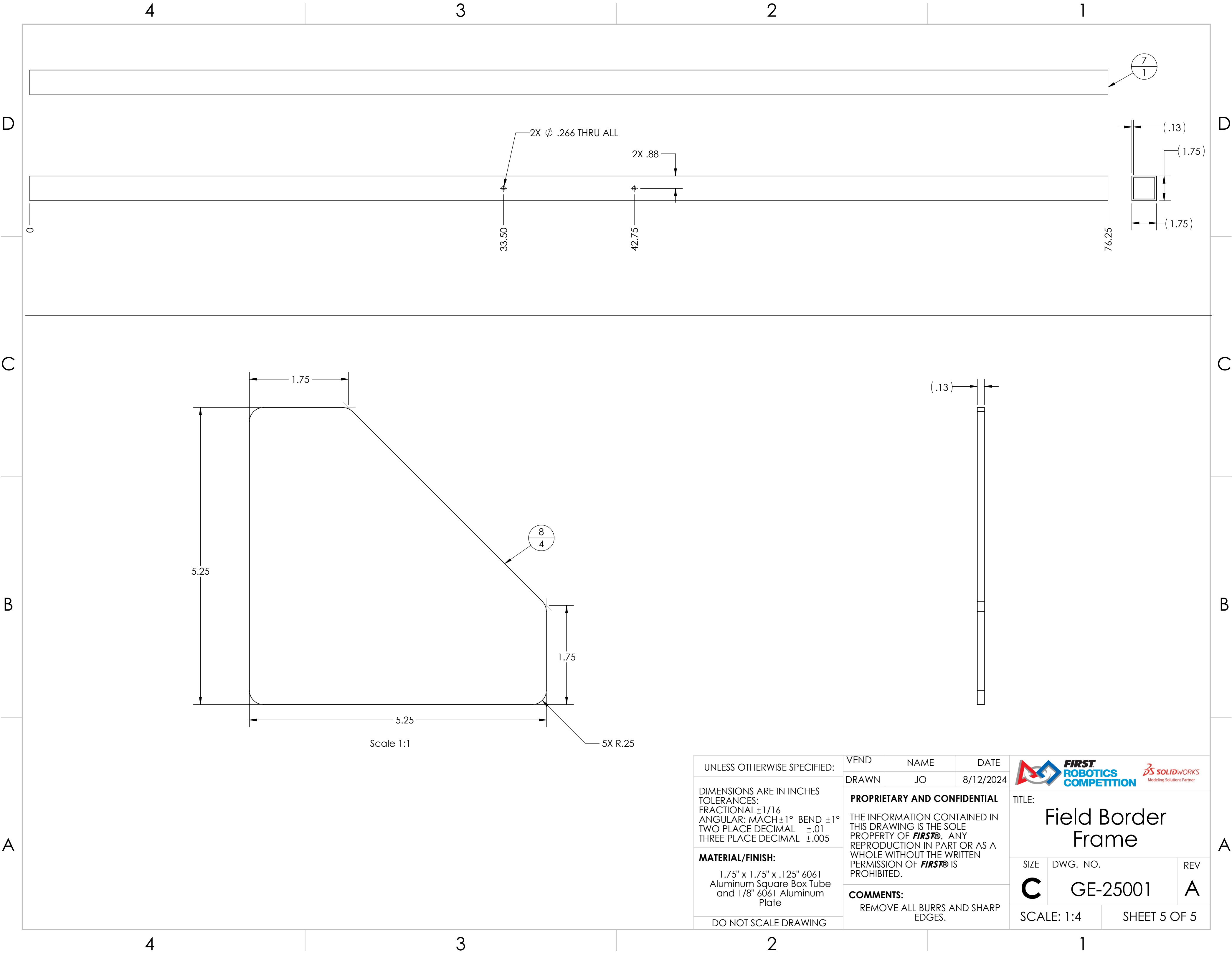
SCALE: 1:7 SHEET 1 OF 5







UNLESS OTHERWISE SPECIFIED:	VEND	NAME	DATE	<div></div>	
	DRAWN	JO	8/12/2024		
DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ±1/16 ANGULAR: MACH ±1° BEND ±1° TWO PLACE DECIMAL ±.01 THREE PLACE DECIMAL ±.005	PROPRIETARY AND CONFIDENTIAL			TITLE: Field Border Frame	
	THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF FIRST® . ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FIRST® IS PROHIBITED.				
	COMMENTS:			SIZE C	
	REMOVE ALL BURRS AND SHARP EDGES.				
MATERIAL/FINISH:	6061 Aluminum - 1.75" x .125" Square Box Tube and 1-1/4" Sch 40 Pipe			DWG. NO. GE-25001	
DO NOT SCALE DRAWING				REV A	
				SCALE: 1:1	
			SHEET 4 OF 5		



UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN INCHES
TOLERANCES:
FRACTIONAL $\pm 1/16$
ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$
TWO PLACE DECIMAL $\pm .01$
THREE PLACE DECIMAL $\pm .005$

MATERIAL/FINISH:
1.75" x 1.75" x .125" 6061
Aluminum Square Box Tube
and 1/8" 6061 Aluminum
Plate

DO NOT SCALE DRAWING

VEND	NAME	DATE
DRAWN	JO	8/12/2024

PROPRIETARY AND CONFIDENTIAL
THE INFORMATION CONTAINED IN
THIS DRAWING IS THE SOLE
PROPERTY OF **FIRST**. ANY
REPRODUCTION IN PART OR AS A
WHOLE WITHOUT THE WRITTEN
PERMISSION OF **FIRST** IS
PROHIBITED.

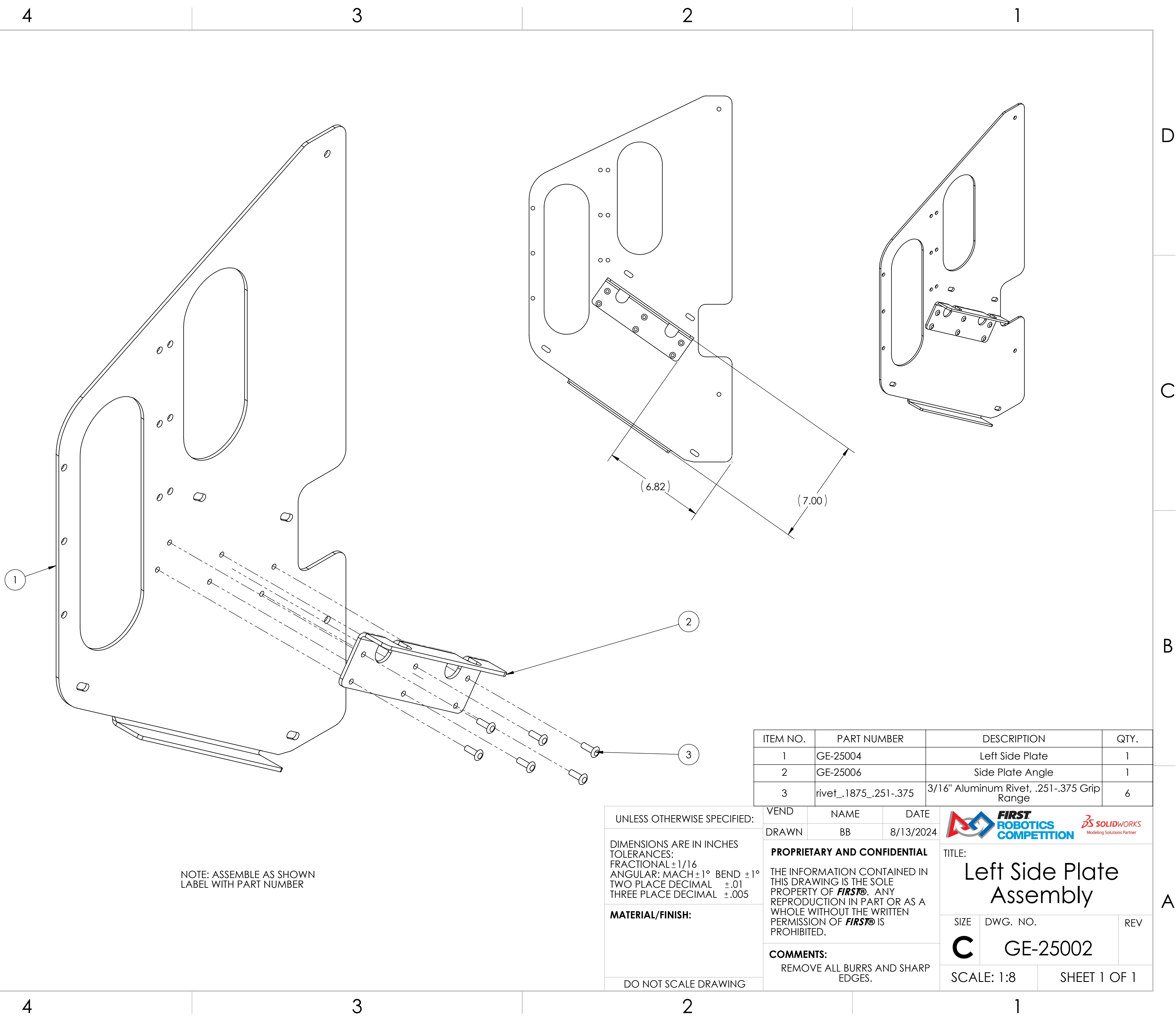
COMMENTS:
REMOVE ALL BURRS AND SHARP
EDGES.



TITLE:
**Field Border
Frame**

SIZE	DWG. NO.	REV
C	GE-25001	A

SCALE: 1:4 SHEET 5 OF 5



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	GE-25004	Left Side Plate	1
2	GE-25006	Side Plate Angle	1
3	rivet_.1875_.251-.375	3/16" Aluminum Rivet, .251-.375 Grip Range	6

UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN INCHES
TOLERANCES:
FRACTIONAL $\pm 1/16$
ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$
TWO PLACE DECIMAL $\pm .01$
THREE PLACE DECIMAL $\pm .005$

MATERIAL/FINISH:

DO NOT SCALE DRAWING

VEND	NAME	DATE
DRAWN	BB	8/13/2024

PROPRIETARY AND CONFIDENTIAL

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COMMENTS:
REMOVE ALL BURRS AND SHARP EDGES.

	
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TITLE: Left Side Plate Assembly		
SIZE C	DWG. NO. GE-25002	REV
SCALE: 1:8		SHEET 1 OF 1

4

3

2

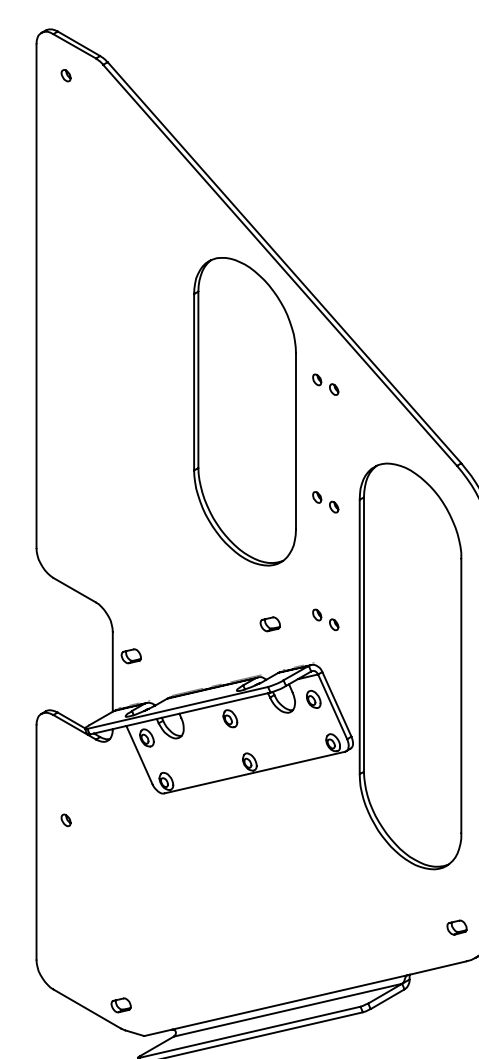
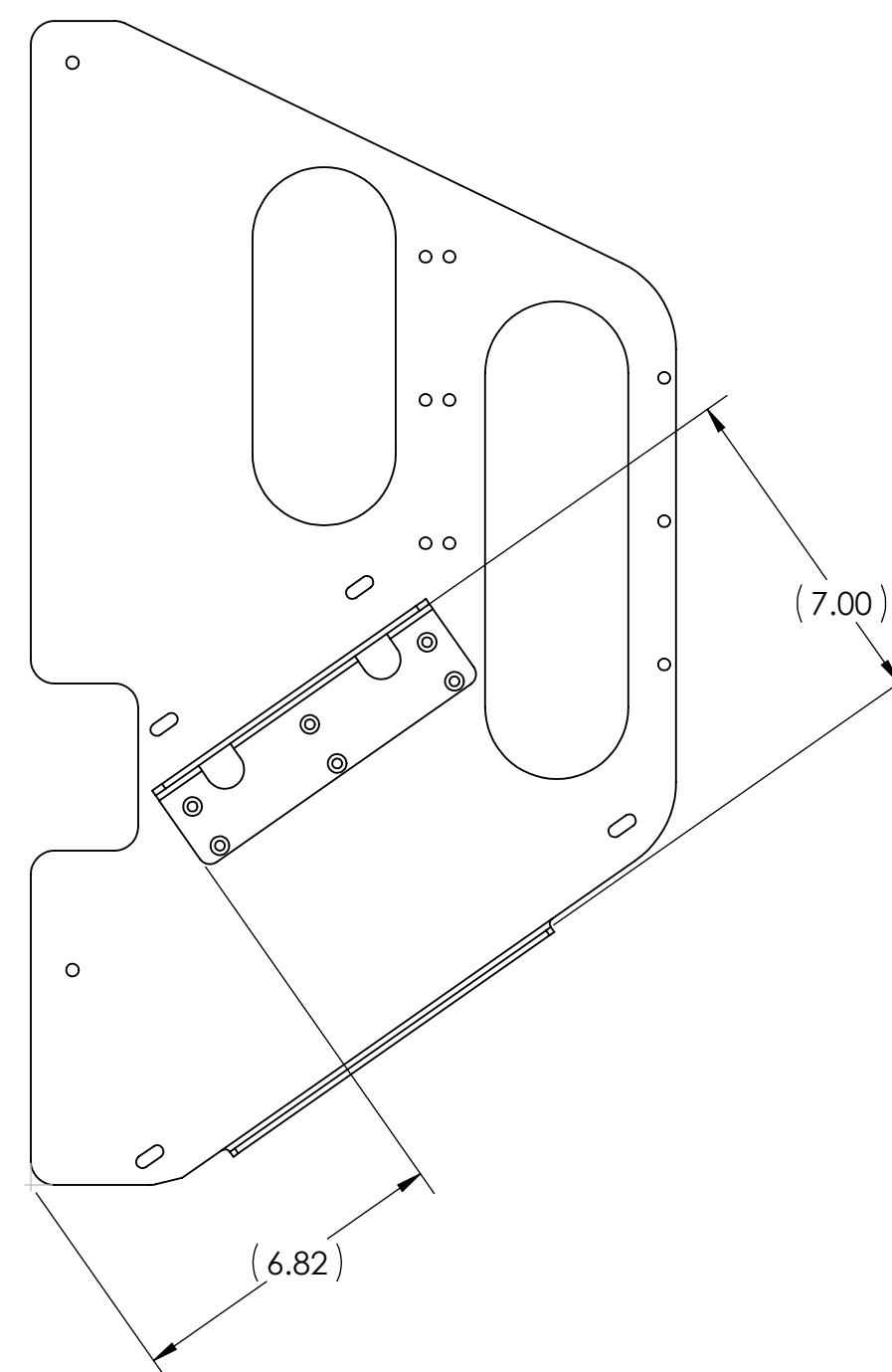
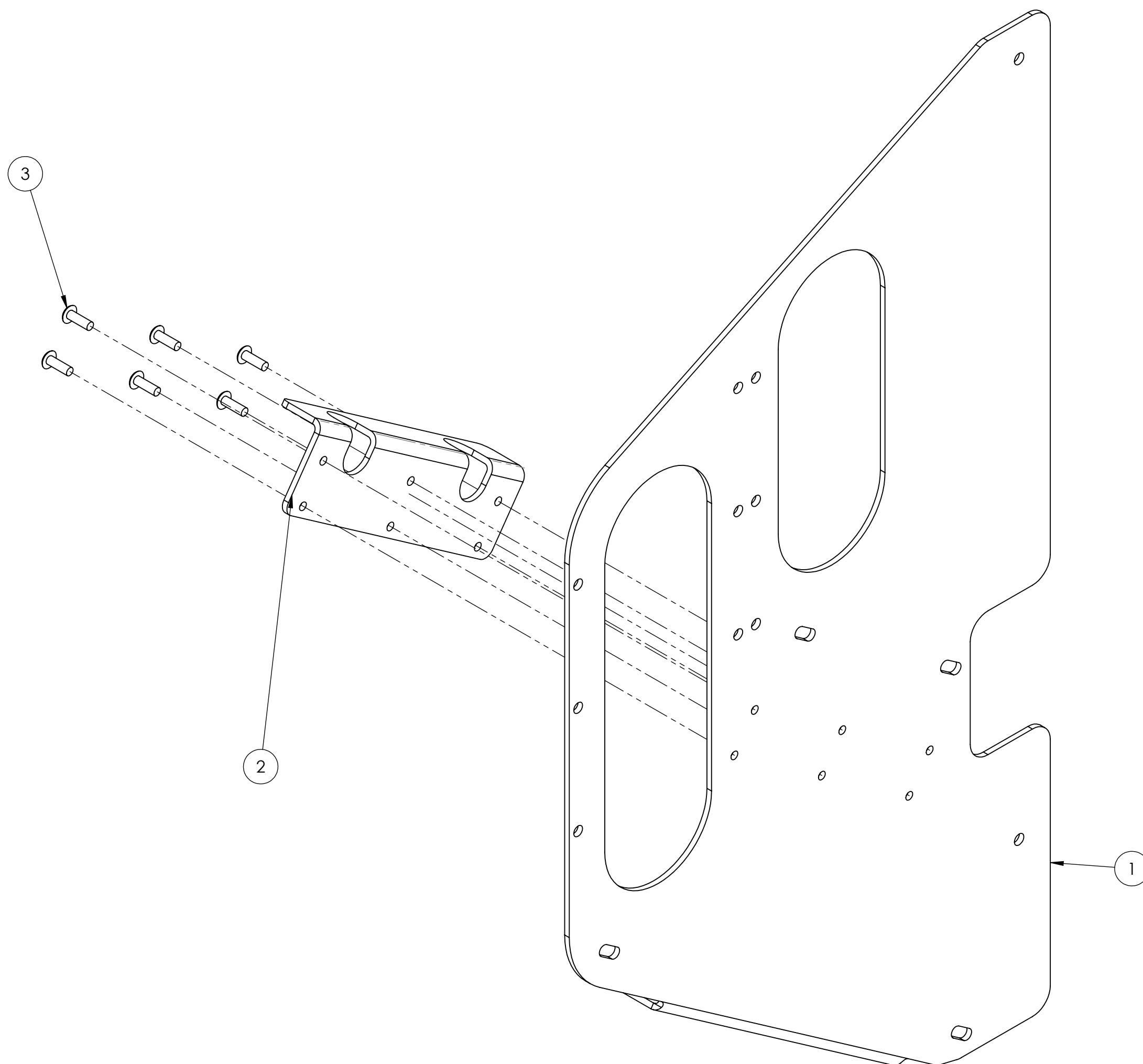
1

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NOTE: ASSEMBLE AS SHOWN
LABEL WITH PART NUMBER

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	GE-25005	Right Side Plate	1
2	GE-25006	Side Plate Angle	1
3	rivet_.1875_.251-.375	3/16" Aluminum Rivet, .251-.375 Grip Range	6

UNLESS OTHERWISE SPECIFIED:		VEN	NAME	DATE	 	
DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL $\pm 1/16$ ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$ TWO PLACE DECIMAL $\pm .01$ THREE PLACE DECIMAL $\pm .005$		DRAWN	BB	8/13/2024	TITLE: Right Side Plate Assembly	
MATERIAL/FINISH:		PROPRIETARY AND CONFIDENTIAL THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF FIRST® . ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FIRST® IS PROHIBITED.			SIZE C	
DO NOT SCALE DRAWING		COMMENTS: REMOVE ALL BURRS AND SHARP EDGES.			DWG. NO. GE-25003	
					REV	
					SCALE: 1:8	
					SHEET 1 OF 1	

D

C

B

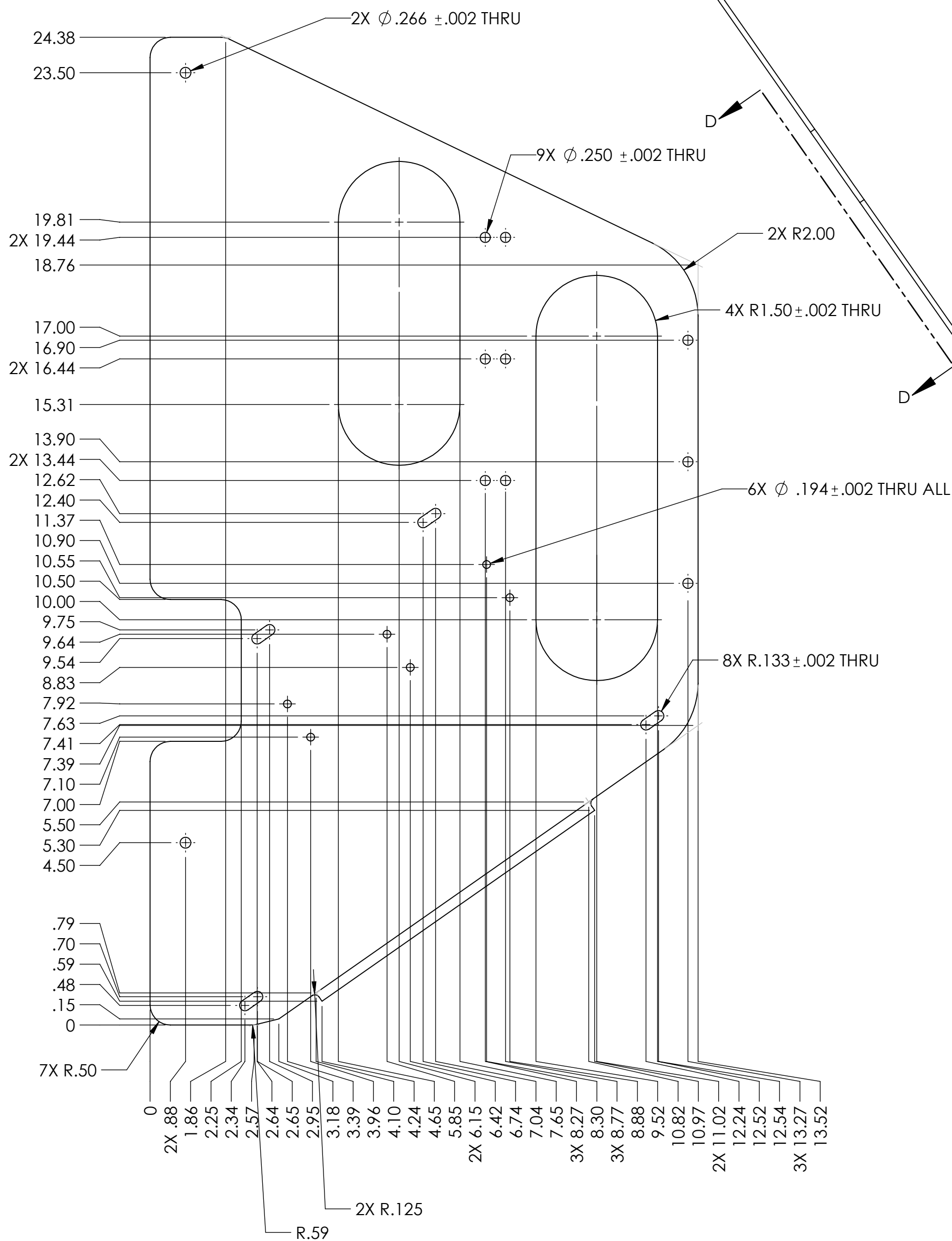
A

D

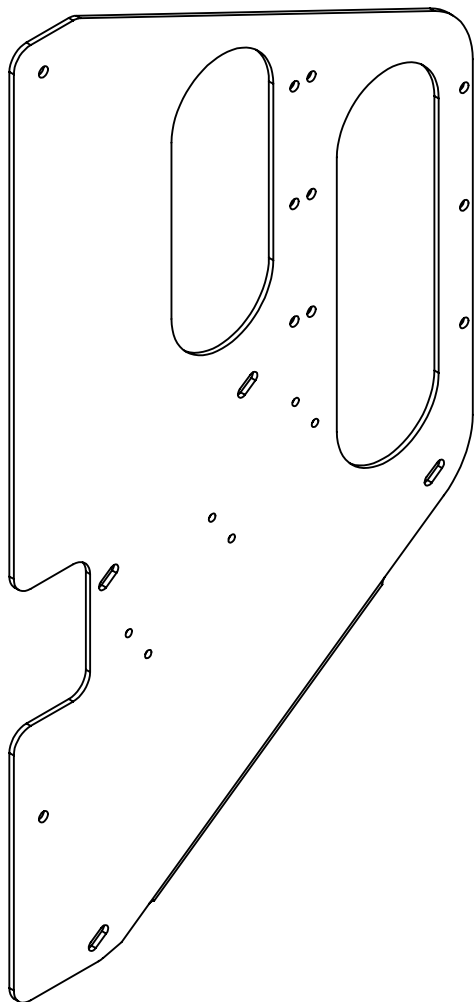
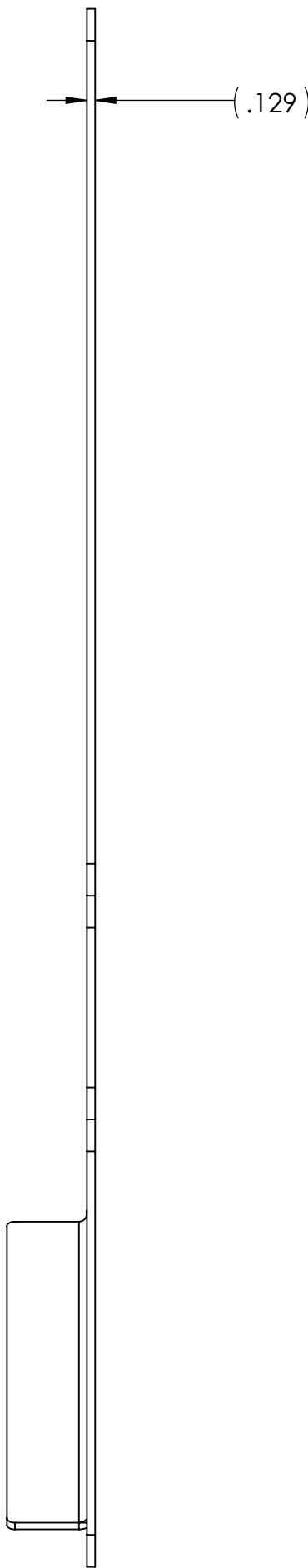
C

B

A



VIEW D-D
SCALE 1 : 2.5



NOTE: FOLLOW DXF FILE FOR CUTS

UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN INCHES
TOLERANCES:
FRACTIONAL $\pm 1/16$
ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$
TWO PLACE DECIMAL $\pm .02$
THREE PLACE DECIMAL $\pm .010$

MATERIAL/FINISH:
8 Ga 5052 Aluminum

DO NOT SCALE DRAWING

BEND	NAME	DATE
DRAWN	BB	8/12/2024

PROPRIETARY AND CONFIDENTIAL

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COMMENTS:
REMOVE ALL BURRS AND SHARP EDGES.

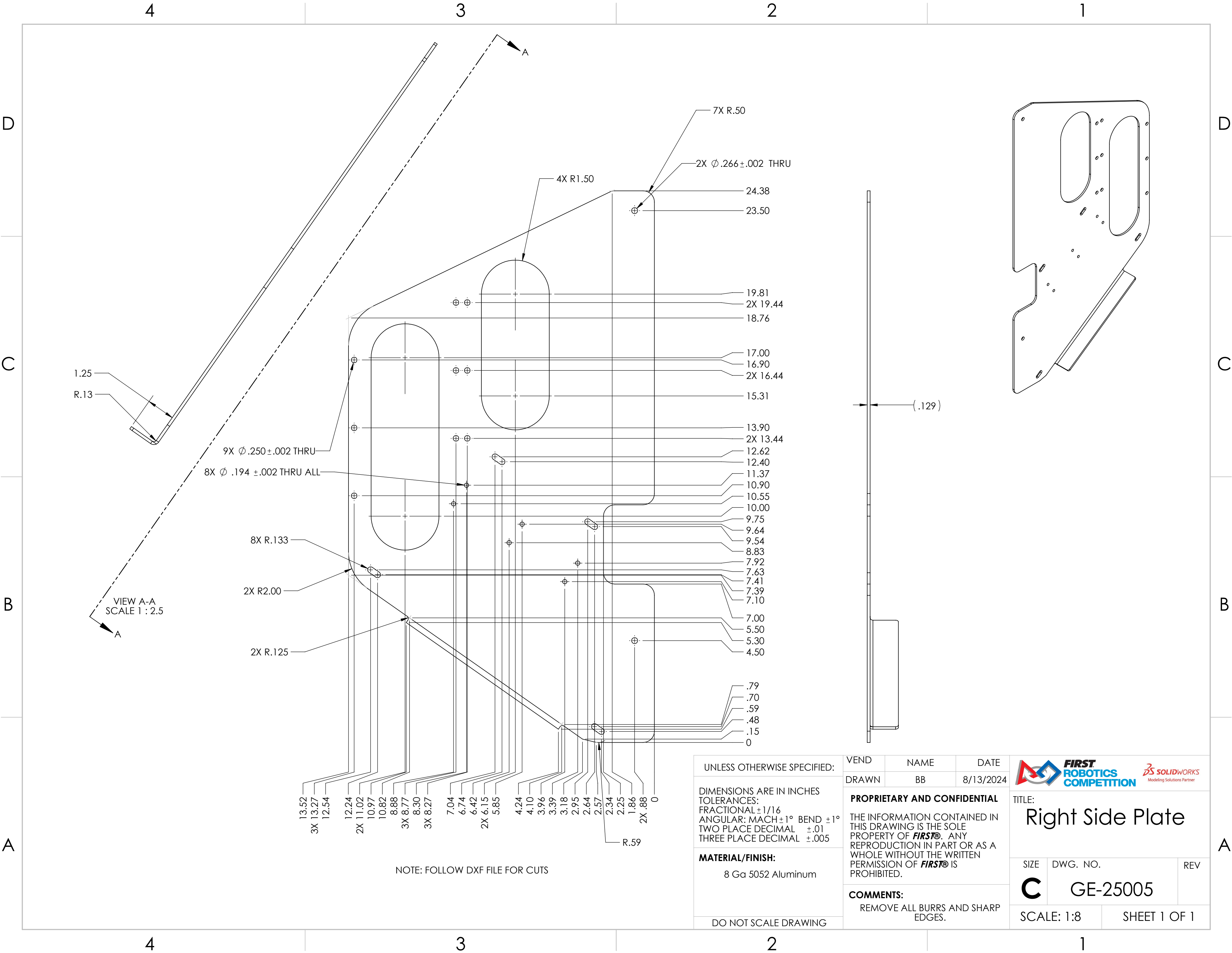


TITLE: Left Side Plate

SIZE	DWG. NO.	REV
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C GE-25004

SCALE: 1:8	SHEET 1 OF 1
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UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN INCHES
TOLERANCES:
FRACTIONAL $\pm 1/16$
ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$
TWO PLACE DECIMAL $\pm .01$
THREE PLACE DECIMAL $\pm .005$

MATERIAL/FINISH:

8 Ga 5052 Aluminum

DO NOT SCALE DRAWING

VEND

DRAWN

NAME

BB

DATE

8/13/2024

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COMMENTS:

REMOVE ALL BURRS AND SHARP EDGES.



FIRST
ROBOTICS
COMPETITION



Modeling Solutions Partner

TITLE:

Right Side Plate

SIZE

C

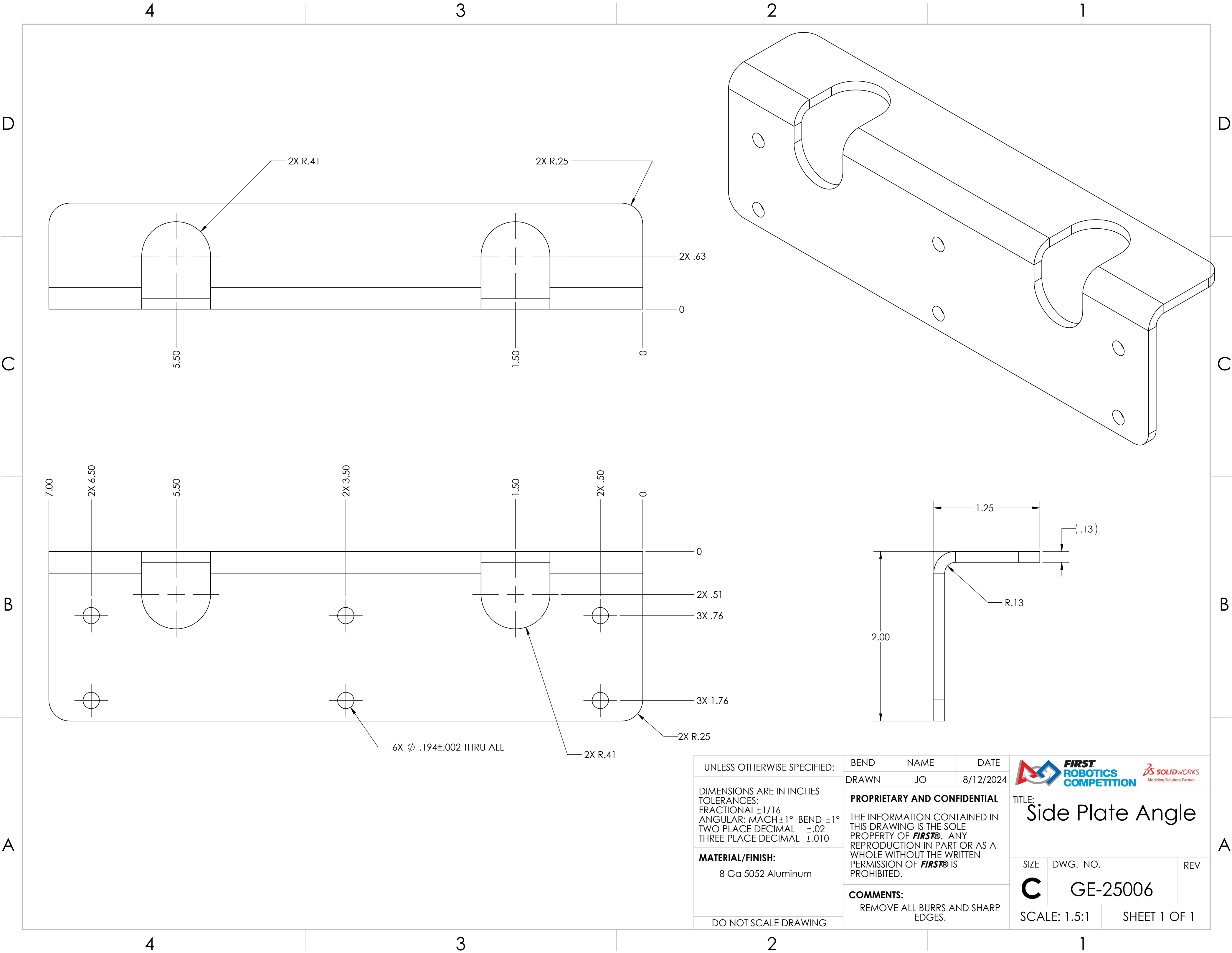
DWG. NO.

GE-25005

REV

SCALE: 1:8

SHEET 1 OF 1



UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN INCHES
TOLERANCES:
FRACTIONAL $\pm 1/16$
ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$
TWO PLACE DECIMAL $\pm .02$
THREE PLACE DECIMAL $\pm .010$

MATERIAL/FINISH:
8 Ga 5052 Aluminum

DO NOT SCALE DRAWING

BEND	NAME	DATE
DRAWN	JO	8/12/2024

PROPRIETARY AND CONFIDENTIAL

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF **FIRST**. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF **FIRST** IS PROHIBITED.

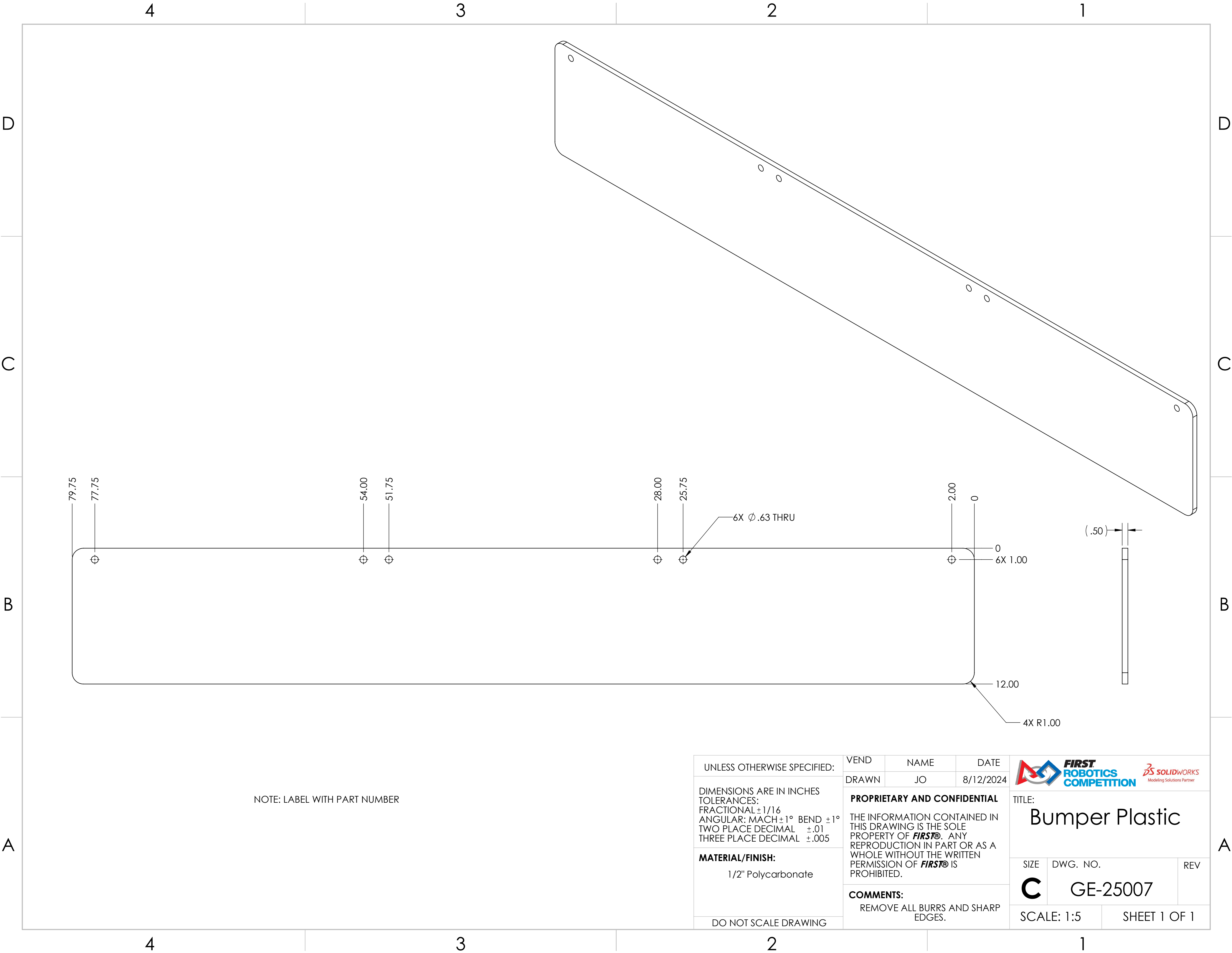
COMMENTS:
REMOVE ALL BURRS AND SHARP EDGES.





TITLE:
Side Plate Angle

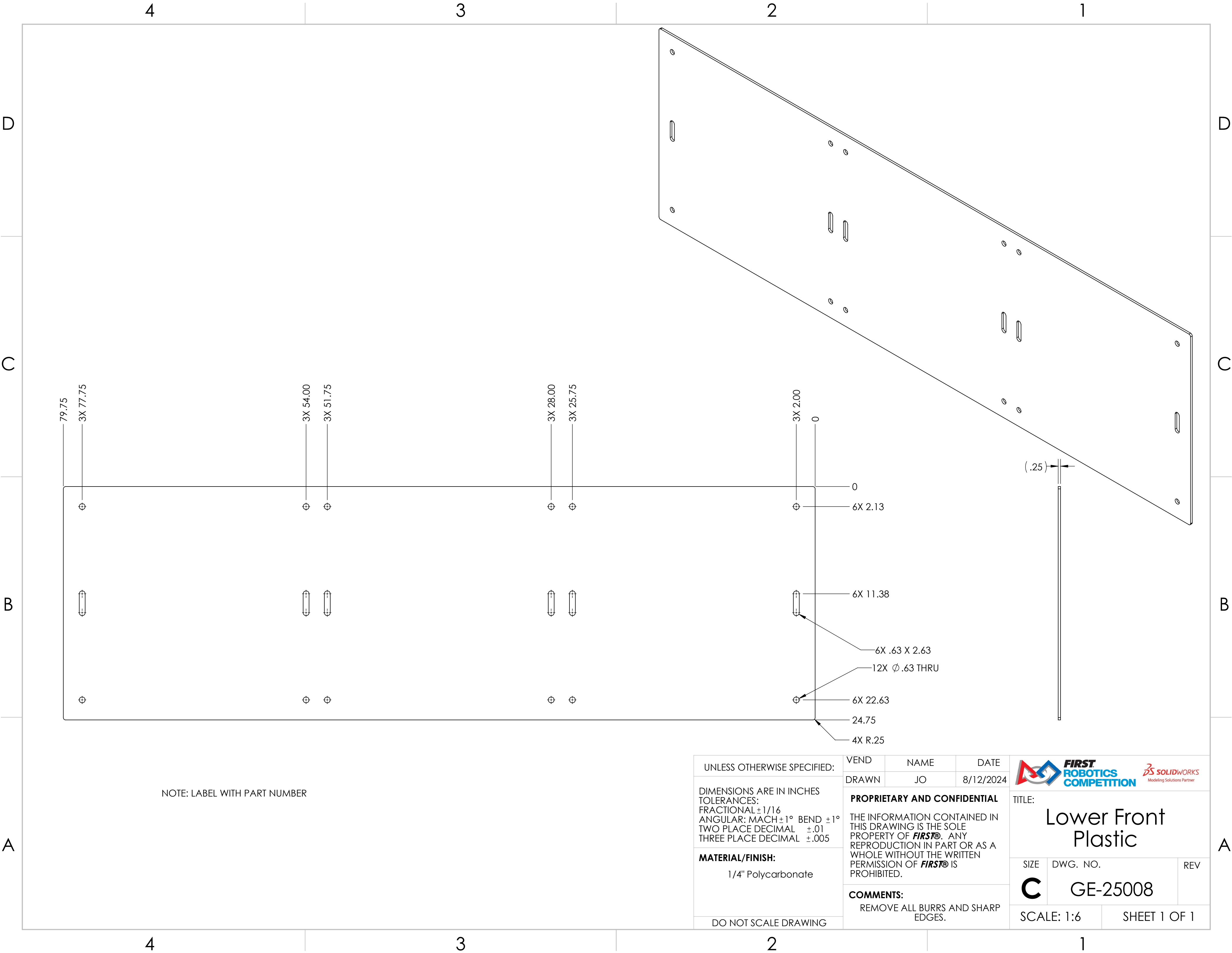
SIZE	DWG. NO.	REV
C	GE-25006	

SCALE: 1.5:1 SHEET 1 OF 1



NOTE: LABEL WITH PART NUMBER

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL $\pm 1/16$ ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$ TWO PLACE DECIMAL $\pm .01$ THREE PLACE DECIMAL $\pm .005$ MATERIAL/FINISH: 1/2" Polycarbonate DO NOT SCALE DRAWING	VEND	NAME	DATE	<div></div> <div>TITLE: Bumper Plastic</div>		
	DRAWN	JO	8/12/2024			
	PROPRIETARY AND CONFIDENTIAL THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF FIRST® . ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FIRST® IS PROHIBITED. COMMENTS: REMOVE ALL BURRS AND SHARP EDGES.			SIZE C	DWG. NO. GE-25007	REV
SCALE: 1:5		SHEET 1 OF 1				



UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN INCHES
TOLERANCES:
FRACTIONAL $\pm 1/16$
ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$
TWO PLACE DECIMAL $\pm .01$
THREE PLACE DECIMAL $\pm .005$



MATERIAL/FINISH:
1/4" Polycarbonate

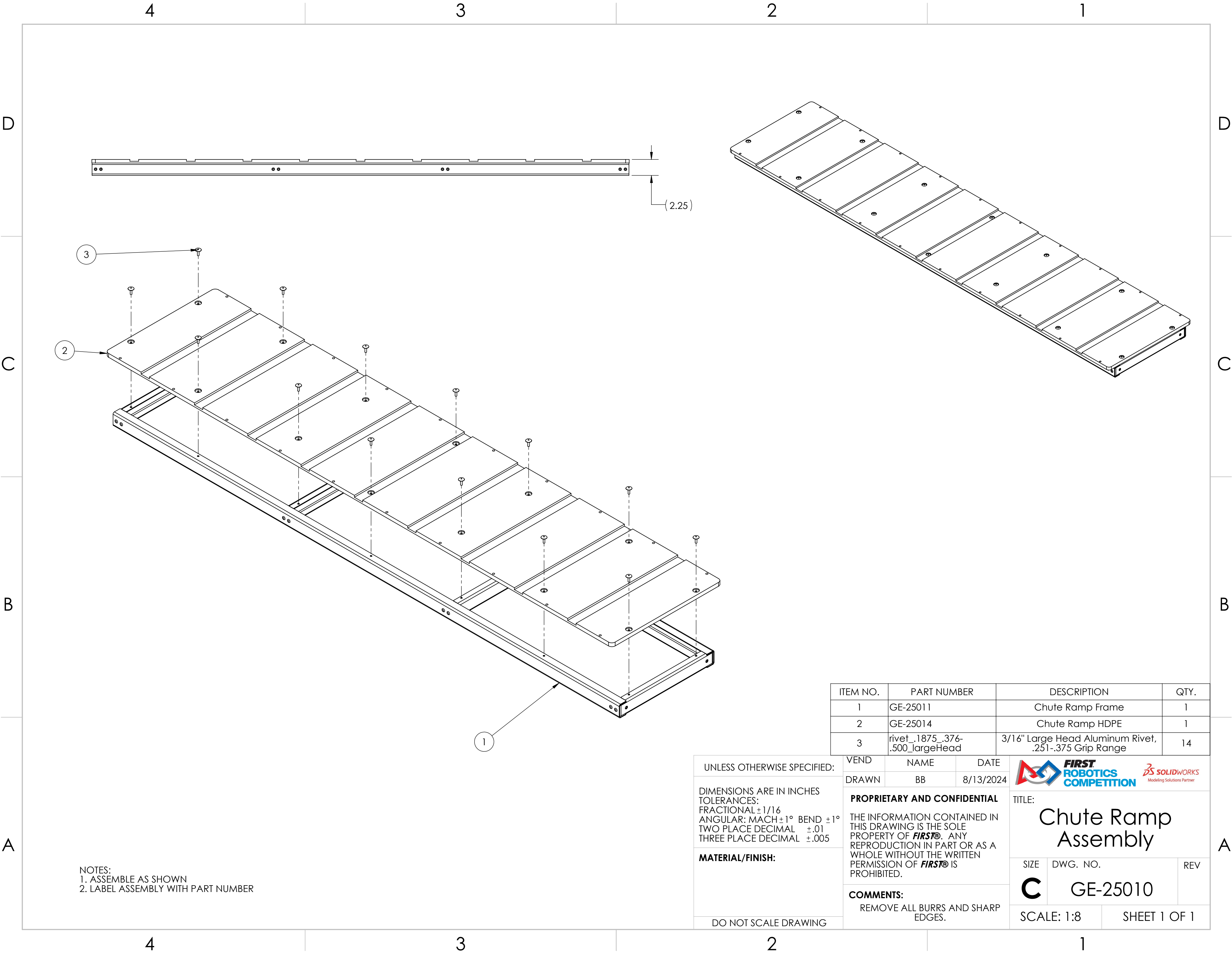
DO NOT SCALE DRAWING

VEND	NAME	DATE
DRAWN	JO	8/12/2024

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COMMENTS:
REMOVE ALL BURRS AND SHARP EDGES.

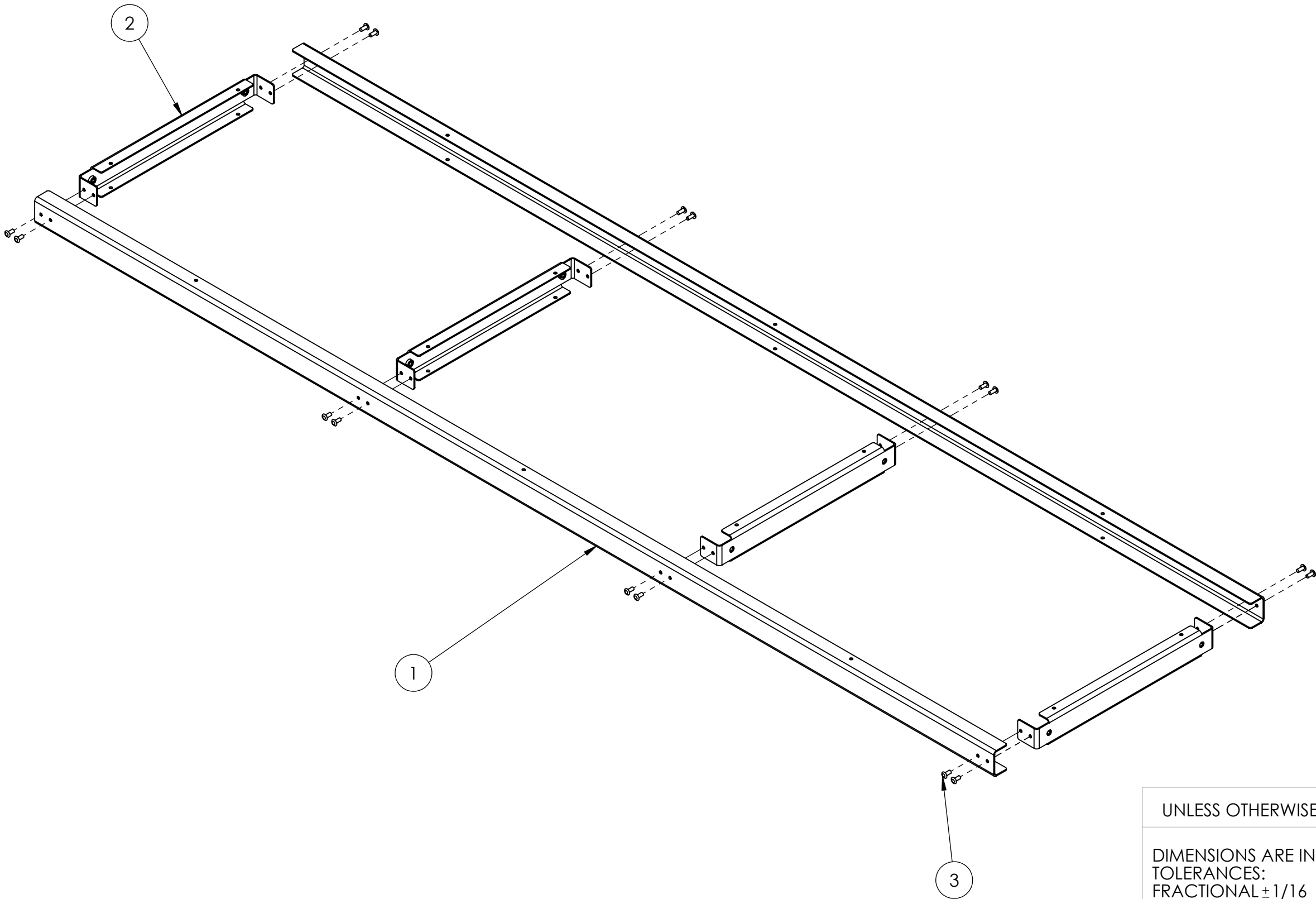
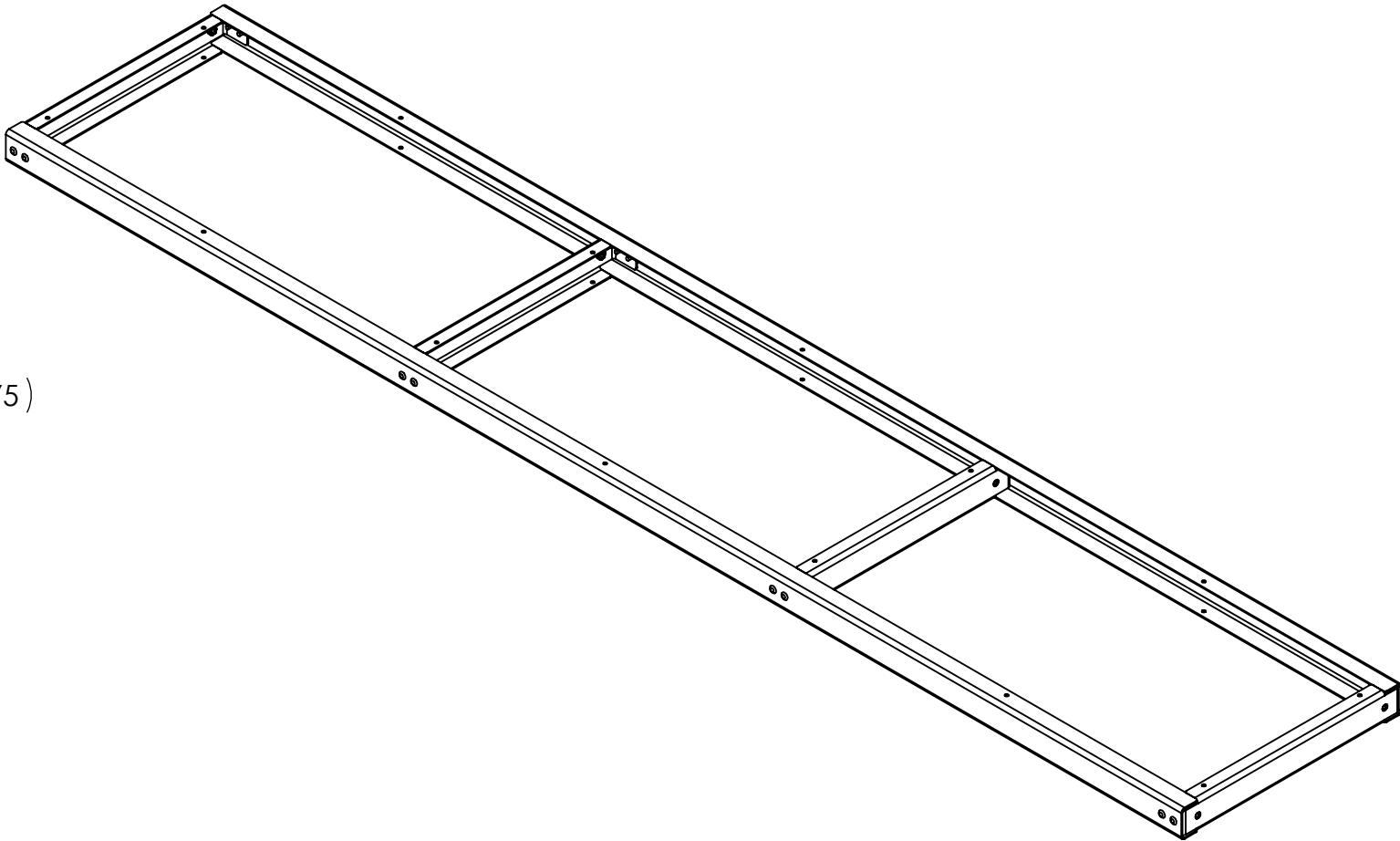
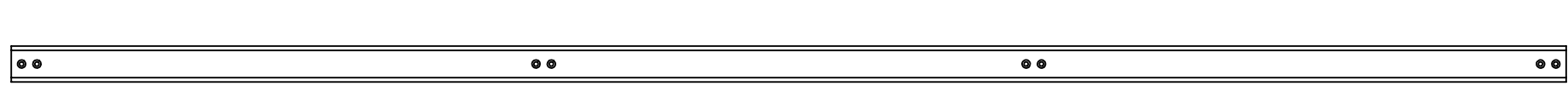
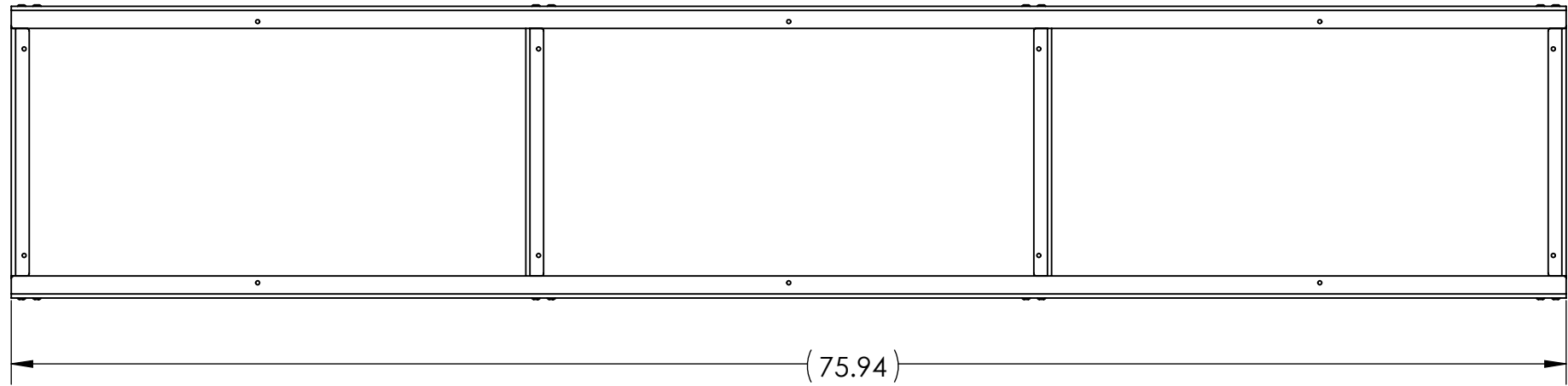
 		
TITLE: Lower Front Plastic		
SIZE C	DWG. NO. GE-25008	REV
SCALE: 1:6		SHEET 1 OF 1



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	GE-25011	Chute Ramp Frame	1
2	GE-25014	Chute Ramp HDPE	1
3	rivet_.1875_.376-.500_largeHead	3/16" Large Head Aluminum Rivet, .251-.375 Grip Range	14

UNLESS OTHERWISE SPECIFIED:			VEND	NAME	DATE
DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL $\pm 1/16$ ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$ TWO PLACE DECIMAL $\pm .01$ THREE PLACE DECIMAL $\pm .005$			DRAWN	BB	8/13/2024
			PROPRIETARY AND CONFIDENTIAL THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF FIRST® . ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FIRST® IS PROHIBITED.		
MATERIAL/FINISH:			COMMENTS: REMOVE ALL BURRS AND SHARP EDGES.		
DO NOT SCALE DRAWING			TITLE: Chute Ramp Assembly		
			SIZE C	DWG. NO. GE-25010	REV
			SCALE: 1:8		SHEET 1 OF 1

NOTES:
1. ASSEMBLE AS SHOWN
2. LABEL ASSEMBLY WITH PART NUMBER





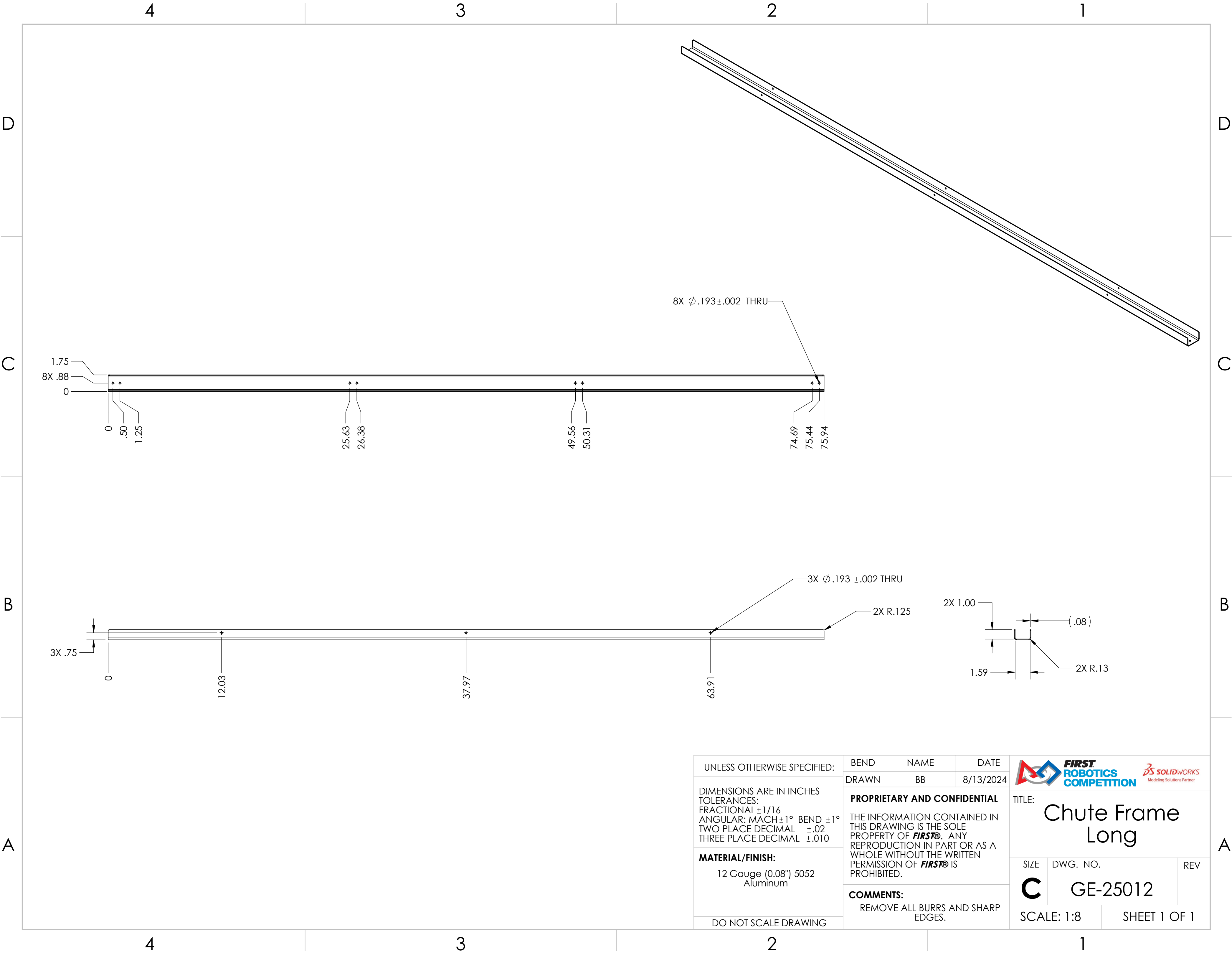
NOTE: ASSEMBLE AS SHOWN



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	GE-25012	Chute Frame Long	2
2	GE-25013	Chute Ramp Frame Short with PEMs	4
3	rivet_.1875_.126-.25	3/16" Rivet, .126-.25 Grip Range	16

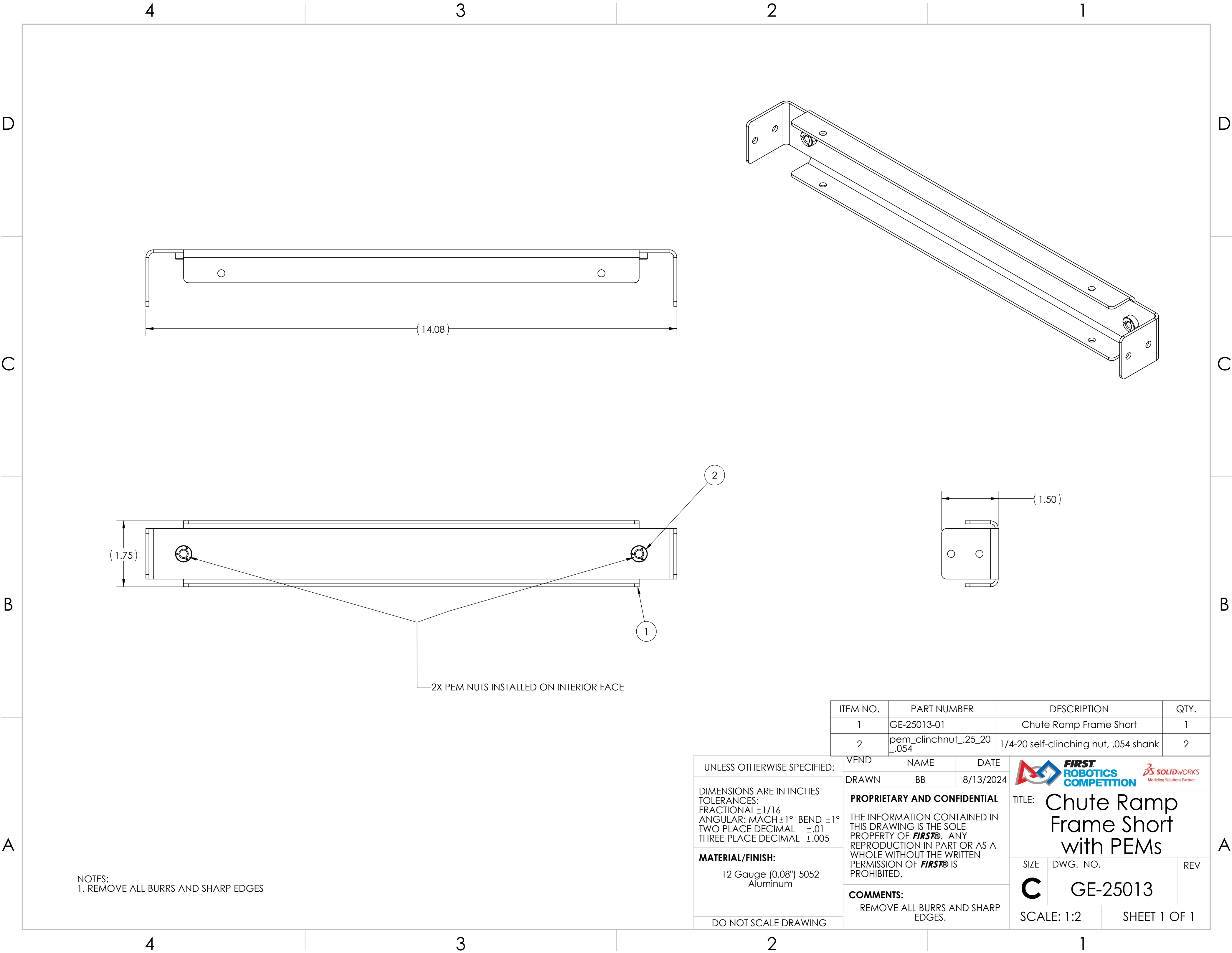
UNLESS OTHERWISE SPECIFIED:
DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL $\pm 1/16$ ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$ TWO PLACE DECIMAL $\pm .01$ THREE PLACE DECIMAL $\pm .005$
MATERIAL/FINISH:
DO NOT SCALE DRAWING

VEND	NAME	DATE
DRAWN	BB	8/13/2024
PROPRIETARY AND CONFIDENTIAL		
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF FIRST® . ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FIRST® IS PROHIBITED.		
COMMENTS:		
REMOVE ALL BURRS AND SHARP EDGES.		

 		
TITLE:		
Chute Ramp Frame		
SIZE	DWG. NO.	REV
C	GE-25011	
SCALE: 1:12		SHEET 1 OF 1





UNLESS OTHERWISE SPECIFIED:	BEND	NAME	DATE	<div></div>		
	DRAWN	BB	8/13/2024			
DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ±1/16 ANGULAR: MACH ±1° BEND ±1° TWO PLACE DECIMAL ±.02 THREE PLACE DECIMAL ±.010	PROPRIETARY AND CONFIDENTIAL			TITLE: Chute Frame Long		
	THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF FIRST® . ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FIRST® IS PROHIBITED.					
	COMMENTS: REMOVE ALL BURRS AND SHARP EDGES.			SIZE	DWG. NO.	REV
MATERIAL/FINISH: 12 Gauge (0.08") 5052 Aluminum				C	GE-25012	
				SCALE: 1:8		
DO NOT SCALE DRAWING						



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	GE-25013-01	Chute Ramp Frame Short	1
2	pem_clinchnut_.25_20_.054	1/4-20 self-clinching nut, .054 shank	2

UNLESS OTHERWISE SPECIFIED:
DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL $\pm 1/16$ ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$ TWO PLACE DECIMAL $\pm .01$ THREE PLACE DECIMAL $\pm .005$
MATERIAL/FINISH: 12 Gauge (0.08") 5052 Aluminum
DO NOT SCALE DRAWING

VEND	NAME	DATE
DRAWN	BB	8/13/2024
PROPRIETARY AND CONFIDENTIAL THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF FIRST® . ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FIRST® IS PROHIBITED.		
COMMENTS: REMOVE ALL BURRS AND SHARP EDGES.		

 		
TITLE: Chute Ramp Frame Short with PEMs		
SIZE	DWG. NO.	REV
C	GE-25013	
SCALE: 1:2		SHEET 1 OF 1

NOTES:
1. REMOVE ALL BURRS AND SHARP EDGES

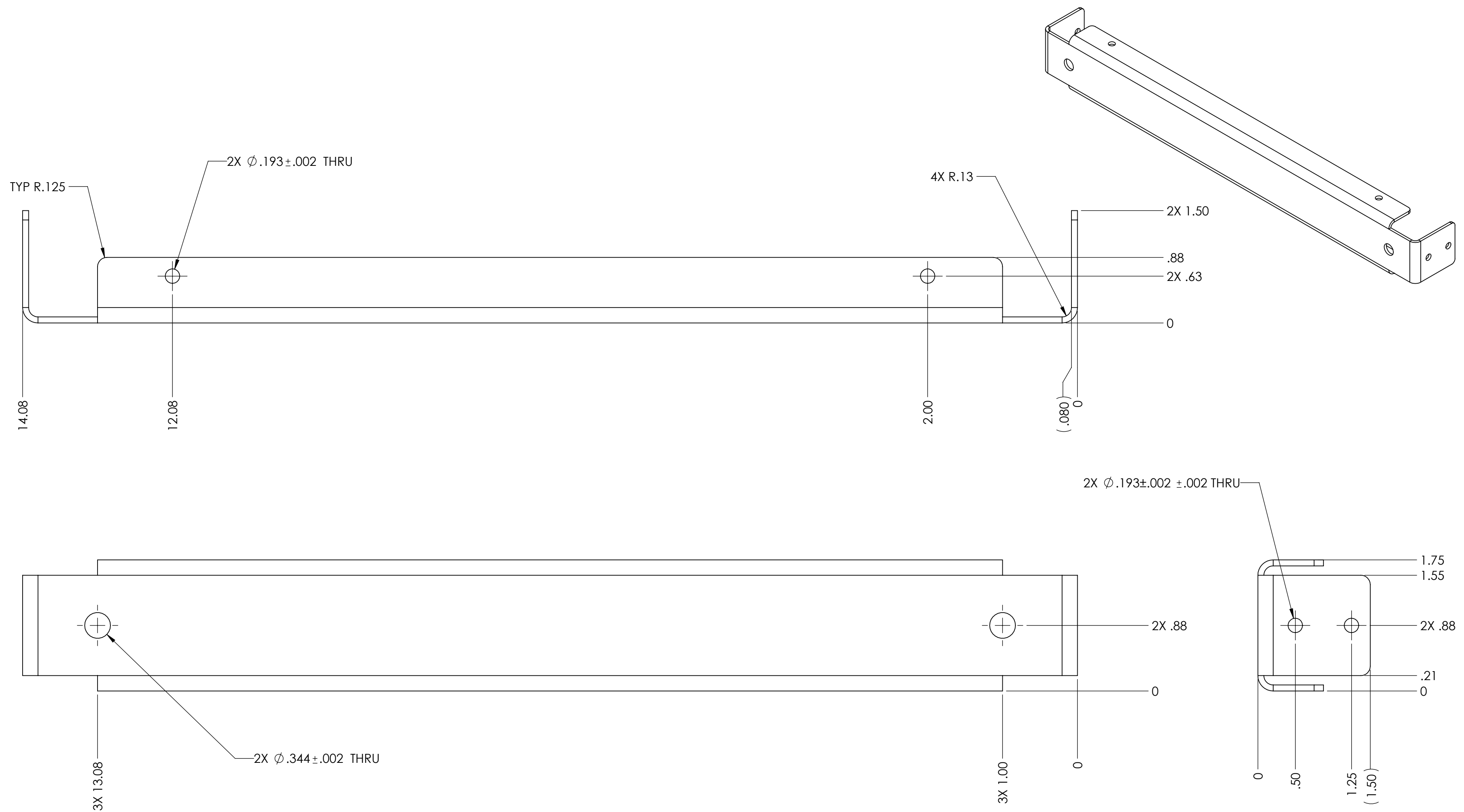
1



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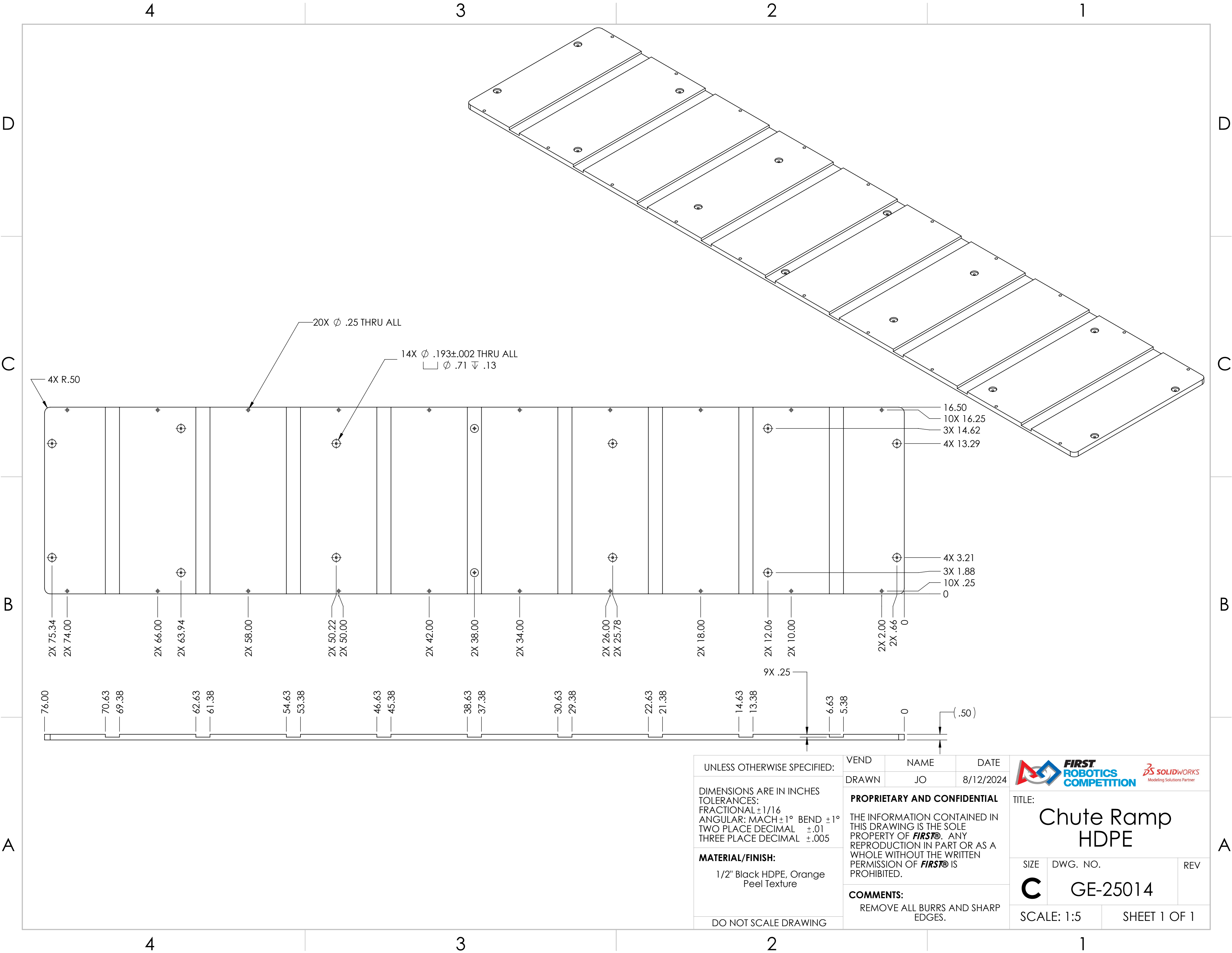
C

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UNLESS OTHERWISE SPECIFIED:		BEND	NAME	DATE	 FIRST ROBOTICS COMPETITION		 SOLIDWORKS Modeling Solutions Partner	
<p>DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL $\pm 1/16$ ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$ TWO PLACE DECIMAL $\pm .02$ THREE PLACE DECIMAL $\pm .010$</p> <p>MATERIAL/FINISH:</p> <p>12 Gauge (0.08") 5052 Aluminum</p>		DRAWN	BB	8/13/2024	<p>PROPRIETARY AND CONFIDENTIAL</p> <p>THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF FIRST®. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FIRST® IS PROHIBITED.</p>			
		<p>COMMENTS:</p> <p>REMOVE ALL BURRS AND SHARP EDGES.</p>						
		DO NOT SCALE DRAWING				TITLE:		Chute Ramp Frame Short
				SIZE	DWG. NO.		REV	
				C	GE-25013-01			
				SCALE: 1:2		SHEET 1 OF 1		



4X R.50

20X \varnothing .25 THRU ALL

14X \varnothing .193 \pm .002 THRU ALL
 \square \varnothing .71 ∇ .13

16.50
10X 16.25
3X 14.62
4X 13.29

4X 3.21
3X 1.88
10X .25
0

2X 75.34
2X 74.00

2X 66.00
2X 63.94

2X 58.00

2X 50.22
2X 50.00

2X 42.00

2X 38.00

2X 34.00

2X 26.00
2X 25.78

2X 18.00

2X 12.06
2X 10.00

2X 2.00
2X .66
0

76.00
70.63
69.38

62.63
61.38

54.63
53.38

46.63
45.38

38.63
37.38

30.63
29.38

22.63
21.38



14.63
13.38

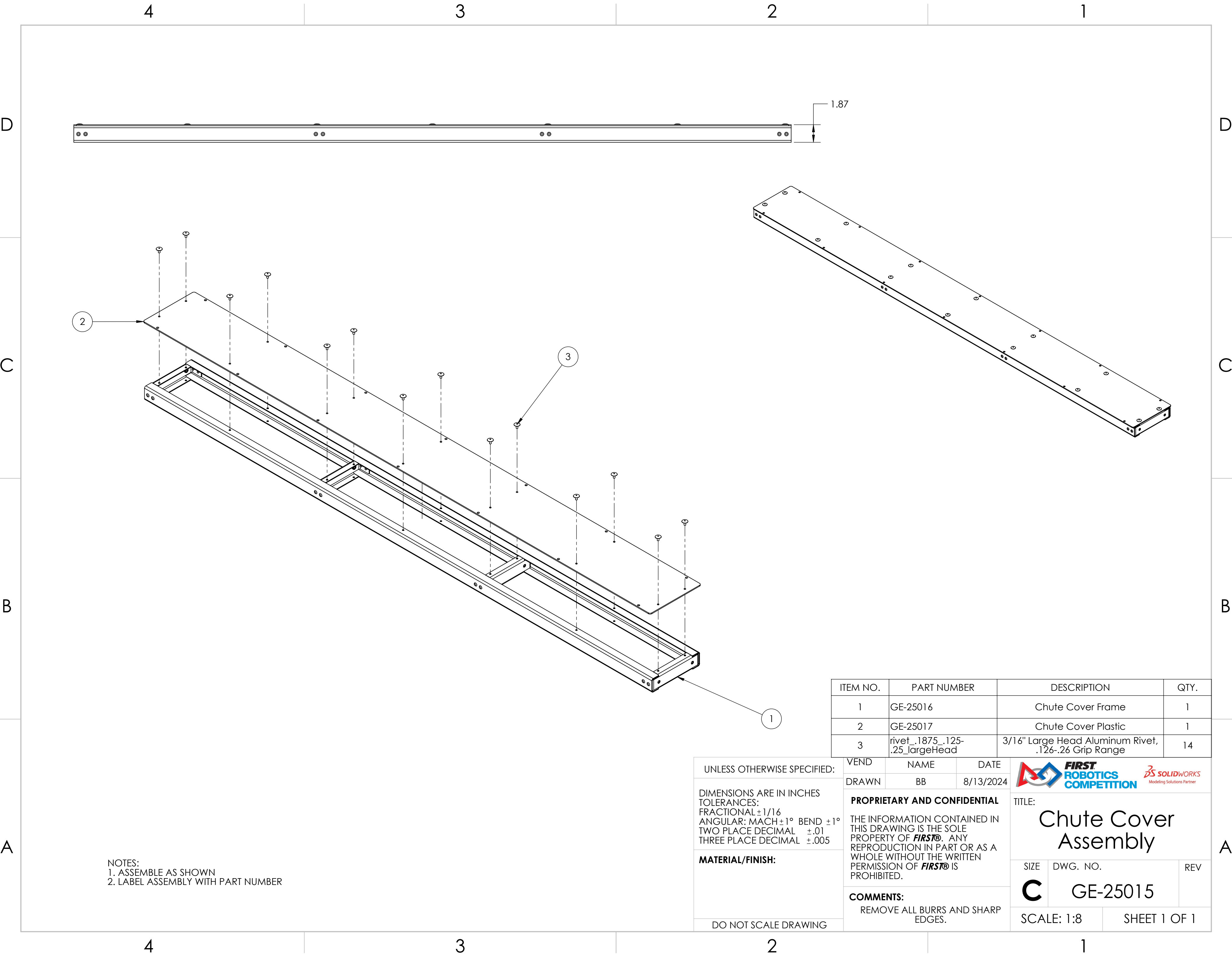
9X .25

6.63
5.38

0

(.50)

UNLESS OTHERWISE SPECIFIED:	VEND	NAME	DATE	<div></div> <div>TITLE:</div> <div>Chute Ramp HDPE</div>		
	DRAWN	JO	8/12/2024			
DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ±1/16 ANGULAR: MACH ±1° BEND ±1° TWO PLACE DECIMAL ±.01 THREE PLACE DECIMAL ±.005	PROPRIETARY AND CONFIDENTIAL			SIZE	DWG. NO.	REV
	THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF FIRST® . ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FIRST® IS PROHIBITED.					
MATERIAL/FINISH: 1/2" Black HDPE, Orange Peel Texture	COMMENTS:			C	GE-25014	
	REMOVE ALL BURRS AND SHARP EDGES.					
DO NOT SCALE DRAWING				SCALE: 1:5		SHEET 1 OF 1



NOTES:
1. ASSEMBLE AS SHOWN
2. LABEL ASSEMBLY WITH PART NUMBER

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	GE-25016	Chute Cover Frame	1
2	GE-25017	Chute Cover Plastic	1
3	rivet_.1875_.125-.25_largeHead	3/16" Large Head Aluminum Rivet, .126-.26 Grip Range	14



UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN INCHES
TOLERANCES:
FRACTIONAL $\pm 1/16$
ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$
TWO PLACE DECIMAL $\pm .01$
THREE PLACE DECIMAL $\pm .005$

MATERIAL/FINISH:

DO NOT SCALE DRAWING

VEND	NAME	DATE
DRAWN	BB	8/13/2024
PROPRIETARY AND CONFIDENTIAL THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF FIRST® . ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FIRST® IS PROHIBITED. COMMENTS: REMOVE ALL BURRS AND SHARP EDGES.		



TITLE:

Chute Cover Assembly

SIZE	DWG. NO.	REV
C	GE-25015	

SCALE: 1:8	SHEET 1 OF 1
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4

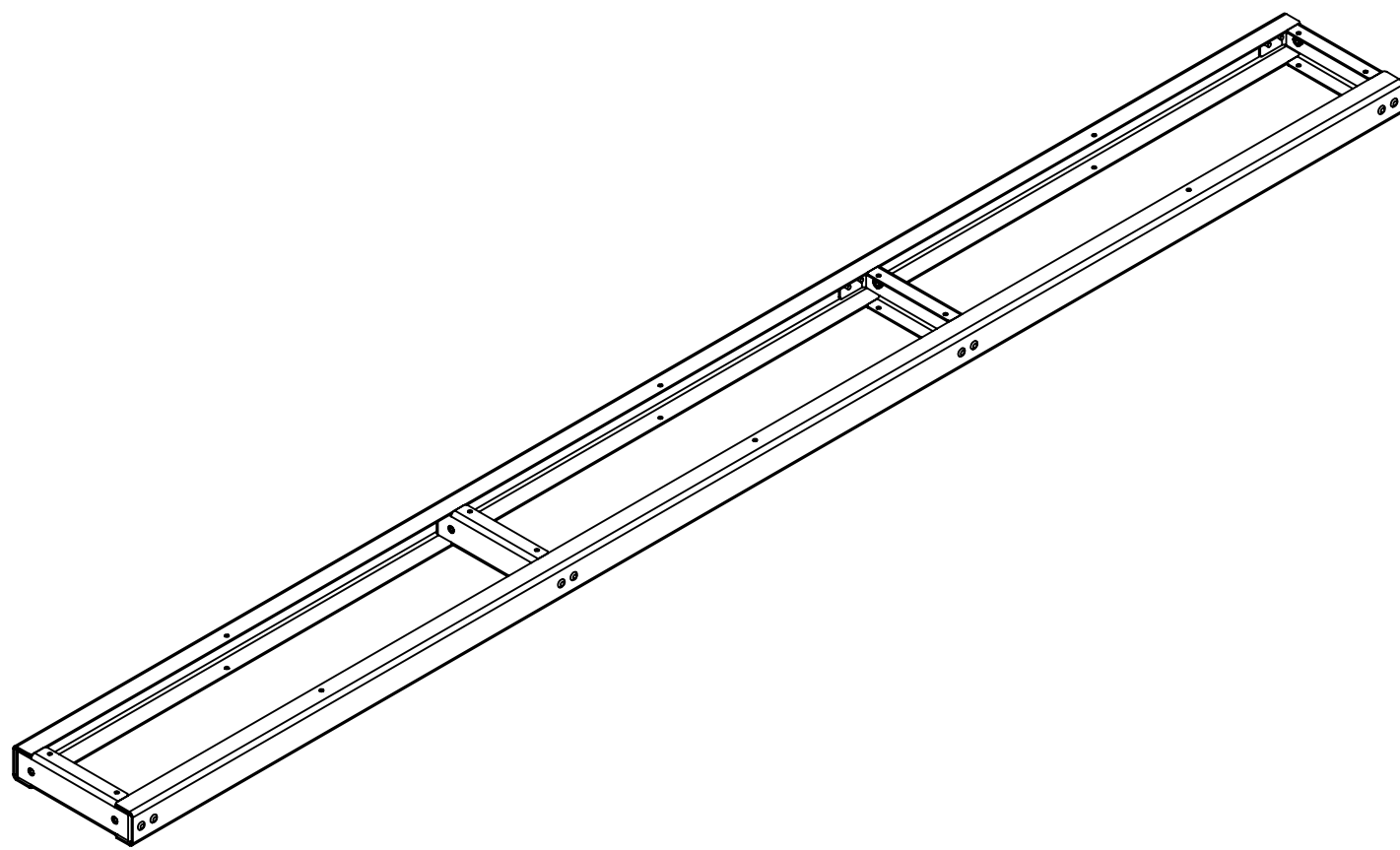
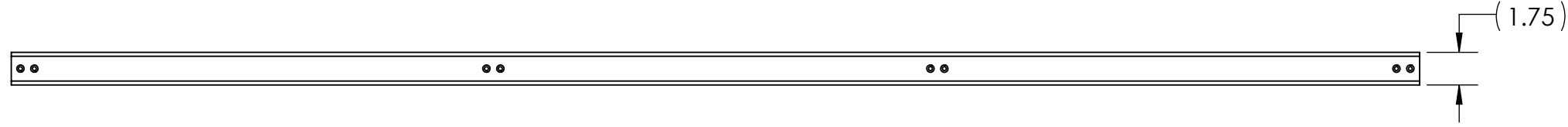
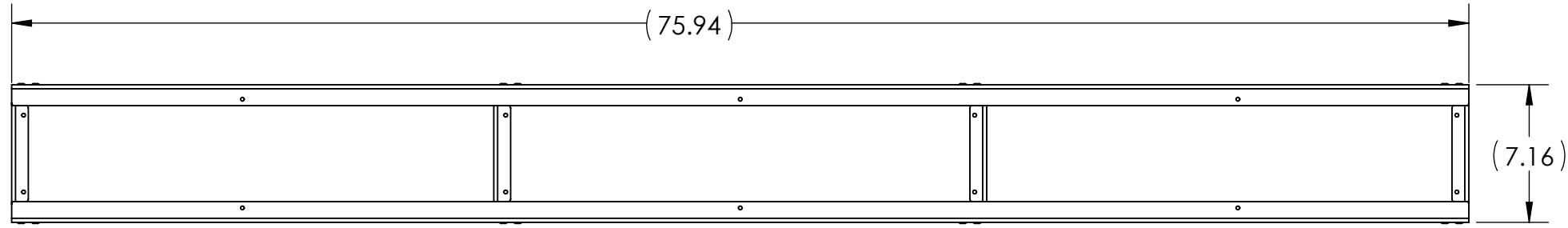
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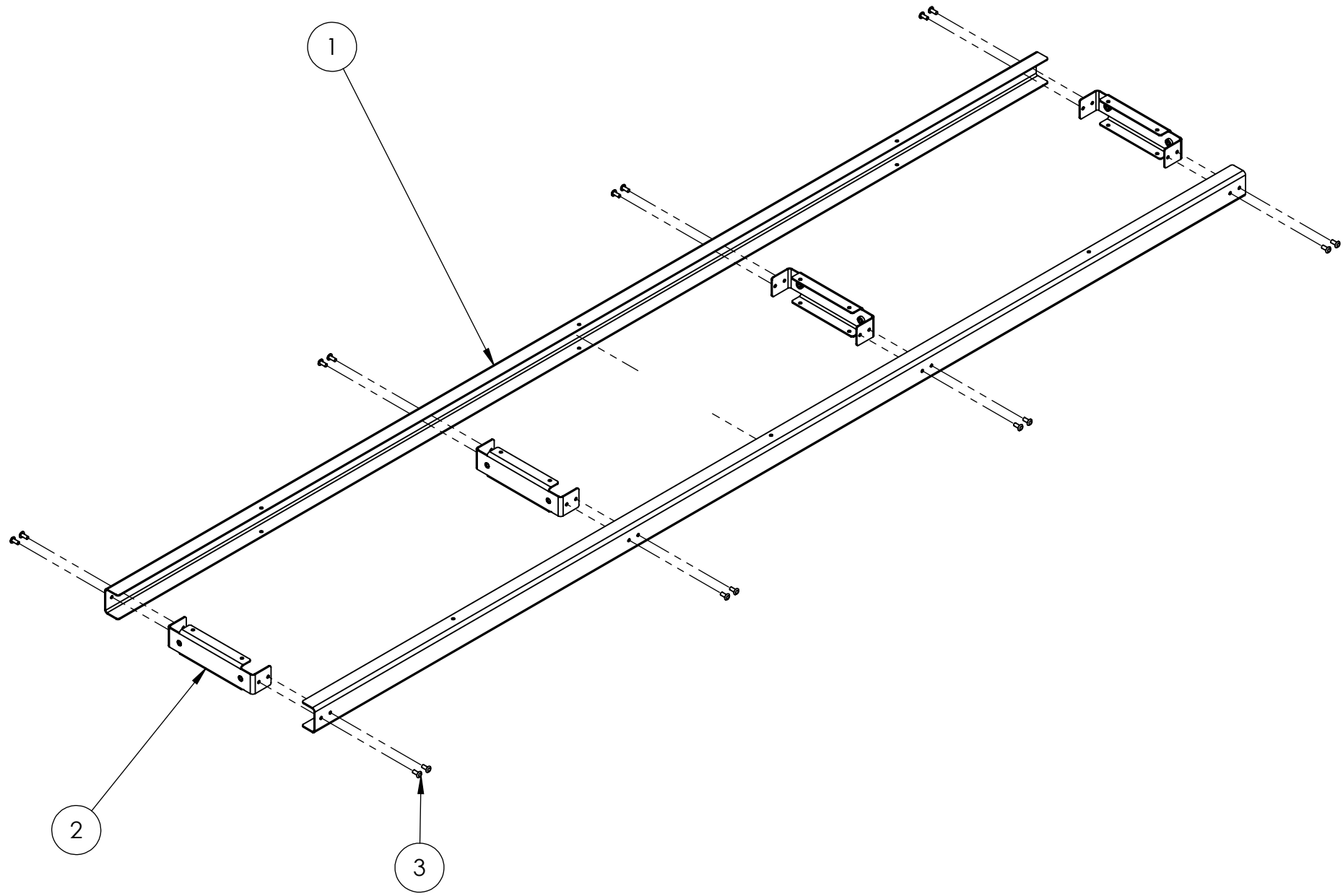
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NOTE: ASSEMBLE AS SHOWN



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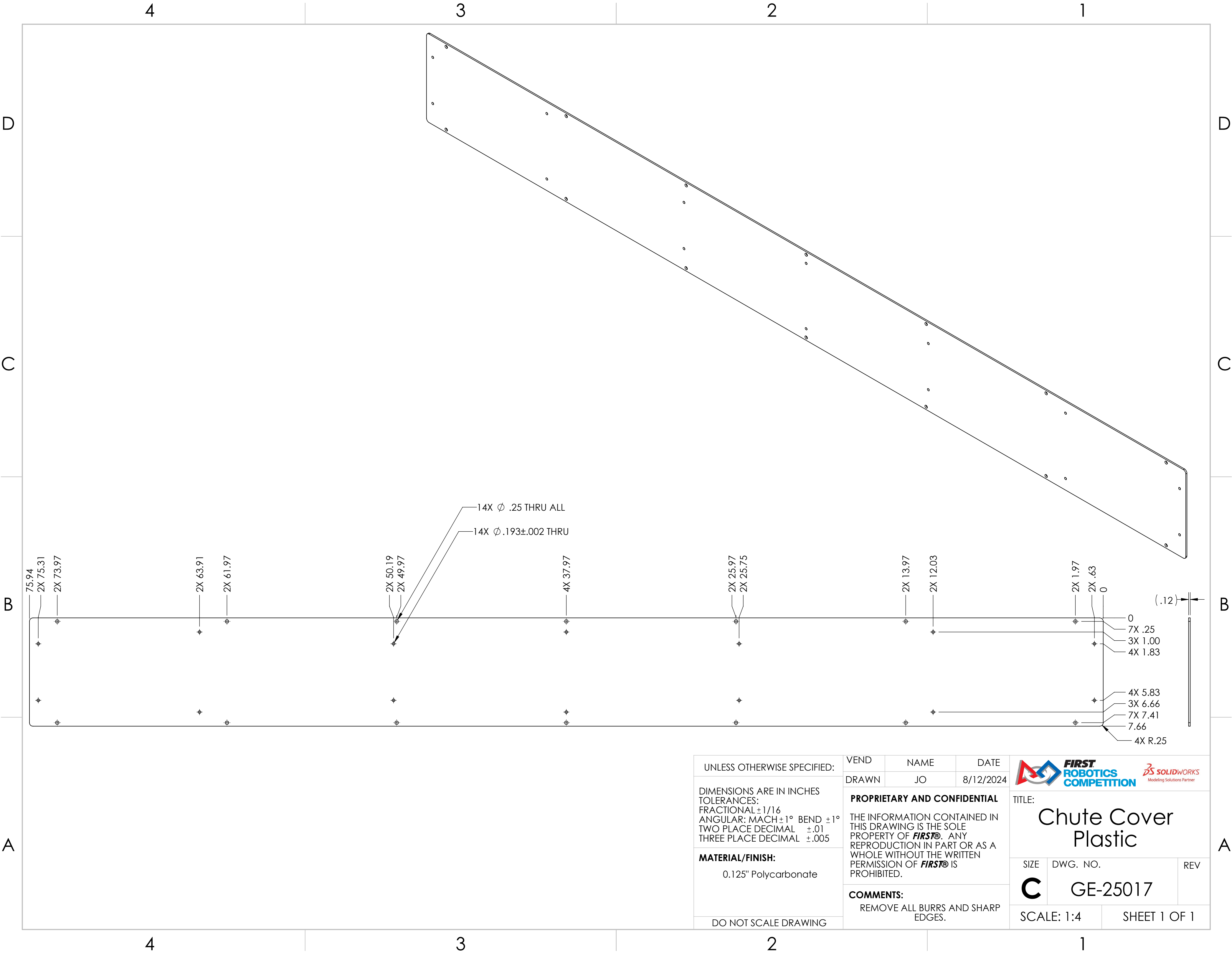
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ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	GE-25012	Chute Frame Long	2
2	GE-25018	Chute Cover Frame Short with PEMs	4
3	rivet_.1875_.126-.25	3/16" Rivet, .126-.25 Grip Range	16

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ±1/16 ANGULAR: MACH ±1° BEND ±1° TWO PLACE DECIMAL ±.01 THREE PLACE DECIMAL ±.005 MATERIAL/FINISH: DO NOT SCALE DRAWING	VEND	NAME	DATE	<div></div> <div>TITLE: <h1>Chute Cover Frame</h1></div>			
	DRAWN	BB	8/13/2024				
	PROPRIETARY AND CONFIDENTIAL THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF FIRST® . ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FIRST® IS PROHIBITED.				SIZE	DWG. NO.	REV
	COMMENTS: REMOVE ALL BURRS AND SHARP EDGES.				C	GE-25016	
				SCALE: 1:12		SHEET 1 OF 1	



UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN INCHES
TOLERANCES:
FRACTIONAL $\pm 1/16$
ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$
TWO PLACE DECIMAL $\pm .01$
THREE PLACE DECIMAL $\pm .005$

MATERIAL/FINISH:
0.125" Polycarbonate

DO NOT SCALE DRAWING

VEND	NAME	DATE
DRAWN	JO	8/12/2024

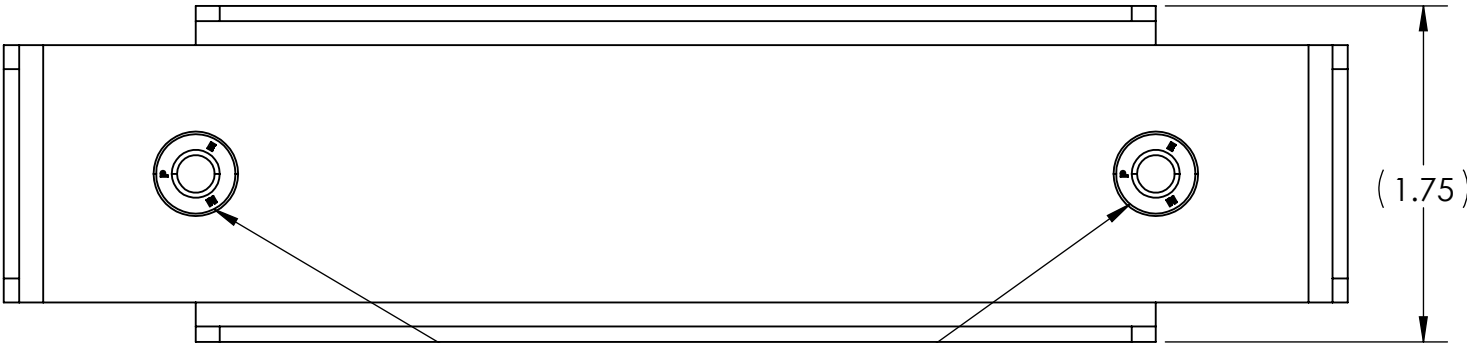
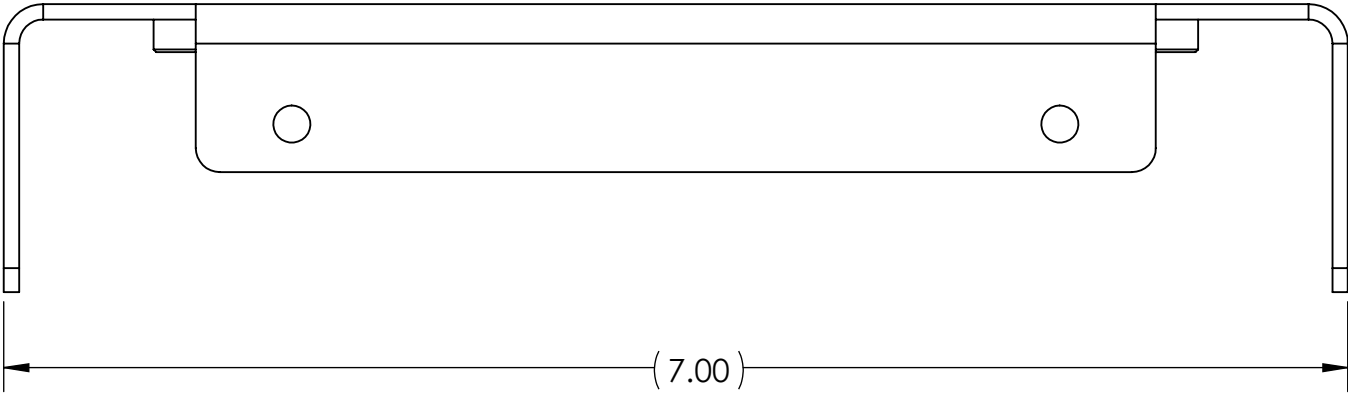
PROPRIETARY AND CONFIDENTIAL

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF **FIRST®**. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF **FIRST®** IS PROHIBITED.

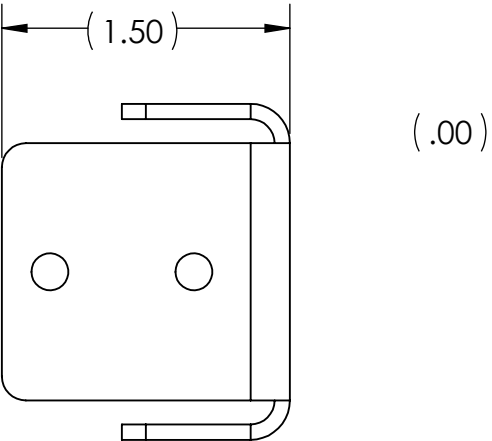
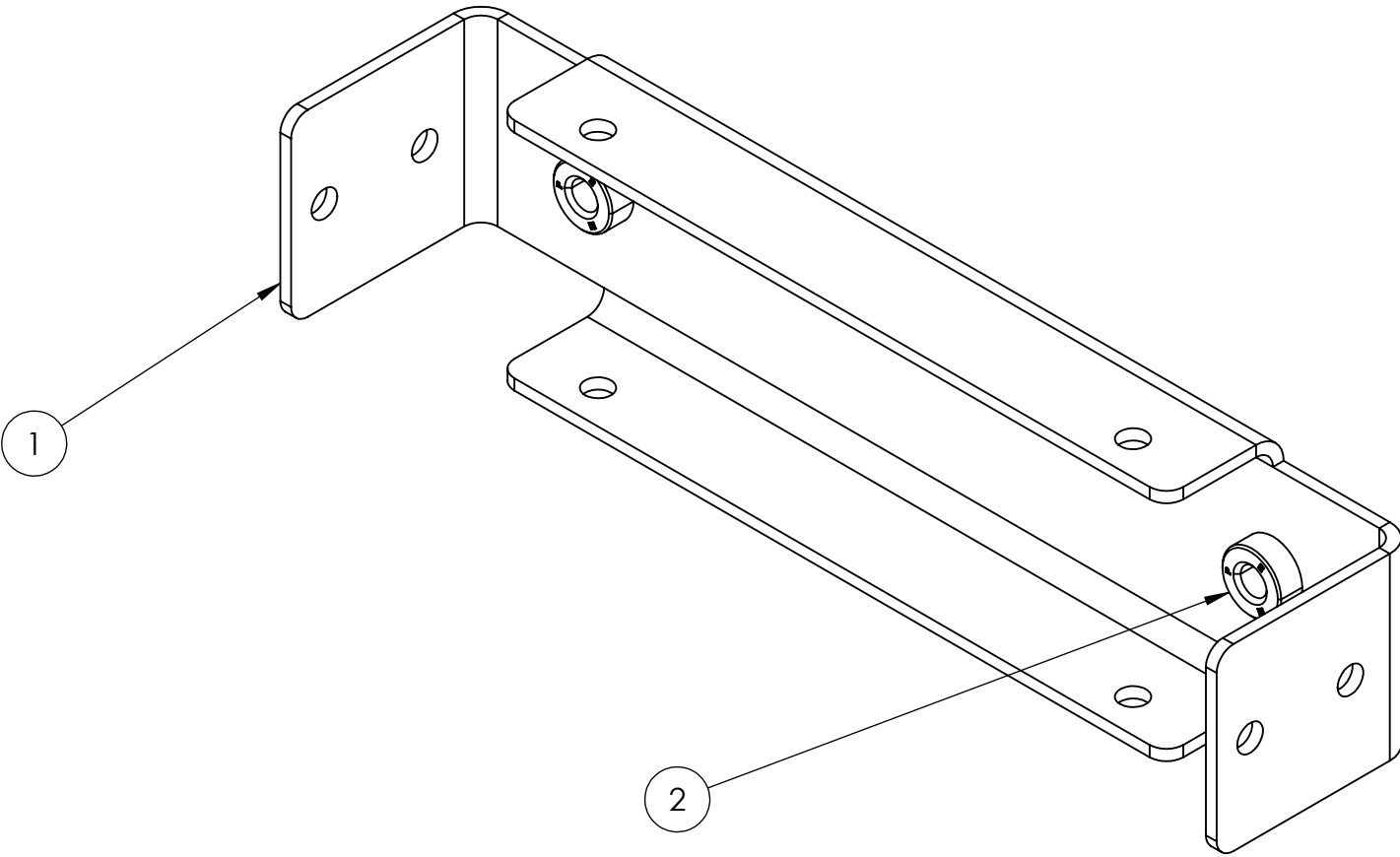
COMMENTS:
REMOVE ALL BURRS AND SHARP EDGES.





TITLE: Chute Cover Plastic		
SIZE C	DWG. NO. GE-25017	REV
SCALE: 1:4		SHEET 1 OF 1



2X PEM NUTS INSTALLED ON INTERIOR FACE

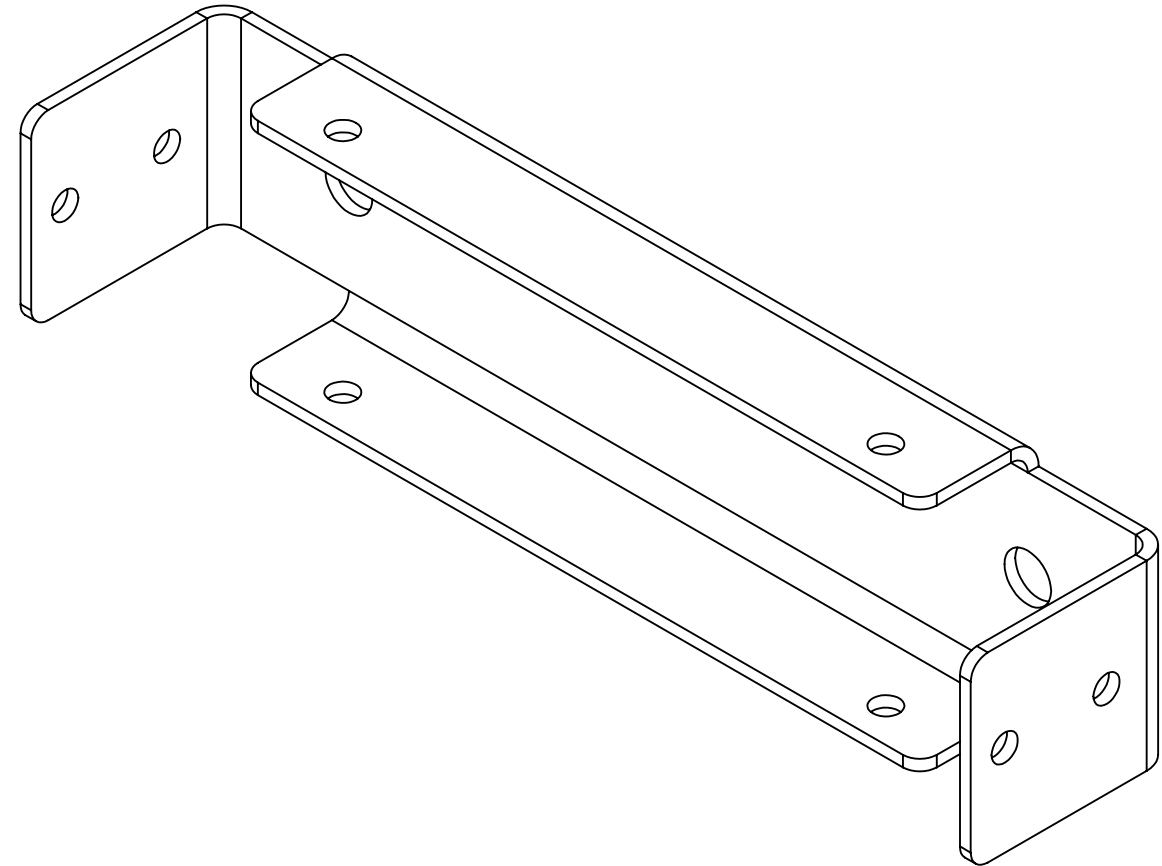


ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	GE-25018-01	Chute Cover Frame Short	1
2	pem_clinchnut_.25_20_.054	1/4-20 self-clinching nut, .054 shank	2

UNLESS OTHERWISE SPECIFIED:	VEND	NAME	DATE	<div><div></div><div>TITLE: Chute Cover Frame Short with PEMs</div></div>	
	DRAWN	BB	8/13/2024		
DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ±1/16 ANGULAR: MACH ±1° BEND ±1° TWO PLACE DECIMAL ±.01 THREE PLACE DECIMAL ±.005	PROPRIETARY AND CONFIDENTIAL			SIZE C	
	THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF FIRST® . ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FIRST® IS PROHIBITED.				
MATERIAL/FINISH: 12 Gauge (0.08") 5052 Aluminum	COMMENTS:			DWG. NO.	
	REMOVE ALL BURRS AND SHARP EDGES.			GE-25018	
DO NOT SCALE DRAWING				SCALE: 1:1	SHEET 1 OF 1

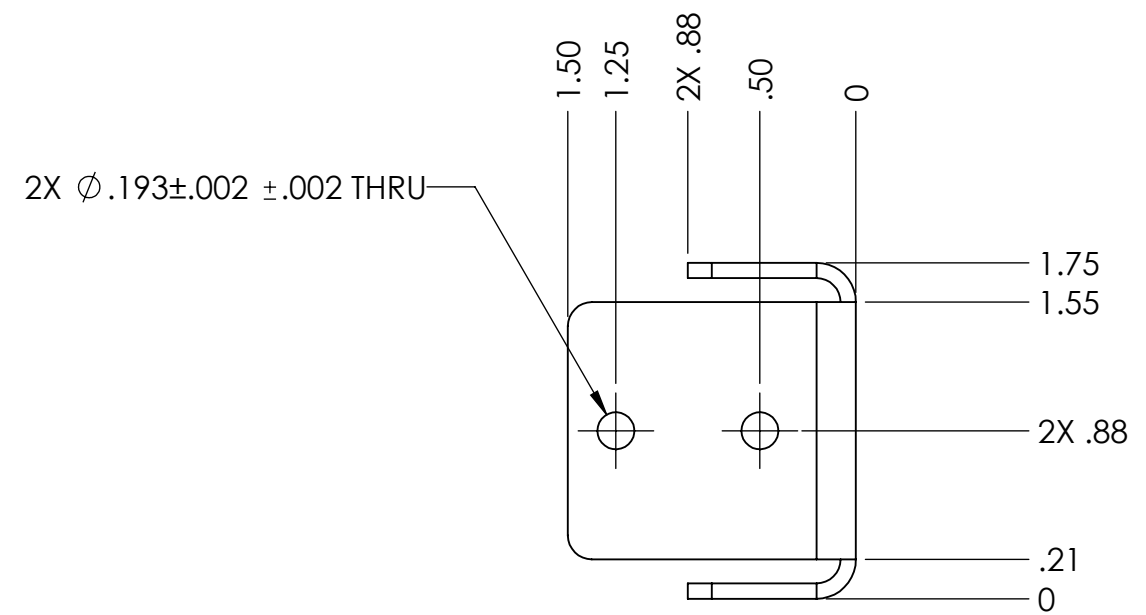
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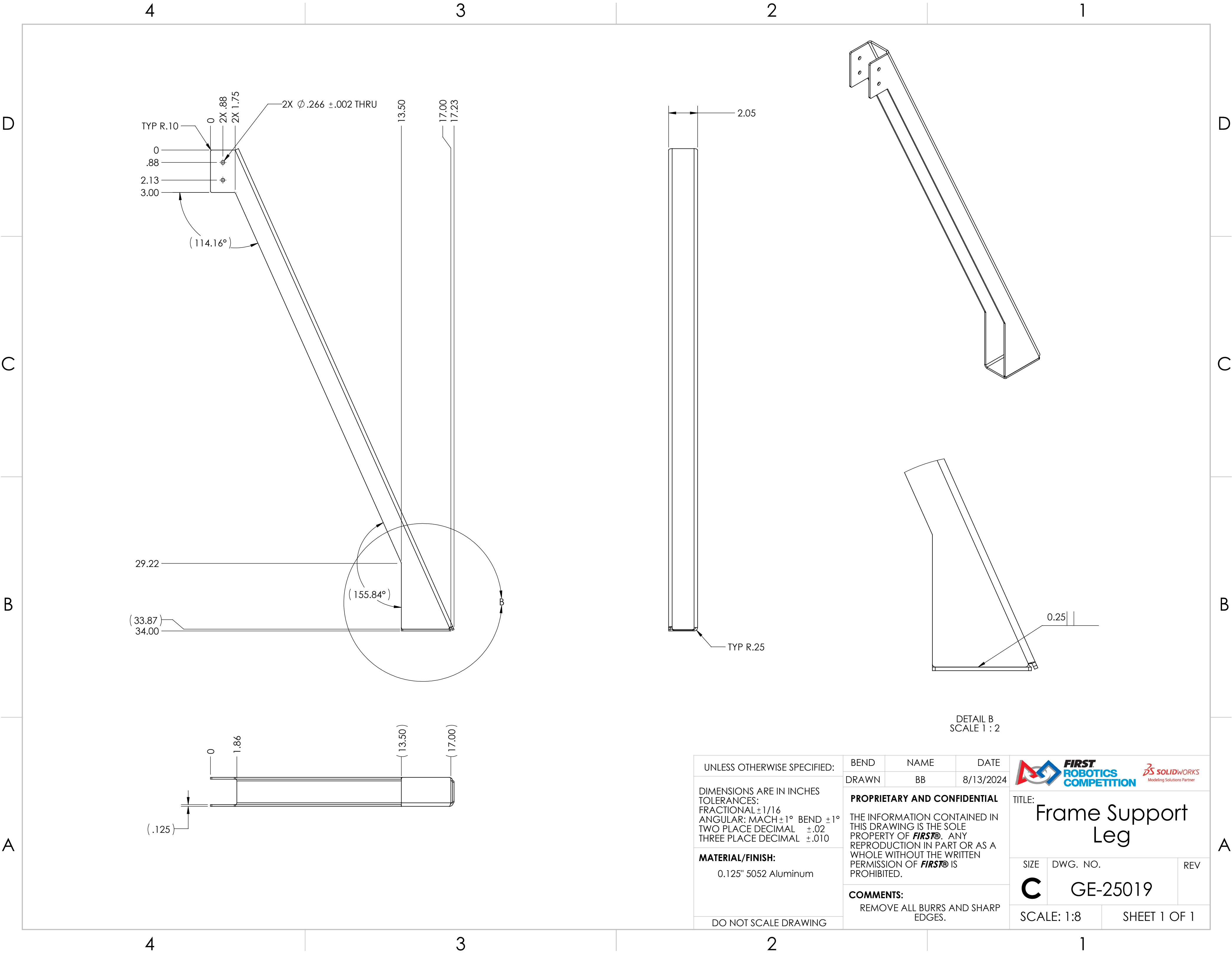
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UNLESS OTHERWISE SPECIFIED:		BEND	NAME	DATE	 	
DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL $\pm 1/16$ ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$ TWO PLACE DECIMAL $\pm .02$ THREE PLACE DECIMAL $\pm .010$		DRAWN	BB	8/13/2024	TITLE: Chute Cover Frame Short	
MATERIAL/FINISH: 12 Gauge (0.08") 5052 Aluminum		PROPRIETARY AND CONFIDENTIAL THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF FIRST ®. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FIRST ® IS PROHIBITED.			SIZE C	
DO NOT SCALE DRAWING		COMMENTS: REMOVE ALL BURRS AND SHARP EDGES.			DWG. NO. GE-25018-01	
					REV	
			SCALE: 1:1		SHEET 1 OF 1	



UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN INCHES
TOLERANCES:
FRACTIONAL ±1/16
ANGULAR: MACH ±1° BEND ±1°
TWO PLACE DECIMAL ±.02
THREE PLACE DECIMAL ±.010

MATERIAL/FINISH:
0.125" 5052 Aluminum

DO NOT SCALE DRAWING

BEND	NAME	DATE
DRAWN	BB	8/13/2024

PROPRIETARY AND CONFIDENTIAL

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF **FIRST®**. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF **FIRST®** IS PROHIBITED.

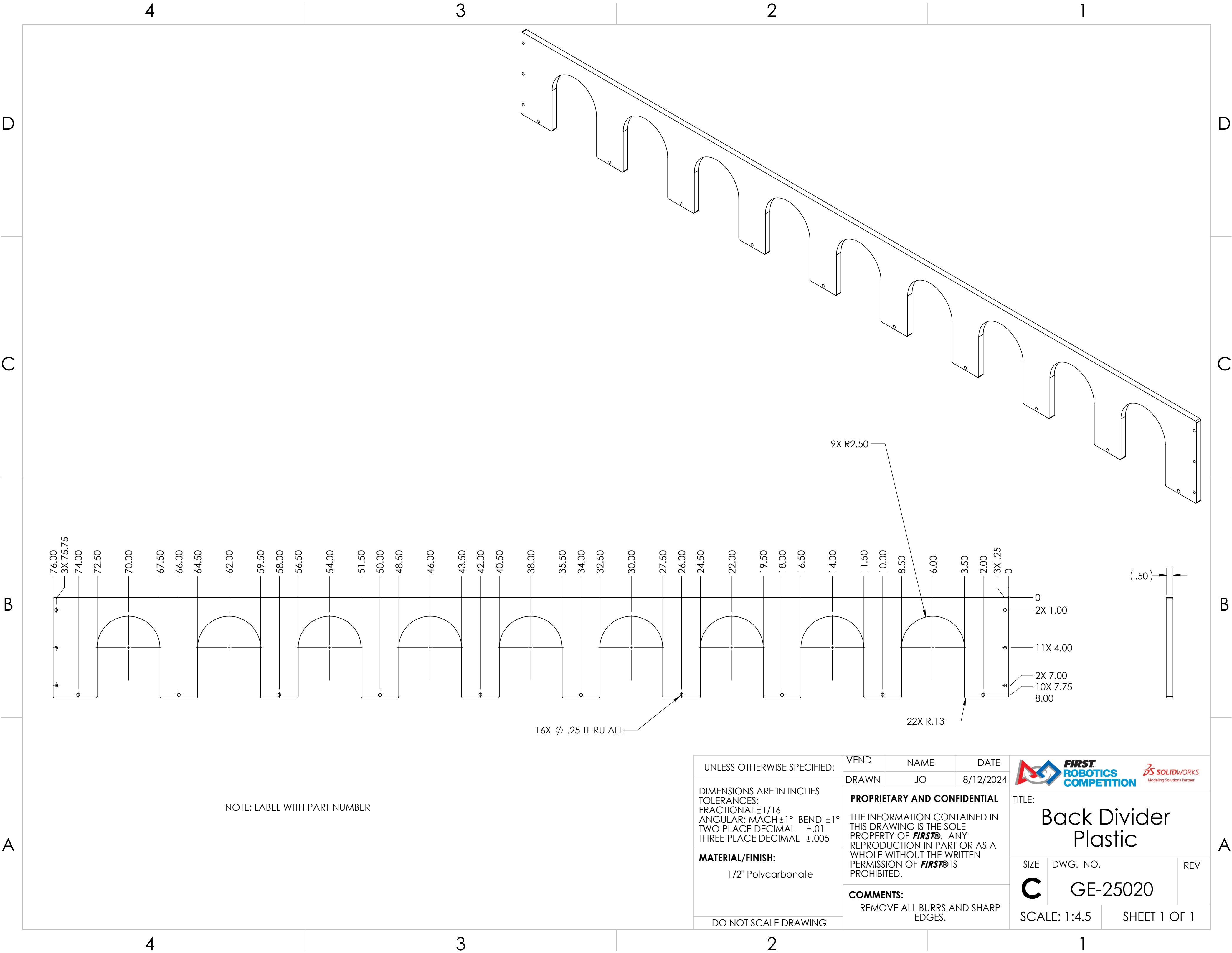
COMMENTS:
REMOVE ALL BURRS AND SHARP EDGES.



TITLE:
Frame Support Leg

SIZE	DWG. NO.	REV
C	GE-25019	

SCALE: 1:8 SHEET 1 OF 1



NOTE: LABEL WITH PART NUMBER

UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN INCHES
TOLERANCES:
FRACTIONAL $\pm 1/16$
ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$
TWO PLACE DECIMAL $\pm .01$
THREE PLACE DECIMAL $\pm .005$

MATERIAL/FINISH:
1/2" Polycarbonate

DO NOT SCALE DRAWING

VEND	NAME	DATE
DRAWN	JO	8/12/2024

PROPRIETARY AND CONFIDENTIAL

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF **FIRST**. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF **FIRST** IS PROHIBITED.

COMMENTS:
REMOVE ALL BURRS AND SHARP EDGES.



TITLE:
Back Divider Plastic

SIZE C	DWG. NO. GE-25020	REV
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SCALE: 1:4.5 SHEET 1 OF 1

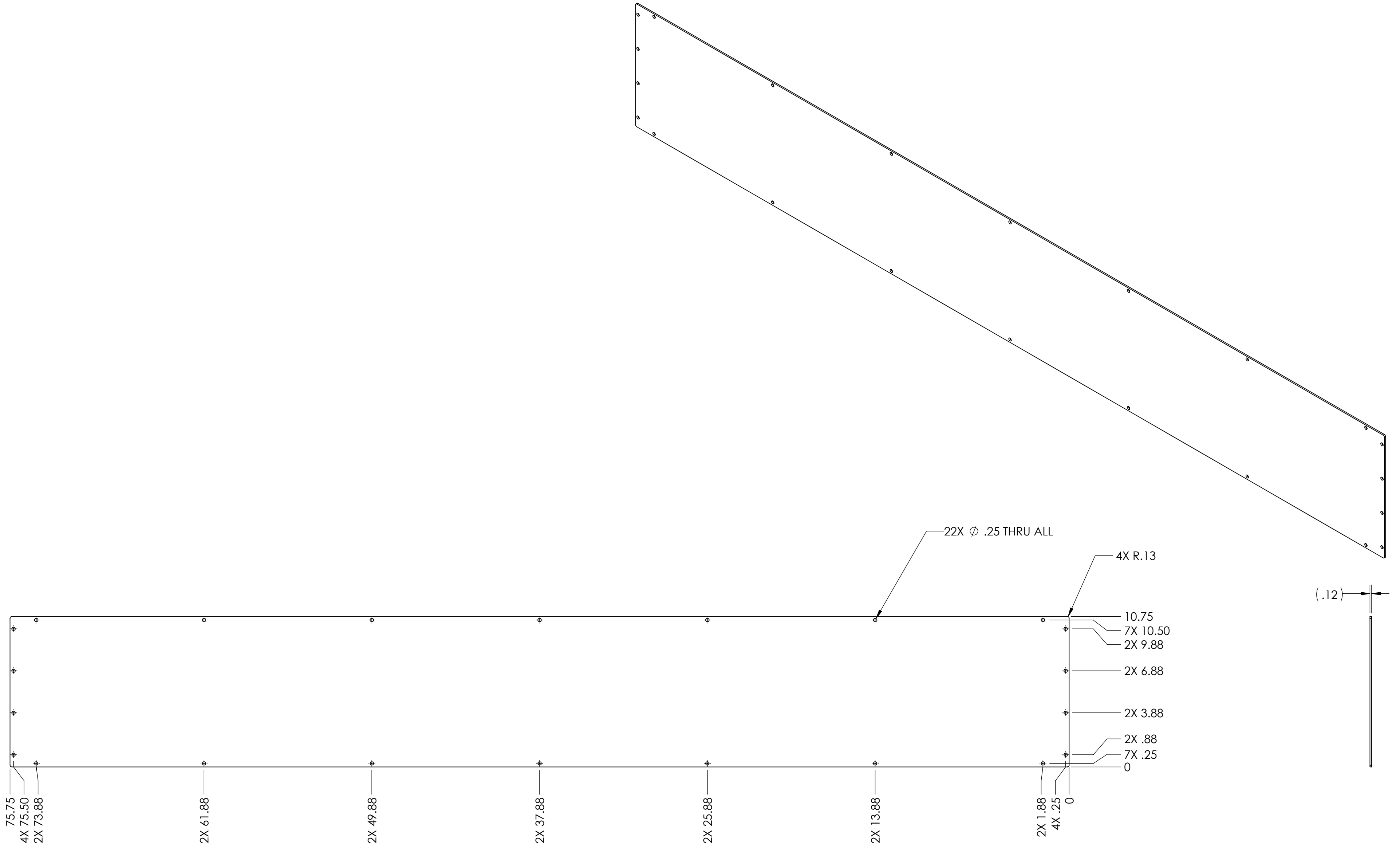
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D

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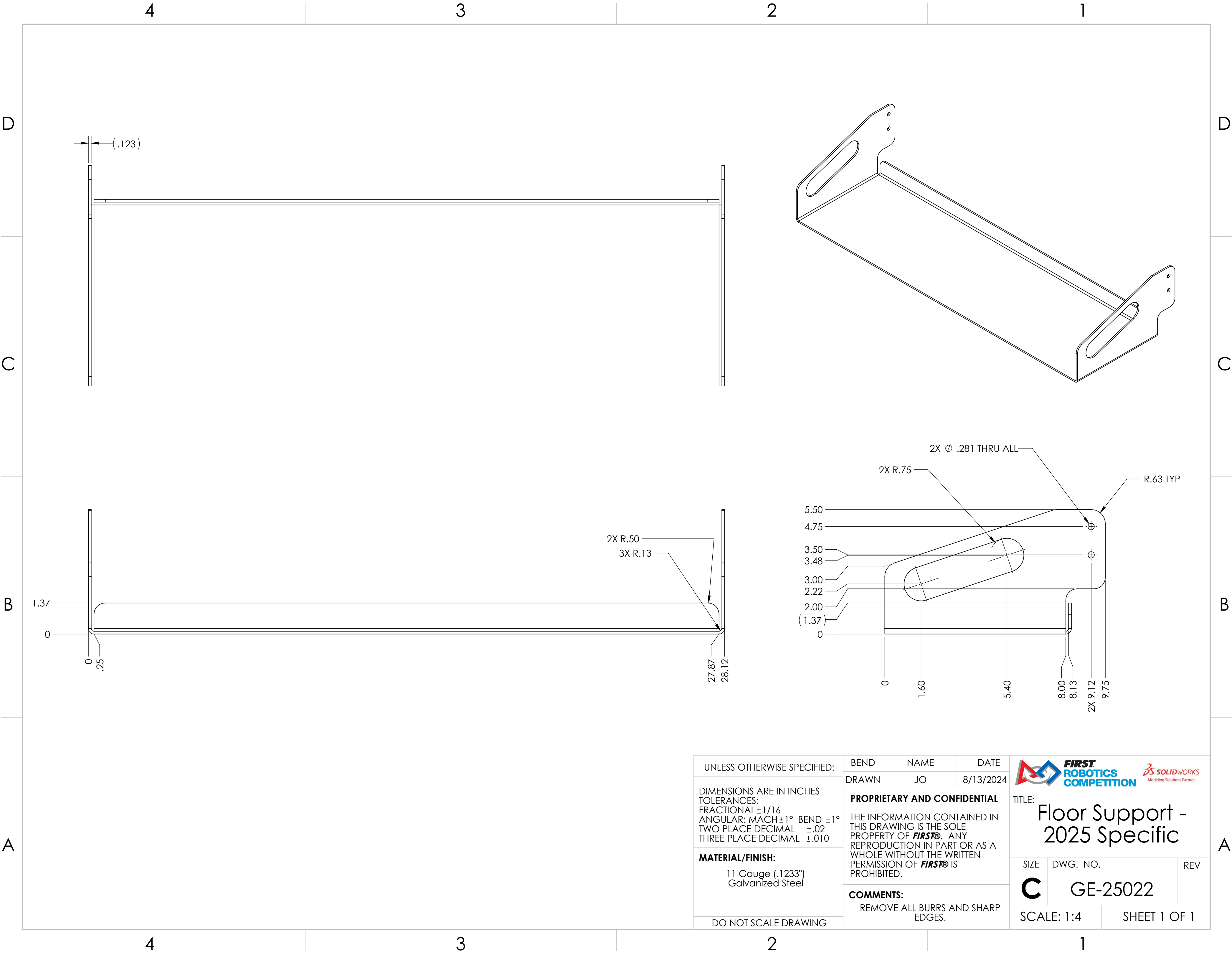
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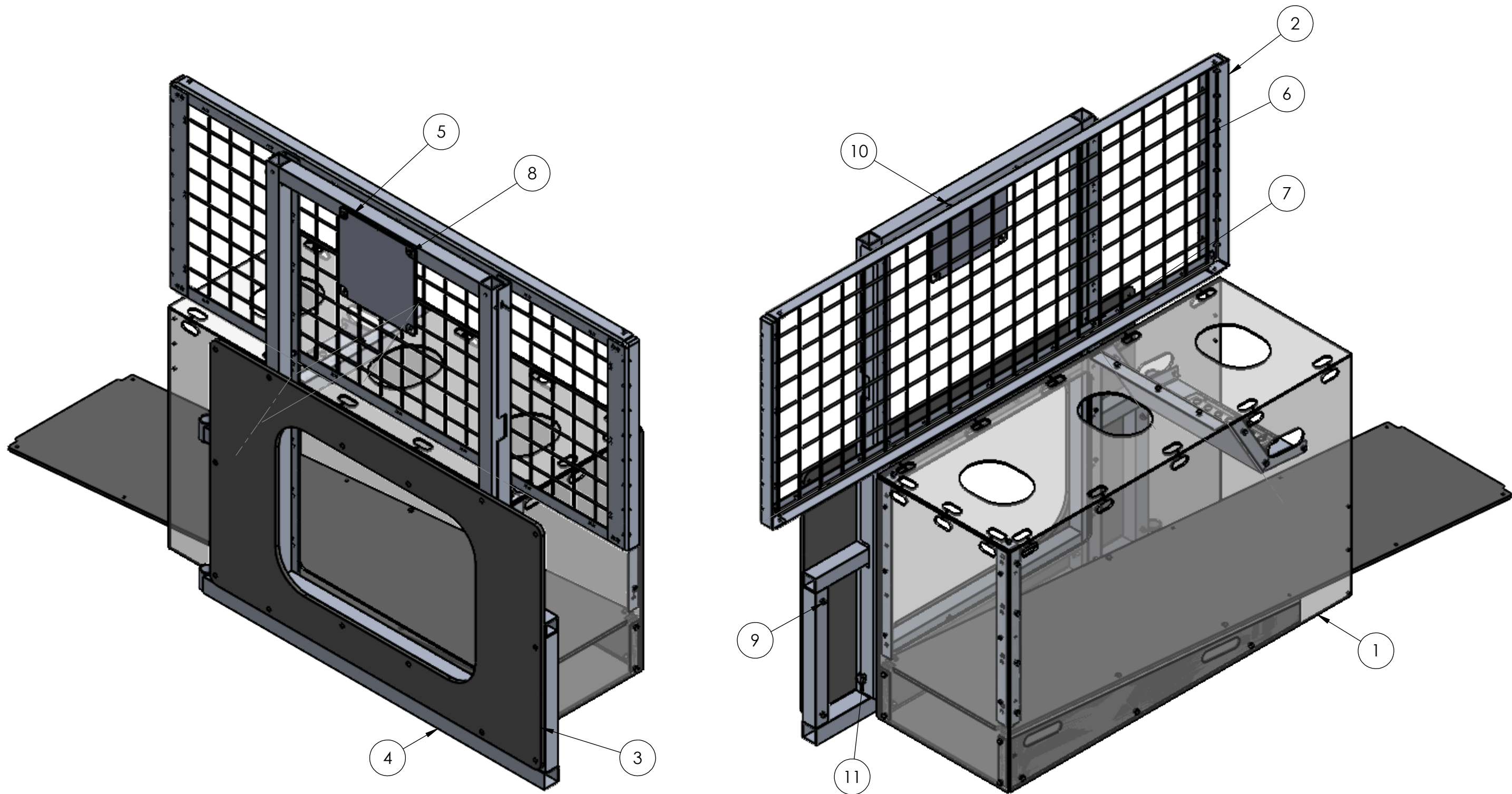


Notes:
Label with Part Number

UNLESS OTHERWISE SPECIFIED:		VEND		NAME		DATE		
		DRAWN		JO		8/12/2024		
DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ±1/16 ANGULAR: MACH ±1° BEND ±1° TWO PLACE DECIMAL ±.01 THREE PLACE DECIMAL ±.005		PROPRIETARY AND CONFIDENTIAL THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF FIRST® . ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FIRST® IS PROHIBITED.				TITLE:		
MATERIAL/FINISH: 1/8" Polycarbonate						Top Cover Plastic		
						SIZE	DWG. NO.	REV
						C	GE-25021	
DO NOT SCALE DRAWING						SCALE: 1:5		SHEET 1 OF 1



UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ±1/16 ANGULAR: MACH ±1° BEND ±1° TWO PLACE DECIMAL ±.02 THREE PLACE DECIMAL ±.010 MATERIAL/FINISH: 11 Gauge (.1233") Galvanized Steel DO NOT SCALE DRAWING	BEND	NAME	DATE	<div></div> <div>TITLE: Floor Support - 2025 Specific</div> <div><div>SIZE C</div><div>DWG. NO. GE-25022</div><div>REV</div></div> <div>SCALE: 1:4</div> <div>SHEET 1 OF 1</div>	
	DRAWN	JO	8/13/2024		
	PROPRIETARY AND CONFIDENTIAL				
	THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF FIRST® . ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FIRST® IS PROHIBITED.				
	COMMENTS: REMOVE ALL BURRS AND SHARP EDGES.				

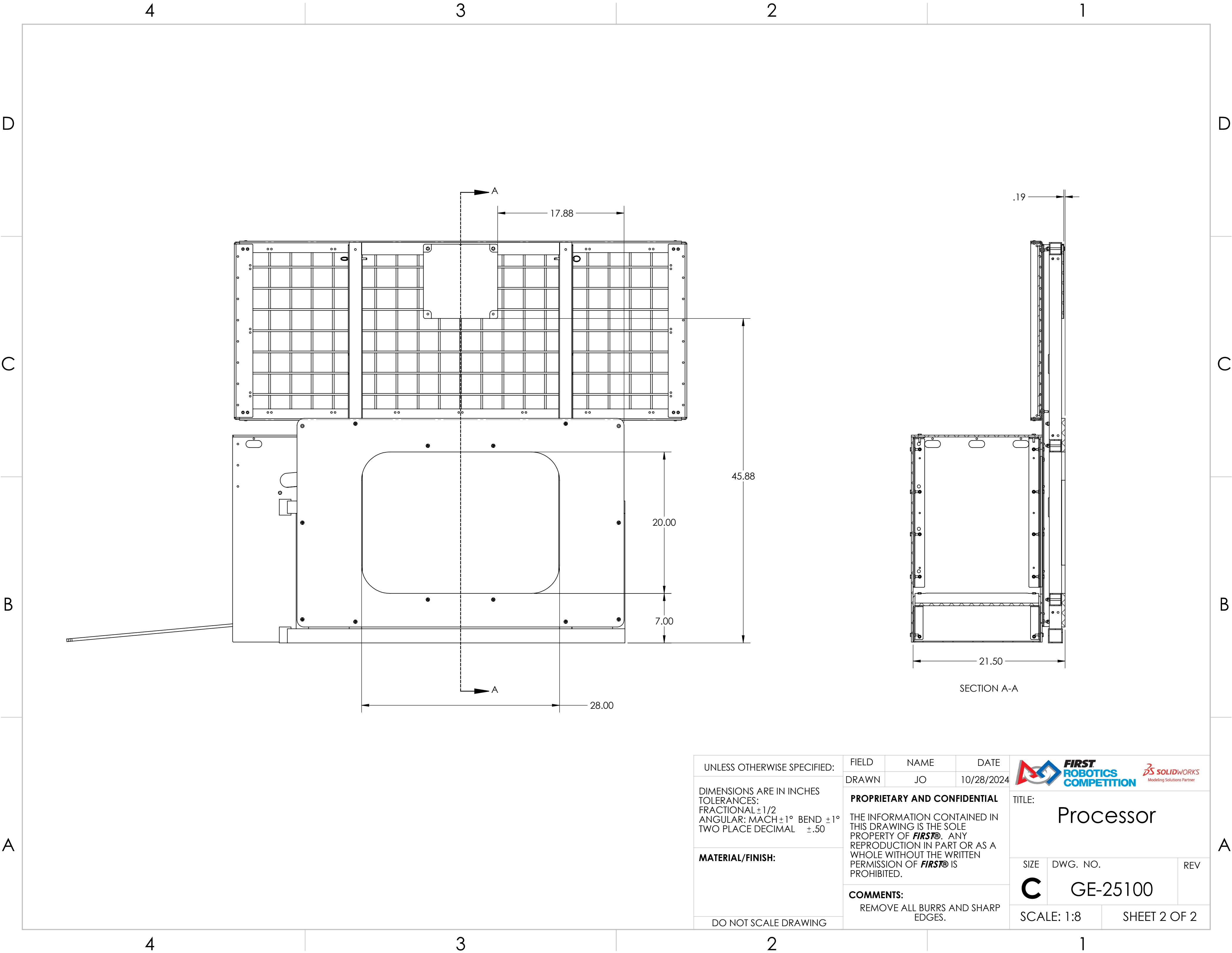




Note: April Tag ID # changes depending on which Processor it is on. See the Field Layout and Marking Diagram for more details.

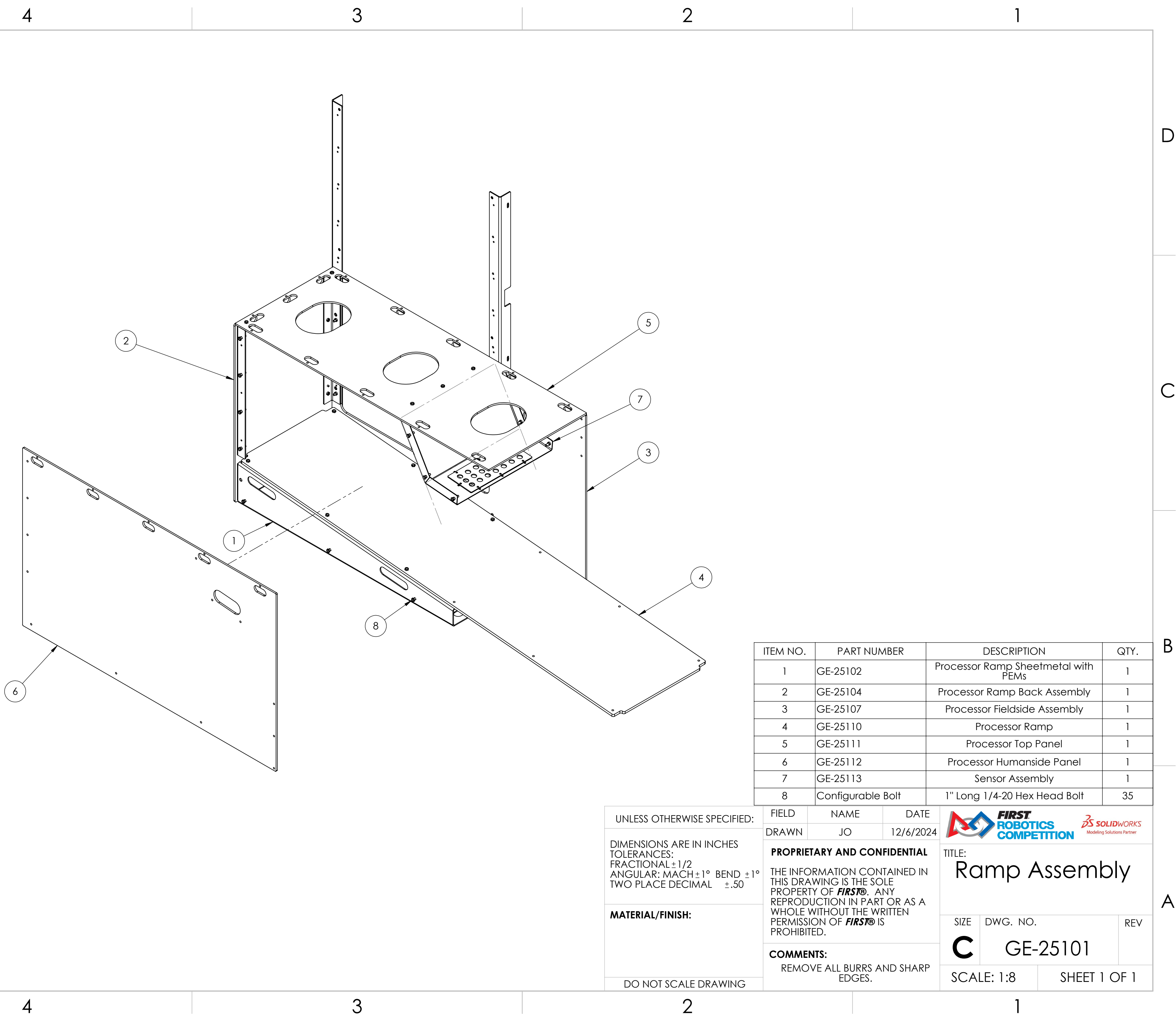
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	GE-25101	Ramp Assembly	1
2	GE-25116	Fence Frame	1
3	GE-25119	Processor Opening	1
4	GE-25120	Processor Weldment	1
5	FE-00083-ID3	AprilTag	1
6	fence	ULINE Grid	1
7	Configurable Bolt	1" Long 1/4-20 Hex Head Bolt	4
8	Configurable Bolt	2.5" Long 1/4-20 Hex Head Bolt	2
9	flat_phil_.25_20_2.75	Steel Phillips Flat Head Screw, 1/4"-20 x 2-3/4" long, fully threaded	12
10	nylock_.25_20	Steel Nylon-Insert Locknut, 1/4"-20	14
11	pin_quick_ring_.25_2.3125	Pin, Ring-Grip Quick-Release with SS Ring, 1/4" Diameter, 2.3125" Usable Length	6

UNLESS OTHERWISE SPECIFIED:		FIELD	NAME	DATE
DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL $\pm 1/2$ ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$ TWO PLACE DECIMAL $\pm .50$		DRAWN	JO	10/28/2024
MATERIAL/FINISH:		PROPRIETARY AND CONFIDENTIAL		
DO NOT SCALE DRAWING		THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF FIRST® . ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FIRST® IS PROHIBITED.		
		COMMENTS: REMOVE ALL BURRS AND SHARP EDGES.		
		TITLE: Processor		
		SIZE	DWG. NO.	REV
		C	GE-25100	
		SCALE: 1:10		SHEET 1 OF 2





UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL $\pm 1/2$ ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$ TWO PLACE DECIMAL $\pm .50$ MATERIAL/FINISH: DO NOT SCALE DRAWING	FIELD	NAME	DATE	<div></div>	
	DRAWN	JO	10/28/2024		
	PROPRIETARY AND CONFIDENTIAL THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF FIRST® . ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FIRST® IS PROHIBITED.				TITLE: Processor
	COMMENTS: REMOVE ALL BURRS AND SHARP EDGES.				SIZE C SCALE: 1:8
				DWG. NO. GE-25100	REV
				SHEET 2 OF 2	



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	GE-25102	Processor Ramp Sheetmetal with PEMs	1
2	GE-25104	Processor Ramp Back Assembly	1
3	GE-25107	Processor Fieldside Assembly	1
4	GE-25110	Processor Ramp	1
5	GE-25111	Processor Top Panel	1
6	GE-25112	Processor Humanside Panel	1
7	GE-25113	Sensor Assembly	1
8	Configurable Bolt	1" Long 1/4-20 Hex Head Bolt	35



UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN INCHES
TOLERANCES:
FRACTIONAL $\pm 1/2$
ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$
TWO PLACE DECIMAL $\pm .50$

MATERIAL/FINISH:

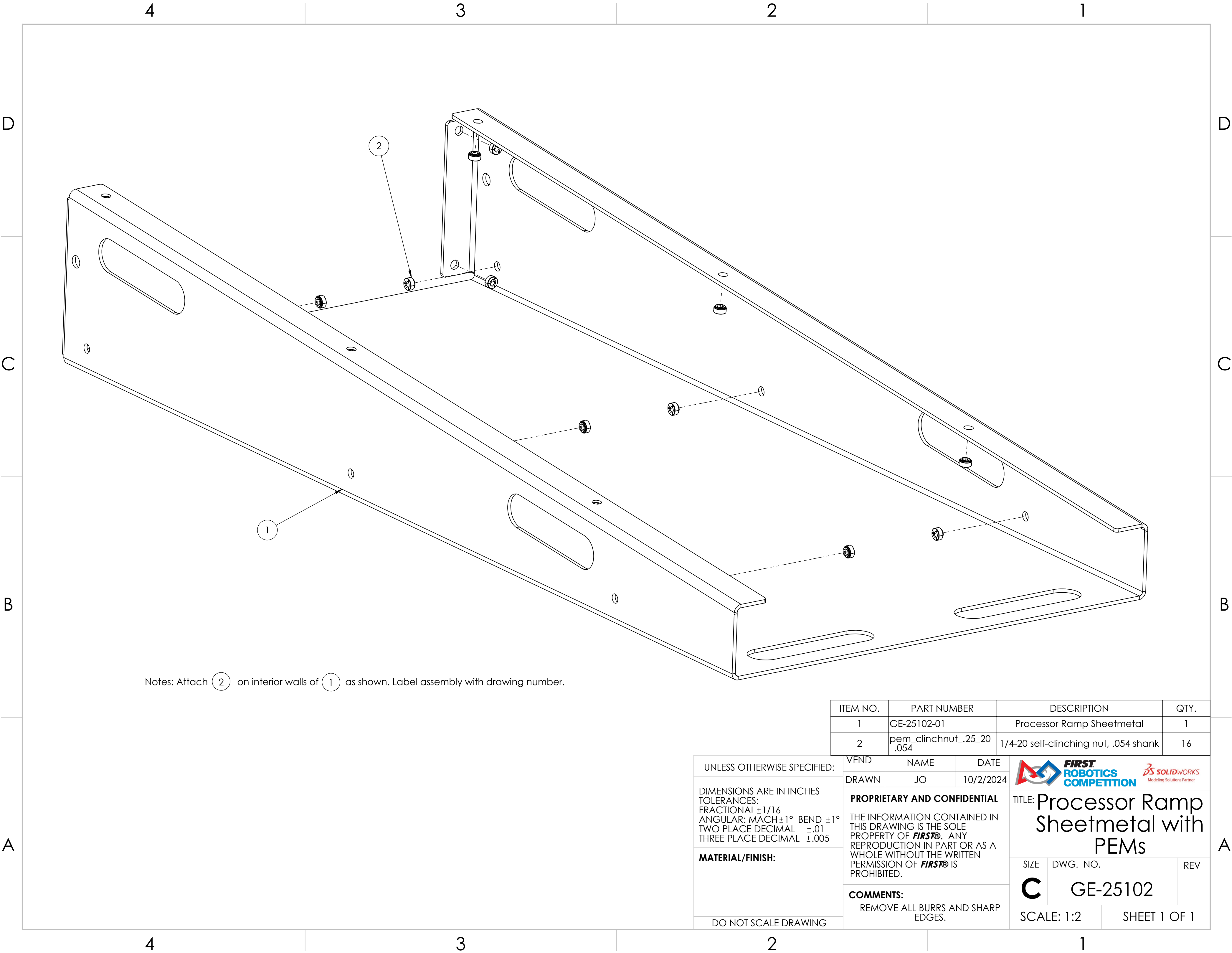
DO NOT SCALE DRAWING

FIELD	NAME	DATE
DRAWN	JO	12/6/2024
PROPRIETARY AND CONFIDENTIAL		
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF FIRST® . ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FIRST® IS PROHIBITED.		
COMMENTS: REMOVE ALL BURRS AND SHARP EDGES.		



TITLE:
Ramp Assembly

SIZE	DWG. NO.	REV
C	GE-25101	
SCALE: 1:8		SHEET 1 OF 1



Notes: Attach 2 on interior walls of 1 as shown. Label assembly with drawing number.

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	GE-25102-01	Processor Ramp Sheetmetal	1
2	pem_clinchnut_.25_20_.054	1/4-20 self-clinching nut, .054 shank	16

UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN INCHES
TOLERANCES:
FRACTIONAL $\pm 1/16$
ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$
TWO PLACE DECIMAL $\pm .01$
THREE PLACE DECIMAL $\pm .005$

MATERIAL/FINISH:

DO NOT SCALE DRAWING

VEND

NAME

DATE

DRAWN

JO



10/2/2024

PROPRIETARY AND CONFIDENTIAL

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF **FIRST®**. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF **FIRST®** IS PROHIBITED.

COMMENTS:

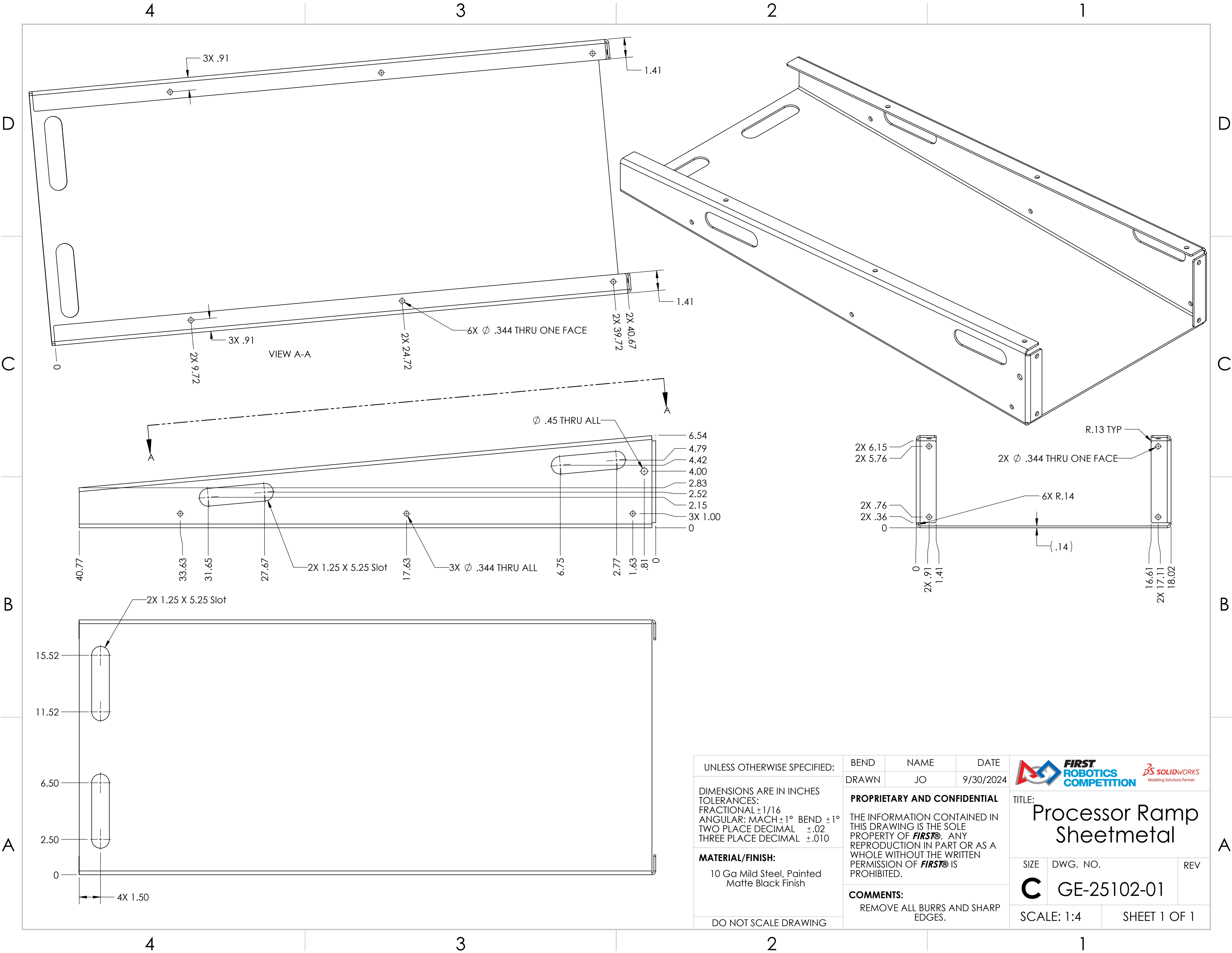
REMOVE ALL BURRS AND SHARP EDGES.



TITLE: Processor Ramp Sheetmetal with PEMs

SIZE	DWG. NO.	REV
C	GE-25102	

SCALE: 1:2	SHEET 1 OF 1
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UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN INCHES
TOLERANCES:
FRACTIONAL $\pm 1/16$
ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$
TWO PLACE DECIMAL $\pm .02$
THREE PLACE DECIMAL $\pm .010$

MATERIAL/FINISH:
10 Ga Mild Steel, Painted
Matte Black Finish

DO NOT SCALE DRAWING

BEND	NAME	DATE
DRAWN	JO	9/30/2024

PROPRIETARY AND CONFIDENTIAL

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF **FIRST**. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF **FIRST** IS PROHIBITED.

COMMENTS:
REMOVE ALL BURRS AND SHARP EDGES.



TITLE:
Processor Ramp Sheetmetal

SIZE	DWG. NO.	REV
C	GE-25102-01	

SCALE: 1:4 SHEET 1 OF 1

4

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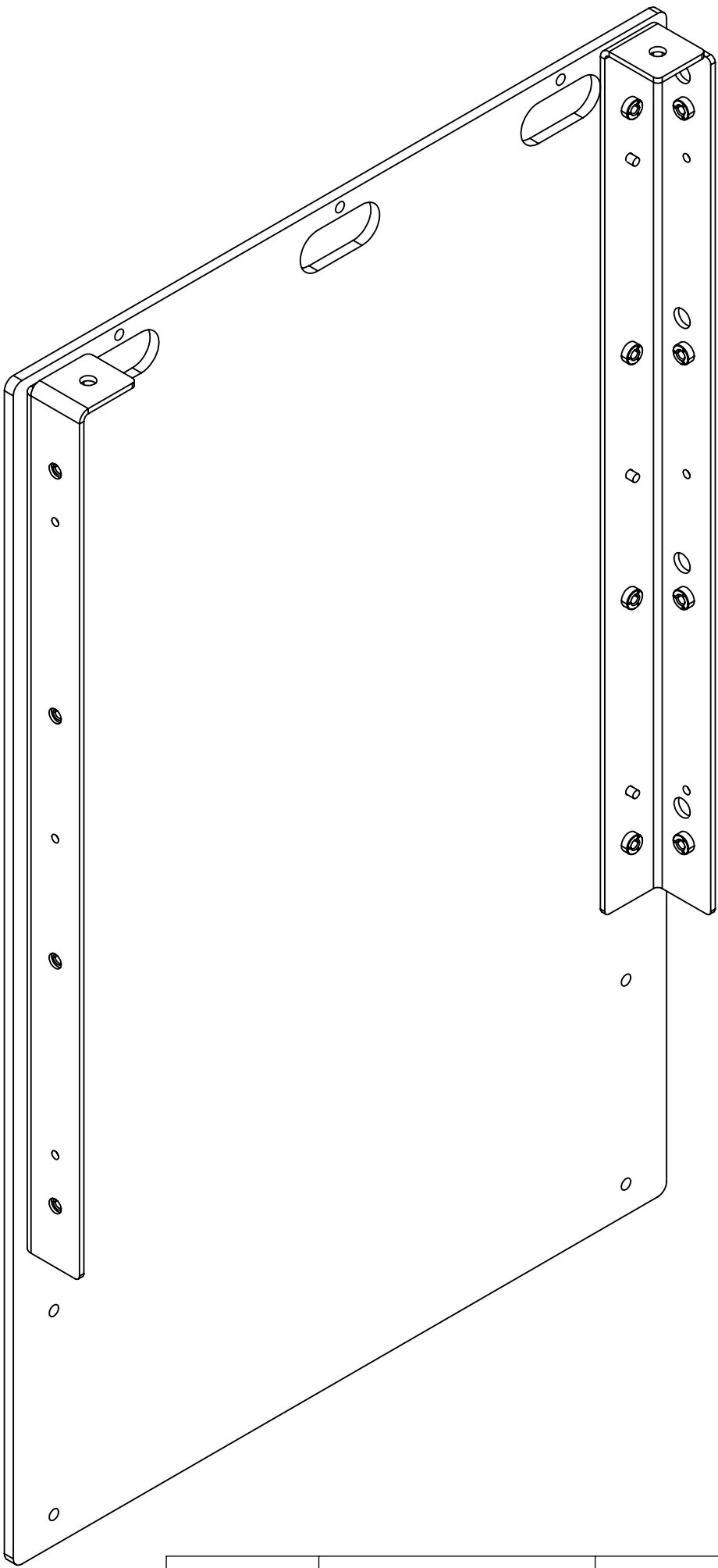
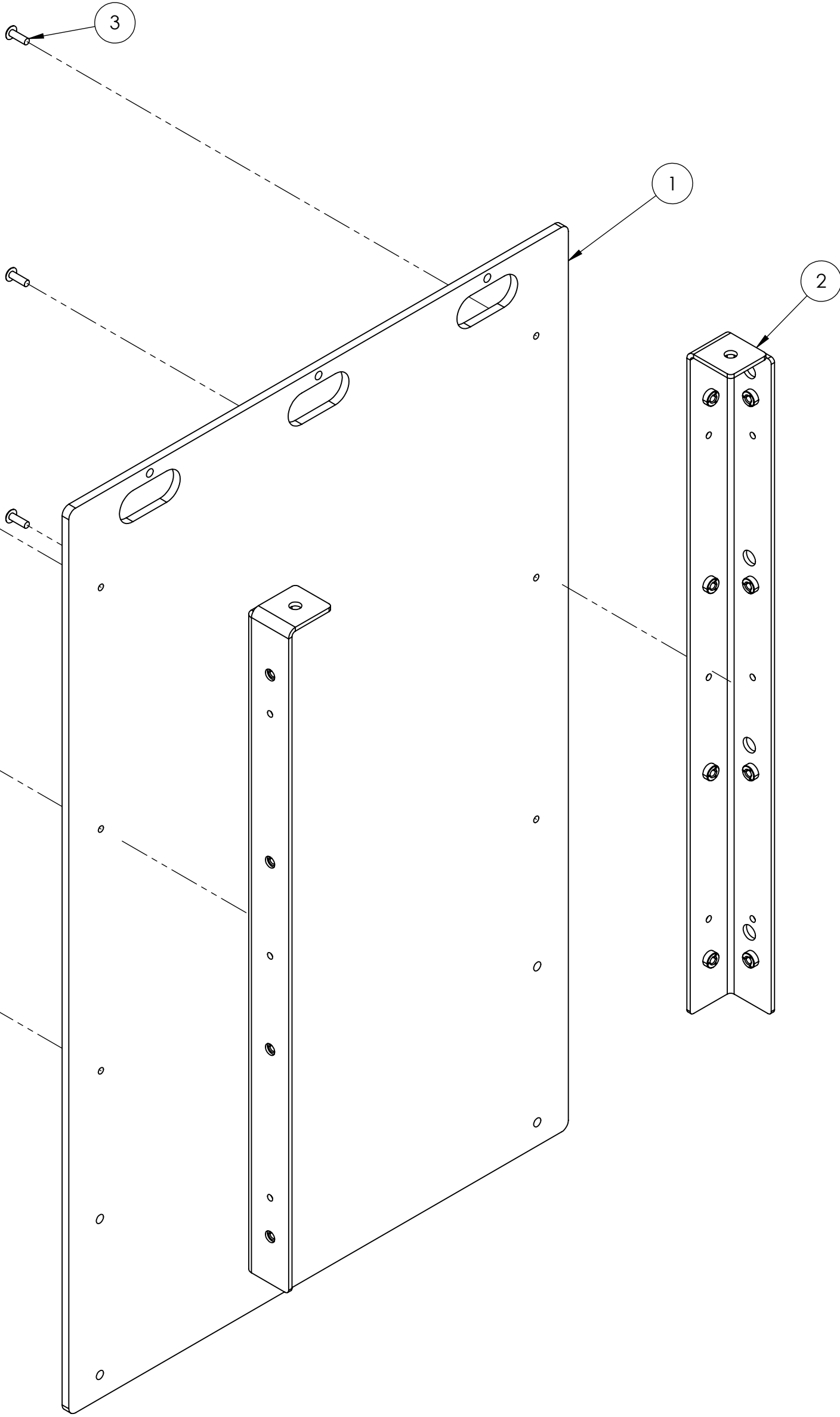
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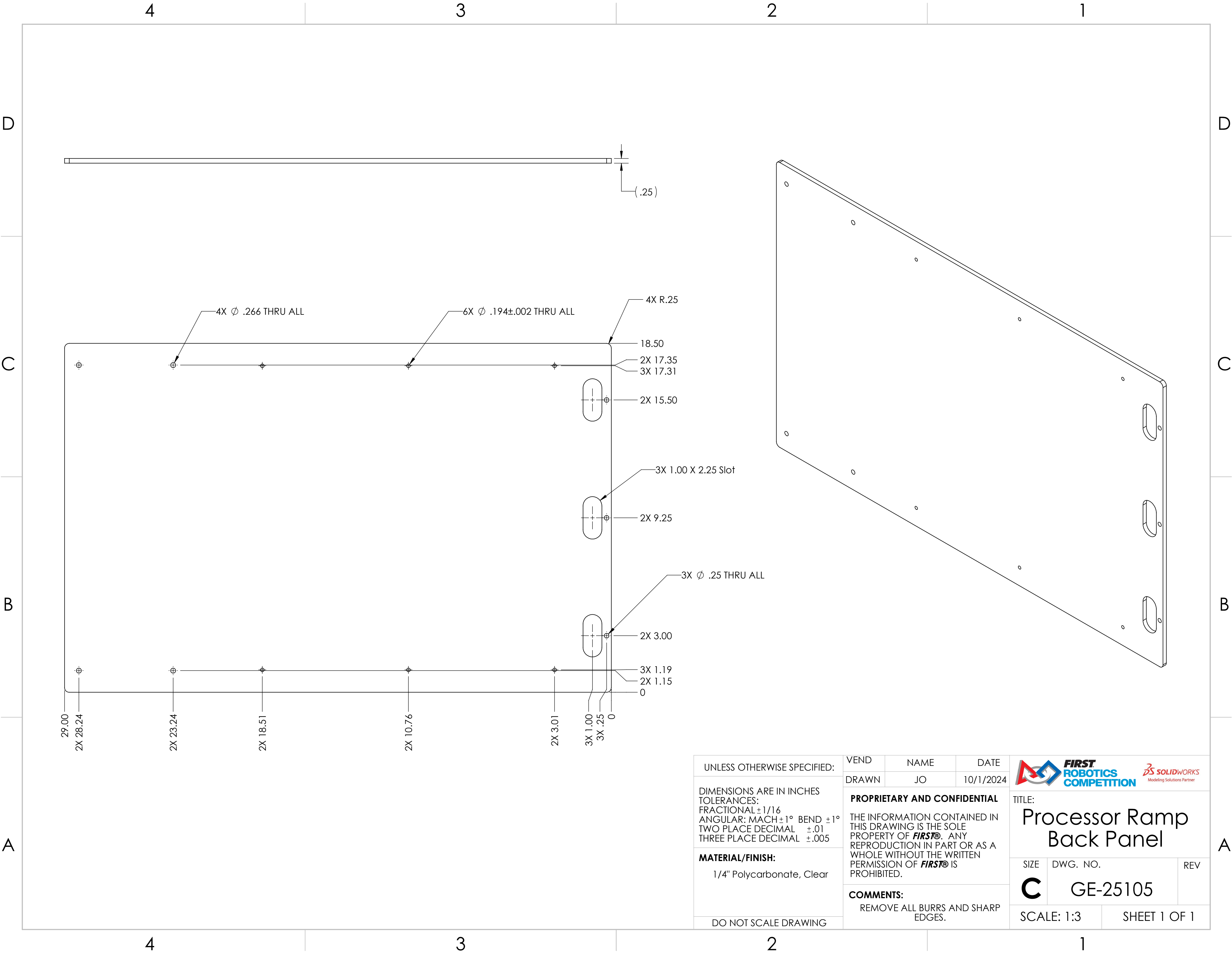
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Notes: Attach 1 to 2 using 3 as shown. Label assembly with drawing number.

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	GE-25105	Processor Ramp Back Panel	1
2	GE-25106	Processor Inner Corner Bracket w/ PEMs	2
3	rivet_.1875_.251-.375	3/16" Aluminum Rivet, .251-.375 Grip Range	6

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ±1/16 ANGULAR: MACH ±1° BEND ±1° TWO PLACE DECIMAL ±.01 THREE PLACE DECIMAL ±.005 MATERIAL/FINISH: DO NOT SCALE DRAWING	VEND	NAME	DATE	 	
	DRAWN	JO	10/2/2024		
	PROPRIETARY AND CONFIDENTIAL			TITLE: Processor Ramp Back Assembly	
	THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF FIRST® . ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FIRST® IS PROHIBITED.				
COMMENTS: REMOVE ALL BURRS AND SHARP EDGES.			SIZE	DWG. NO.	REV
			C	GE-25104	
			SCALE: 1:3		SHEET 1 OF 1



UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN INCHES
TOLERANCES:
FRACTIONAL ±1/16
ANGULAR: MACH ±1° BEND ±1°
TWO PLACE DECIMAL ±.01
THREE PLACE DECIMAL ±.005

MATERIAL/FINISH:
1/4" Polycarbonate, Clear

DO NOT SCALE DRAWING

VEND	NAME	DATE
DRAWN	JO	10/1/2024

PROPRIETARY AND CONFIDENTIAL

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF **FIRST®**. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF **FIRST®** IS PROHIBITED.

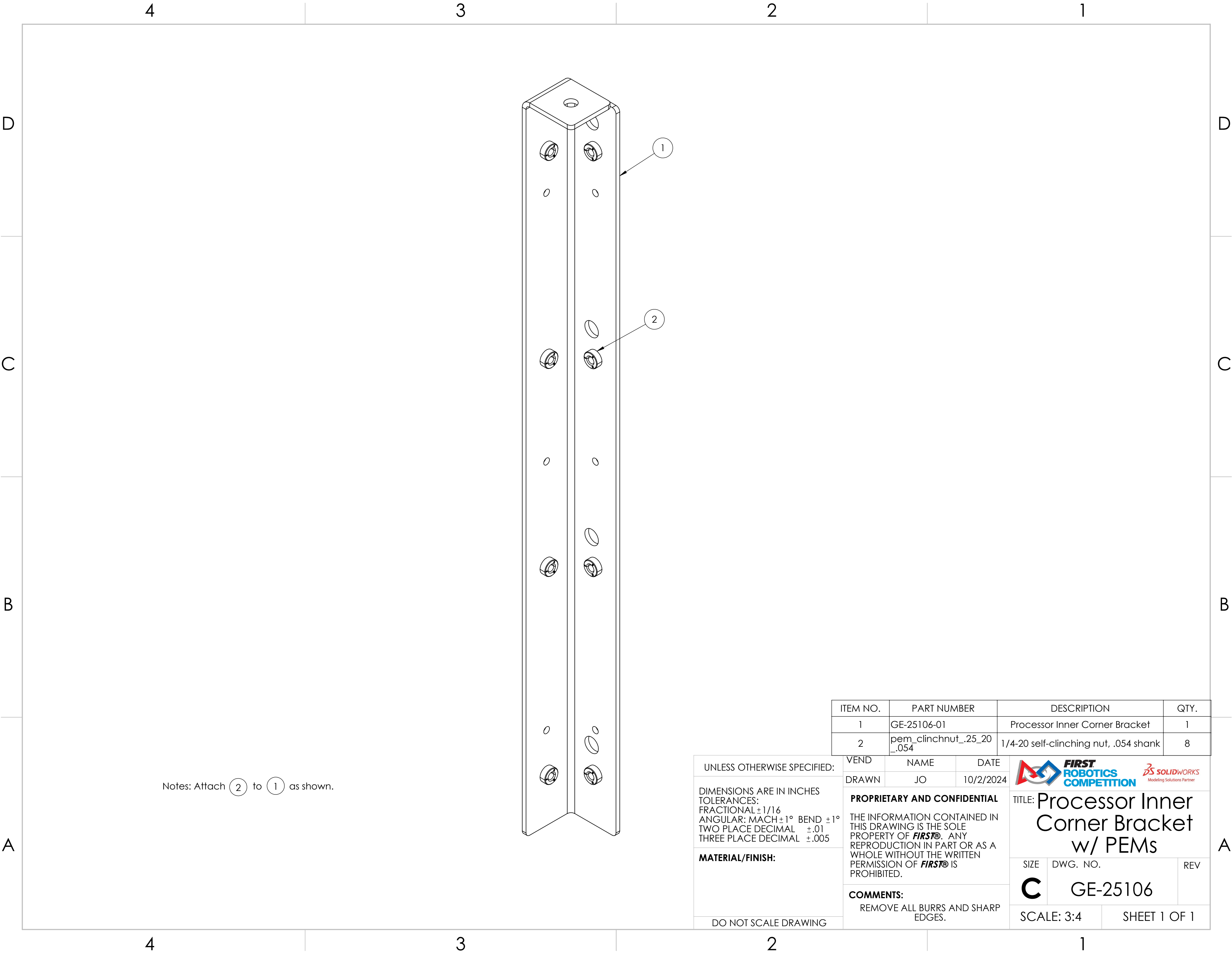
COMMENTS:
REMOVE ALL BURRS AND SHARP EDGES.



TITLE:
Processor Ramp Back Panel

SIZE	DWG. NO.	REV
C	GE-25105	

SCALE: 1:3 SHEET 1 OF 1



Notes: Attach 2 to 1 as shown.

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	GE-25106-01	Processor Inner Corner Bracket	1
2	pem_clinchnut_.25_20_.054	1/4-20 self-clinching nut, .054 shank	8

UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN INCHES
TOLERANCES:
FRACTIONAL $\pm 1/16$
ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$
TWO PLACE DECIMAL $\pm .01$
THREE PLACE DECIMAL $\pm .005$

MATERIAL/FINISH:

DO NOT SCALE DRAWING

VEND

NAME

DATE

DRAWN

JO



10/2/2024

PROPRIETARY AND CONFIDENTIAL

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF **FIRST**. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF **FIRST** IS PROHIBITED.

COMMENTS:

REMOVE ALL BURRS AND SHARP EDGES.



TITLE: Processor Inner Corner Bracket w/ PEMs

SIZE

DWG. NO.

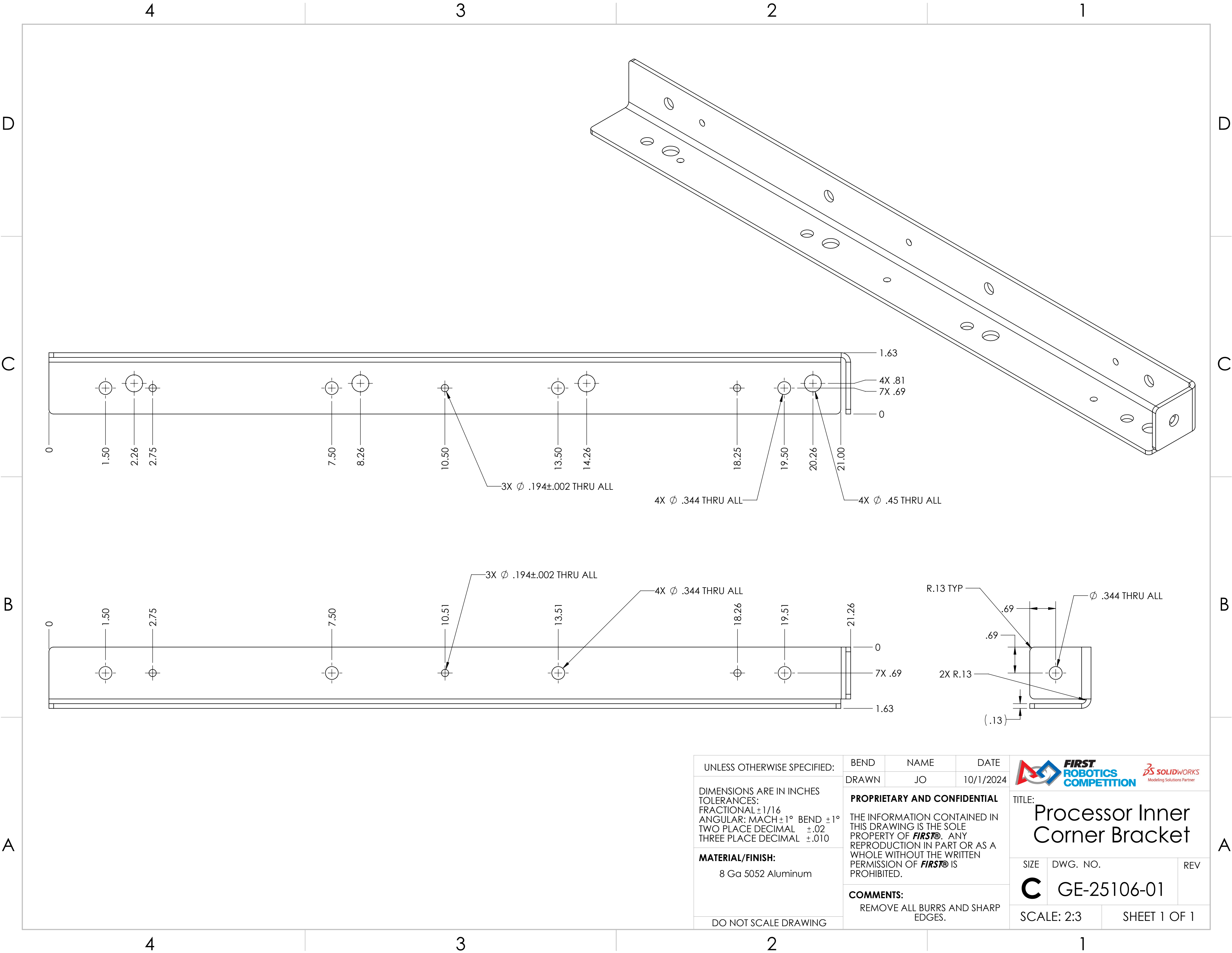
REV



C

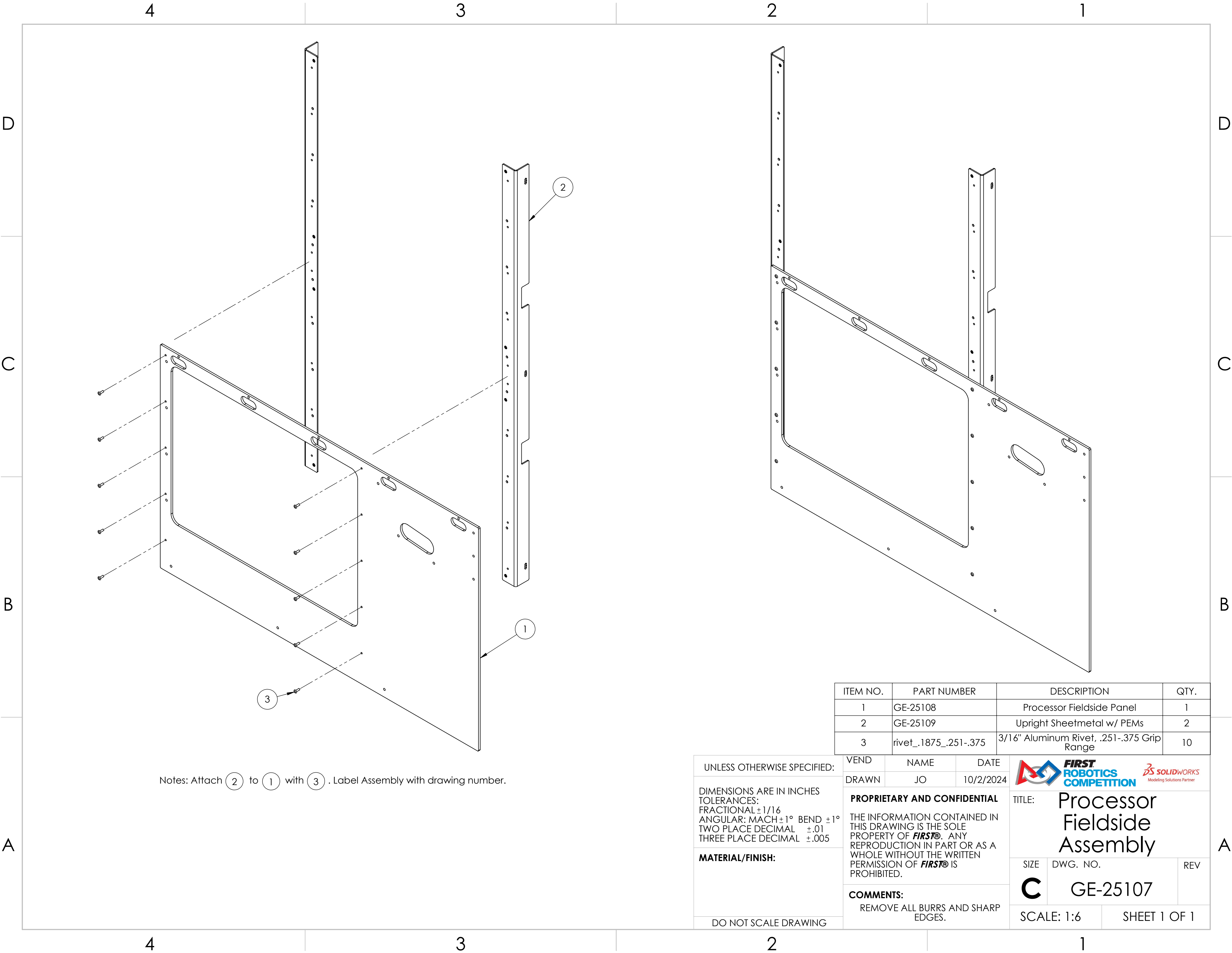
GE-25106

SCALE: 3:4

SHEET 1 OF 1




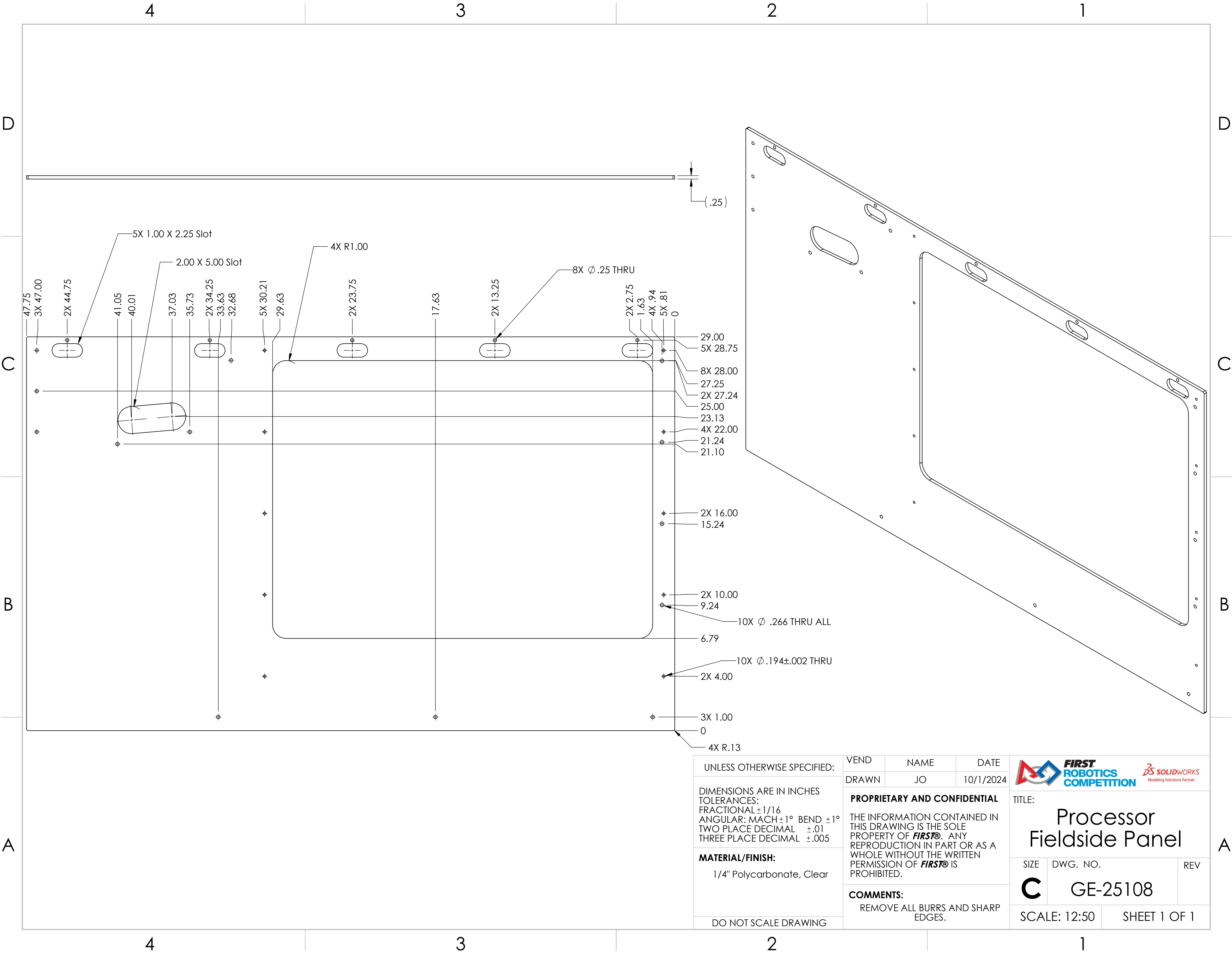
UNLESS OTHERWISE SPECIFIED:	BEND	NAME	DATE	<div></div> <div>TITLE: Processor Inner Corner Bracket</div>		
	DRAWN	JO	10/1/2024			
DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ±1/16 ANGULAR: MACH ±1° BEND ±1° TWO PLACE DECIMAL ±.02 THREE PLACE DECIMAL ±.010	PROPRIETARY AND CONFIDENTIAL THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF FIRST® . ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FIRST® IS PROHIBITED.			SIZE	DWG. NO.	REV
	COMMENTS: REMOVE ALL BURRS AND SHARP EDGES.			C	GE-25106-01	
MATERIAL/FINISH: 8 Ga 5052 Aluminum				SCALE: 2:3		SHEET 1 OF 1
DO NOT SCALE DRAWING						



Notes: Attach 2 to 1 with 3. Label Assembly with drawing number.

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	GE-25108	Processor Fieldside Panel	1
2	GE-25109	Upright Sheetmetal w/ PEMs	2
3	rivet_.1875_.251-.375	3/16" Aluminum Rivet, .251-.375 Grip Range	10

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL $\pm 1/16$ ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$ TWO PLACE DECIMAL $\pm .01$ THREE PLACE DECIMAL $\pm .005$ MATERIAL/FINISH: DO NOT SCALE DRAWING	VEND	NAME	DATE		
	DRAWN	JO	10/2/2024		
	PROPRIETARY AND CONFIDENTIAL THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF FIRST . ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FIRST IS PROHIBITED.			TITLE: Processor Fieldside Assembly	
	COMMENTS: REMOVE ALL BURRS AND SHARP EDGES.			SIZE C	DWG. NO. GE-25107 REV
SCALE: 1:6		SHEET 1 OF 1			



UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN INCHES
TOLERANCES:
FRACTIONAL $\pm 1/16$
ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$
TWO PLACE DECIMAL $\pm .01$
THREE PLACE DECIMAL $\pm .005$

MATERIAL/FINISH:
1/4" Polycarbonate, Clear

DO NOT SCALE DRAWING

VEND	NAME	DATE
DRAWN	JO	10/1/2024

PROPRIETARY AND CONFIDENTIAL

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COMMENTS:
REMOVE ALL BURRS AND SHARP EDGES.



TITLE:
Processor Fieldside Panel

SIZE	DWG. NO.	REV
C	GE-25108	

SCALE: 12:50 SHEET 1 OF 1

4

3

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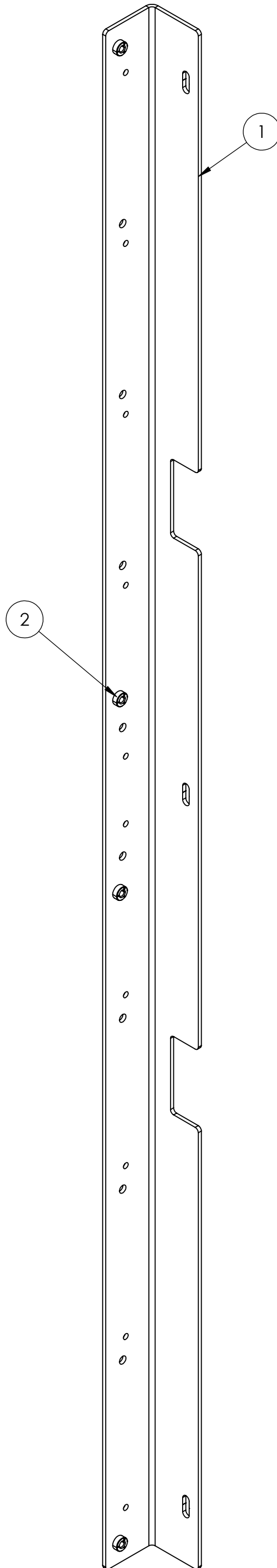
A

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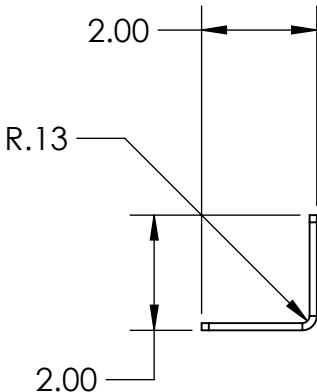
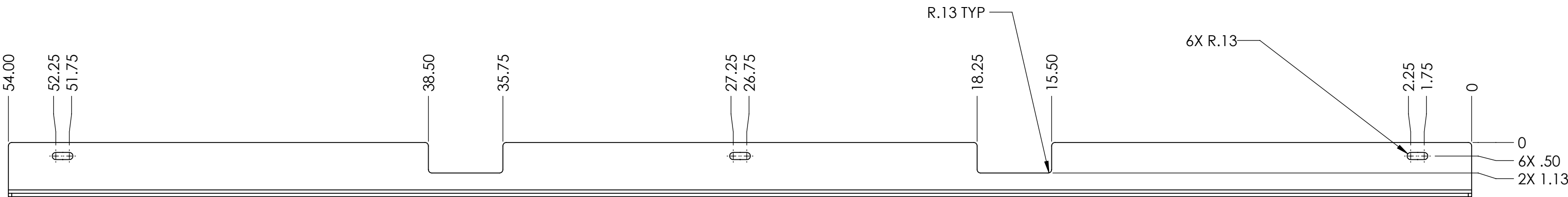
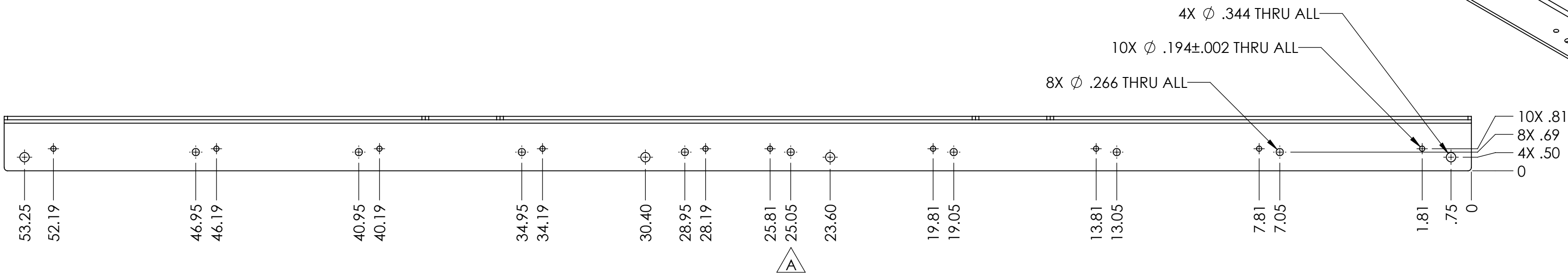
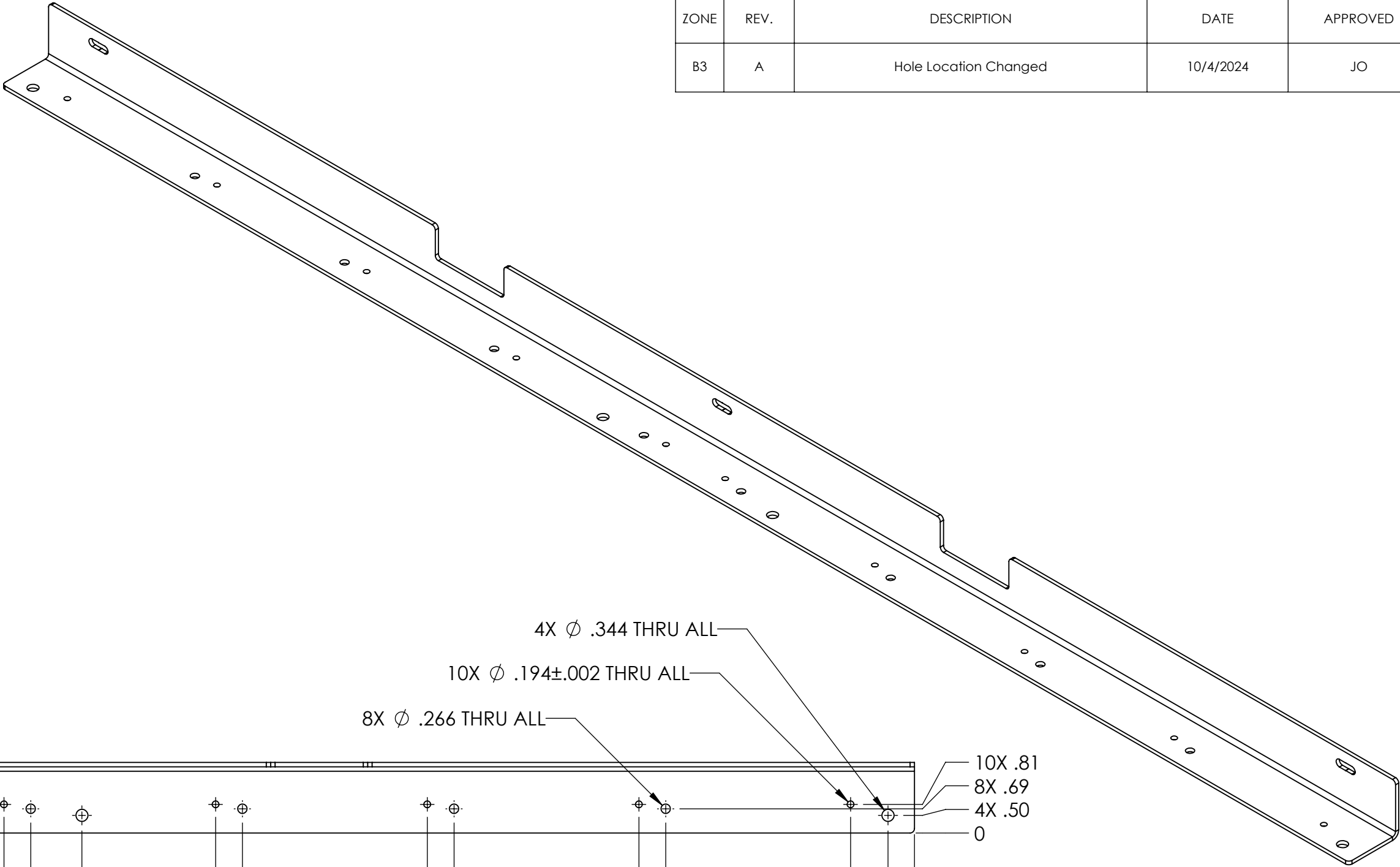


Notes: Attach (2) to (1) as shown.

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	GE-25109-01	Upright Sheetmetal	1
2	pem_clinchnut_.25_20_.054	1/4-20 self-clinching nut, .054 shank	4

UNLESS OTHERWISE SPECIFIED:		VEND		NAME		DATE	
		DRAWN		JO		10/2/2024	
DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ±1/16 ANGULAR: MACH ±1° BEND ±1° TWO PLACE DECIMAL ±.01 THREE PLACE DECIMAL ±.005		PROPRIETARY AND CONFIDENTIAL				TITLE: Upright Sheetmetal w/ PEMs	
		THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF FIRST® . ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FIRST® IS PROHIBITED.					
MATERIAL/FINISH:		COMMENTS:				SIZE	
		REMOVE ALL BURRS AND SHARP EDGES.				DWG. NO.	
DO NOT SCALE DRAWING						REV	
						C GE-25109	
						SCALE: 1:3	
						SHEET 1 OF 1	

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
B3	A	Hole Location Changed	10/4/2024	JO



UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN INCHES
TOLERANCES:
FRACTIONAL $\pm 1/16$
ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$
TWO PLACE DECIMAL $\pm .02$
THREE PLACE DECIMAL $\pm .010$

MATERIAL/FINISH:
8 Ga 5052 Aluminum

DO NOT SCALE DRAWING

BEND	NAME	DATE
DRAWN	JO	9/30/2024

PROPRIETARY AND CONFIDENTIAL

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COMMENTS:
REMOVE ALL BURRS AND SHARP EDGES.



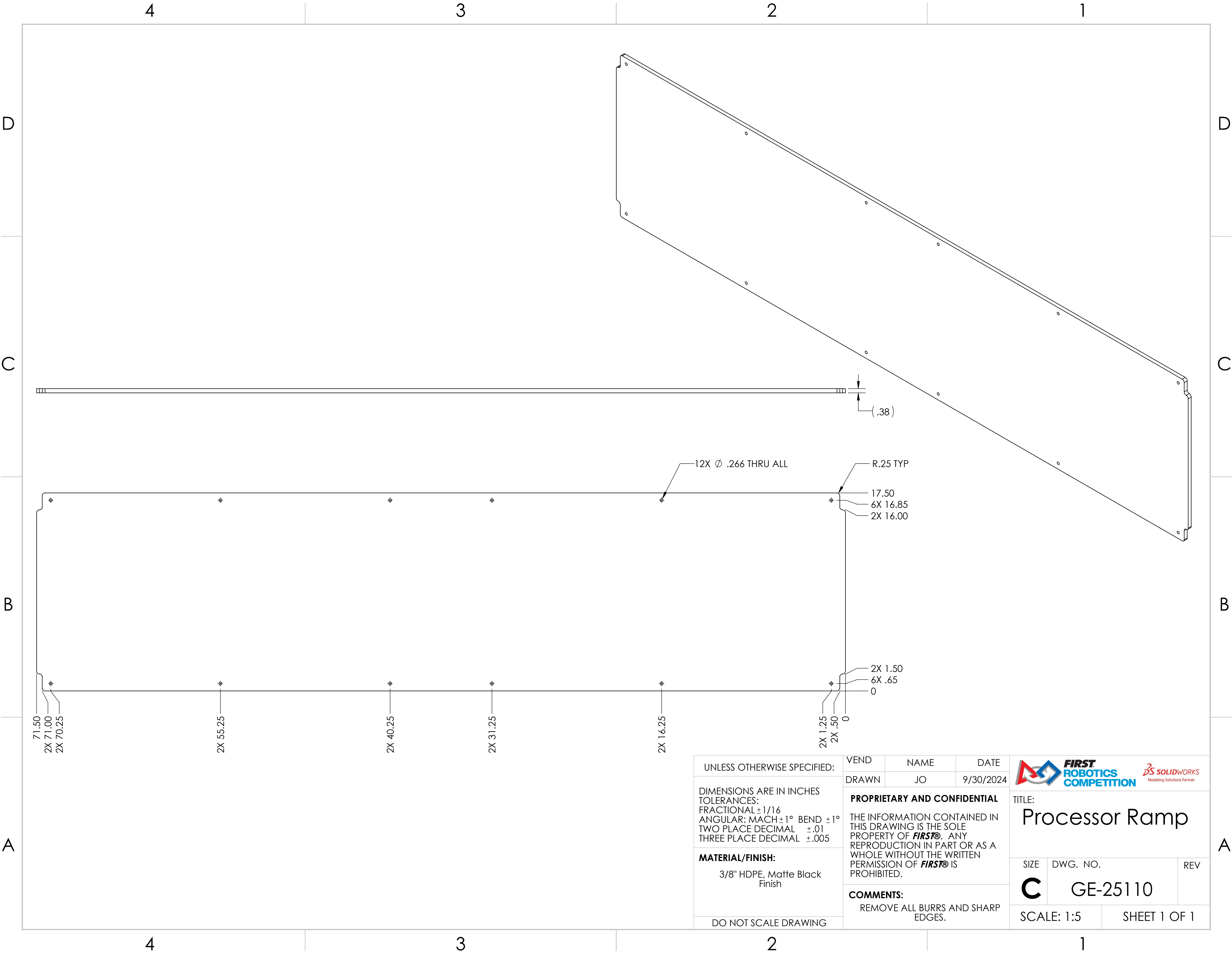
FIRST
ROBOTICS
COMPETITION



TITLE:
Upright Sheetmetal

SIZE	DWG. NO.	REV
C	GE-25109-01	A

SCALE: 3:10 SHEET 1 OF 1



UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN INCHES
TOLERANCES:
FRACTIONAL $\pm 1/16$
ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$
TWO PLACE DECIMAL $\pm .01$
THREE PLACE DECIMAL $\pm .005$

MATERIAL/FINISH:
3/8" HDPE, Matte Black
Finish

DO NOT SCALE DRAWING

VEND

DRAWN

NAME

JO

DATE

9/30/2024

PROPRIETARY AND CONFIDENTIAL

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WHOLE WITHOUT THE WRITTEN
PERMISSION OF **FIRST®** IS
PROHIBITED.

COMMENTS:

REMOVE ALL BURRS AND SHARP
EDGES.

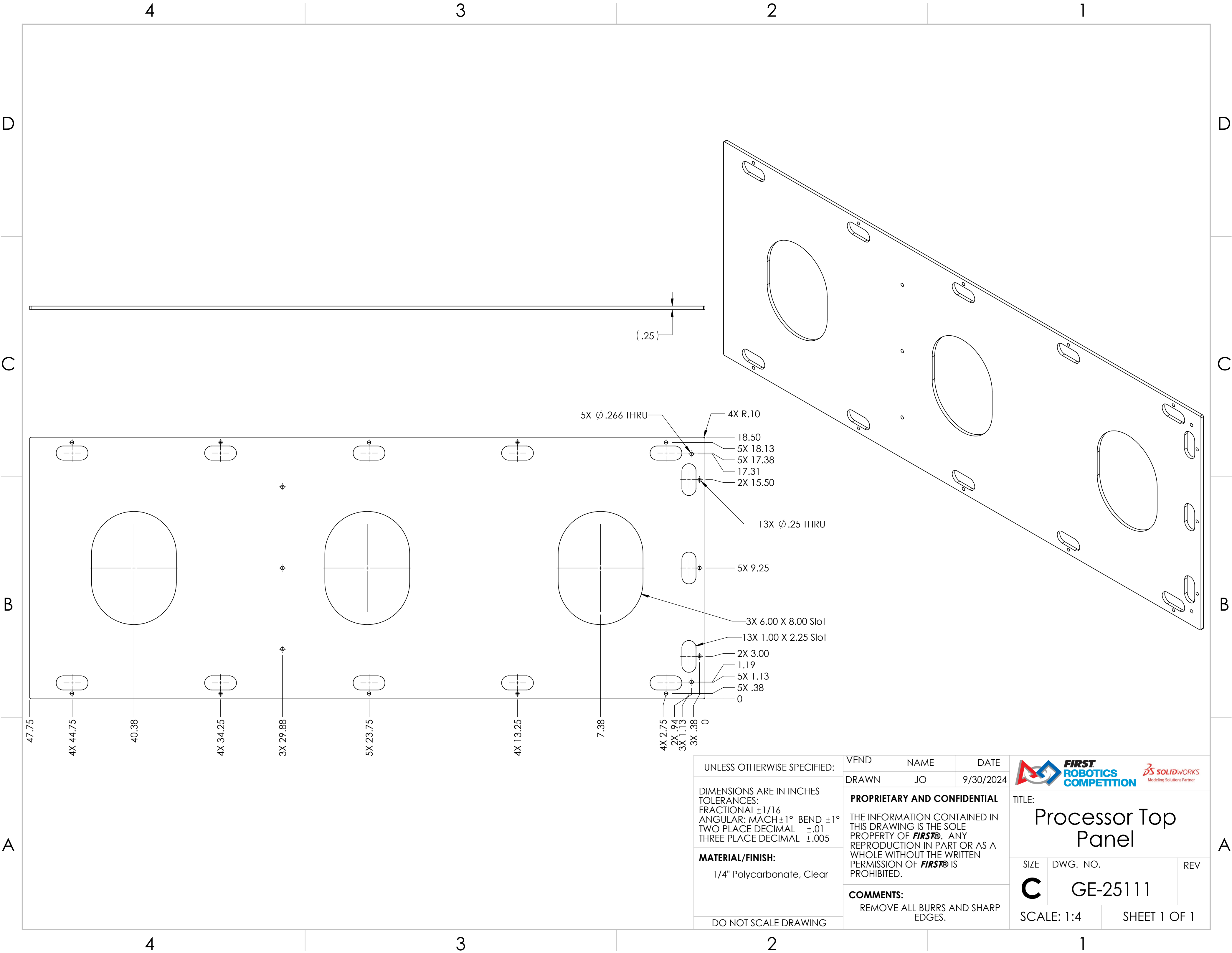


TITLE:
Processor Ramp

SIZE DWG. NO. REV

C GE-25110

SCALE: 1:5 SHEET 1 OF 1



UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN INCHES
TOLERANCES:
FRACTIONAL $\pm 1/16$
ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$
TWO PLACE DECIMAL $\pm .01$
THREE PLACE DECIMAL $\pm .005$

MATERIAL/FINISH:
1/4" Polycarbonate, Clear



DO NOT SCALE DRAWING

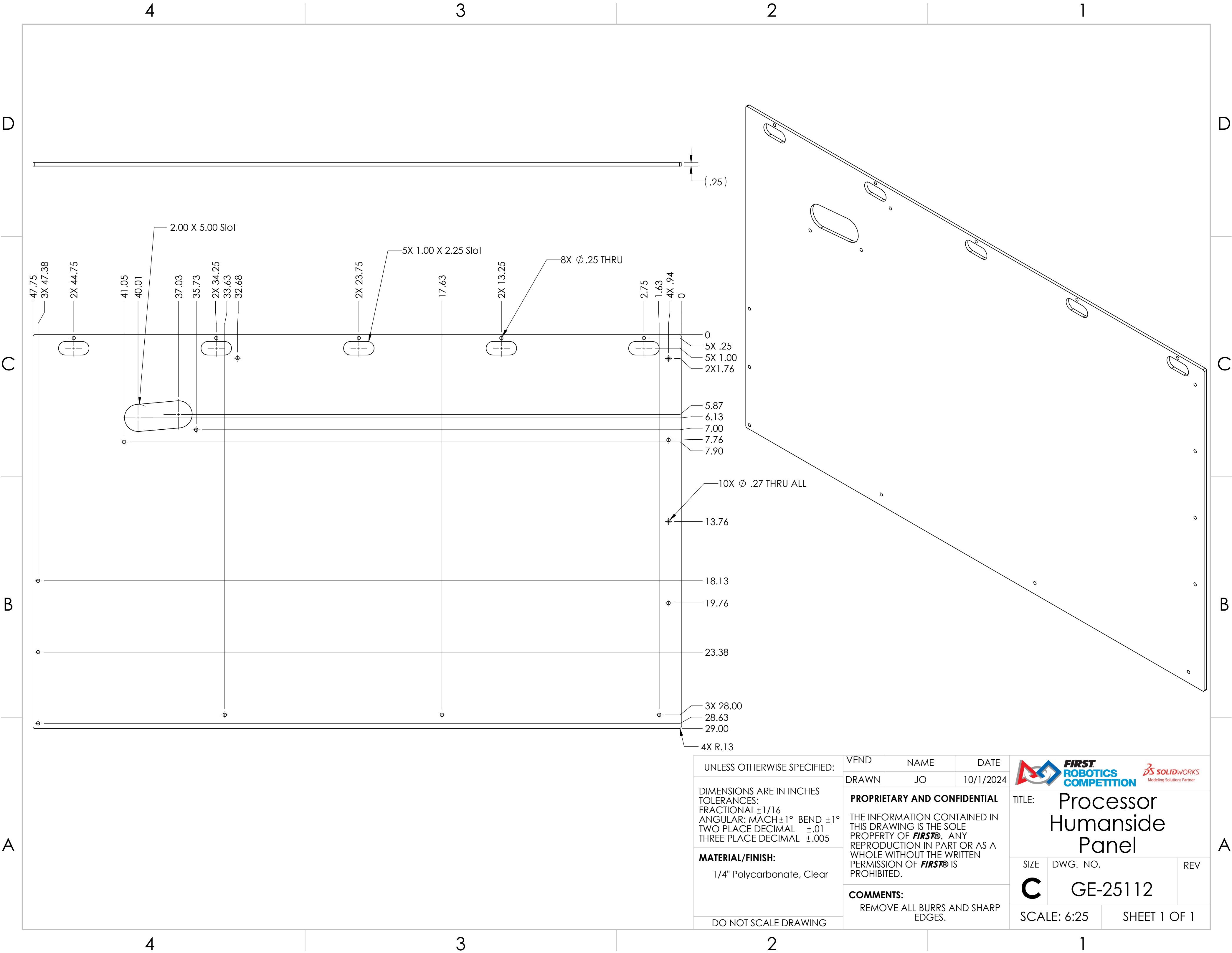
VEND	NAME	DATE
DRAWN	JO	9/30/2024

PROPRIETARY AND CONFIDENTIAL

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COMMENTS:
REMOVE ALL BURRS AND SHARP EDGES.

 		
TITLE: Processor Top Panel		
SIZE C	DWG. NO. GE-25111	REV
SCALE: 1:4		SHEET 1 OF 1



UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN INCHES
TOLERANCES:
FRACTIONAL $\pm 1/16$
ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$
TWO PLACE DECIMAL $\pm .01$
THREE PLACE DECIMAL $\pm .005$

MATERIAL/FINISH:
1/4" Polycarbonate, Clear



DO NOT SCALE DRAWING

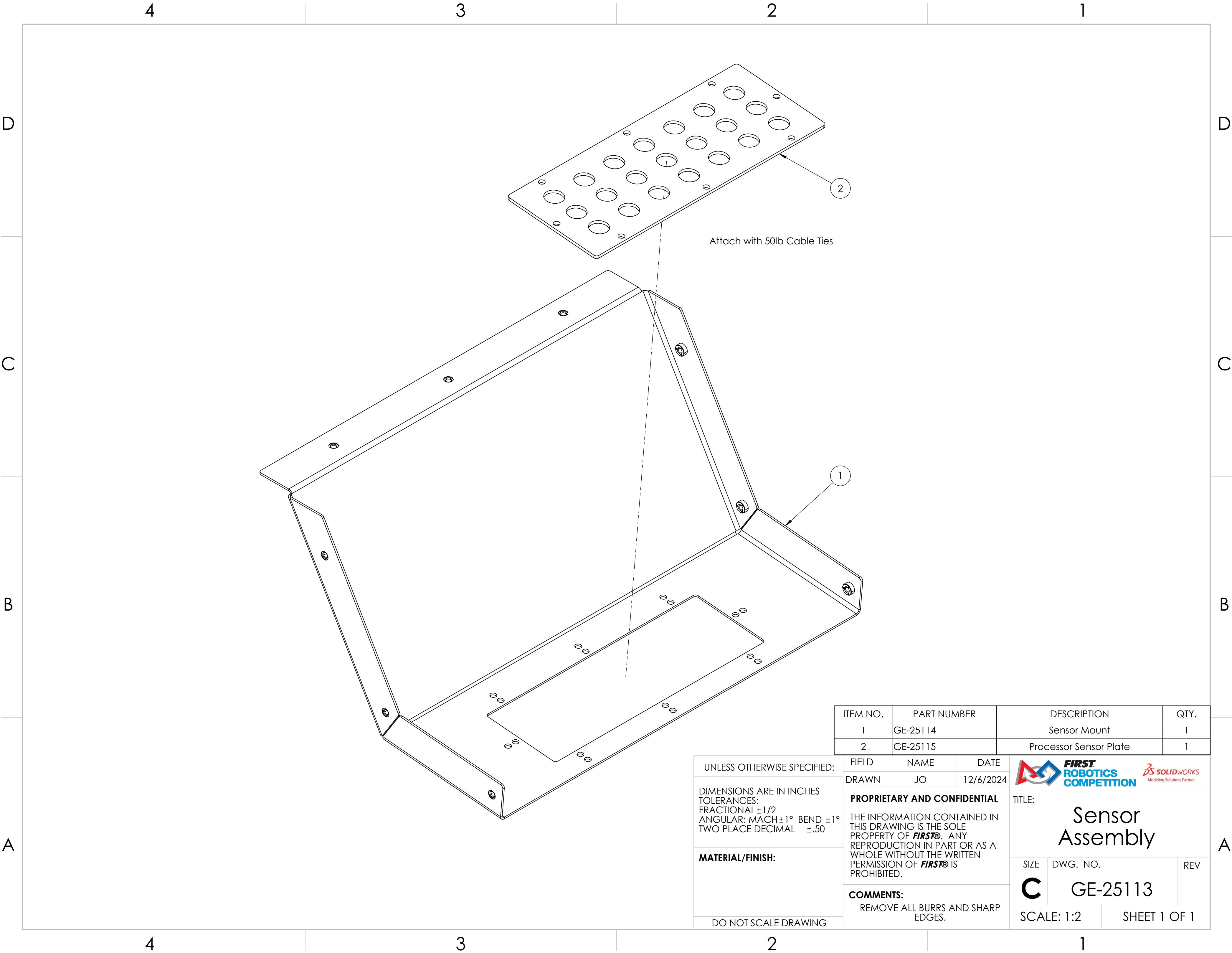
VEND	NAME	DATE
DRAWN	JO	10/1/2024

PROPRIETARY AND CONFIDENTIAL

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COMMENTS:
REMOVE ALL BURRS AND SHARP EDGES.

 		
TITLE: Processor Humanside Panel		
SIZE	DWG. NO.	REV
C	GE-25112	
SCALE: 6:25		SHEET 1 OF 1



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	GE-25114	Sensor Mount	1
2	GE-25115	Processor Sensor Plate	1

UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN INCHES
TOLERANCES:
FRACTIONAL $\pm 1/2$
ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$
TWO PLACE DECIMAL $\pm .50$

MATERIAL/FINISH:

DO NOT SCALE DRAWING

FIELD	NAME	DATE
DRAWN	JO	12/6/2024

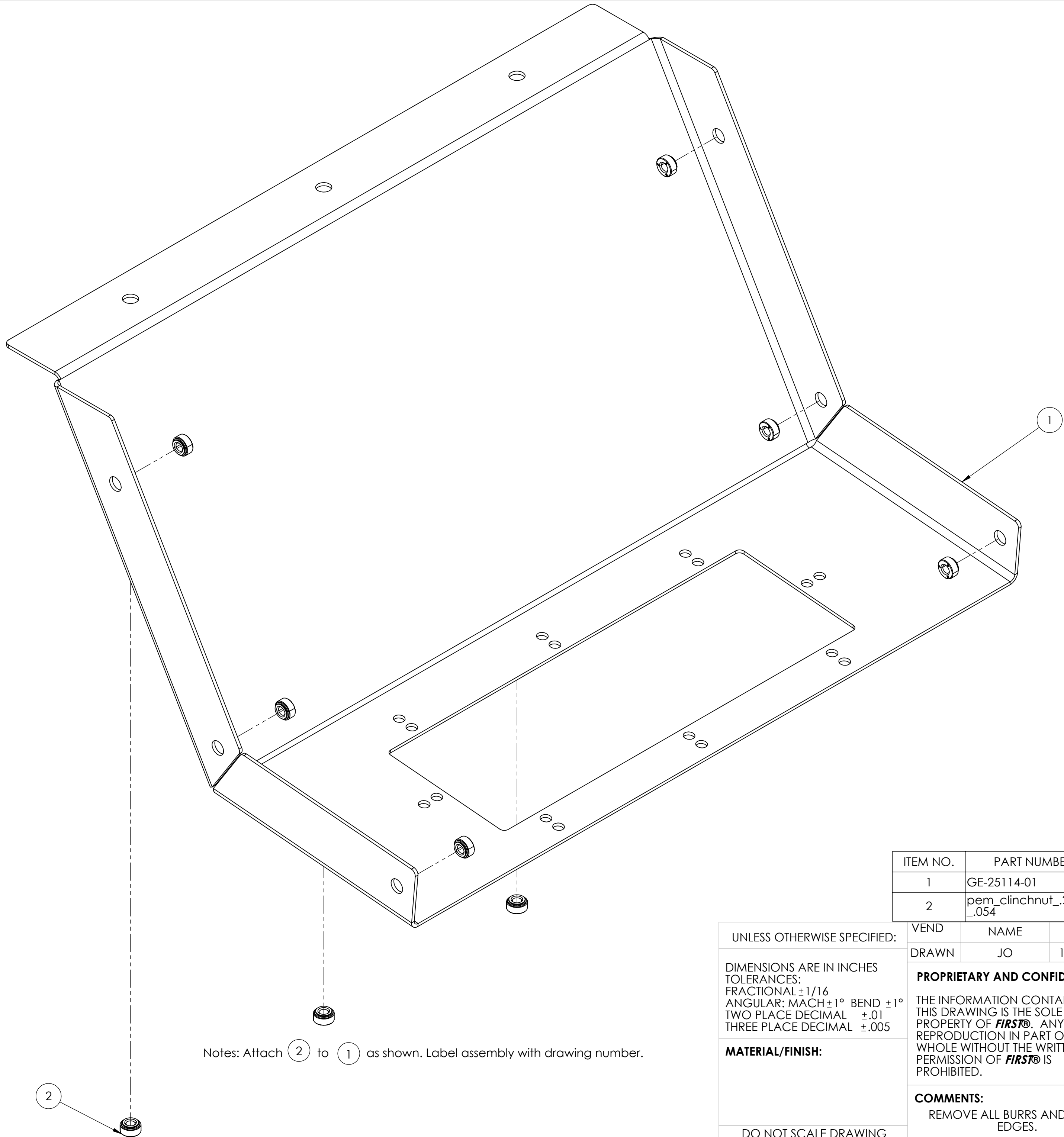
PROPRIETARY AND CONFIDENTIAL
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COMMENTS:
REMOVE ALL BURRS AND SHARP EDGES.



TITLE: Sensor Assembly		
SIZE C	DWG. NO. GE-25113	REV

SCALE: 1:2	SHEET 1 OF 1
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Notes: Attach 2 to 1 as shown. Label assembly with drawing number.

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	GE-25114-01	Processor Sensor Mount Sheetmetal	1
2	pem_clinchnut_.25_20_.054	1/4-20 self-clinching nut, .054 shank	9

UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN INCHES
TOLERANCES:
FRACTIONAL $\pm 1/16$
ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$
TWO PLACE DECIMAL $\pm .01$
THREE PLACE DECIMAL $\pm .005$

MATERIAL/FINISH:

DO NOT SCALE DRAWING

VEND	NAME	DATE
DRAWN	JO	10/2/2024

PROPRIETARY AND CONFIDENTIAL

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COMMENTS:
REMOVE ALL BURRS AND SHARP EDGES.



TITLE:
Sensor Mount

SIZE	DWG. NO.	REV
C	GE-25114	

SCALE: 2:3 SHEET 1 OF 1

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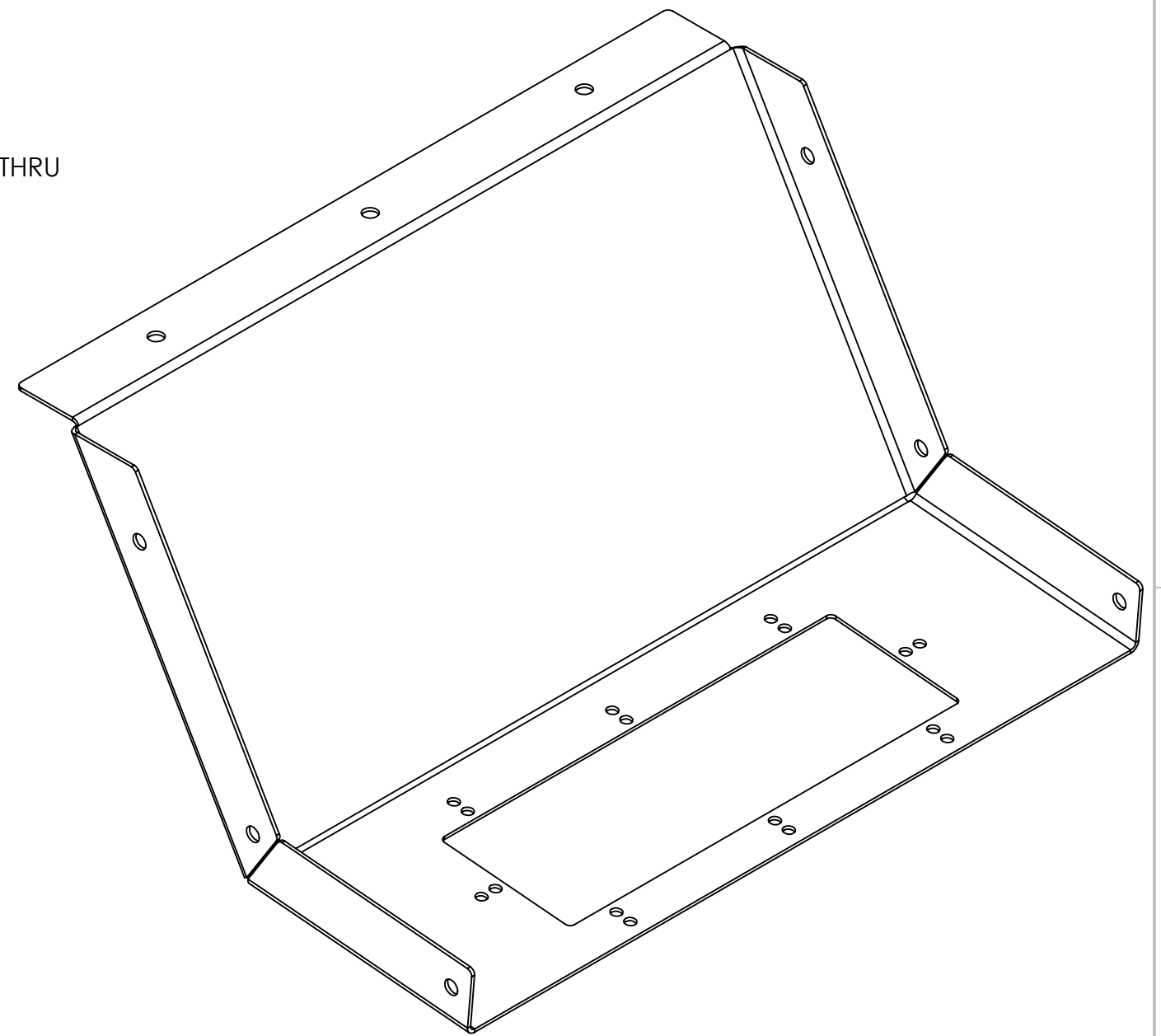
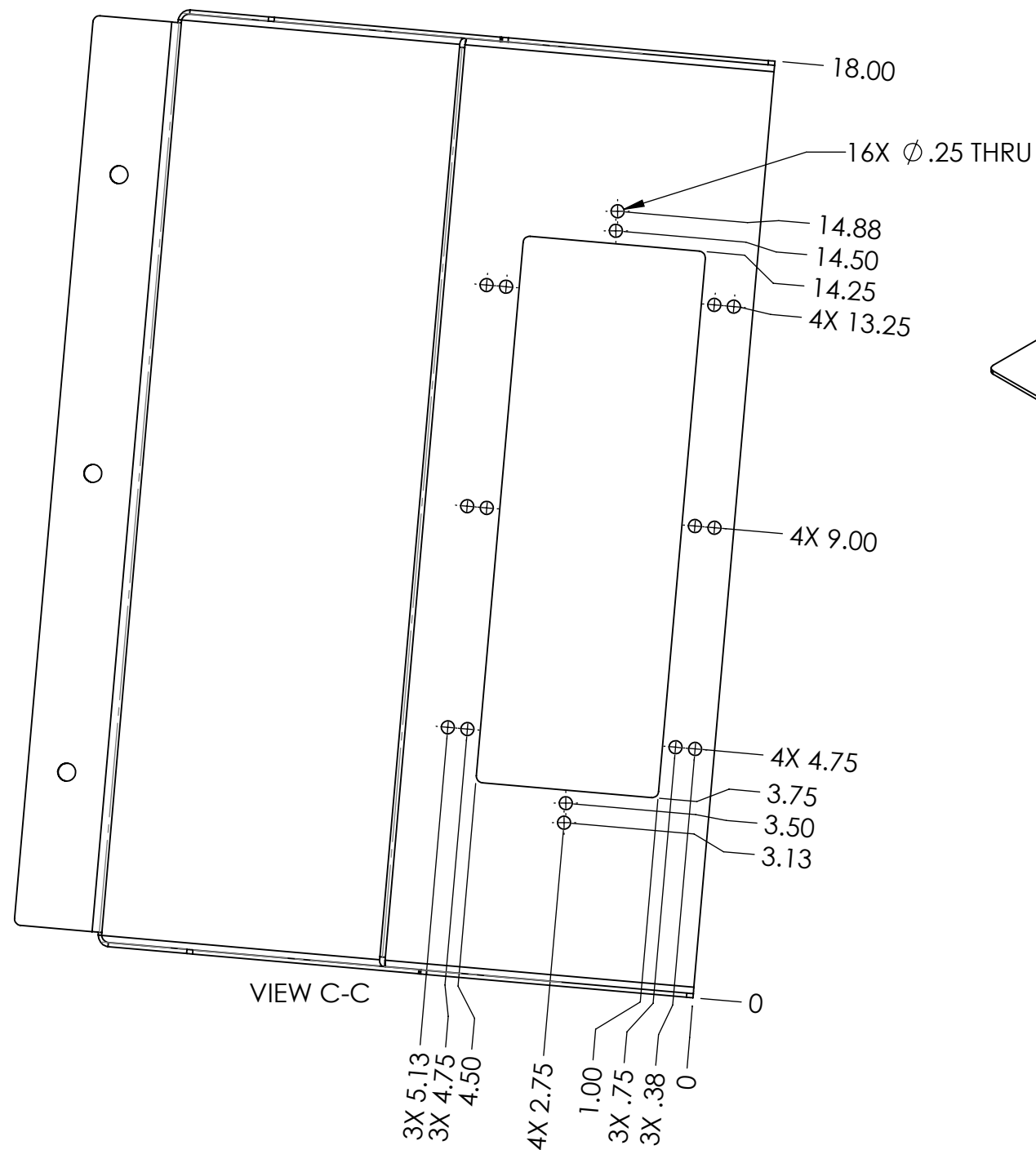
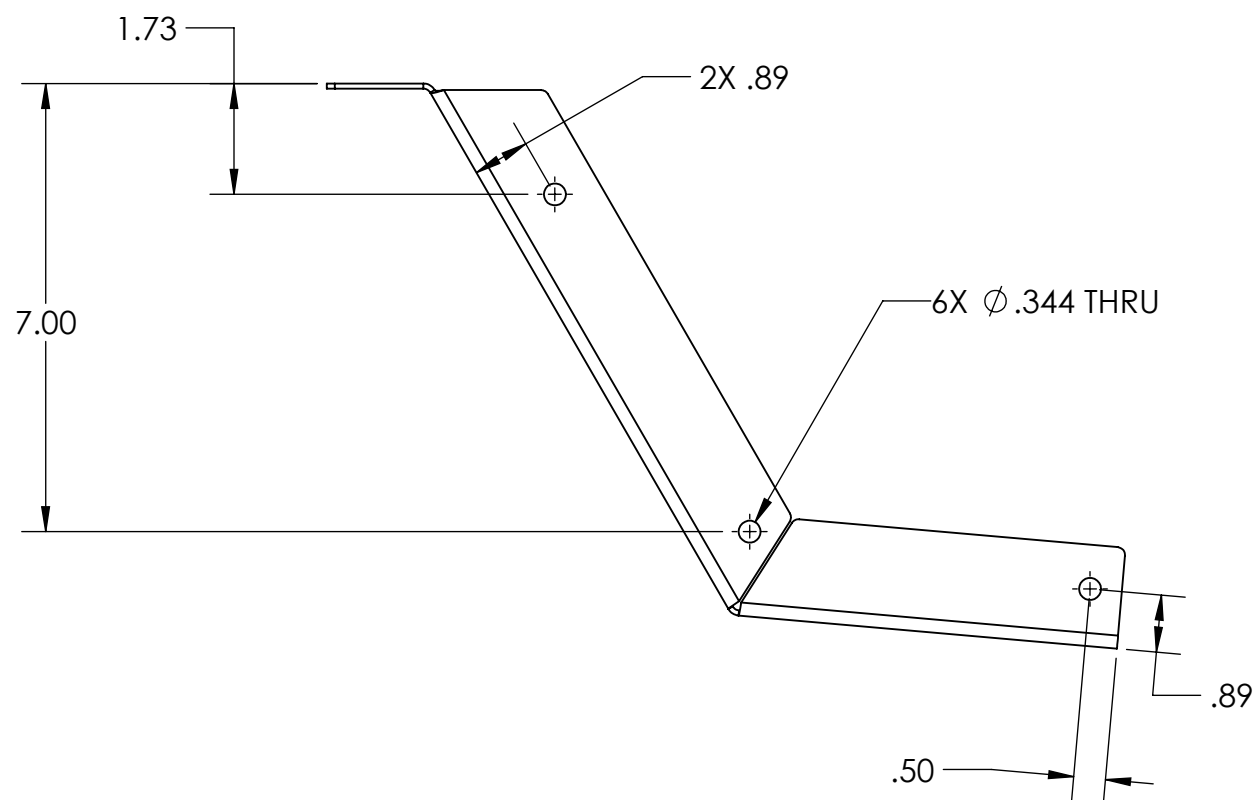
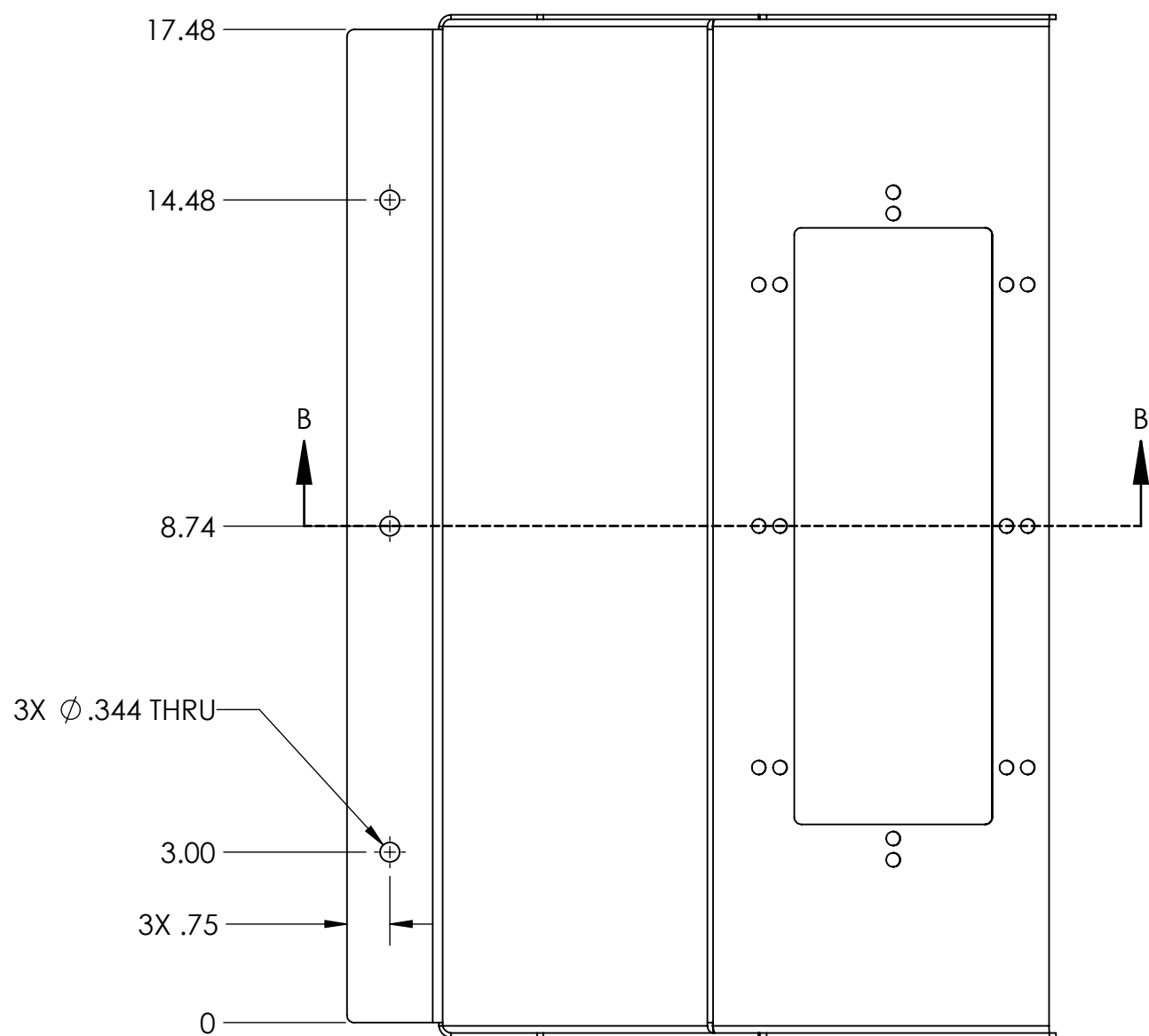
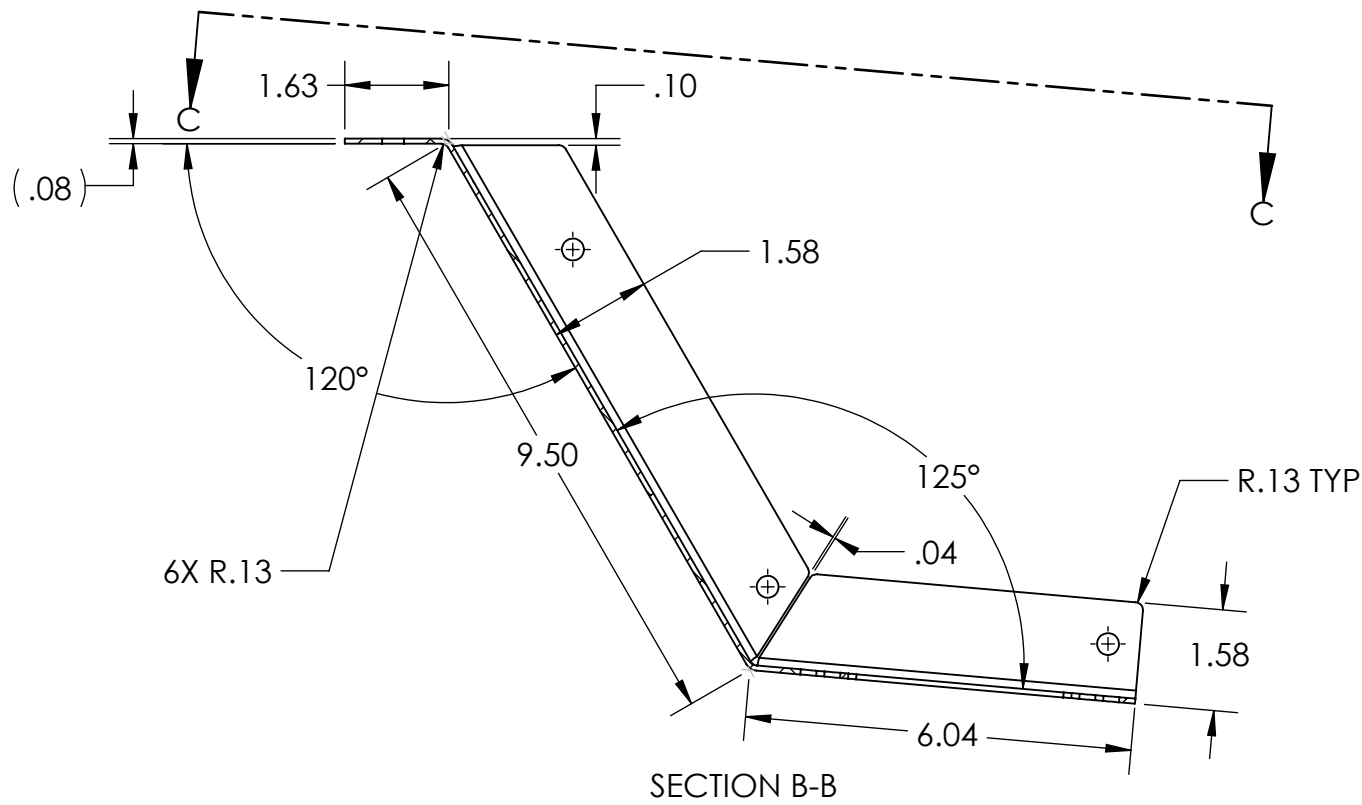
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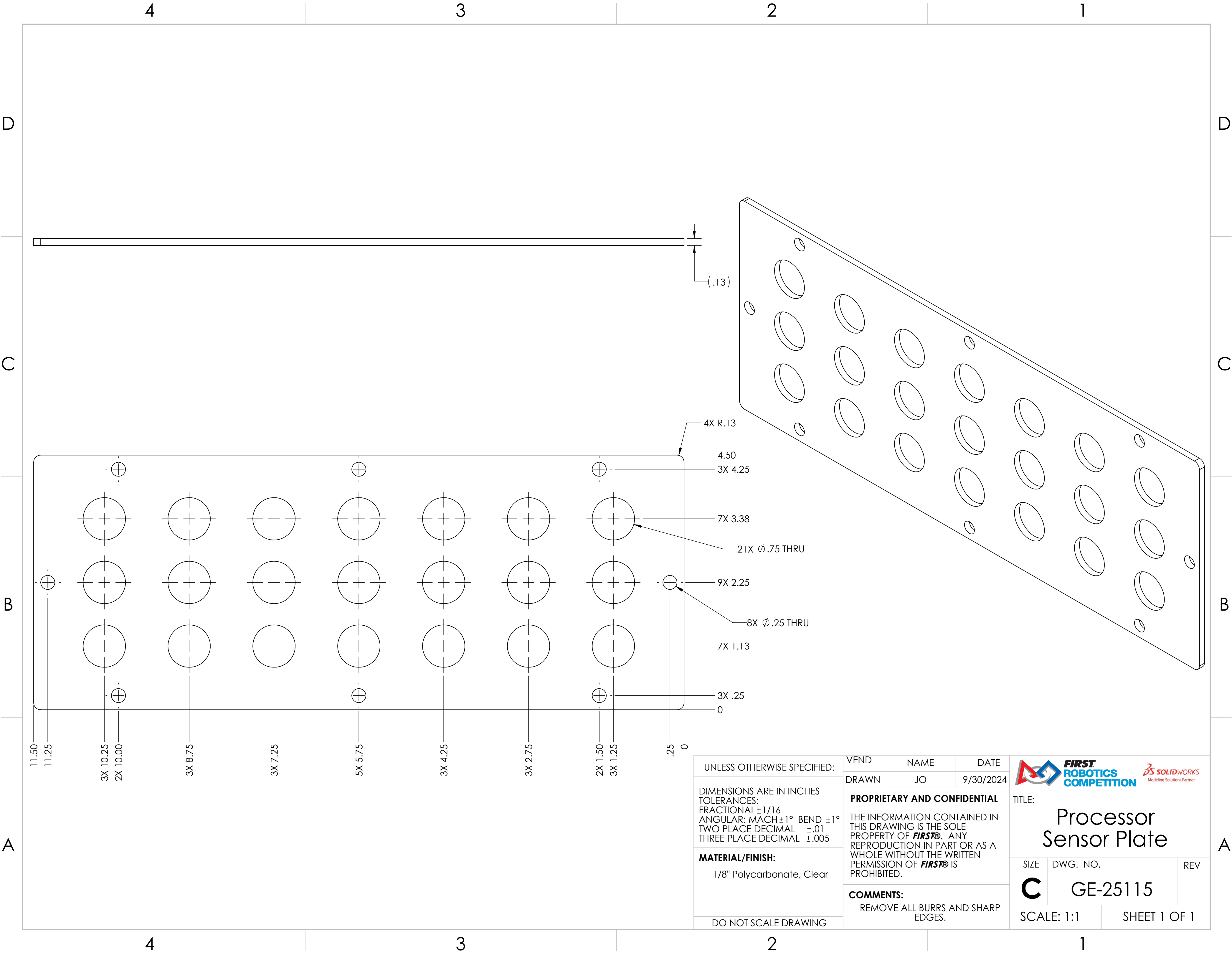
C

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UNLESS OTHERWISE SPECIFIED:	BEND	NAME	DATE	 
	DRAWN	JO	9/30/2024	
DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ±1/16 ANGULAR: MACH±1° BEND ±1° TWO PLACE DECIMAL ±.02 THREE PLACE DECIMAL ±.010	PROPRIETARY AND CONFIDENTIAL			TITLE:Processor Sensor Mount Sheetmetal
	THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF FIRST® . ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FIRST® IS PROHIBITED.			
MATERIAL/FINISH: 12 Ga 5052 Aluminum	COMMENTS:			SIZE DWG. NO. REV
	REMOVE ALL BURRS AND SHARP EDGES.			
DO NOT SCALE DRAWING	SCALE: 1:3			SHEET 1 OF 1



UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN INCHES
TOLERANCES:
FRACTIONAL $\pm 1/16$
ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$
TWO PLACE DECIMAL $\pm .01$
THREE PLACE DECIMAL $\pm .005$


MATERIAL/FINISH:
1/8" Polycarbonate, Clear

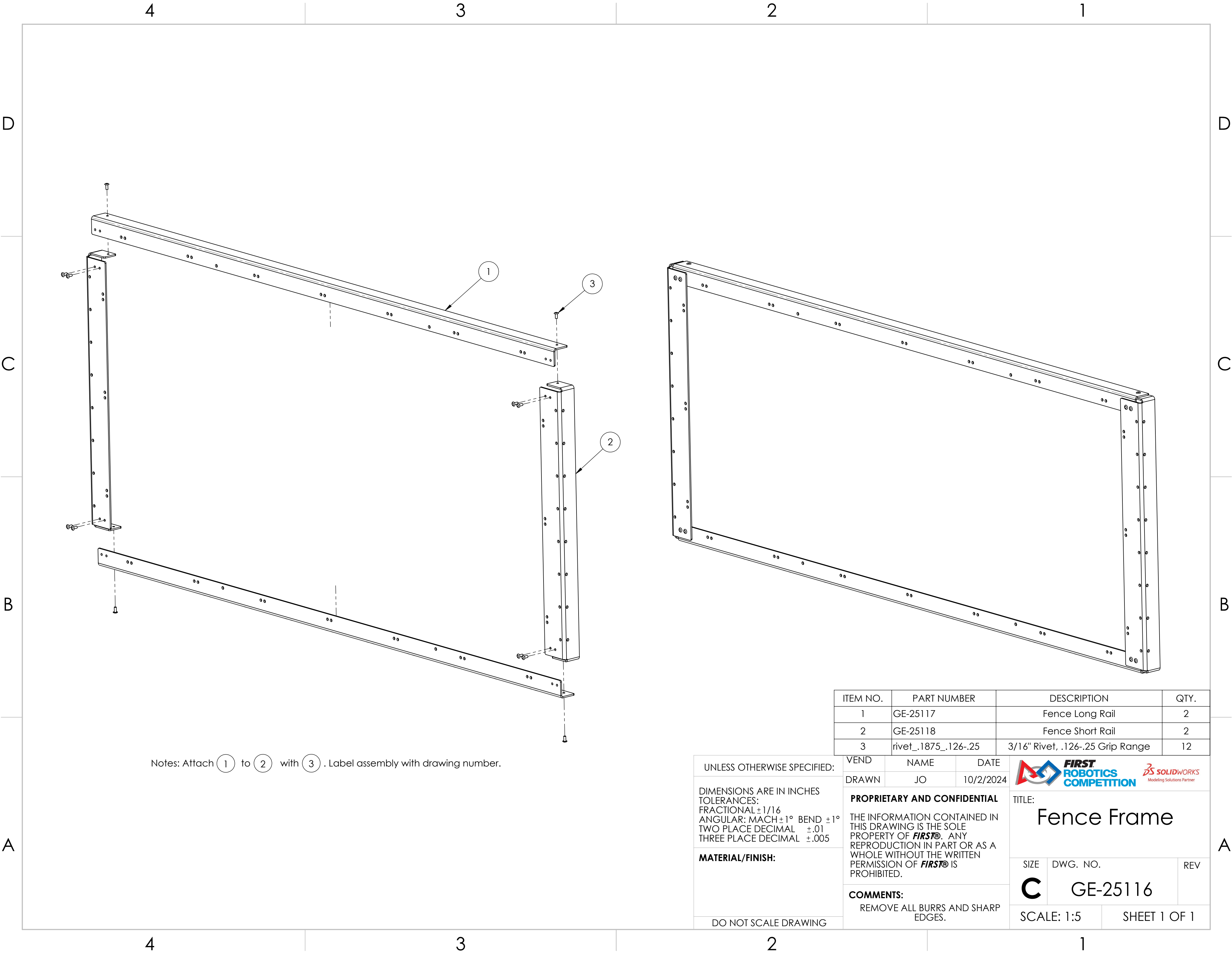
DO NOT SCALE DRAWING

VEND	NAME	DATE
DRAWN	JO	9/30/2024

PROPRIETARY AND CONFIDENTIAL
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COMMENTS:
REMOVE ALL BURRS AND SHARP EDGES.

		
TITLE: Processor Sensor Plate		
SIZE C	DWG. NO. GE-25115	REV
SCALE: 1:1		SHEET 1 OF 1



Notes: Attach 1 to 2 with 3 . Label assembly with drawing number.

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	GE-25117	Fence Long Rail	2
2	GE-25118	Fence Short Rail	2
3	rivet_.1875_.126-.25	3/16" Rivet, .126-.25 Grip Range	12

UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN INCHES
TOLERANCES:
FRACTIONAL $\pm 1/16$
ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$
TWO PLACE DECIMAL $\pm .01$
THREE PLACE DECIMAL $\pm .005$

MATERIAL/FINISH:

DO NOT SCALE DRAWING

VEND	NAME	DATE
DRAWN	JO	10/2/2024

PROPRIETARY AND CONFIDENTIAL

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF **FIRST**. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF **FIRST** IS PROHIBITED.

COMMENTS:

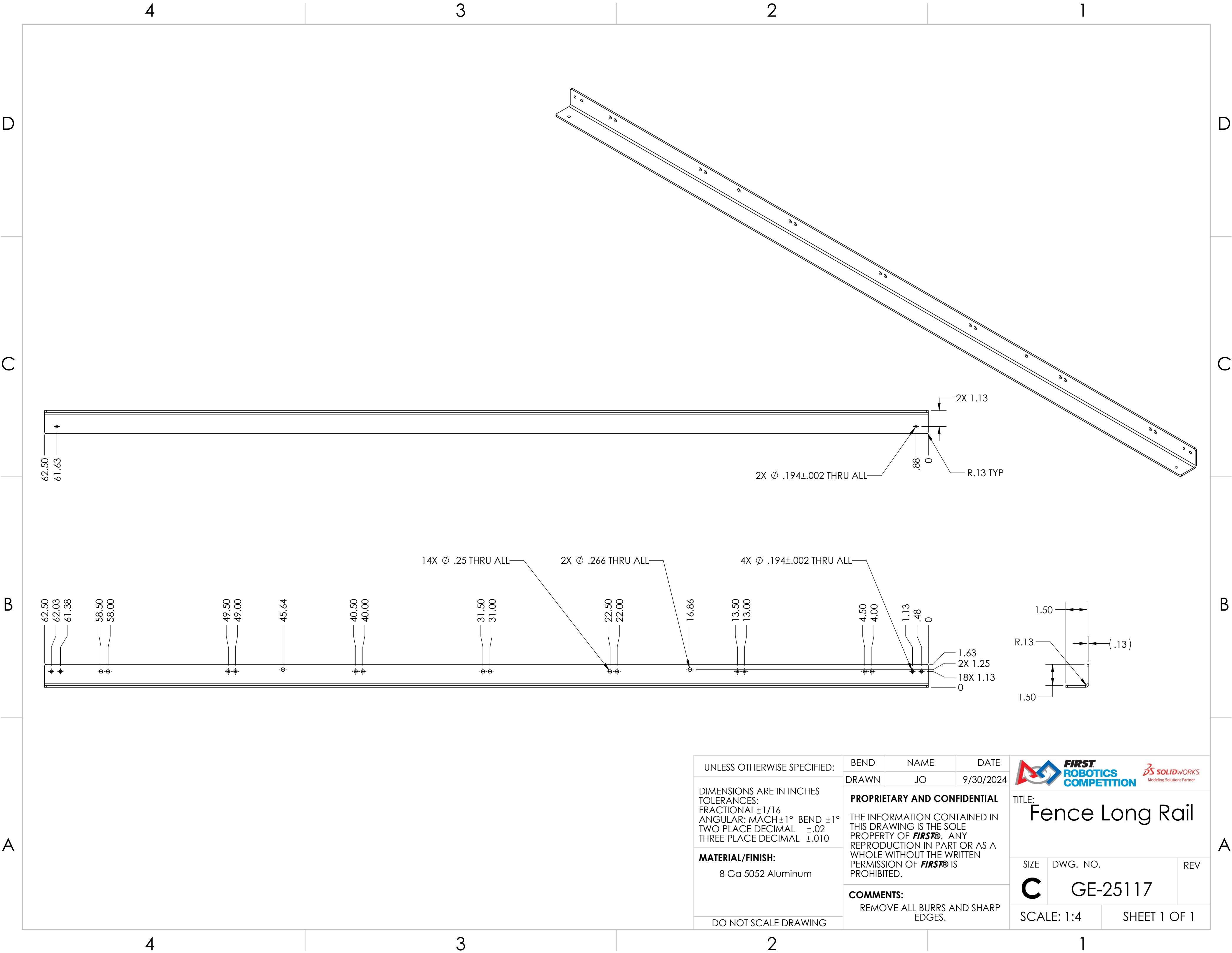
REMOVE ALL BURRS AND SHARP EDGES.





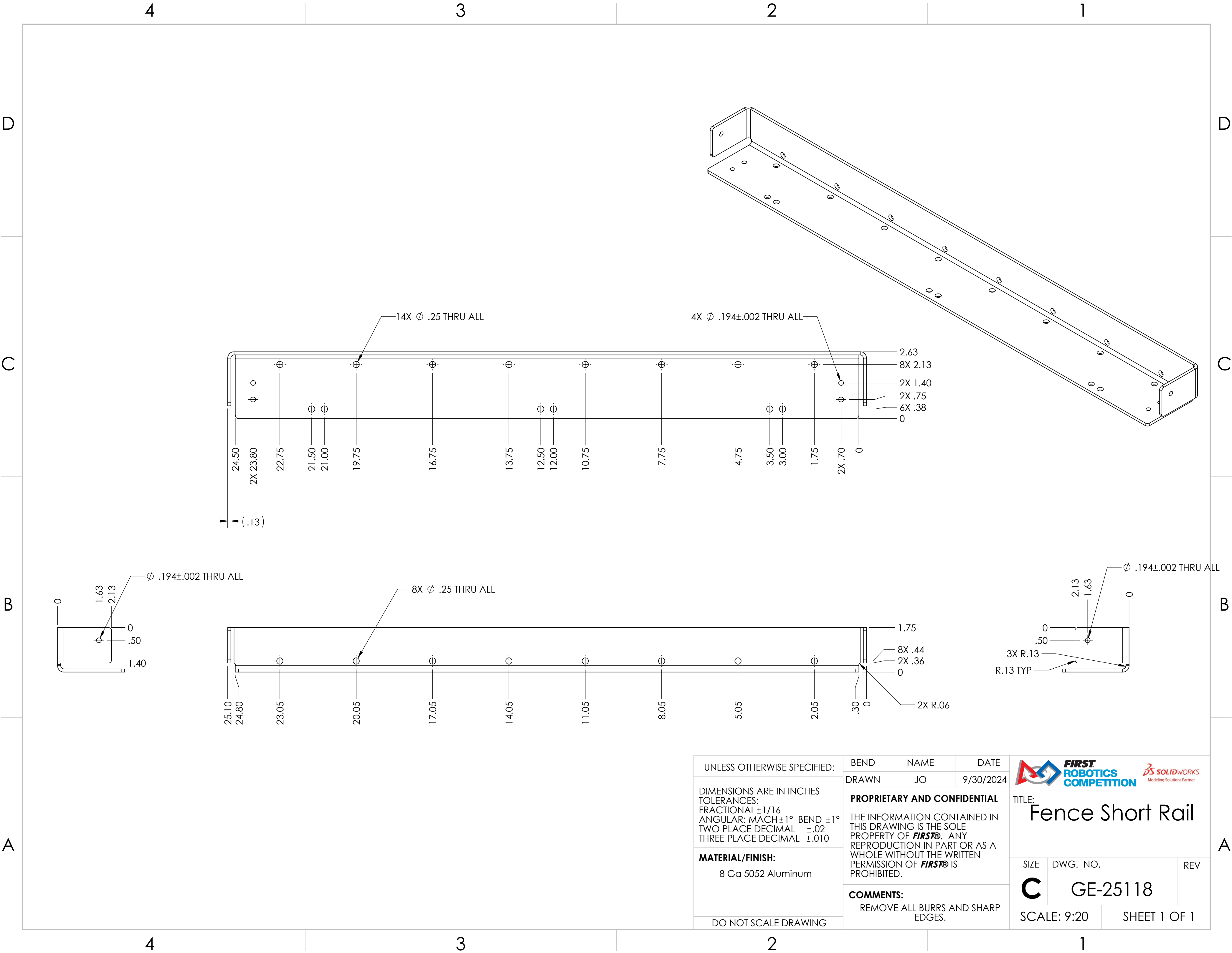
TITLE:
Fence Frame



SIZE	DWG. NO.	REV
C	GE-25116	

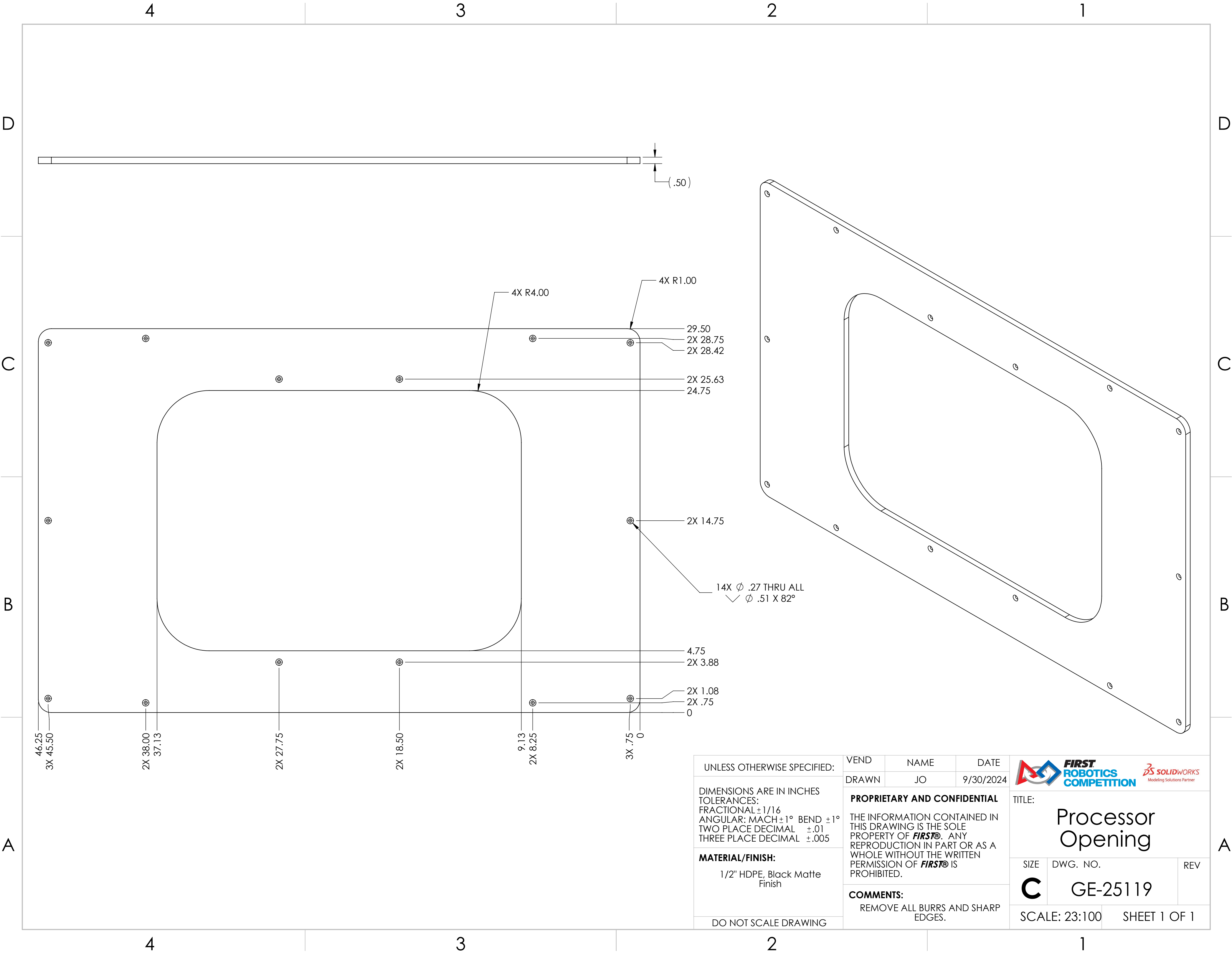
SCALE: 1:5 SHEET 1 OF 1



UNLESS OTHERWISE SPECIFIED:	BEND	NAME	DATE	<div></div> <div>TITLE: Fence Long Rail</div>		
	DRAWN	JO	9/30/2024			
DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ±1/16 ANGULAR: MACH ±1° BEND ±1° TWO PLACE DECIMAL ±.02 THREE PLACE DECIMAL ±.010	PROPRIETARY AND CONFIDENTIAL			THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF FIRST® . ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FIRST® IS PROHIBITED.		
MATERIAL/FINISH:	COMMENTS:			SIZE	DWG. NO.	REV
8 Ga 5052 Aluminum	REMOVE ALL BURRS AND SHARP EDGES.			C	GE-25117	
DO NOT SCALE DRAWING				SCALE: 1:4		SHEET 1 OF 1



UNLESS OTHERWISE SPECIFIED:	BEND	NAME	DATE	<div></div> <div>TITLE: Fence Short Rail</div>		
	DRAWN	JO	9/30/2024			
DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ±1/16 ANGULAR: MACH ±1° BEND ±1° TWO PLACE DECIMAL ±.02 THREE PLACE DECIMAL ±.010	PROPRIETARY AND CONFIDENTIAL			THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF FIRST® . ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FIRST® IS PROHIBITED.		
	COMMENTS:					
	REMOVE ALL BURRS AND SHARP EDGES.					
MATERIAL/FINISH:				SIZE	DWG. NO.	REV
8 Ga 5052 Aluminum				C	GE-25118	
DO NOT SCALE DRAWING				SCALE: 9:20		SHEET 1 OF 1



UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN INCHES
TOLERANCES:
FRACTIONAL $\pm 1/16$
ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$
TWO PLACE DECIMAL $\pm .01$
THREE PLACE DECIMAL $\pm .005$

MATERIAL/FINISH:
1/2" HDPE, Black Matte Finish

DO NOT SCALE DRAWING

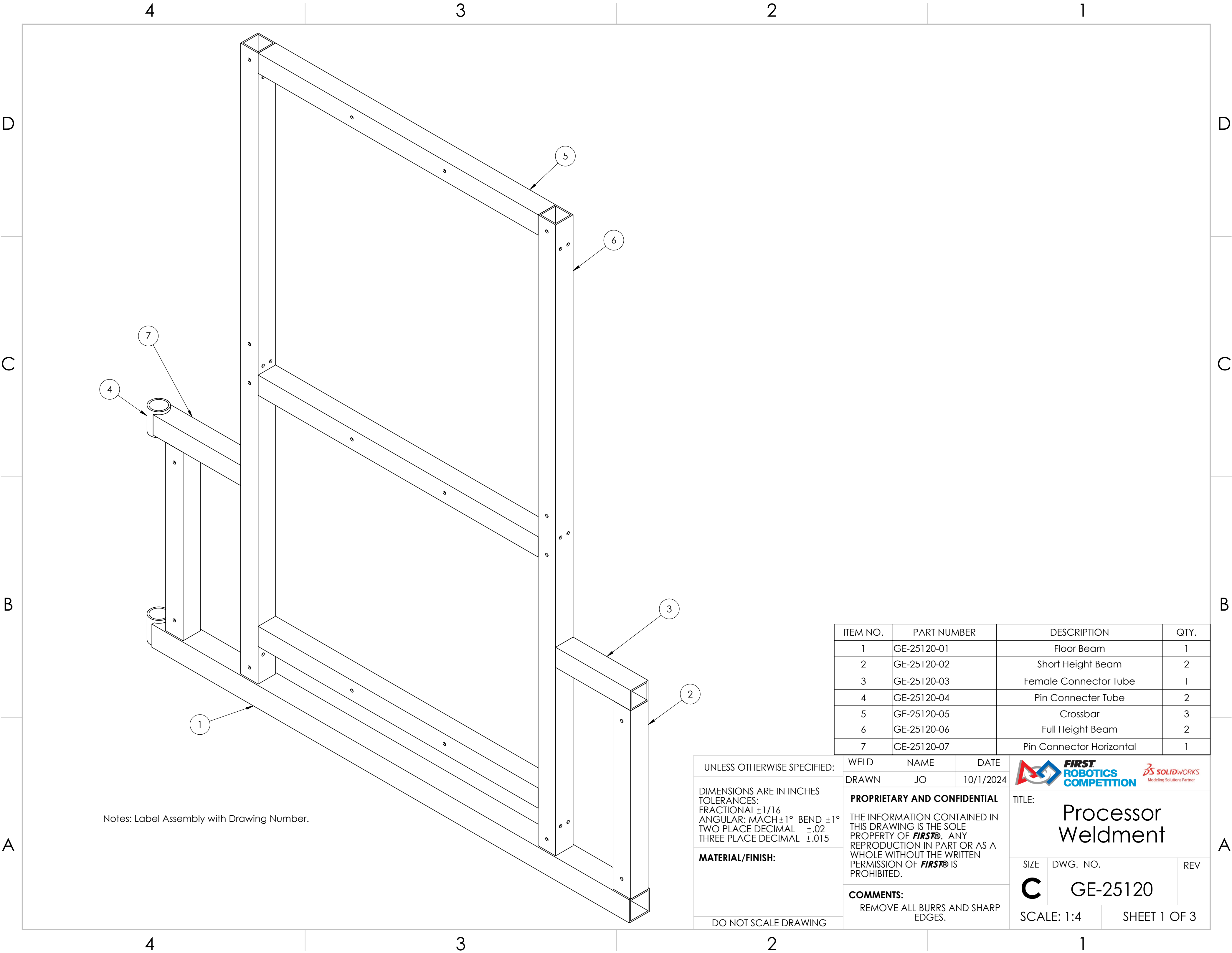
VEND	NAME	DATE
DRAWN	JO	9/30/2024

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COMMENTS:
REMOVE ALL BURRS AND SHARP EDGES.



TITLE: Processor Opening		
SIZE C	DWG. NO. GE-25119	REV
SCALE: 23:100		SHEET 1 OF 1



Notes: Label Assembly with Drawing Number.

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	GE-25120-01	Floor Beam	1
2	GE-25120-02	Short Height Beam	2
3	GE-25120-03	Female Connector Tube	1
4	GE-25120-04	Pin Connector Tube	2
5	GE-25120-05	Crossbar	3
6	GE-25120-06	Full Height Beam	2
7	GE-25120-07	Pin Connector Horizontal	1

UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN INCHES
TOLERANCES:
FRACTIONAL $\pm 1/16$
ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$
TWO PLACE DECIMAL $\pm .02$
THREE PLACE DECIMAL $\pm .015$

MATERIAL/FINISH:

DO NOT SCALE DRAWING

WELD

DRAWN

NAME

JO

DATE

10/1/2024

PROPRIETARY AND CONFIDENTIAL

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COMMENTS:

REMOVE ALL BURRS AND SHARP EDGES.



FIRST
ROBOTICS
COMPETITION



Modeling Solutions Partner

TITLE:

Processor
Weldment

SIZE

C

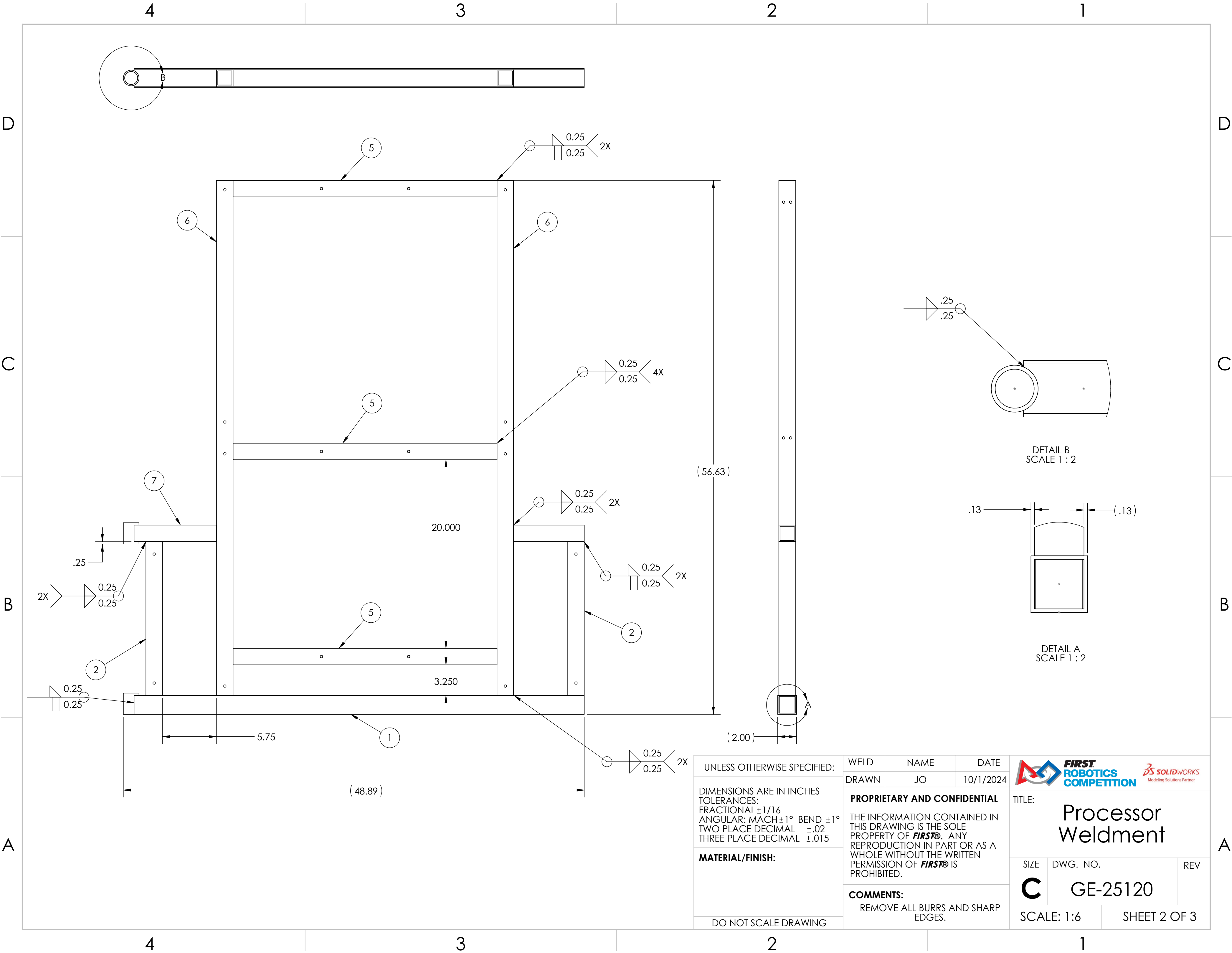
DWG. NO.



GE-25120

REV

SCALE: 1:4

SHEET 1 OF 3



UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL $\pm 1/16$ ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$ TWO PLACE DECIMAL $\pm .02$ THREE PLACE DECIMAL $\pm .015$ MATERIAL/FINISH: DO NOT SCALE DRAWING	WELD	NAME	DATE	 	
	DRAWN	JO	10/1/2024		
	PROPRIETARY AND CONFIDENTIAL THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF FIRST® . ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FIRST® IS PROHIBITED.				TITLE: Processor Weldment
	COMMENTS: REMOVE ALL BURRS AND SHARP EDGES.				SIZE C DWG. NO. GE-25120 REV
SCALE: 1:6				SHEET 2 OF 3	

4

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2

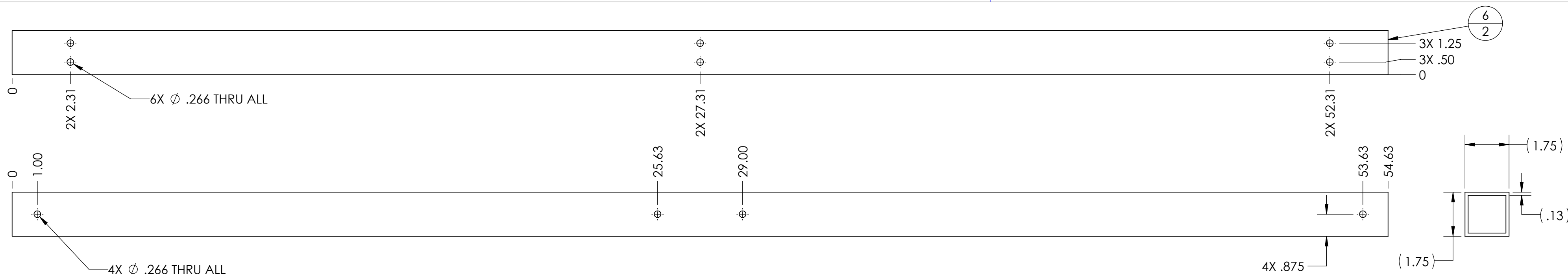
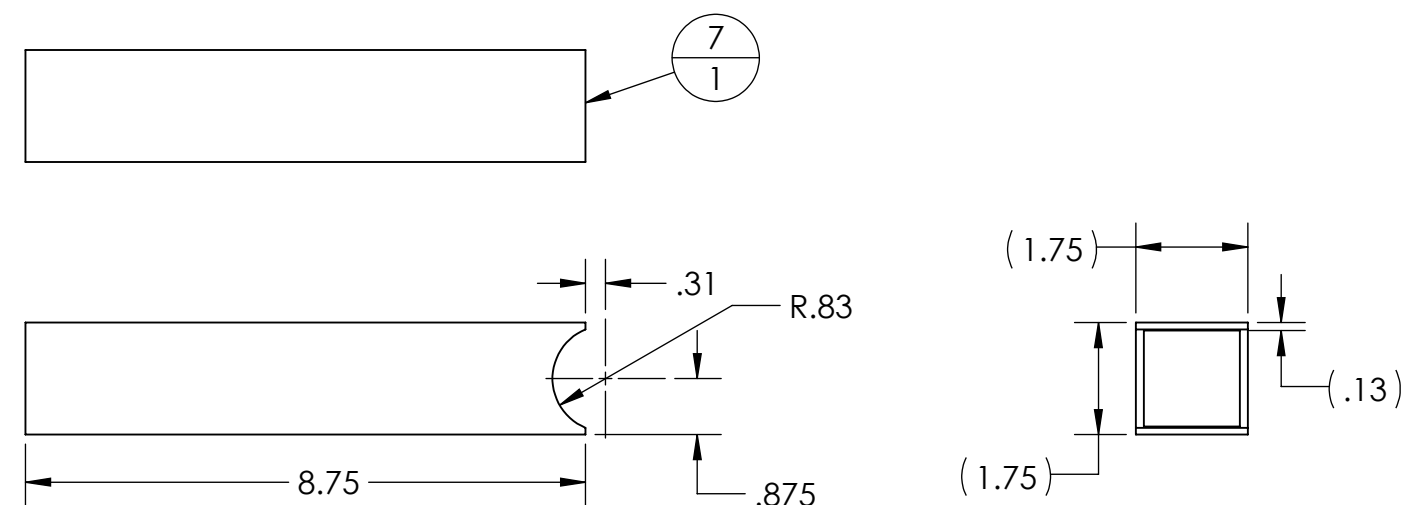
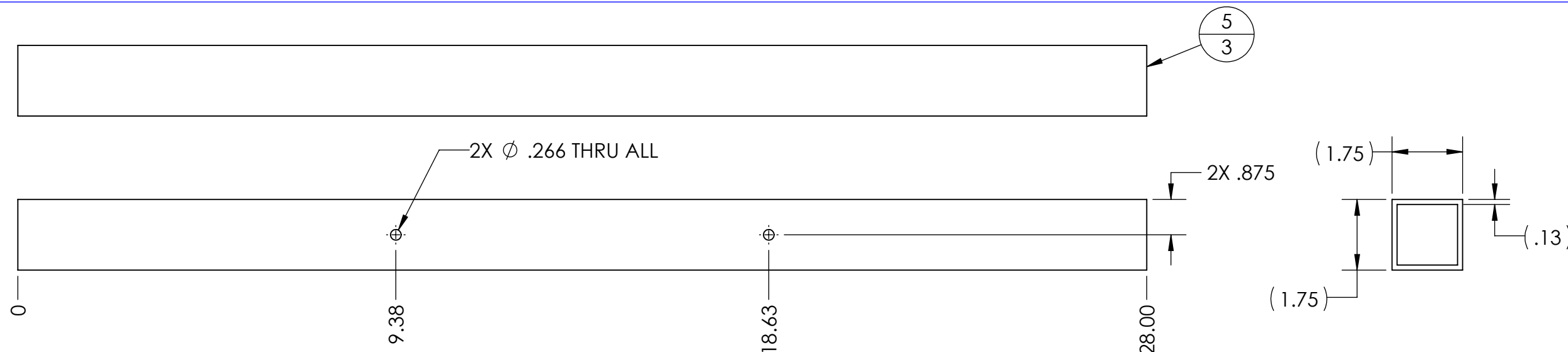
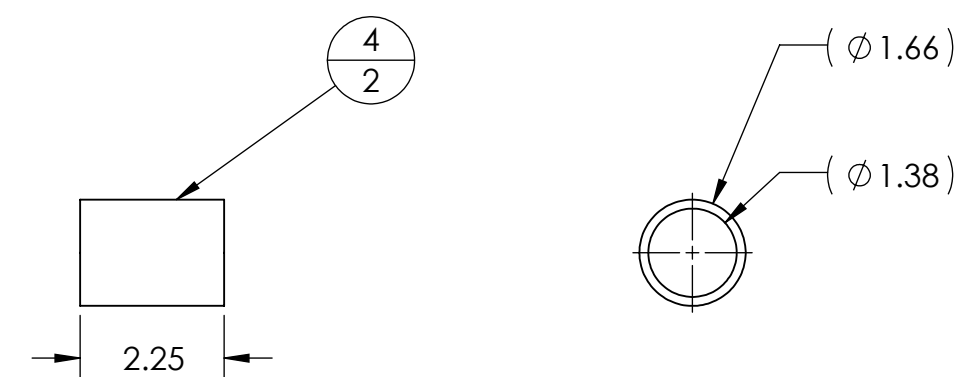
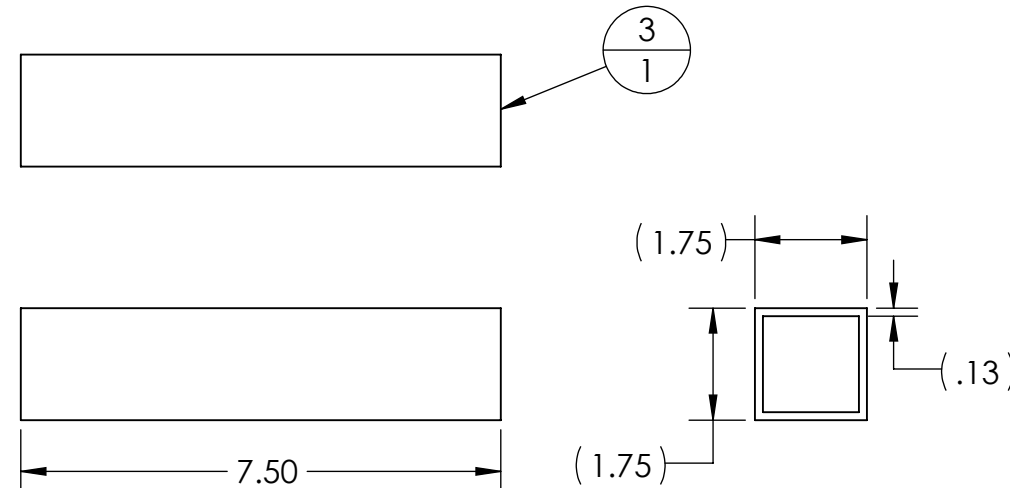
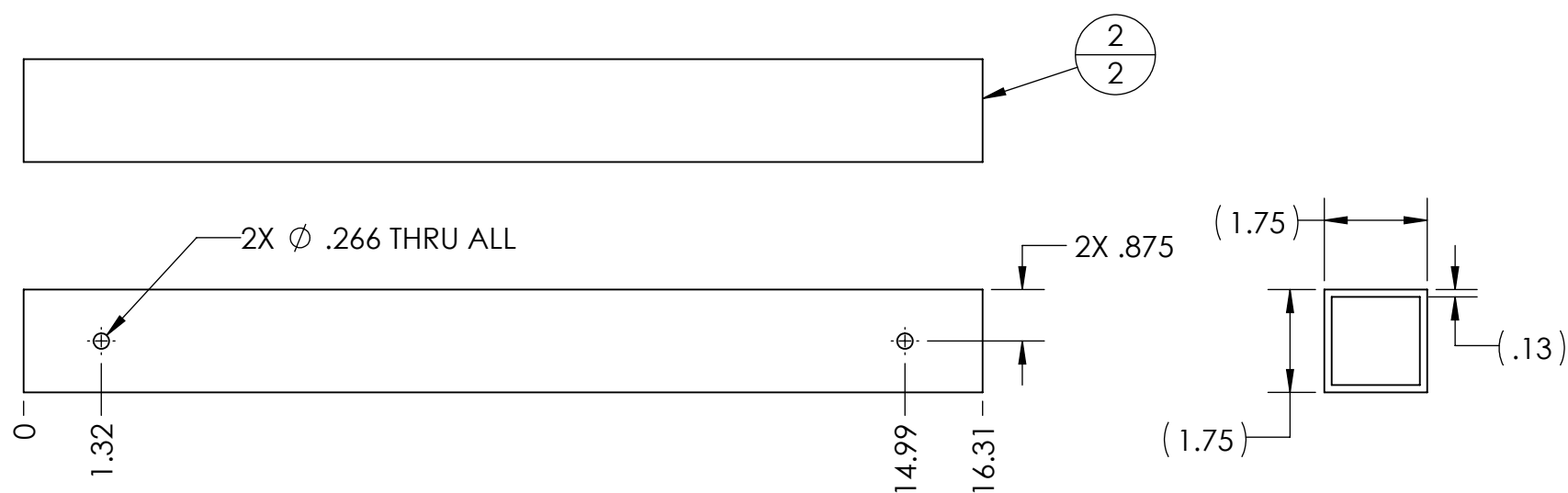
1

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UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN INCHES
TOLERANCES:
FRACTIONAL $\pm 1/16$
ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$
TWO PLACE DECIMAL $\pm .01$
THREE PLACE DECIMAL $\pm .005$

MATERIAL/FINISH:
2" x 1/8" Square Box Tube,
1.75" x 1/8" Square Box Tube
and 1.25" Schedule 40
Round Tube - All 6061
Aluminum

DO NOT SCALE DRAWING

VEND

NAME

DATE _____

DRAWN

JO

10/1/2024

PROPRIETARY AND CONFIDENTIAL

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COMMENTS:

REMOVE ALL BURRS AND SHARP EDGES.



TITLE:

Processor Weldment

SIZE

DWG. NO.	
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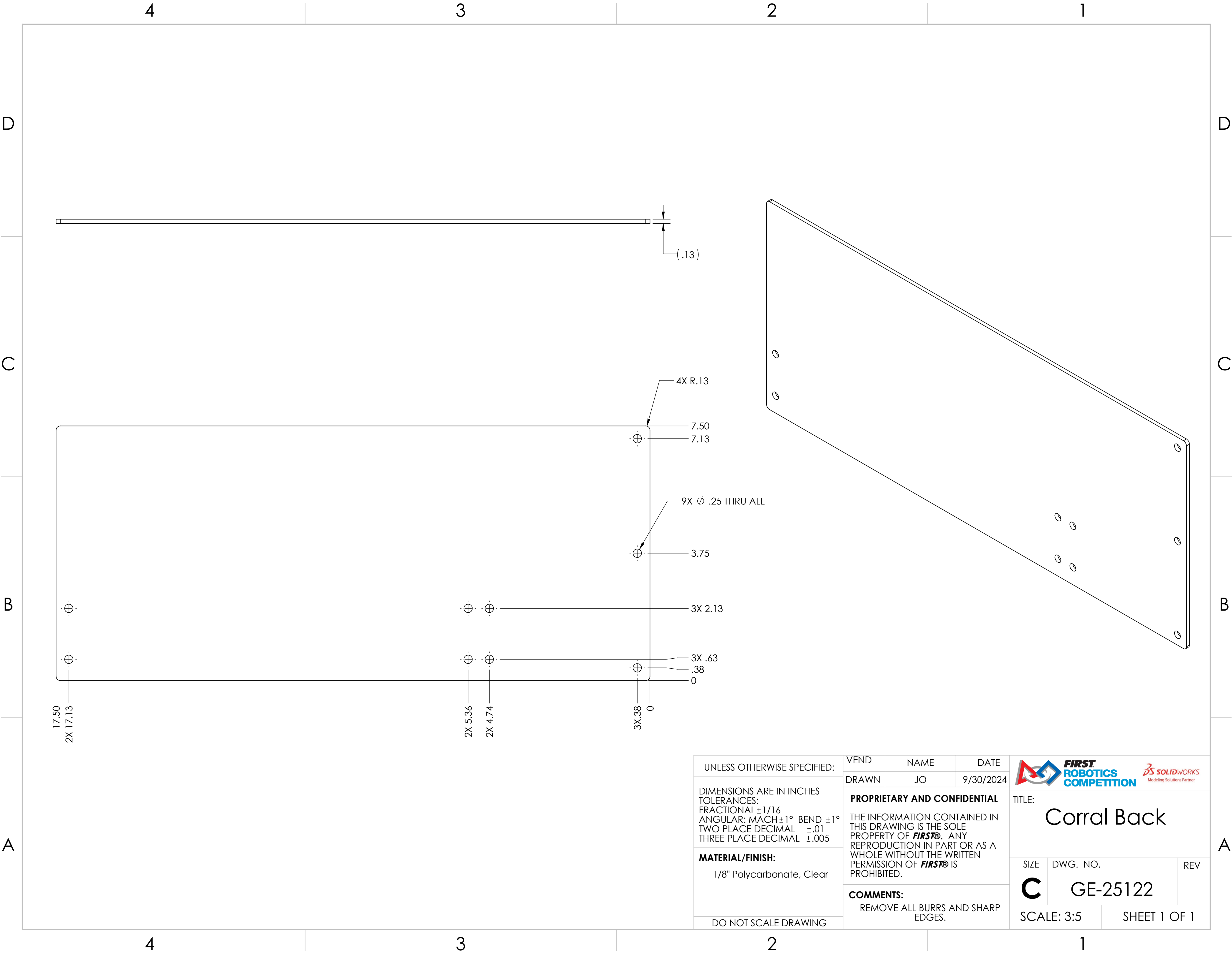
RFV

C

GE-25120

SCALE: 1:3

SHEET 3 OF 3



UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN INCHES
TOLERANCES:
FRACTIONAL $\pm 1/16$
ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$
TWO PLACE DECIMAL $\pm .01$
THREE PLACE DECIMAL $\pm .005$

MATERIAL/FINISH:
1/8" Polycarbonate, Clear

DO NOT SCALE DRAWING

VEND	NAME	DATE
DRAWN	JO	9/30/2024

PROPRIETARY AND CONFIDENTIAL

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF **FIRST®**. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF **FIRST®** IS PROHIBITED.

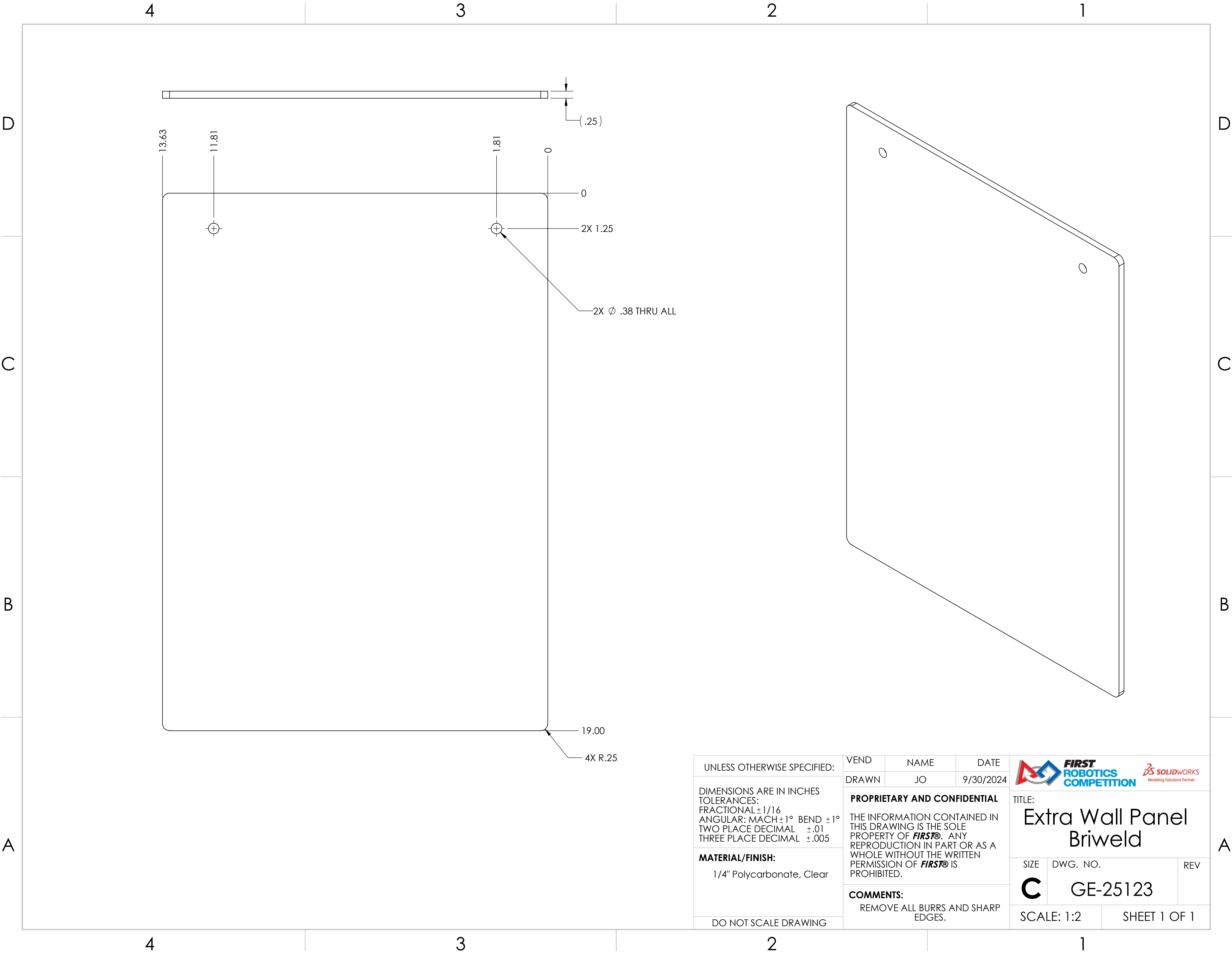
COMMENTS:
REMOVE ALL BURRS AND SHARP EDGES.





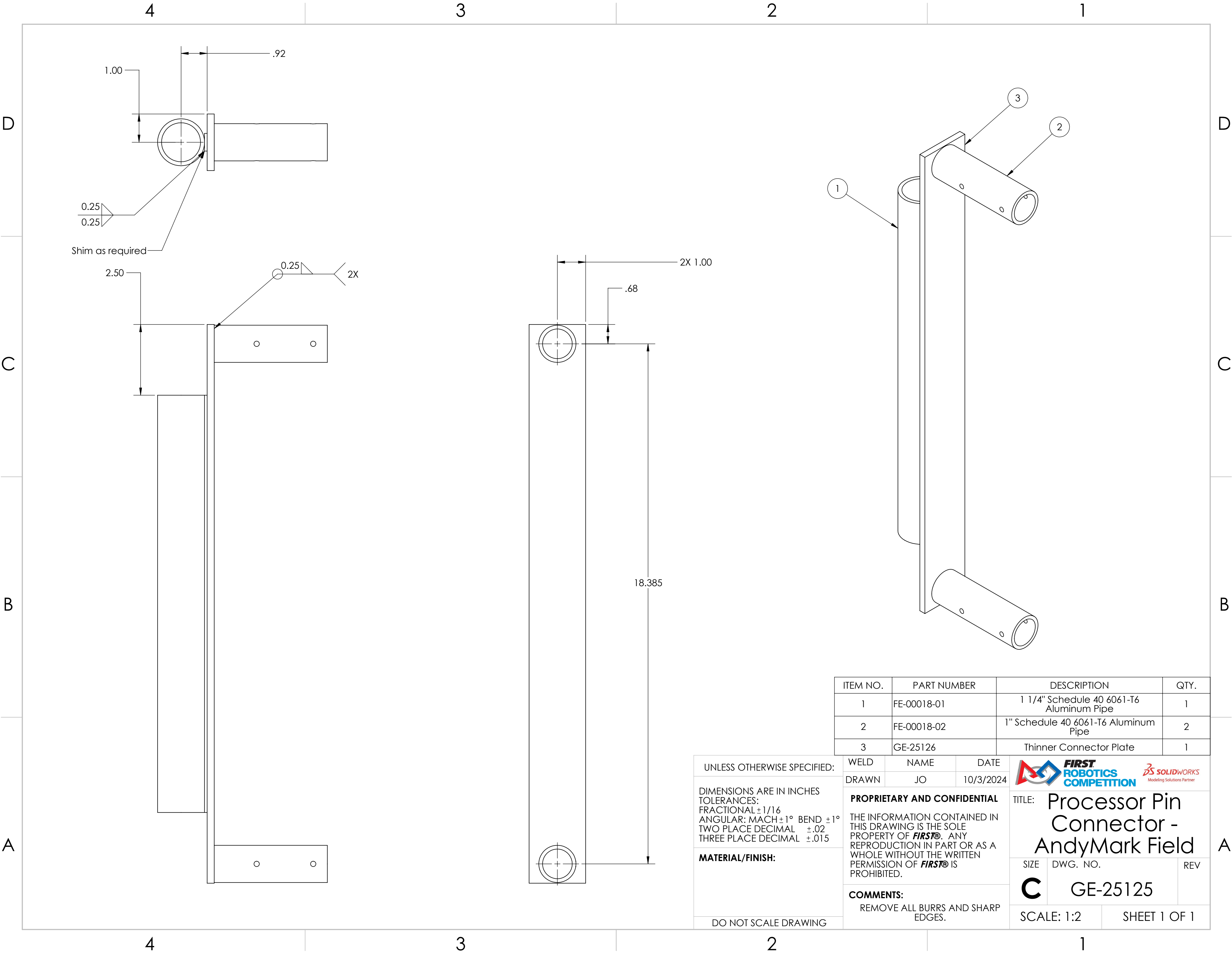
TITLE:
Corral Back

SIZE	DWG. NO.	REV
C	GE-25122	



SCALE: 3:5	SHEET 1 OF 1

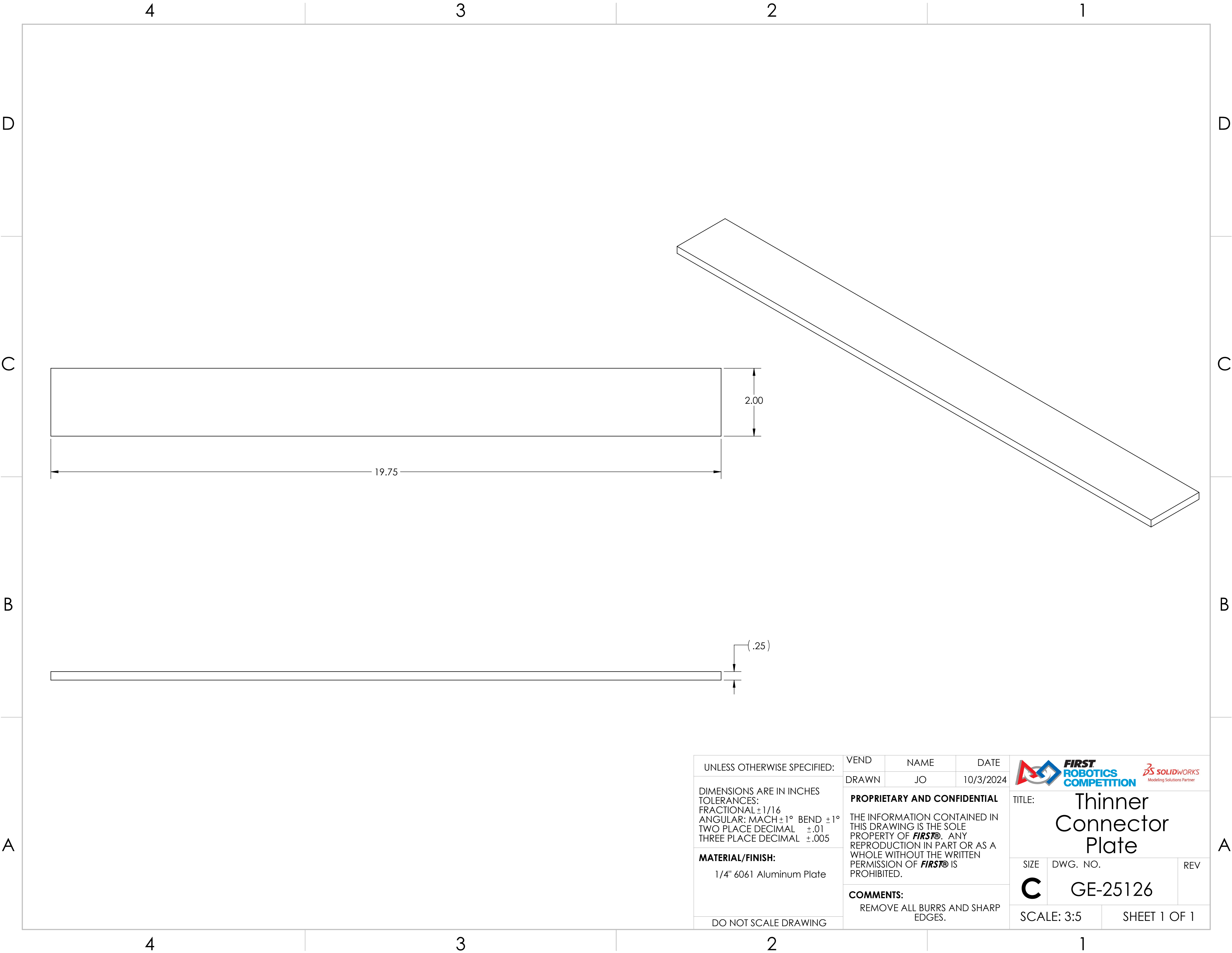




UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ±1/16 ANGULAR: MACH ±1° BEND ±1° TWO PLACE DECIMAL ±.01 THREE PLACE DECIMAL ±.005 MATERIAL/FINISH: 1/4" Polycarbonate, Clear DO NOT SCALE DRAWING	VEND	NAME	DATE	<div></div> <div>TITLE: Extra Wall Panel Briweld</div>		
	DRAWN	JO	9/30/2024			
	PROPRIETARY AND CONFIDENTIAL THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF FIRST® . ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FIRST® IS PROHIBITED. COMMENTS: REMOVE ALL BURRS AND SHARP EDGES.				SIZE	DWG. NO.
				C	GE-25123	
				SCALE: 1:2		SHEET 1 OF 1



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	FE-00018-01	1 1/4" Schedule 40 6061-T6 Aluminum Pipe	1
2	FE-00018-02	1" Schedule 40 6061-T6 Aluminum Pipe	2
3	GE-25126	Thinner Connector Plate	1

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ±1/16 ANGULAR: MACH ±1° BEND ±1° TWO PLACE DECIMAL ±.02 THREE PLACE DECIMAL ±.015 MATERIAL/FINISH: DO NOT SCALE DRAWING	WELD	NAME	DATE	<div></div> <div>TITLE: Processor Pin Connector - AndyMark Field</div> <div><div>SIZE</div><div>DWG. NO.</div><div>REV</div><div>C</div><div>GE-25125</div></div> <div><div>SCALE: 1:2</div><div>SHEET 1 OF 1</div></div>
	DRAWN	JO	10/3/2024	
	PROPRIETARY AND CONFIDENTIAL THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF FIRST® . ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FIRST® IS PROHIBITED.			
	COMMENTS: REMOVE ALL BURRS AND SHARP EDGES.			



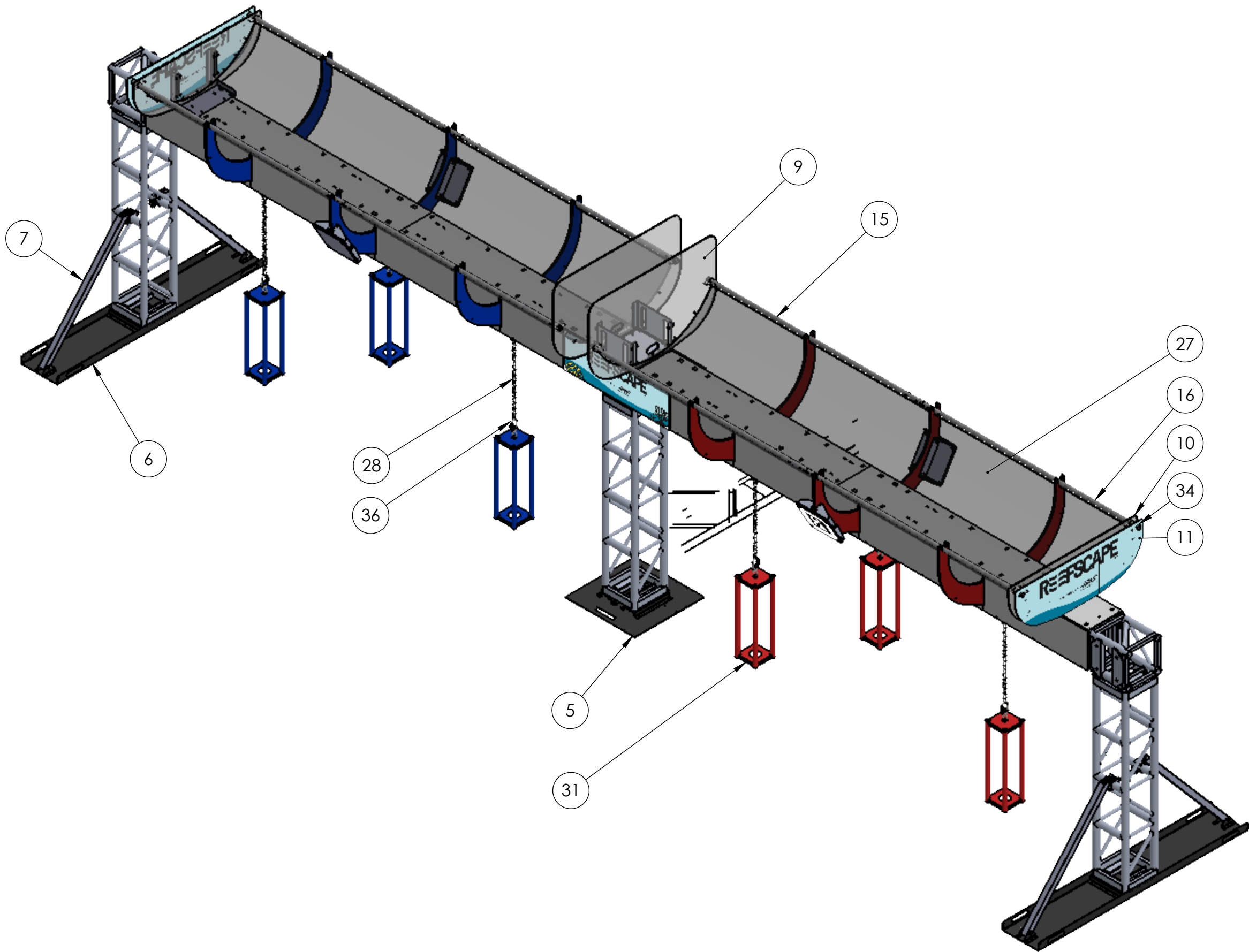
UNLESS OTHERWISE SPECIFIED:	VEND	NAME	DATE	<div></div>		
	DRAWN	JO	10/3/2024			
DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ±1/16 ANGULAR: MACH ±1° BEND ±1° TWO PLACE DECIMAL ±.01 THREE PLACE DECIMAL ±.005	PROPRIETARY AND CONFIDENTIAL			TITLE: Thinner Connector Plate		
	THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF FIRST® . ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FIRST® IS PROHIBITED.					
MATERIAL/FINISH: 1/4" 6061 Aluminum Plate	COMMENTS:			SIZE	DWG. NO.	REV
	REMOVE ALL BURRS AND SHARP EDGES.			C	GE-25126	
DO NOT SCALE DRAWING				SCALE: 3:5		SHEET 1 OF 1

D



C

B

A



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	FE-01002	4' x 1' x 1' Square Truss	4
2	FE-01003	5' x 1' x 1' Square Truss	5
3	FE-01012	3 Way Corner Block	2
4	FE-01013	TS 1212LD-C4P, 4 Way Corner Block Light Duty Truss, Total Structures	1
5	FE-01021		1
6	GE-25203	Truss Base, Long - Sheet Metal Assembly	2
7	GE-25205	Truss Brace Assembly	4
8	GE-25206	Backboard Brace	1
9	GE-25207	Backboard	2
10	GE-25208	Inner Front	2
11	GE-25209	Outer Front w/Vinyl	2
12	GE-25211	Side Panel w/Vinyl	2
13	GE-25213	Rib, Blue	3
14	GE-25214	Rib, Red	3
15	GE-25215	Net Tube Assembly	4
16	GE-25216	Net Tube, Outer	4
17	GE-25218	Brace, Barge End	2
18	GE-25220-ID14	April Tag Assembly, Truss (ID14)	1
19	GE-25220-ID15	April Tag Assembly, Truss (ID15)	1
20	GE-25220-ID4	April Tag Assembly, Truss (ID4)	1
21	GE-25220-ID5	April Tag Assembly, Truss (ID5)	1
22	GE-25221	Top Diffuser	4
23	GE-25222	Side Diffuser 1	4
24	GE-25223	Side Diffuser 2	8
25	GE-25224	Side Diffuser 3	4
26	GE-25227	Diffuser Top, Small	2
27	GE-25228	Net	2
28	GE-25229	Cage Chain	4
29	GE-25230	Eye Nut Assembly	6
30	GE-25231-Blue	Cage Assembly, Blue	3
31	GE-25231-Red	Cage Assembly, Red	3
32	hex_.625_11_2.00	Hex Head Bolt, 5/8"-11 Thread, 2" length	56
33	hexnut_.625_11	5/8"-11 hex nut	52
34	pin_quick_ring_.25_2.3 125	Pin, Ring-Grip Quick-Release with SS Ring, 1/4" Diameter, 2.3125" Usable Length	24
35	washer_flat_.625	Flat washer for 5/8" screw	108
36	3216T41_Carabiner	Carabiner, Locking Steel, .38 thick	10
37	Configurable Bolt	1" Long 1/4-20 Hex Head Bolt	8

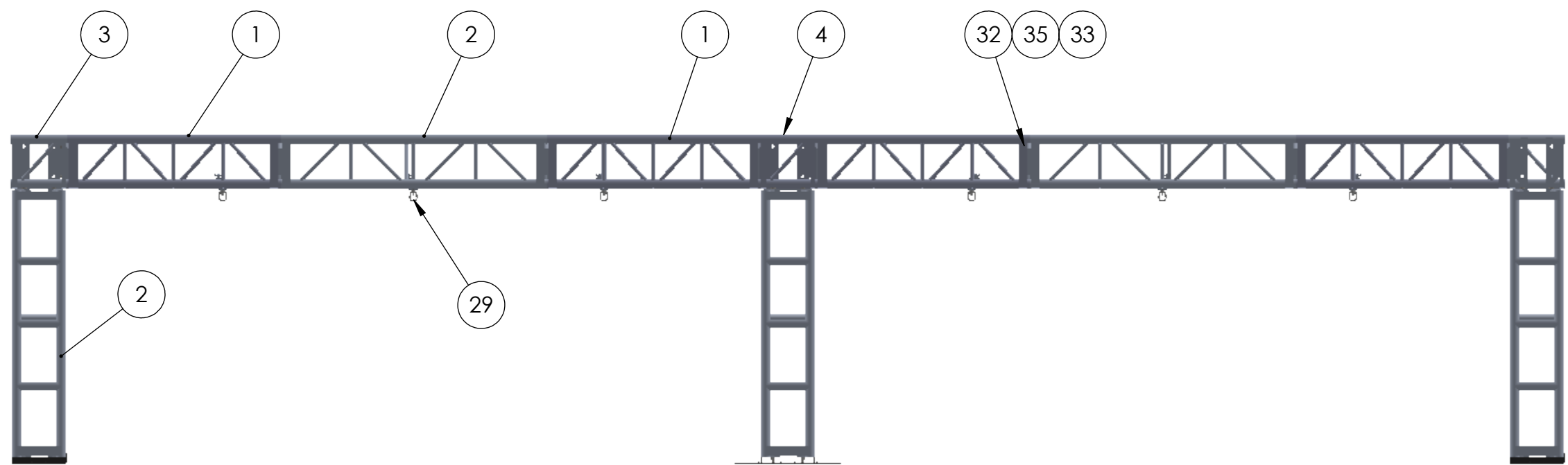
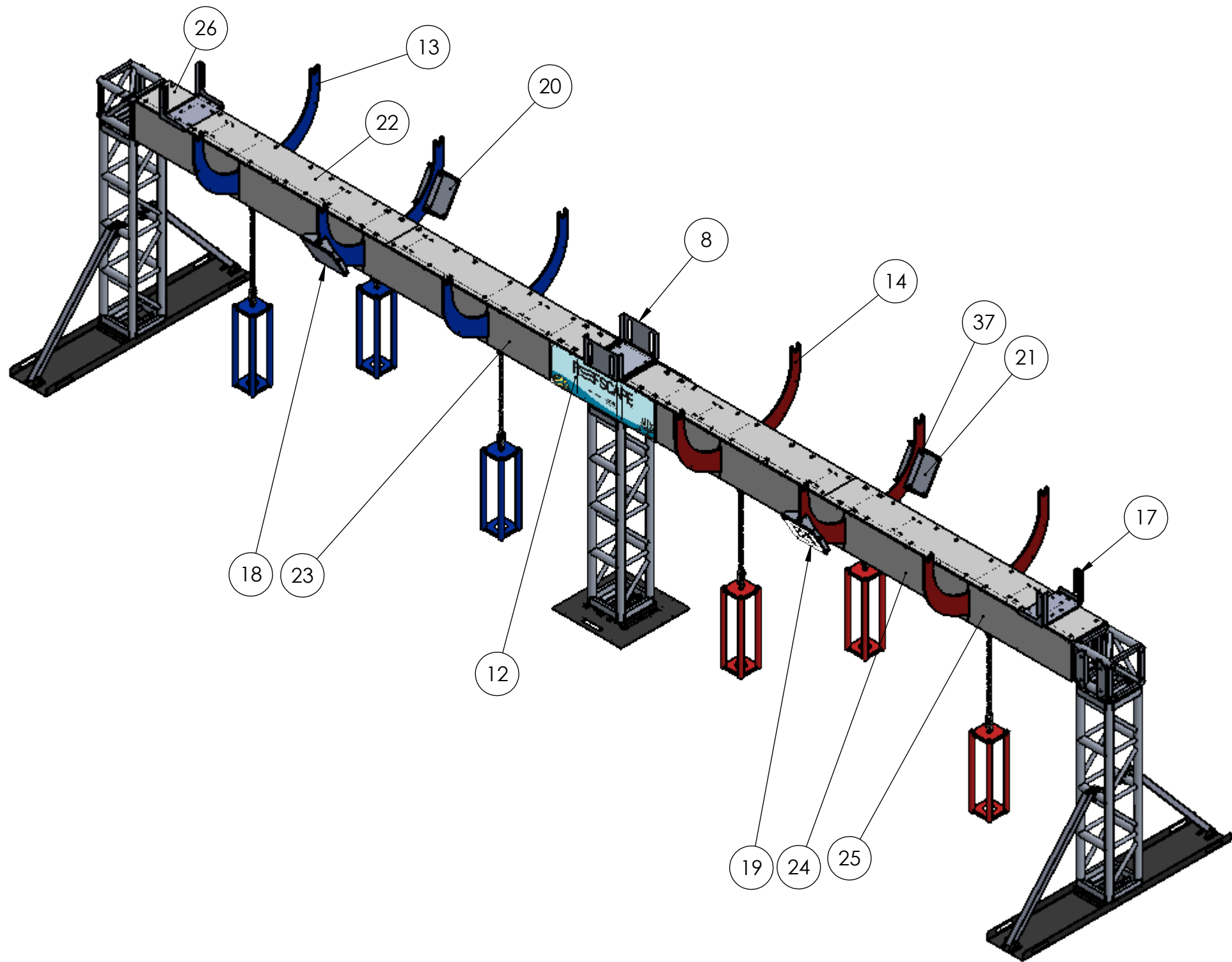
UNLESS OTHERWISE SPECIFIED:	FIELD	NAME	DATE	<div><div>FIRST ROBOTICS COMPETITION</div><div><div>SOLIDWORKS Modeling Solutions Partner</div></div></div>		
DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL $\pm 1/2$ ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$ TWO PLACE DECIMAL $\pm .50$	DRAWN	JO	12/16/2024			TITLE: Barge
MATERIAL/FINISH:	PROPRIETARY AND CONFIDENTIAL THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF FIRST® . ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FIRST® IS PROHIBITED.			SIZE	DWG. NO.	REV
	COMMENTS: REMOVE ALL BURRS AND SHARP EDGES.			C	GE-25200	
DO NOT SCALE DRAWING				SCALE: 1:25		SHEET 1 OF 3

D

C

B

A



Truss Layout

UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN INCHES
TOLERANCES:
FRACTIONAL $\pm 1/2$
ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$
TWO PLACE DECIMAL $\pm .50$

MATERIAL/FINISH:

DO NOT SCALE DRAWING

FIELD

NAME

DATE

DRAWN

JO

12/16/2024

PROPRIETARY AND CONFIDENTIAL

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COMMENTS:

REMOVE ALL BURRS AND SHARP EDGES.



**FIRST
ROBOTICS
COMPETITION**



Modeling Solutions Partner

TITLE:

Barge

SIZE

DWG. NO.

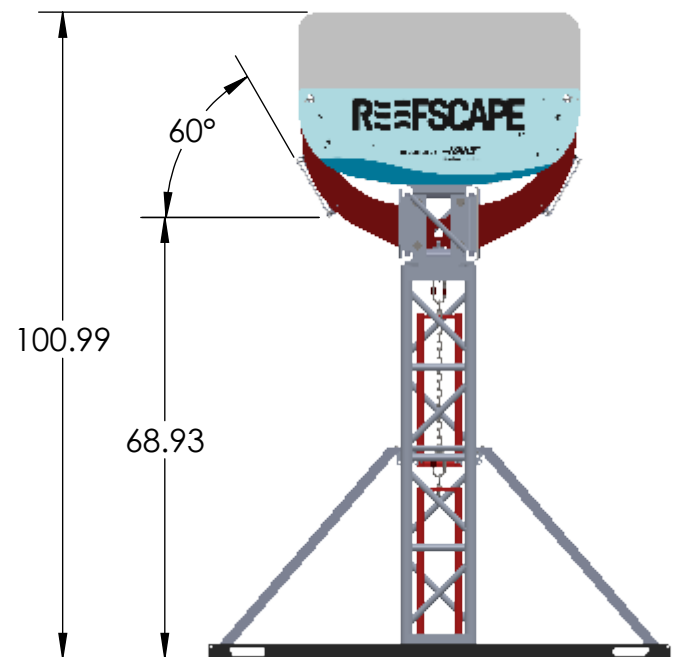
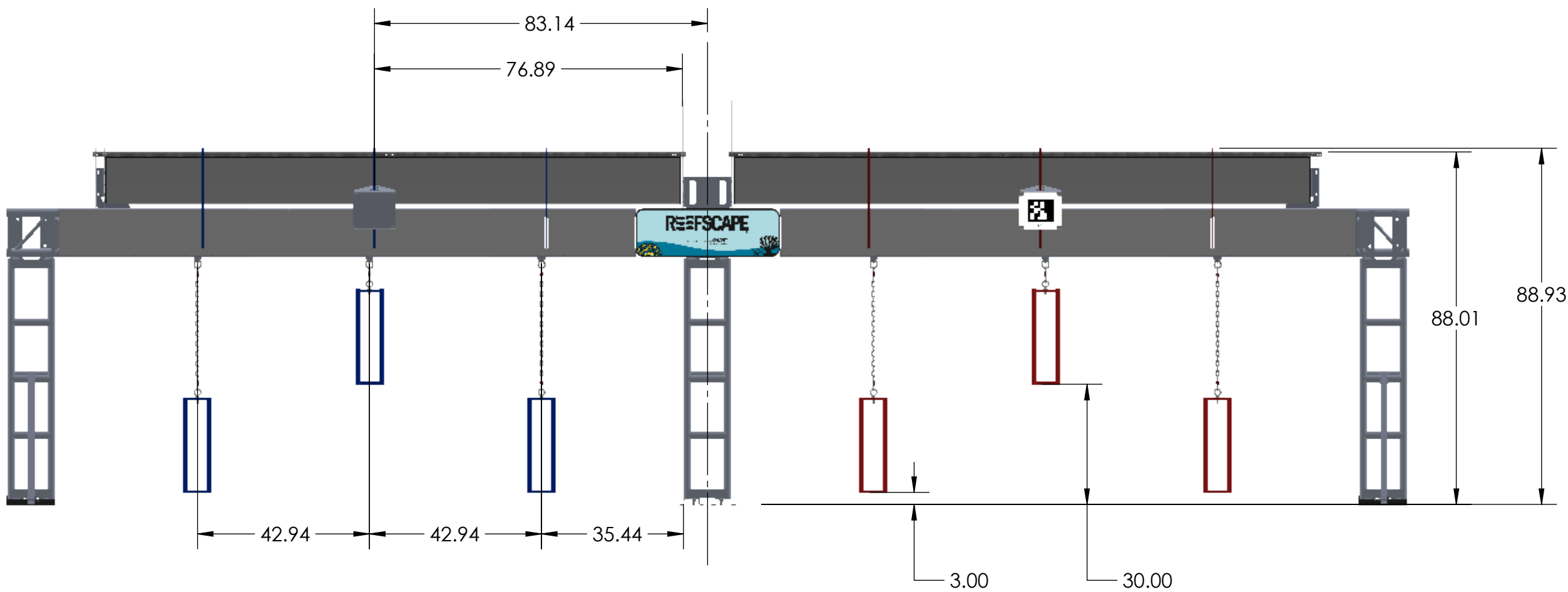
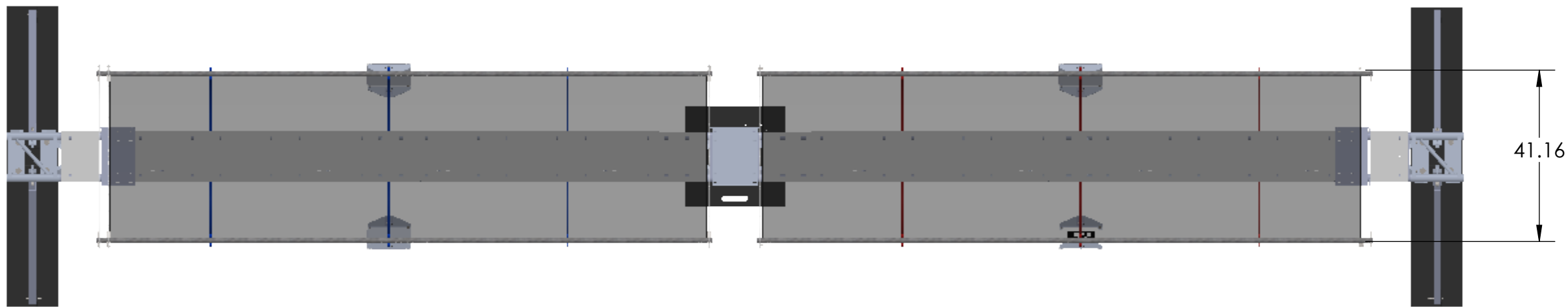
REV

C

GE-25200

SCALE: 1:30

SHEET 2 OF 3



UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN INCHES
TOLERANCES:
FRACTIONAL $\pm 1/2$
ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$
TWO PLACE DECIMAL $\pm .50$

MATERIAL/FINISH:

DO NOT SCALE DRAWING

FIELD

DRAWN

NAME

JO

DATE

12/16/2024

PROPRIETARY AND CONFIDENTIAL

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WHOLE WITHOUT THE WRITTEN
PERMISSION OF **FIRST®** IS
PROHIBITED.

COMMENTS:

REMOVE ALL BURRS AND SHARP
EDGES.



**FIRST
ROBOTICS
COMPETITION**

3D SOLIDWORKS
Modeling Solutions Partner

TITLE:

Barge

SIZE

C

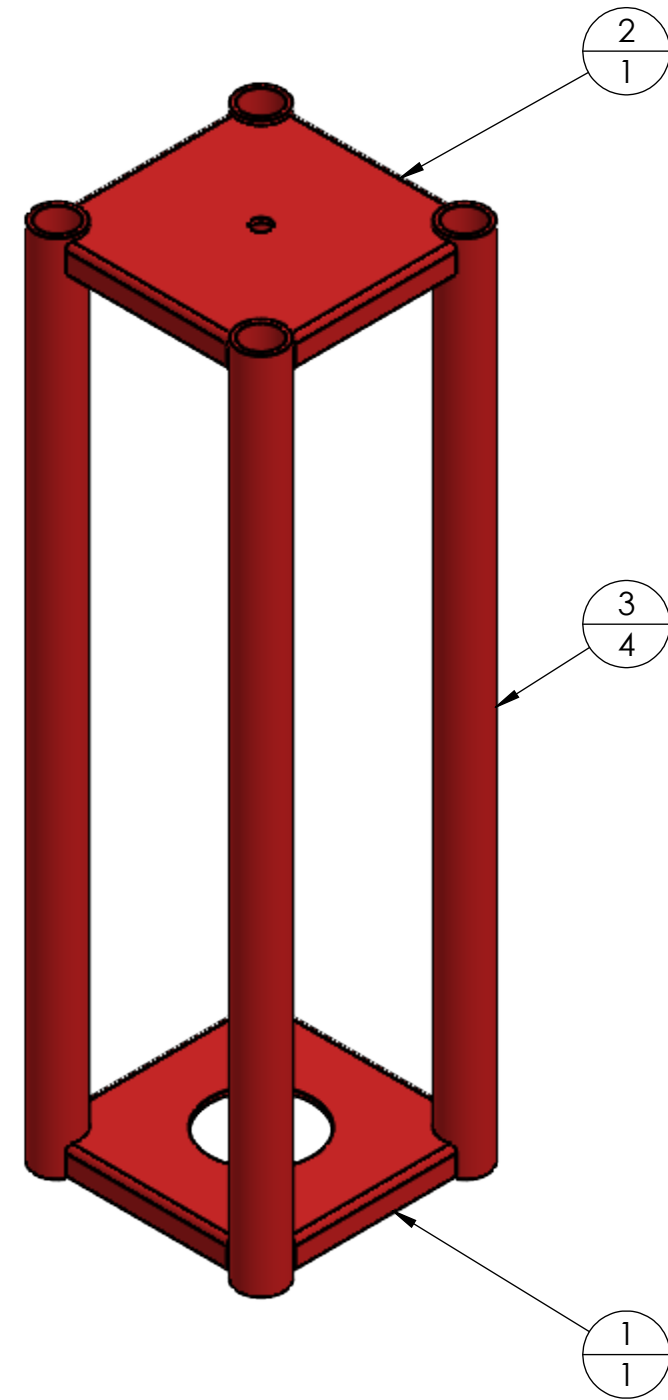
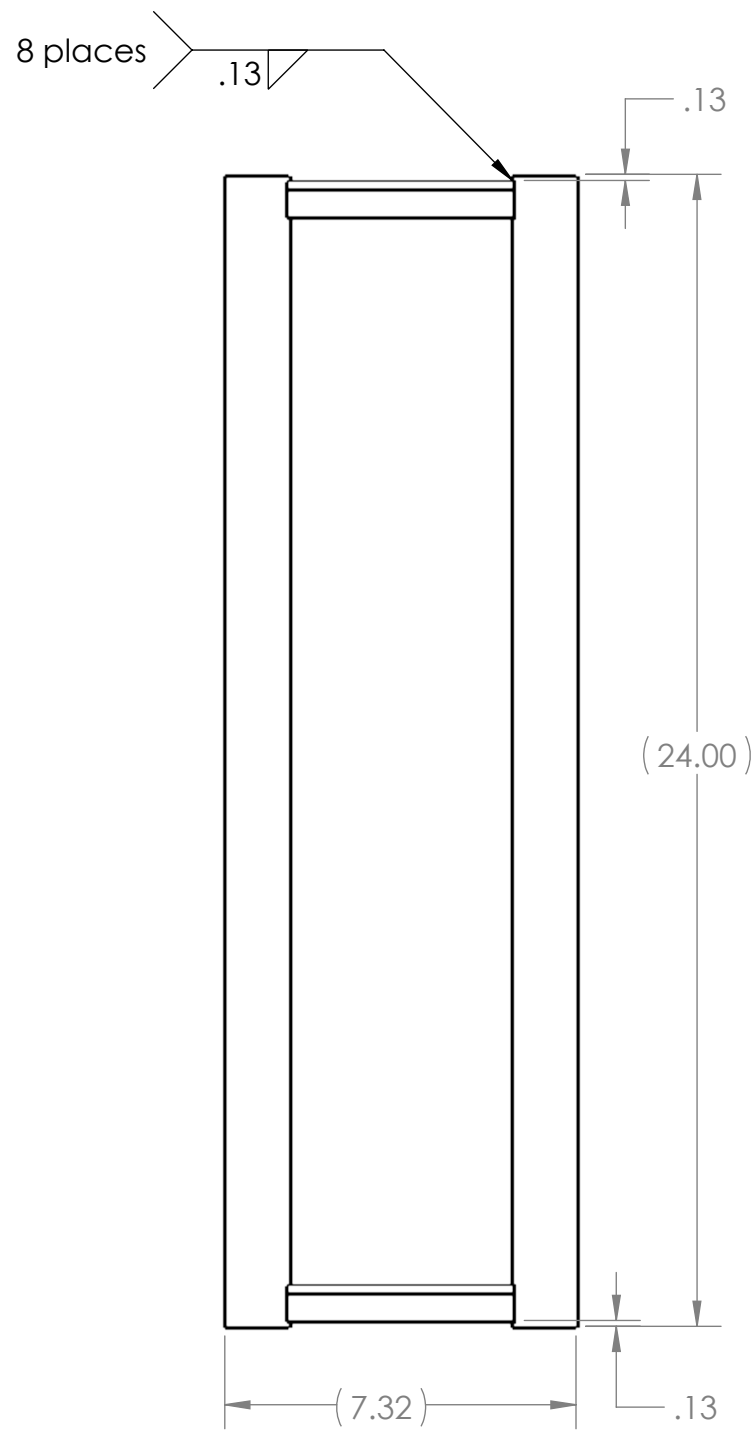
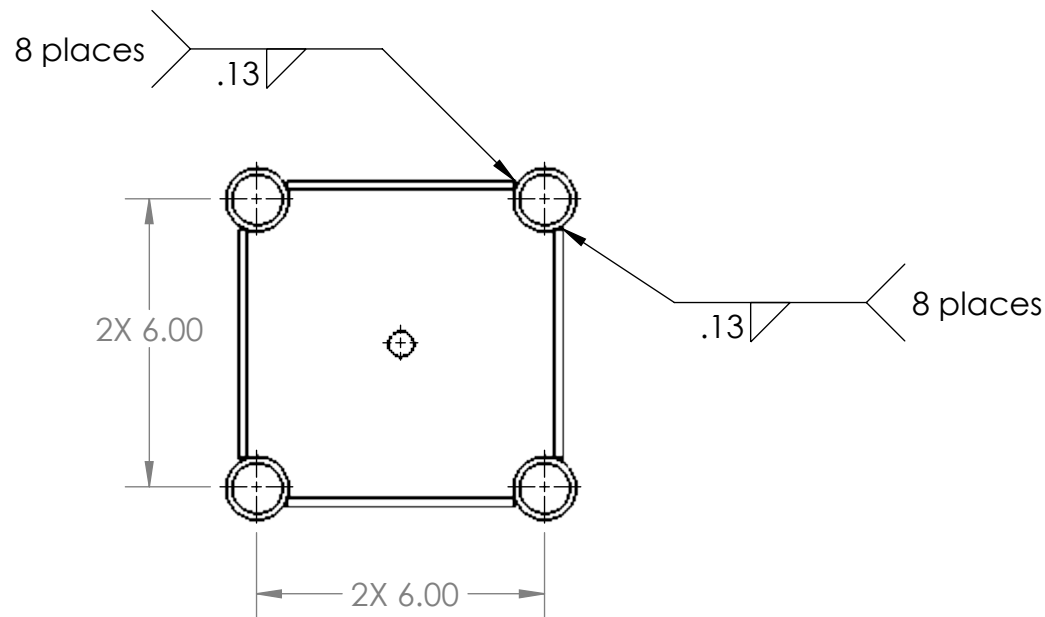
DWG. NO.

GE-25200



REV

SCALE: 1:30

SHEET 3 OF 3



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	GE-25201-01	10 ga. A36/1008 Mild Steel Sheet	1
2	GE-25201-02	10 ga. A36/1008 Mild Steel Sheet	1
3	GE-25201-03	1" Schedule 40 Pipe, A500 Steel	4

UNLESS OTHERWISE SPECIFIED:	WELD	NAME	DATE	<div></div>
	DRAWN	DF	7/10/2024	
DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL $\pm 1/16$ ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$ TWO PLACE DECIMAL $\pm .02$ THREE PLACE DECIMAL $\pm .015$	PROPRIETARY AND CONFIDENTIAL			TITLE: Cage Weldment, Red
	THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF FIRST ®. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FIRST ® IS PROHIBITED.			
MATERIAL/FINISH: Steel, welded and powder coated RAL# 3020	COMMENTS:			SIZE C
	REMOVE ALL BURRS AND SHARP EDGES.			
DO NOT SCALE DRAWING				DWG. NO. GE-25201
			SCALE: 1:4	REV SHEET 1 OF 2

D

C

B

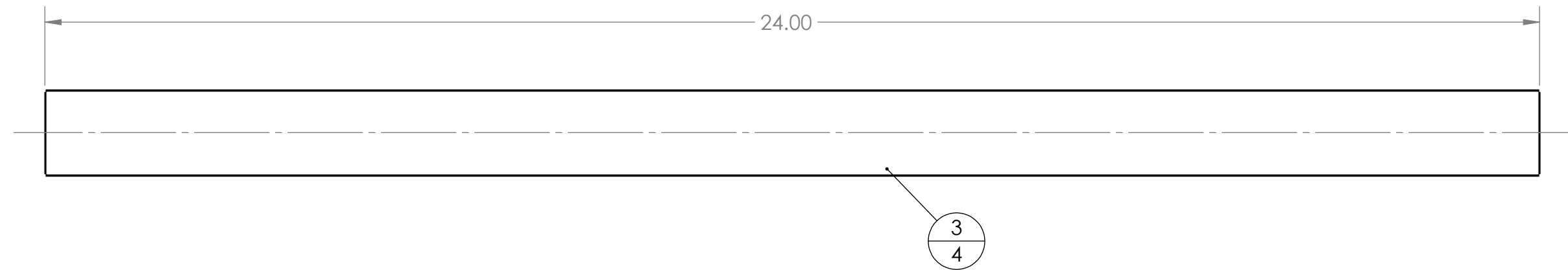
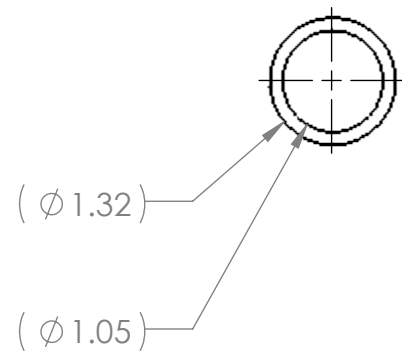
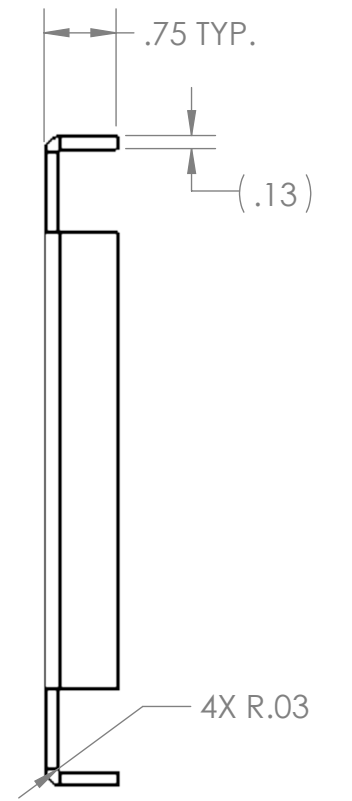
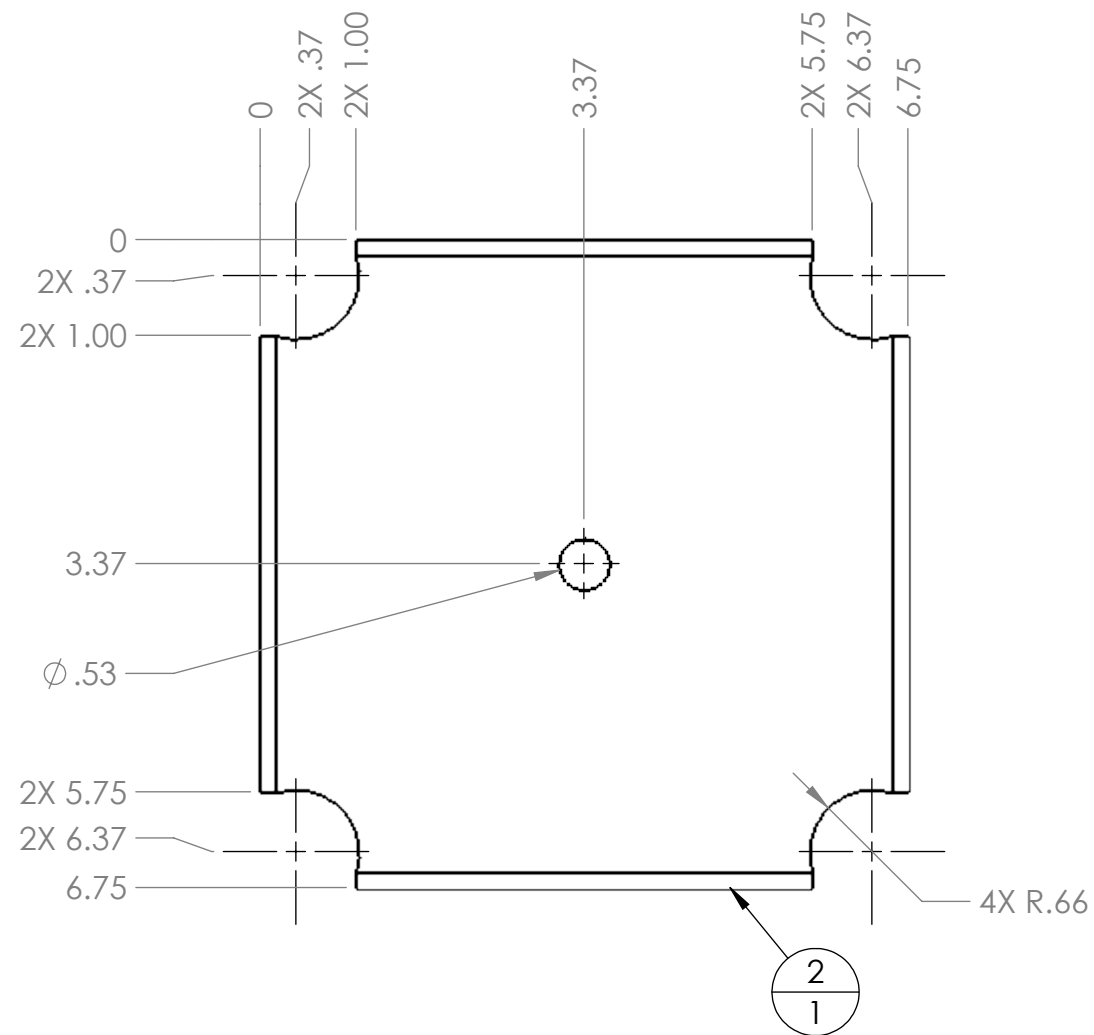
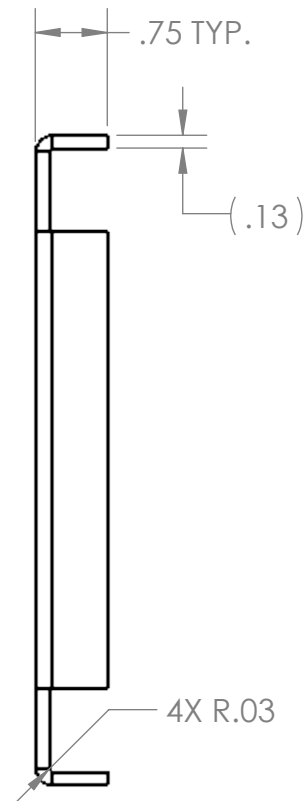
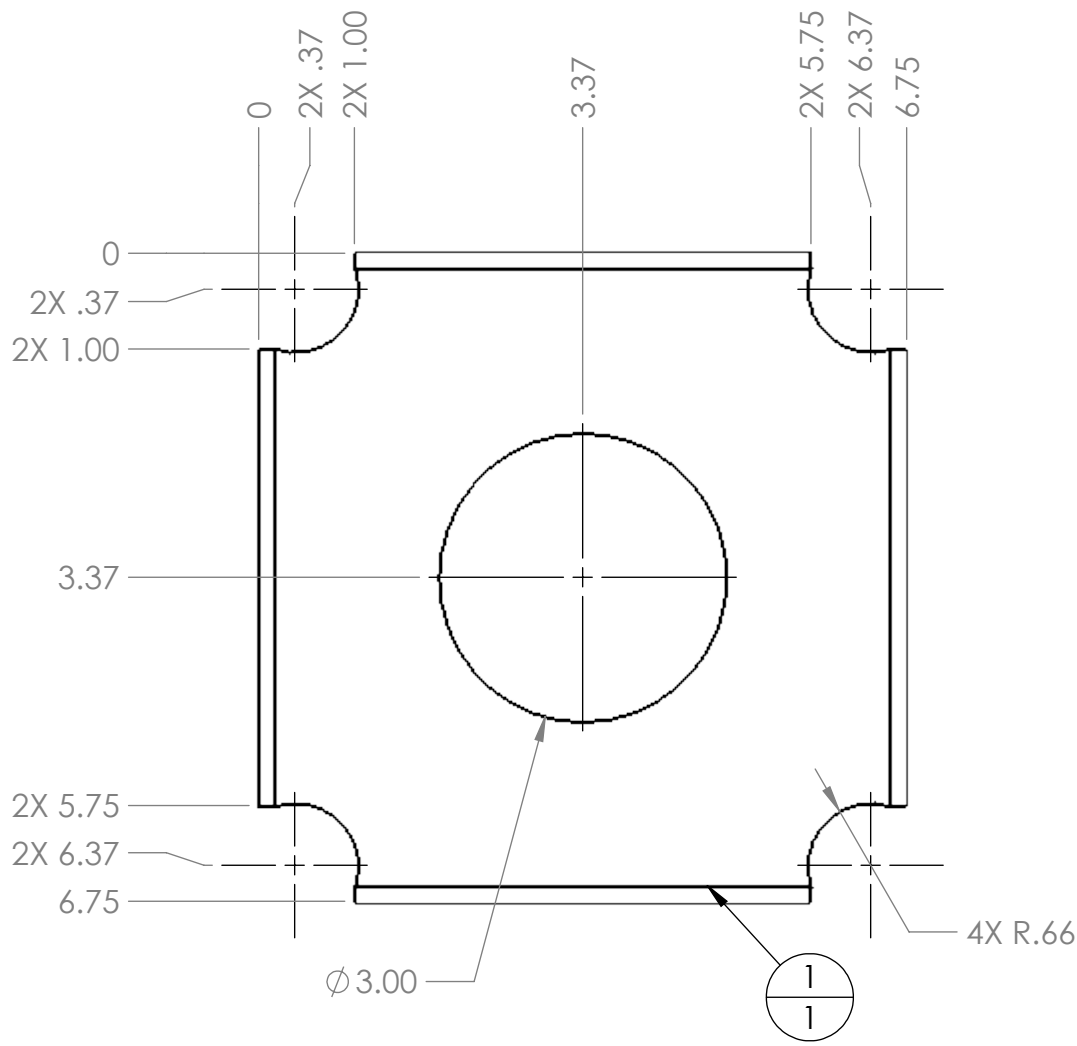
A



D

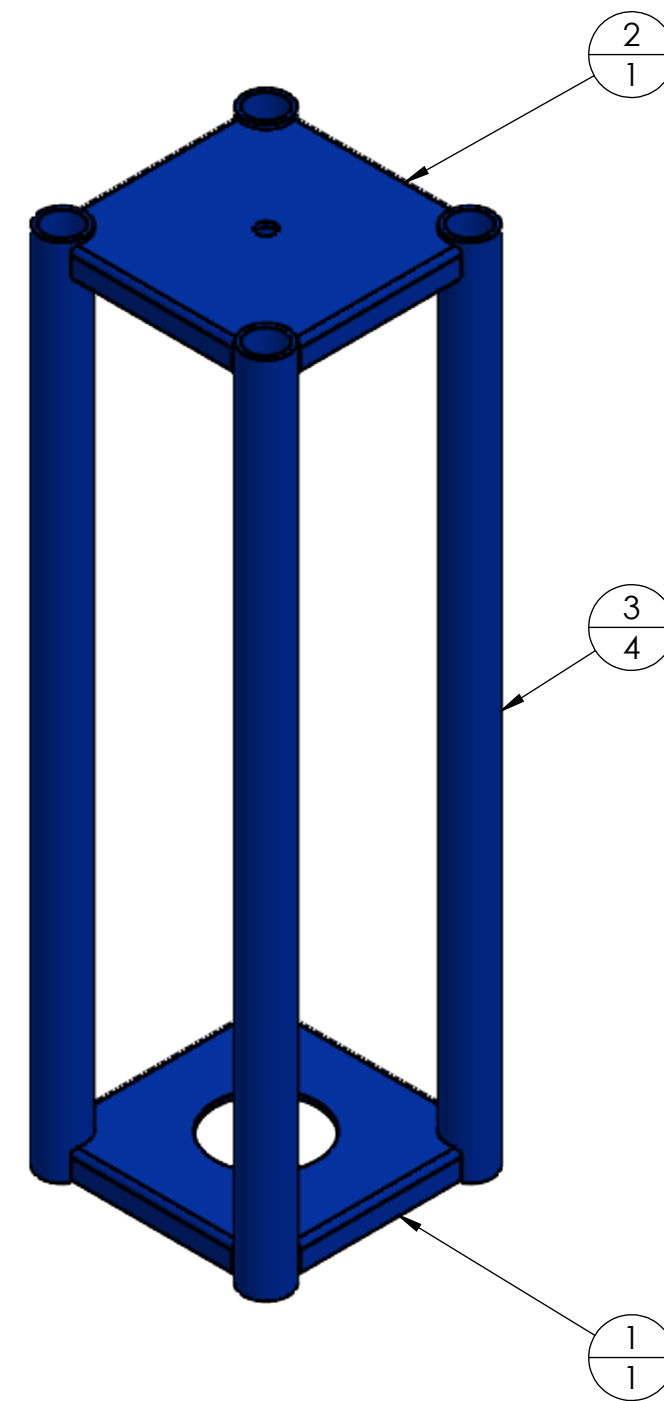
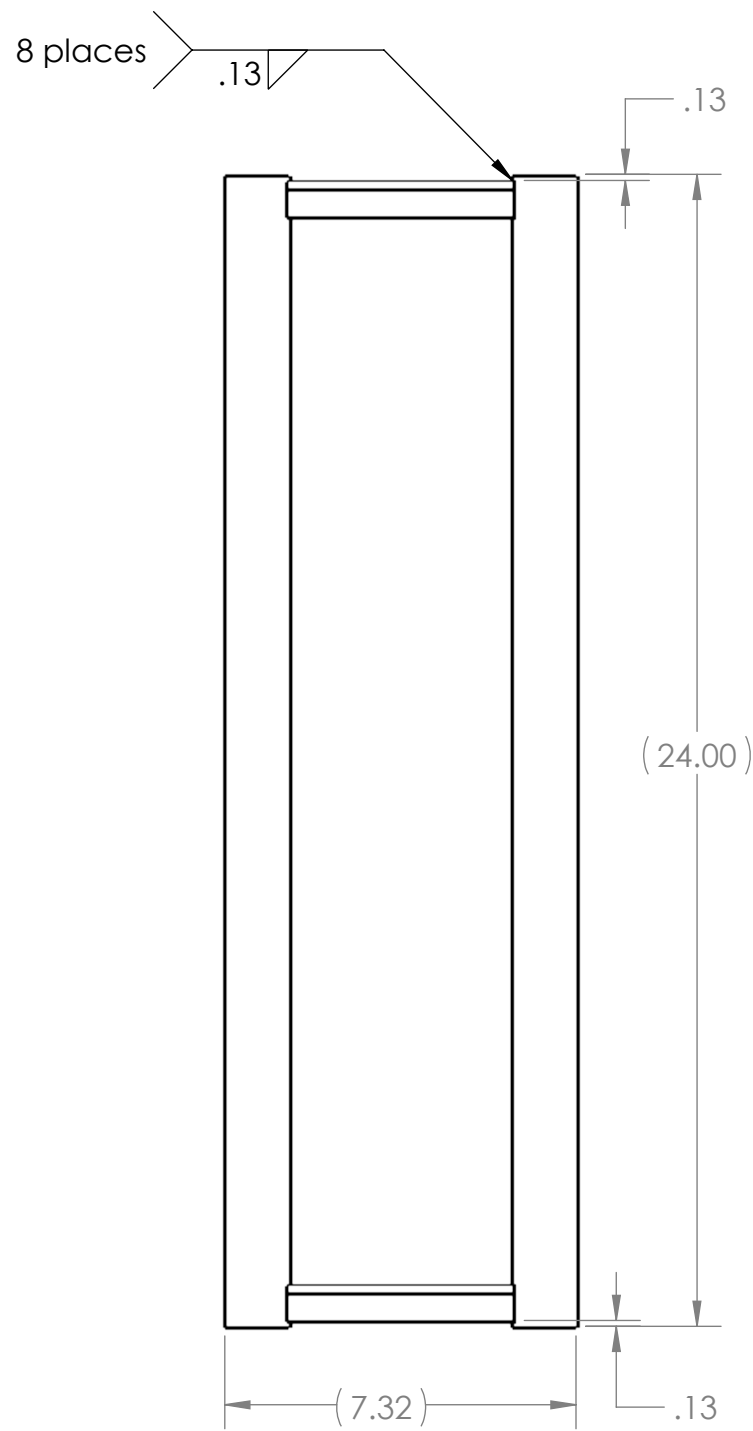
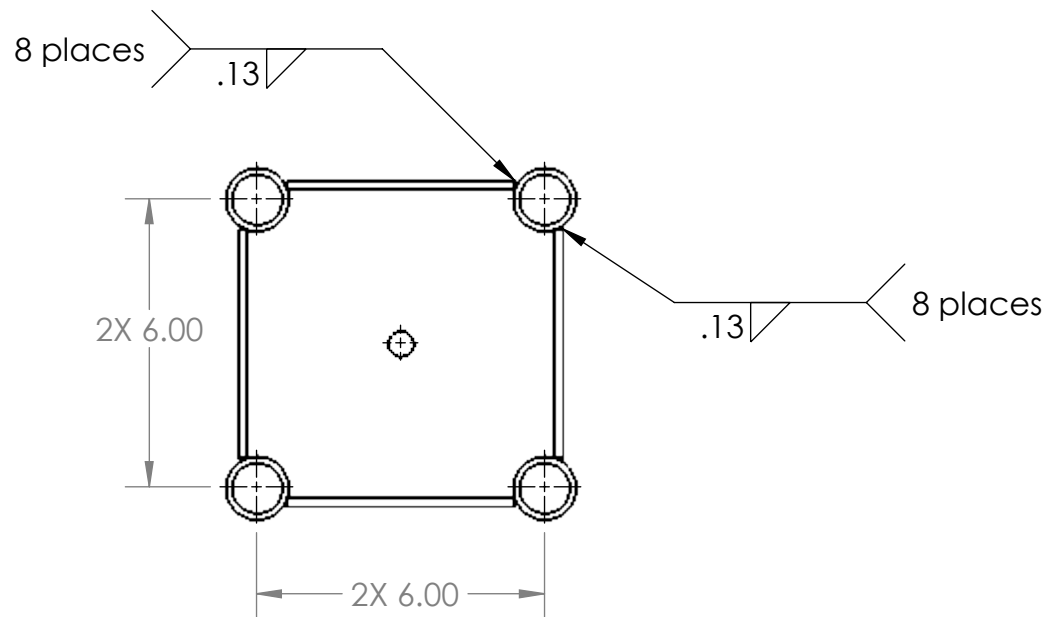
C

B



A



UNLESS OTHERWISE SPECIFIED:	WELD	NAME	DATE	<div><div>FIRST ROBOTICS COMPETITION</div><div>Modeling Solutions Partner</div></div>		
	DRAWN	DF	7/10/2024			
DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL $\pm 1/16$ ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$ TWO PLACE DECIMAL $\pm .02$ THREE PLACE DECIMAL $\pm .015$	PROPRIETARY AND CONFIDENTIAL			TITLE: <div>Cage Weldment, Red</div>		
	THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF FIRST® . ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FIRST® IS PROHIBITED.					
MATERIAL/FINISH:	COMMENTS:			SIZE	DWG. NO.	REV
Steel, welded and powder coated RAL# 3020	REMOVE ALL BURRS AND SHARP EDGES.			C	GE-25201	
DO NOT SCALE DRAWING				SCALE: 1:2		SHEET 2 OF 2



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	GE-25202-01	10 ga. A36/1008 Mild Steel Sheet	1
2	GE-25202-02	10 ga. A36/1008 Mild Steel Sheet	1
3	GE-25202-03	1" Schedule 40 Pipe, A500 Steel	4

UNLESS OTHERWISE SPECIFIED:	WELD	NAME	DATE	<div></div>		
	DRAWN	DF	7/10/2024			
DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL $\pm 1/16$ ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$ TWO PLACE DECIMAL $\pm .02$ THREE PLACE DECIMAL $\pm .015$	PROPRIETARY AND CONFIDENTIAL			TITLE: Cage Weldment, Blue		
	THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF FIRST ®. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FIRST ® IS PROHIBITED.					
MATERIAL/FINISH: Steel, welded and powder coated RAL# 5017	COMMENTS:			SIZE	DWG. NO.	REV
	REMOVE ALL BURRS AND SHARP EDGES.			C	GE-25202	
DO NOT SCALE DRAWING				SCALE: 1:4		SHEET 1 OF 2

D

C

B

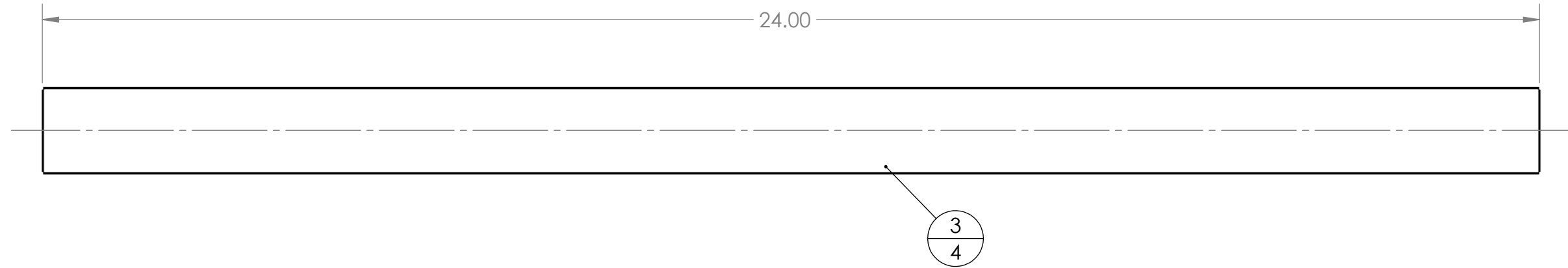
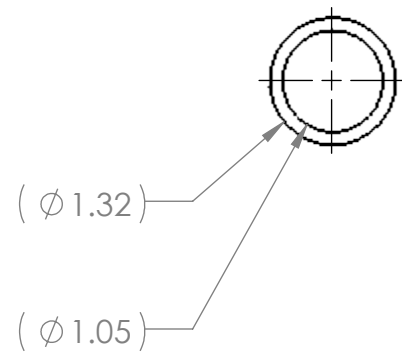
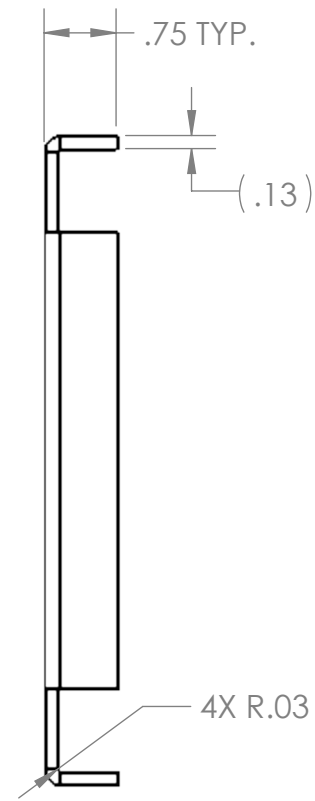
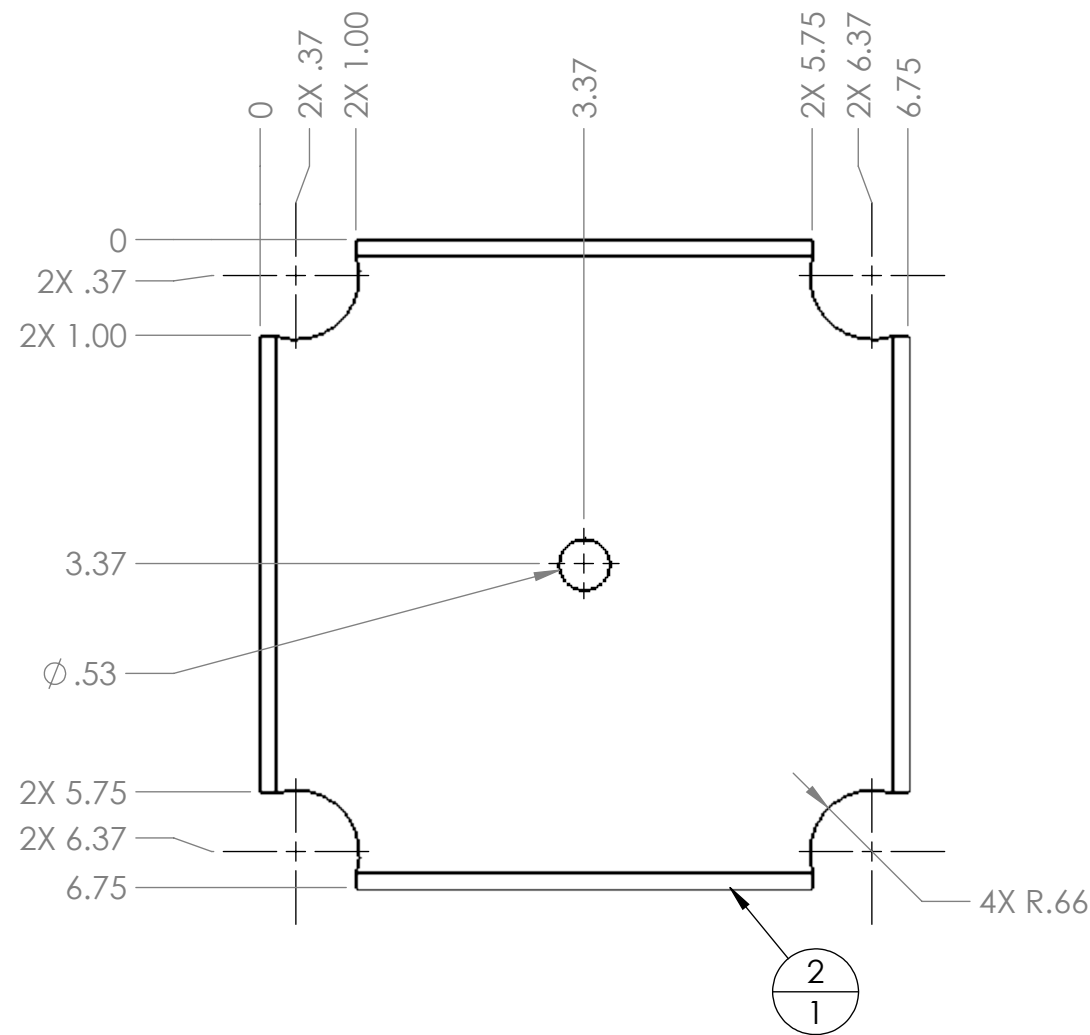
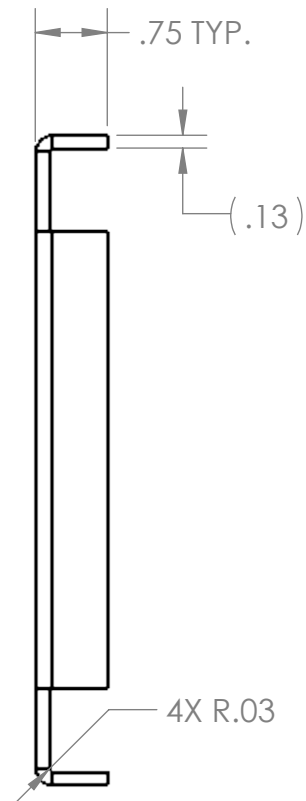
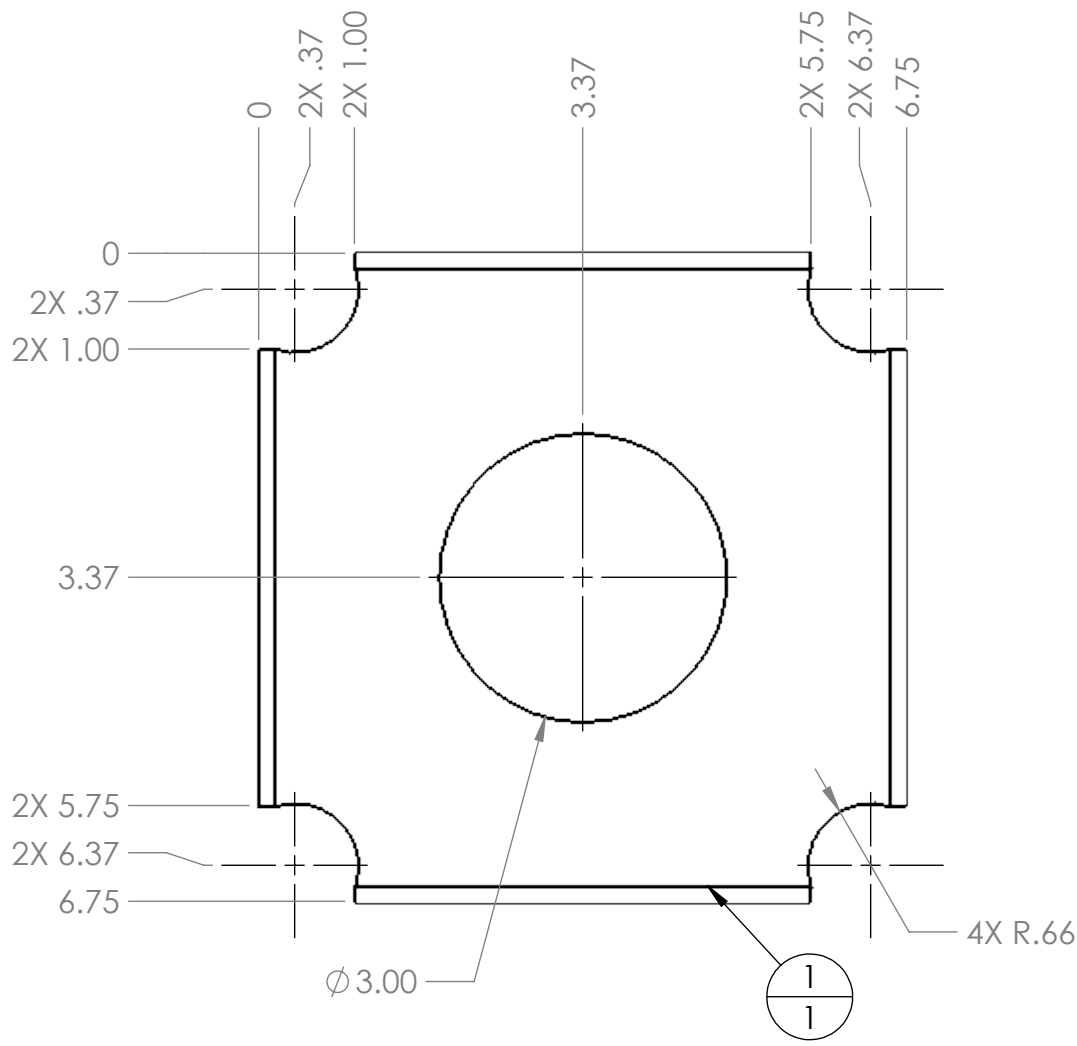
A



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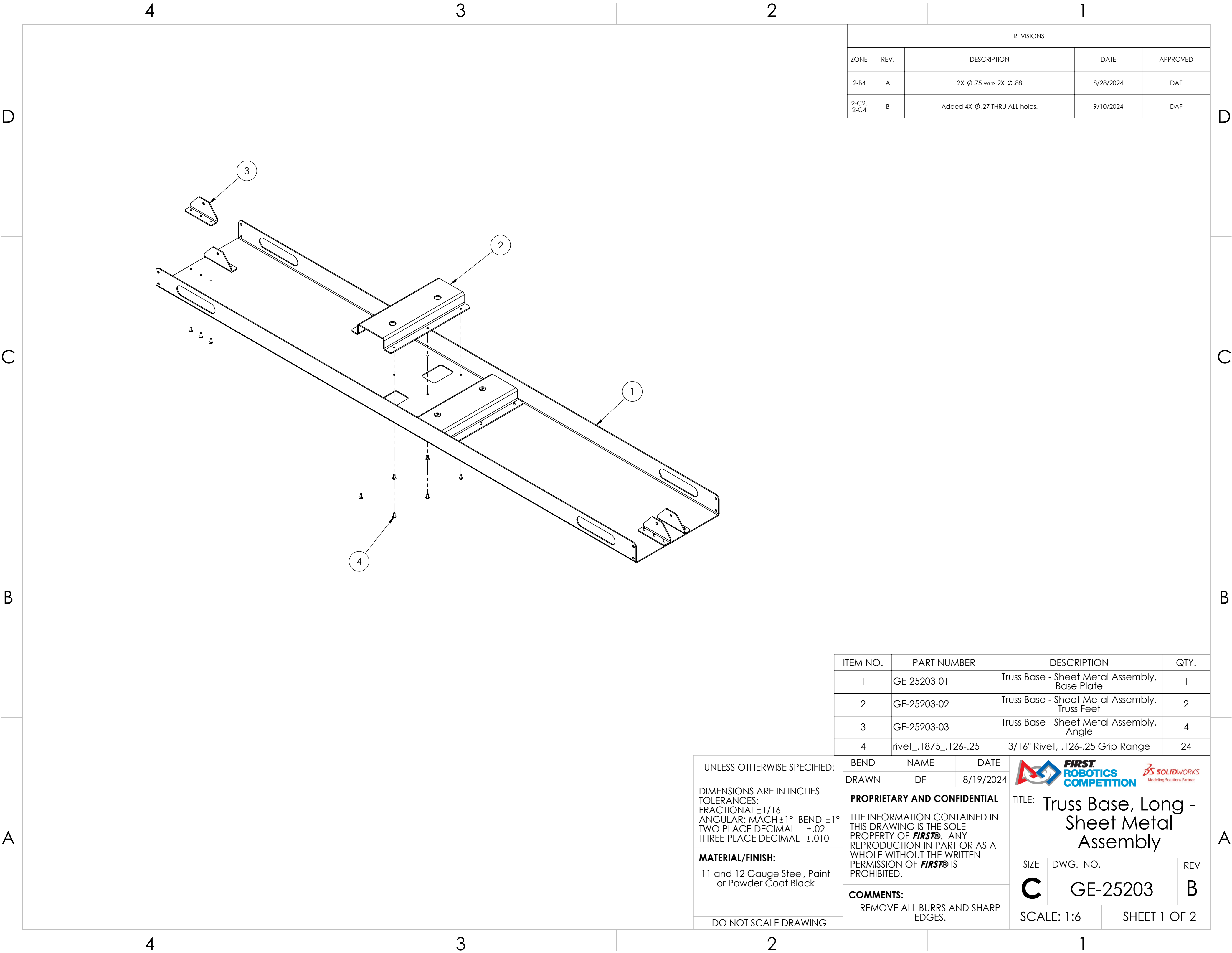
C

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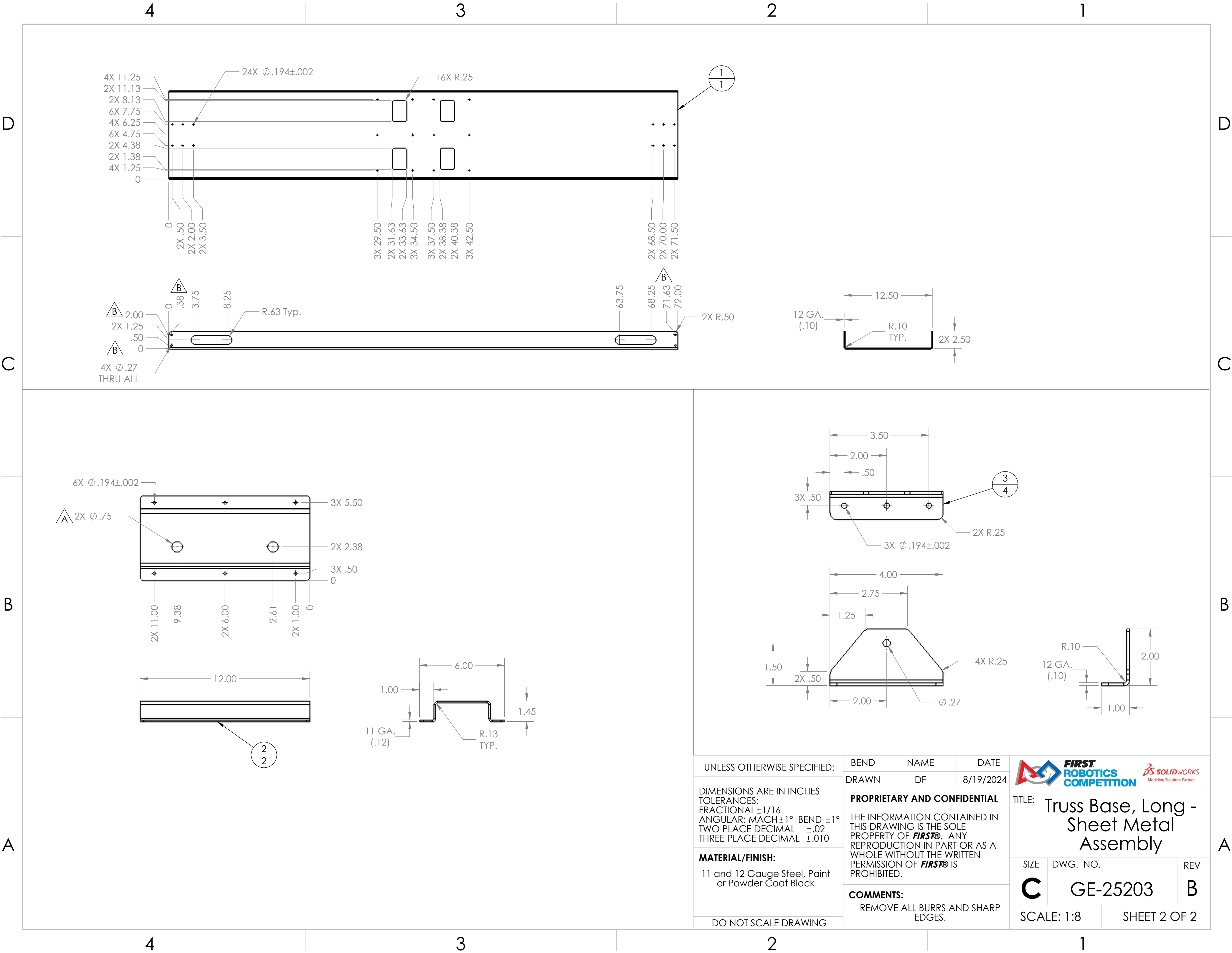
UNLESS OTHERWISE SPECIFIED:	WELD	NAME	DATE	<div><div>FIRST ROBOTICS COMPETITION</div><div>SOLIDWORKS Modeling Solutions Partner</div></div>		
	DRAWN	DF	7/10/2024			
DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ±1/16 ANGULAR: MACH ±1° BEND ±1° TWO PLACE DECIMAL ±.02 THREE PLACE DECIMAL ±.015	PROPRIETARY AND CONFIDENTIAL			TITLE: Cage Weldment, Blue		
	THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF FIRST® . ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FIRST® IS PROHIBITED.					
MATERIAL/FINISH:	COMMENTS:			SIZE	DWG. NO.	REV
Steel, welded and powder coated RAL# 5017	REMOVE ALL BURRS AND SHARP EDGES.			C	GE-25202	
DO NOT SCALE DRAWING				SCALE: 1:2		SHEET 2 OF 2



REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
2-B4	A	2X ϕ .75 was 2X ϕ .88	8/28/2024	DAF
2-C2, 2-C4	B	Added 4X ϕ .27 THRU ALL holes.	9/10/2024	DAF

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	GE-25203-01	Truss Base - Sheet Metal Assembly, Base Plate	1
2	GE-25203-02	Truss Base - Sheet Metal Assembly, Truss Feet	2
3	GE-25203-03	Truss Base - Sheet Metal Assembly, Angle	4
4	rivet_.1875_.126-.25	3/16" Rivet, .126-.25 Grip Range	24

UNLESS OTHERWISE SPECIFIED:		BEND	NAME	DATE	 	
DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ±1/16 ANGULAR: MACH ±1° BEND ±1° TWO PLACE DECIMAL ±.02 THREE PLACE DECIMAL ±.010		DRAWN	DF	8/19/2024	TITLE: Truss Base, Long - Sheet Metal Assembly	
MATERIAL/FINISH: 11 and 12 Gauge Steel, Paint or Powder Coat Black		PROPRIETARY AND CONFIDENTIAL THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF FIRST®. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FIRST® IS PROHIBITED.			SIZE: C DWG. NO. GE-25203 REV: B	
DO NOT SCALE DRAWING		COMMENTS: REMOVE ALL BURRS AND SHARP EDGES.			SCALE: 1:6 SHEET 1 OF 2	



UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN INCHES
TOLERANCES:
FRACTIONAL $\pm 1/16$
ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$
TWO PLACE DECIMAL $\pm .02$
THREE PLACE DECIMAL $\pm .010$

MATERIAL/FINISH:
11 and 12 Gauge Steel, Paint
or Powder Coat Black

DO NOT SCALE DRAWING

BEND

DRAWN

NAME

DF

DATE

8/19/2024

PROPRIETARY AND CONFIDENTIAL

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WHOLE WITHOUT THE WRITTEN
PERMISSION OF **FIRST®** IS
PROHIBITED.

COMMENTS:

REMOVE ALL BURRS AND SHARP
EDGES.



**FIRST
ROBOTICS
COMPETITION**



Modeling Solutions Partner

TITLE: **Truss Base, Long -
Sheet Metal
Assembly**

SIZE

C

DWG. NO.

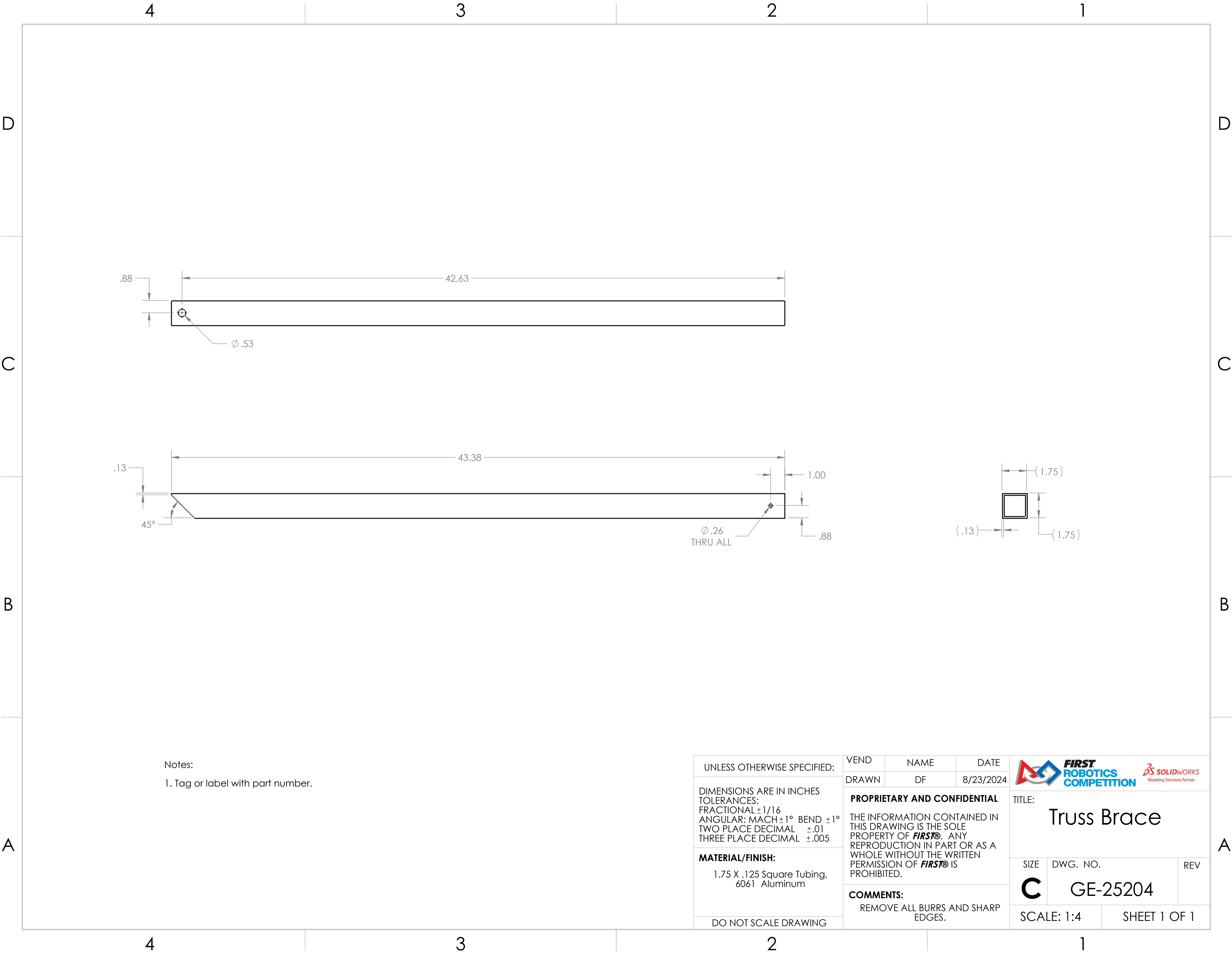
GE-25203

REV



B

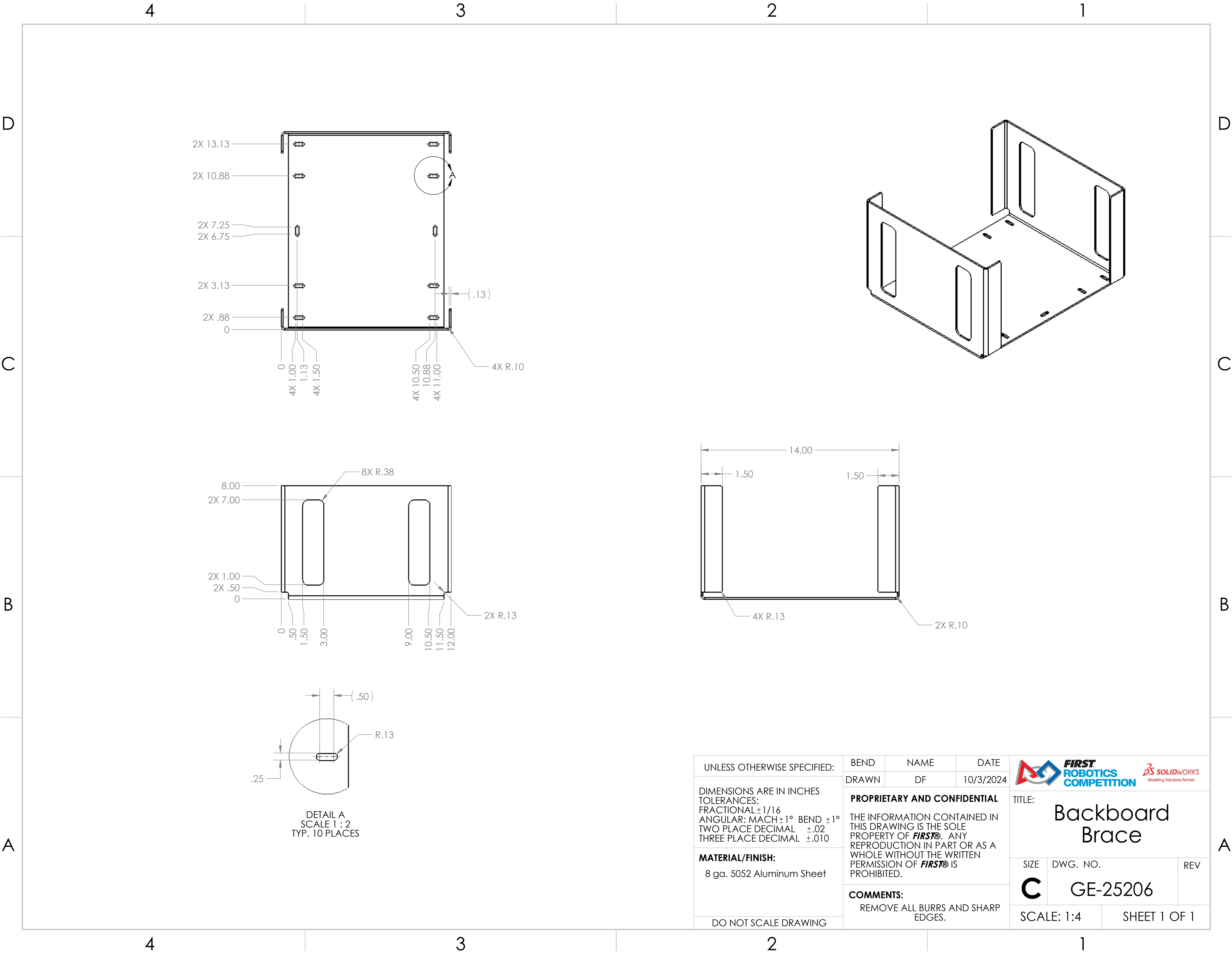
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SHEET 2 OF 2

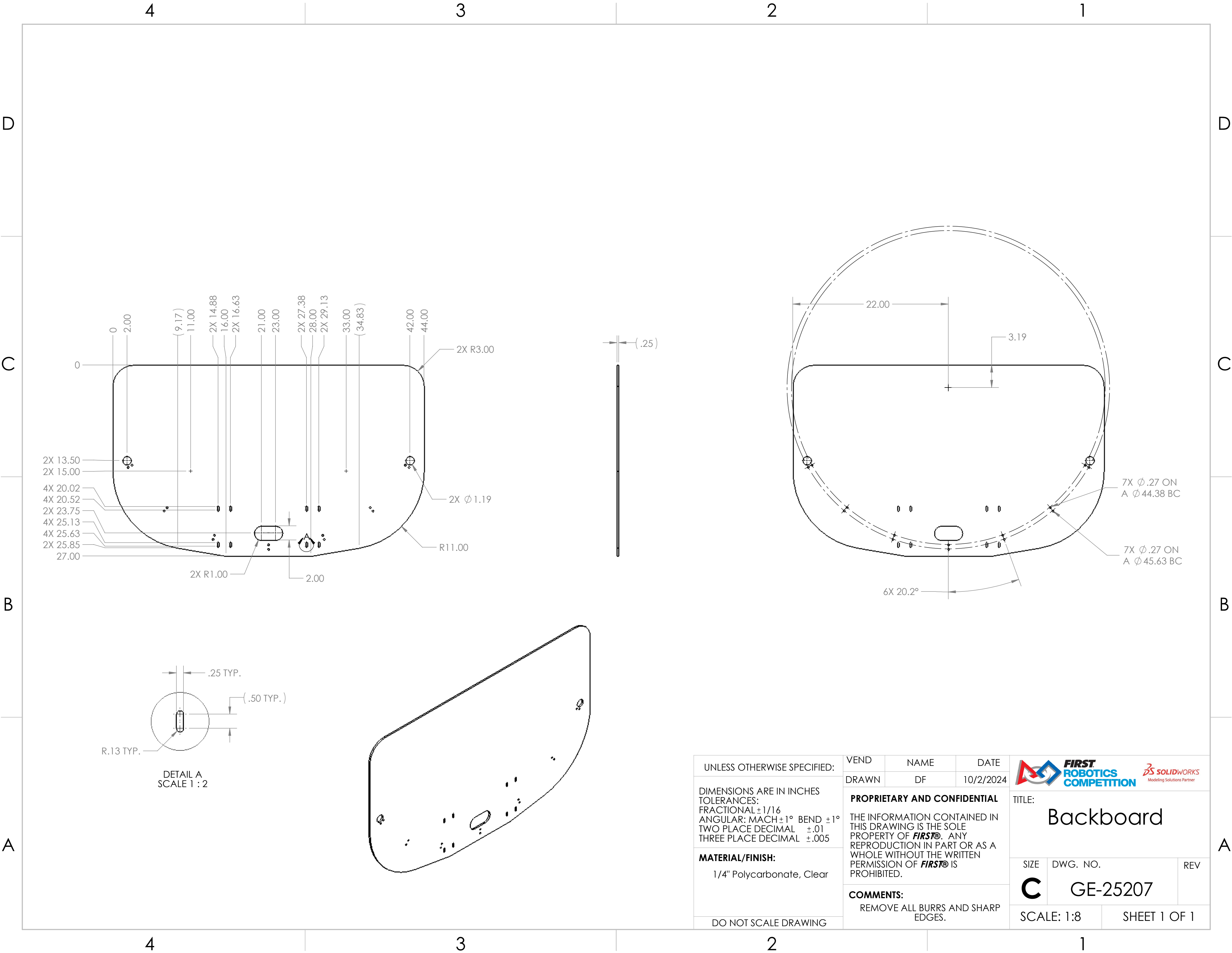




Notes:
1. Tag or label with part number.

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL $\pm 1/16$ ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$ TWO PLACE DECIMAL $\pm .01$ THREE PLACE DECIMAL $\pm .005$ MATERIAL/FINISH: 1.75 X .125 Square Tubing, 6061 Aluminum DO NOT SCALE DRAWING	VEND	NAME	DATE	<div></div> <div>TITLE: <h1>Truss Brace</h1></div>		
	DRAWN	DF	8/23/2024			
	PROPRIETARY AND CONFIDENTIAL THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF FIRST® . ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FIRST® IS PROHIBITED.			SIZE	DWG. NO.	REV
	COMMENTS: REMOVE ALL BURRS AND SHARP EDGES.			C	GE-25204	
SCALE: 1:4		SHEET 1 OF 1				

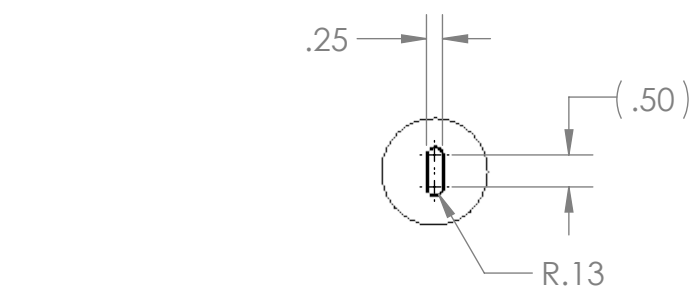
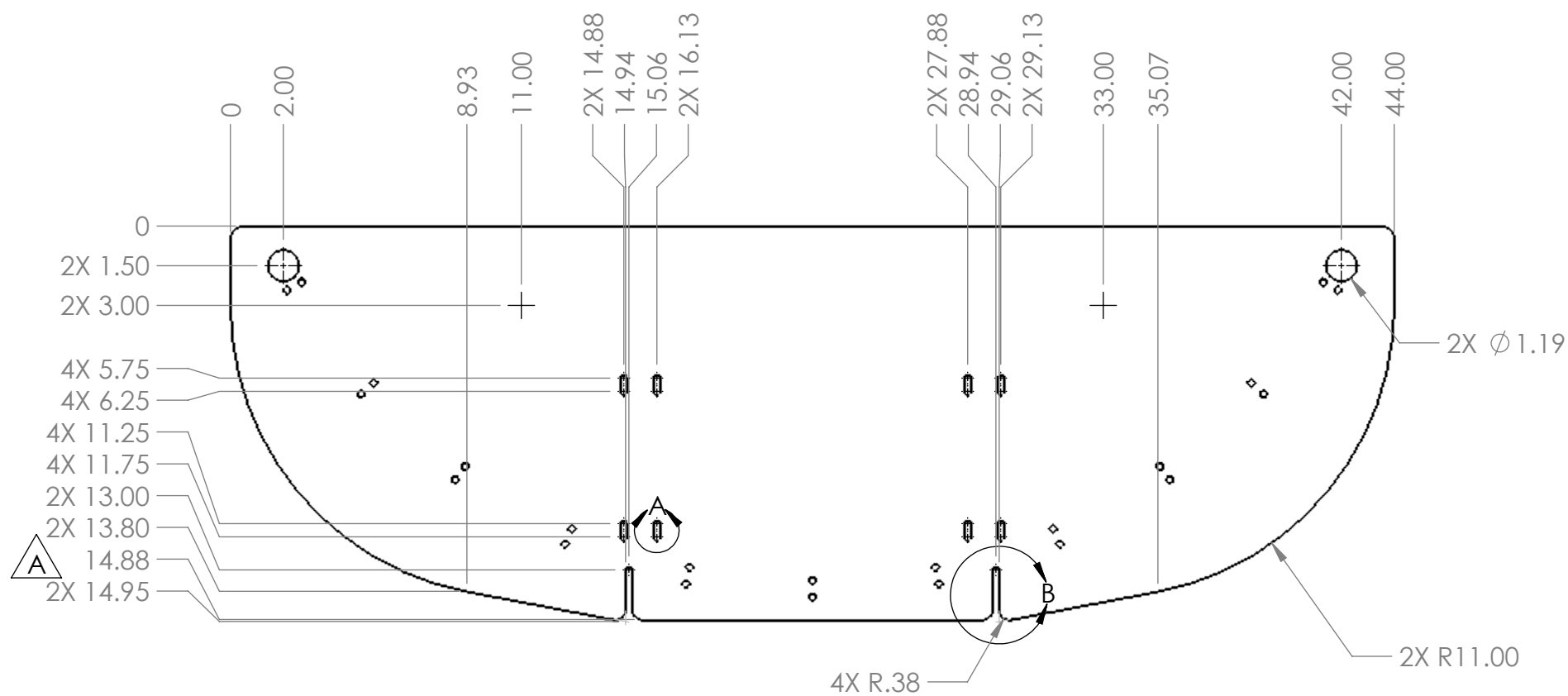


UNLESS OTHERWISE SPECIFIED:	BEND	NAME	DATE	<div></div>		
	DRAWN	DF	10/3/2024			
DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ±1/16 ANGULAR: MACH ±1° BEND ±1° TWO PLACE DECIMAL ±.02 THREE PLACE DECIMAL ±.010	PROPRIETARY AND CONFIDENTIAL			TITLE: Backboard Brace		
	THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF FIRST® . ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FIRST® IS PROHIBITED.					
	COMMENTS: REMOVE ALL BURRS AND SHARP EDGES.			SIZE	DWG. NO.	REV
MATERIAL/FINISH: 8 ga. 5052 Aluminum Sheet				C	GE-25206	
				SCALE: 1:4		
DO NOT SCALE DRAWING						

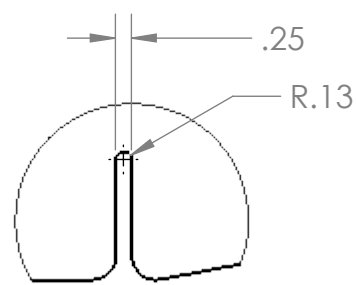


UNLESS OTHERWISE SPECIFIED:	VEND	NAME	DATE	<div></div> <div>TITLE: <h1>Backboard</h1></div>		
	DRAWN	DF	10/2/2024			
DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ±1/16 ANGULAR: MACH ±1° BEND ±1° TWO PLACE DECIMAL ±.01 THREE PLACE DECIMAL ±.005	PROPRIETARY AND CONFIDENTIAL THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF FIRST® . ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FIRST® IS PROHIBITED.			SIZE	DWG. NO.	REV
	COMMENTS: REMOVE ALL BURRS AND SHARP EDGES.			C	GE-25207	
	DO NOT SCALE DRAWING			SCALE: 1:8		SHEET 1 OF 1
MATERIAL/FINISH: 1/4" Polycarbonate, Clear						

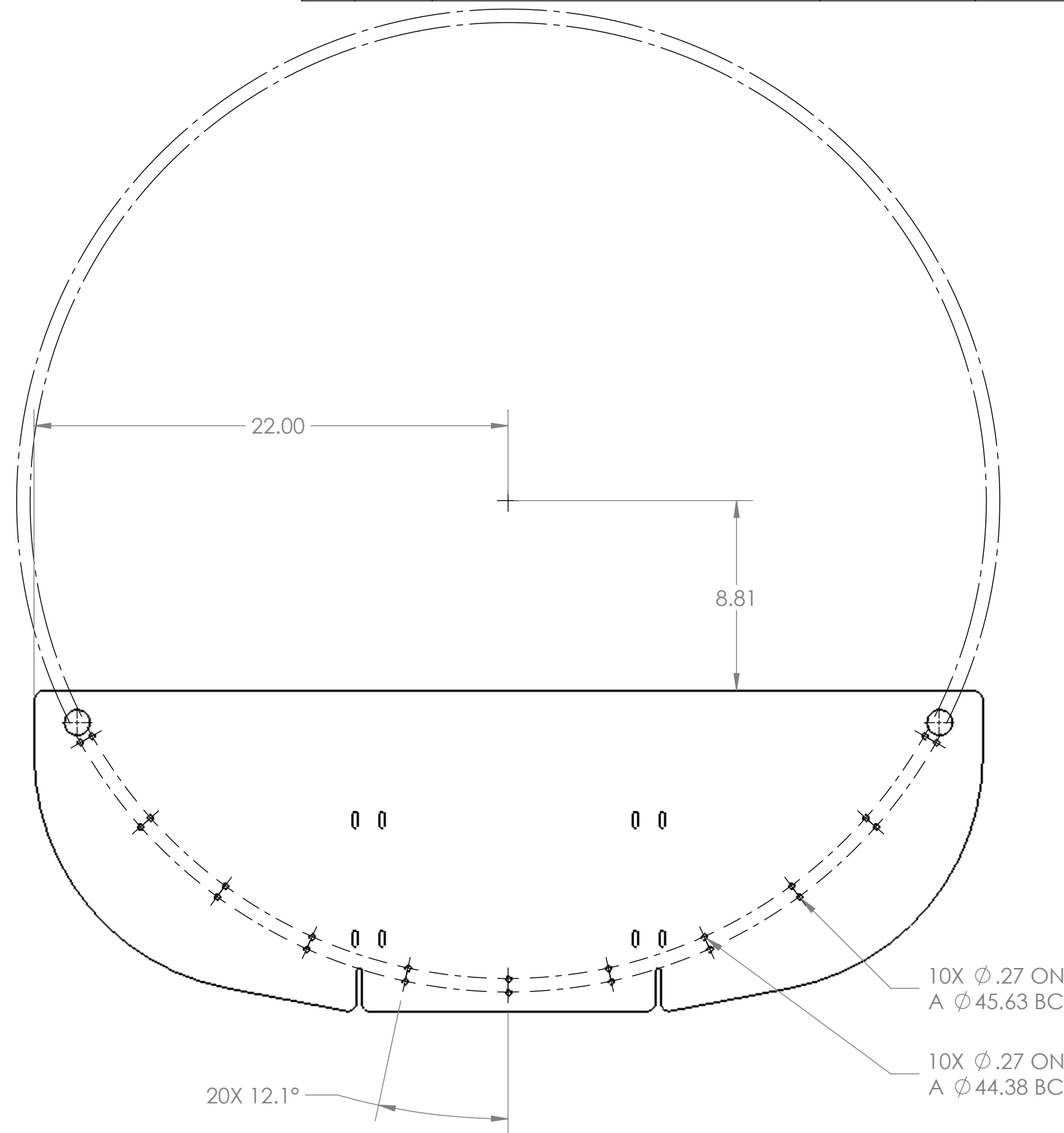
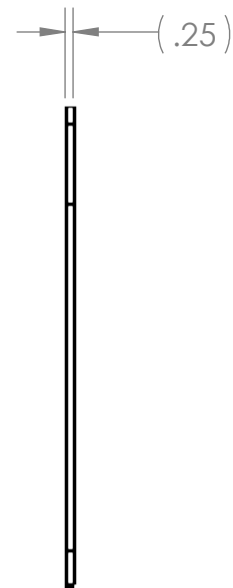
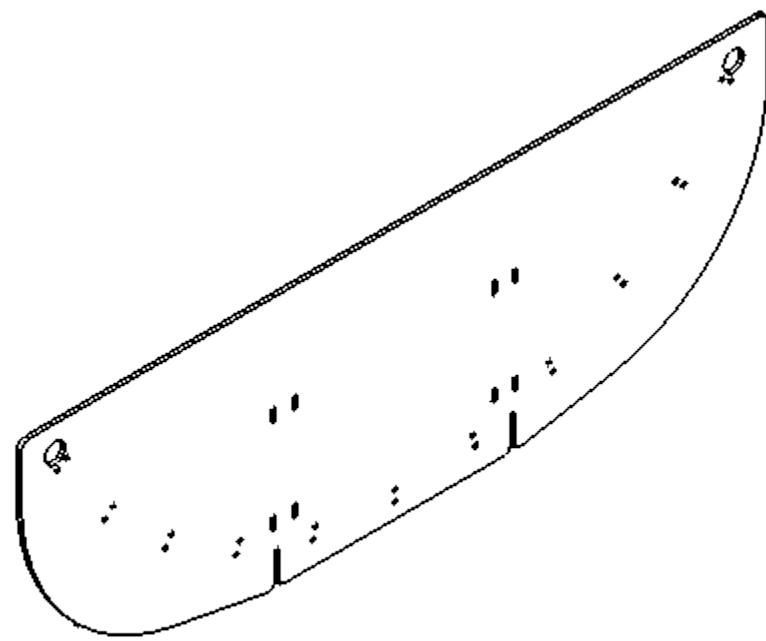
REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
B4	A	14.88 was 15.00	10/3/2024	DF





DETAIL A
SCALE 1 : 3
TYP. 8 PLACES

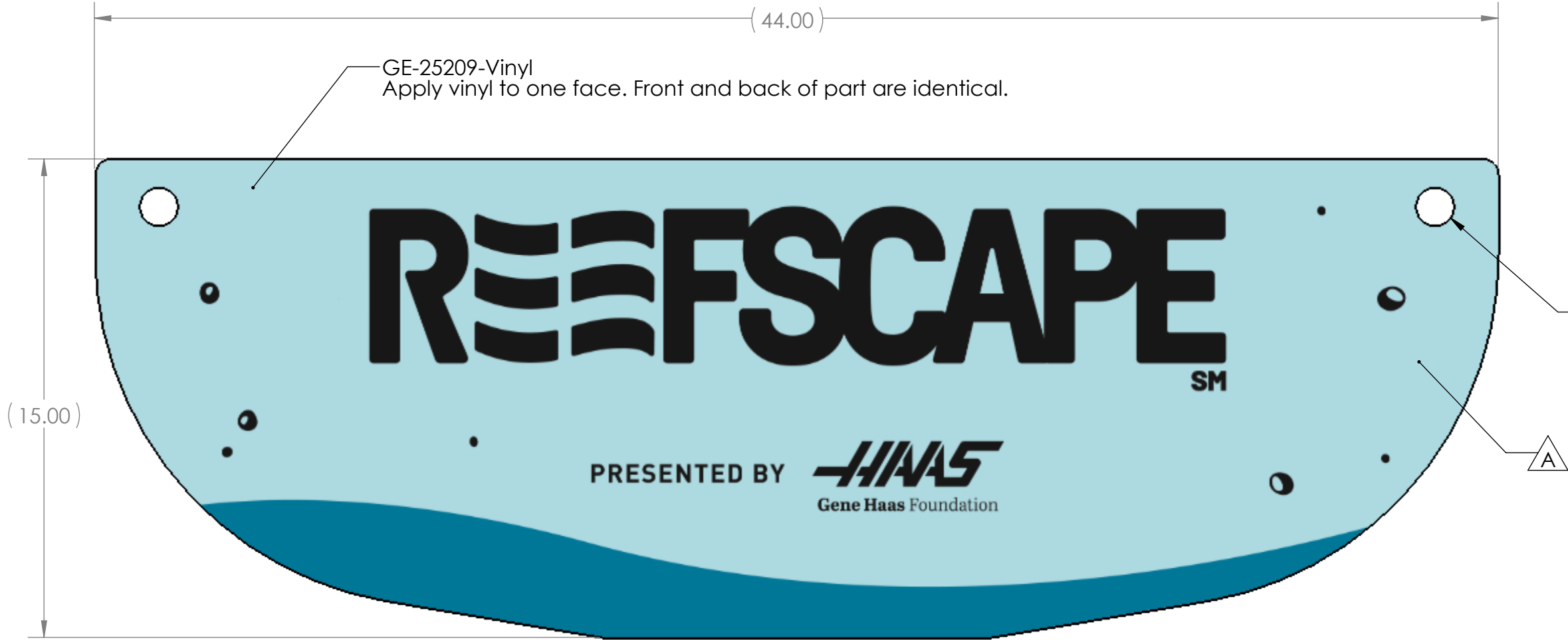


DETAIL B
SCALE 1 : 3
TYP. 2 PLACES





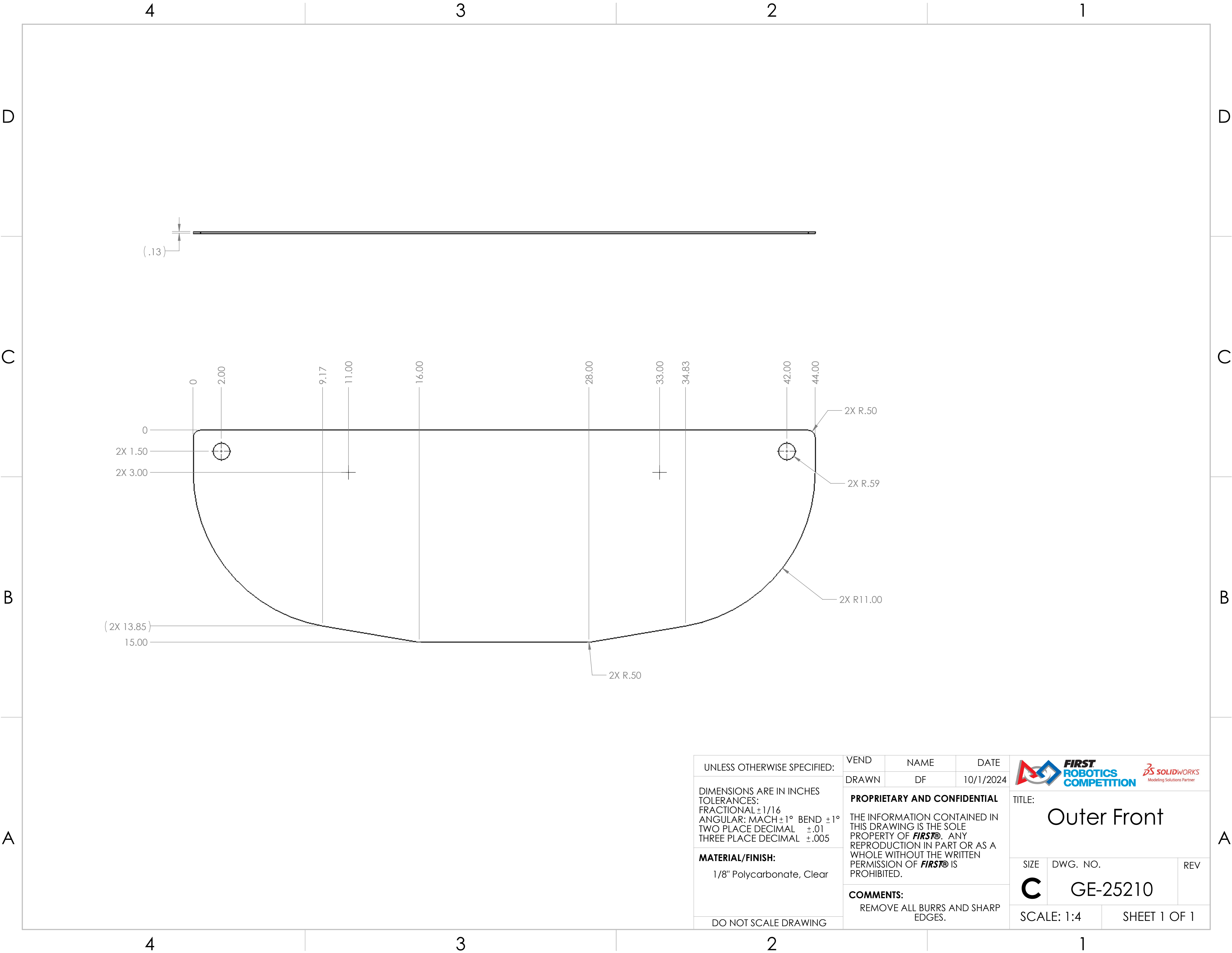
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL $\pm 1/16$ ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$ TWO PLACE DECIMAL $\pm .01$ THREE PLACE DECIMAL $\pm .005$ MATERIAL/FINISH: 1/4" Polycarbonate, Clear COMMENTS: REMOVE ALL BURRS AND SHARP EDGES. DO NOT SCALE DRAWING	VEND	NAME	DATE	 			
	DRAWN	DF	10/3/2024				
	PROPRIETARY AND CONFIDENTIAL THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF FIRST® . ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FIRST® IS PROHIBITED.				TITLE: Inner Front		
	SIZE C		DWG. NO.		REV		
GE-25208			A				
SCALE: 1:6		SHEET 1 OF 1					



REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
B2	A	Updated graphics	10/21/2024	DF



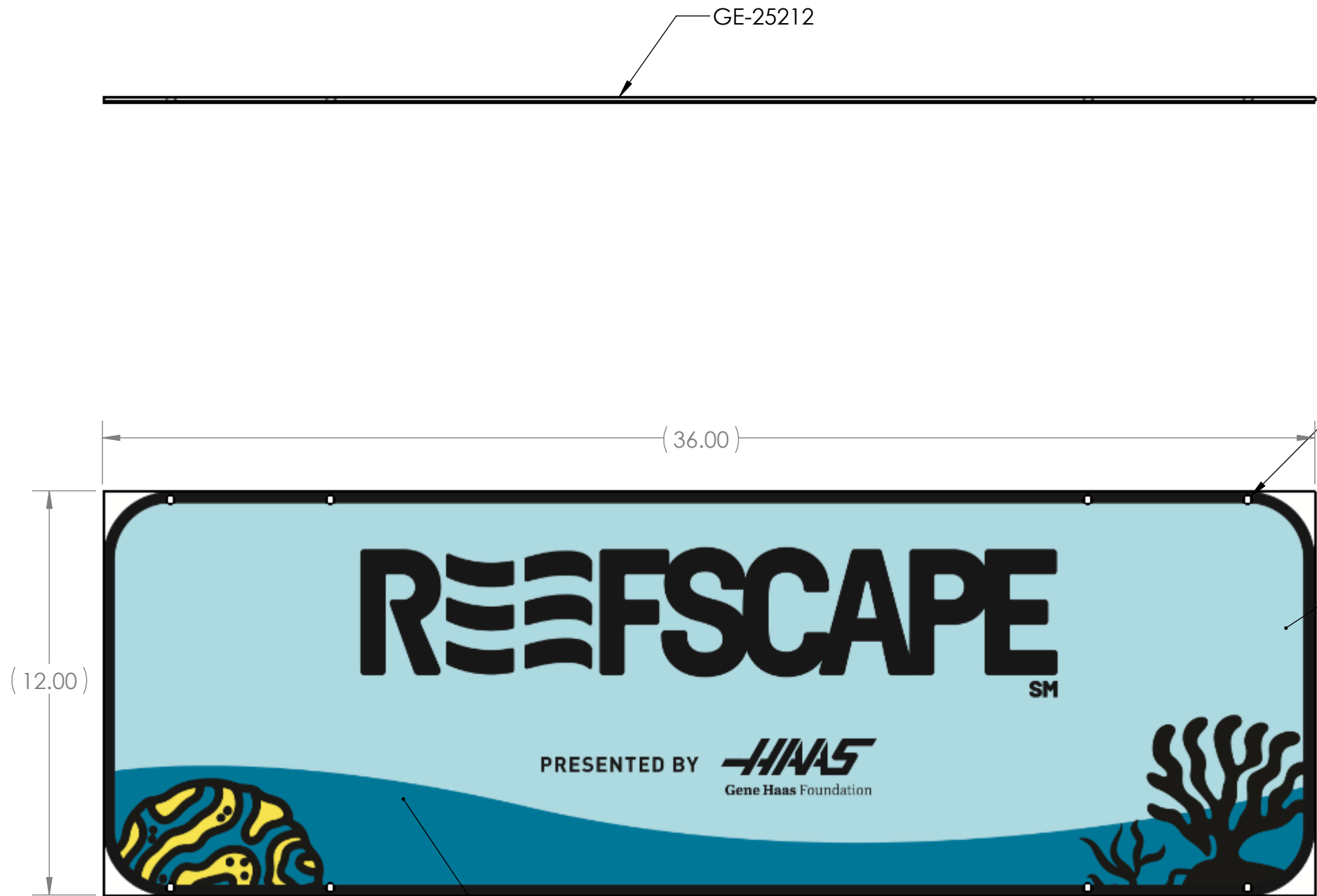
Notes:
1. QTY per field: 2
2. Gloss Vinyl finish.

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL $\pm 1/16$ ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$ TWO PLACE DECIMAL $\pm .01$ THREE PLACE DECIMAL $\pm .005$ MATERIAL/FINISH: DO NOT SCALE DRAWING	VEND DRAWN	NAME DF	DATE 10/7/2024	  TITLE: Outer Front w/Vinyl	
	PROPRIETARY AND CONFIDENTIAL THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF FIRST® . ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FIRST® IS PROHIBITED.			SIZE C	DWG. NO. GE-25209
	COMMENTS: REMOVE ALL BURRS AND SHARP EDGES.			REV A	
SCALE: 1:4		SHEET 1 OF 1			





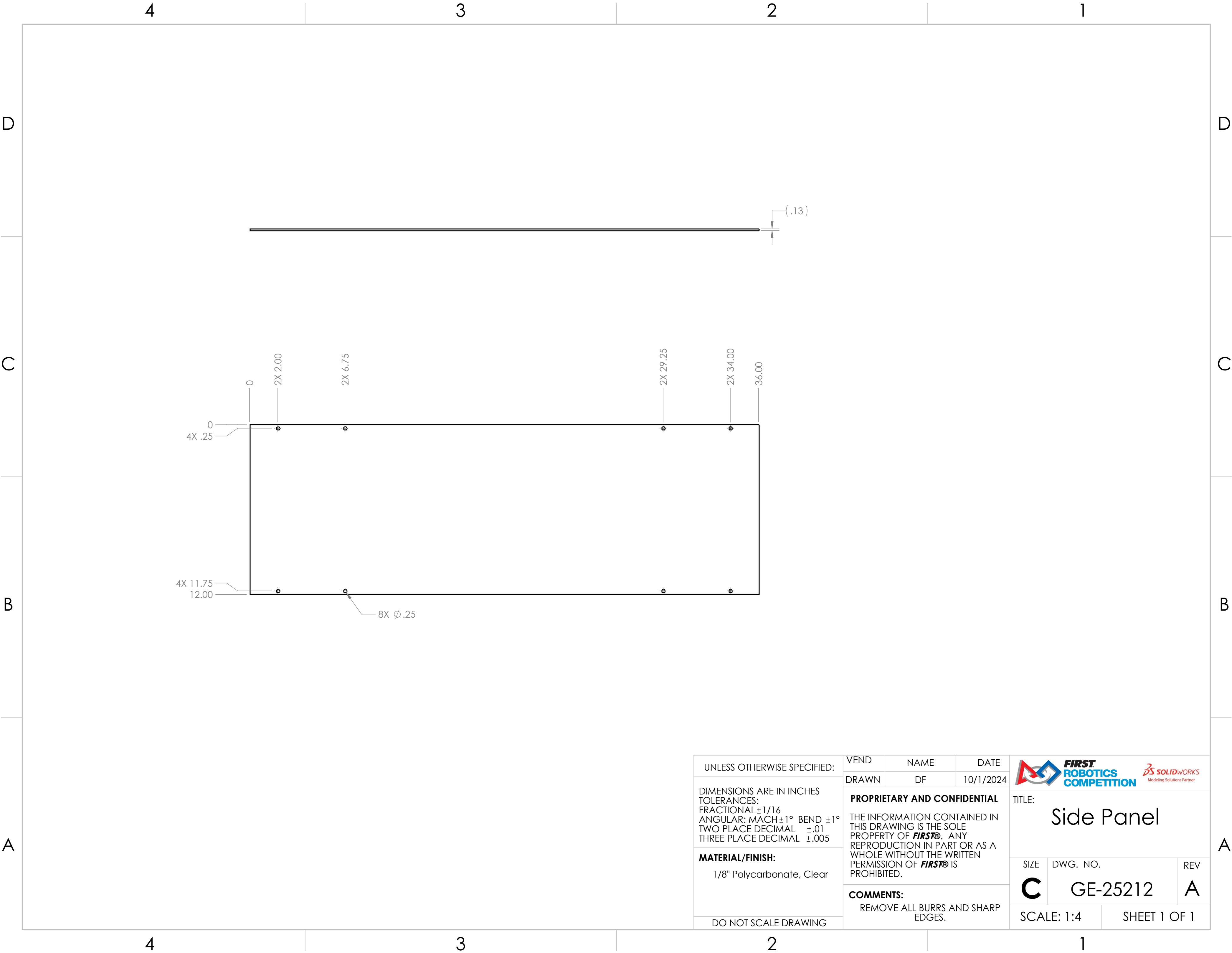
UNLESS OTHERWISE SPECIFIED:	VEND	NAME	DATE	<div><div></div><div>TITLE: Outer Front</div></div>		
	DRAWN	DF	10/1/2024			
DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ±1/16 ANGULAR: MACH ±1° BEND ±1° TWO PLACE DECIMAL ±.01 THREE PLACE DECIMAL ±.005	PROPRIETARY AND CONFIDENTIAL			<div><div>SIZE</div><div>DWG. NO.</div><div>REV</div></div>		
	THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF FIRST® . ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FIRST® IS PROHIBITED.					
	COMMENTS:					
MATERIAL/FINISH:	REMOVE ALL BURRS AND SHARP EDGES.			<div><div>C</div><div>GE-25210</div></div>		
1/8" Polycarbonate, Clear						
DO NOT SCALE DRAWING				SCALE: 1:4		SHEET 1 OF 1



REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
B2	A	Updatedg graphics	10/21/2024	DF

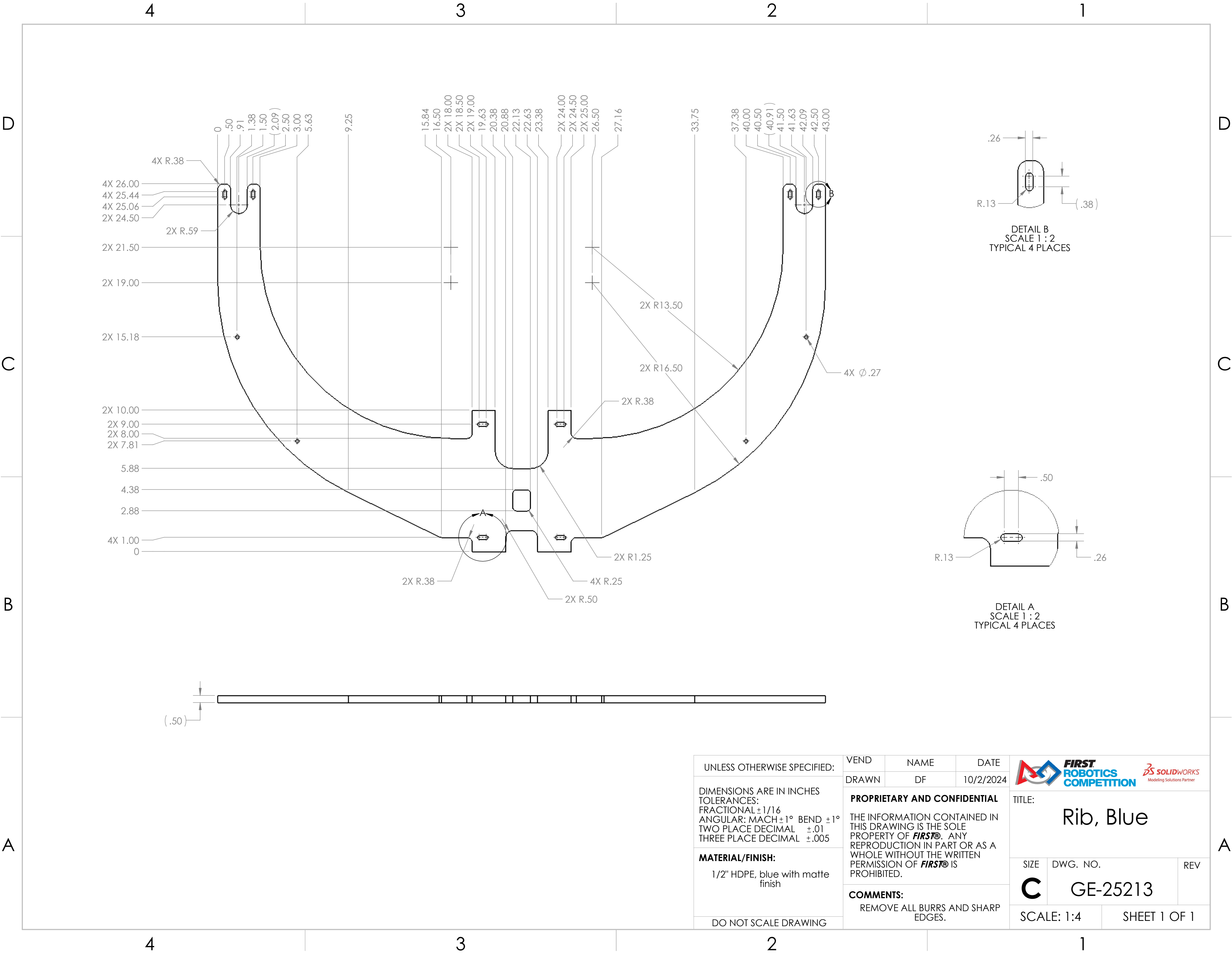


- Notes:
- QTY per field: 2
 - Gloss Vinyl finish.

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ±1/16 ANGULAR: MACH ±1° BEND ±1° TWO PLACE DECIMAL ±.01 THREE PLACE DECIMAL ±.005 MATERIAL/FINISH: DO NOT SCALE DRAWING	VEN DRAWN	NAME DF	DATE 10/8/2024	<div><div></div><div>TITLE: Side Panel w/Vinyl</div></div>	
	PROPRIETARY AND CONFIDENTIAL THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF FIRST® . ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FIRST® IS PROHIBITED.				
	COMMENTS: REMOVE ALL BURRS AND SHARP EDGES.			SIZE C	DWG. NO. GE-25211
SCALE: 1:4			SHEET 1 OF 1		



UNLESS OTHERWISE SPECIFIED:	VEND	NAME	DATE	<div></div> <div>TITLE: <h1>Side Panel</h1></div>		
	DRAWN	DF	10/1/2024			
DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ±1/16 ANGULAR: MACH ±1° BEND ±1° TWO PLACE DECIMAL ±.01 THREE PLACE DECIMAL ±.005	PROPRIETARY AND CONFIDENTIAL			<div><div>SIZE</div><div>DWG. NO.</div><div>REV</div></div> <div><div>C</div><div>GE-25212</div><div>A</div></div> <div><div>SCALE: 1:4</div><div>SHEET 1 OF 1</div></div>		
	THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF FIRST® . ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FIRST® IS PROHIBITED.					
	COMMENTS: REMOVE ALL BURRS AND SHARP EDGES.					
MATERIAL/FINISH:						
1/8" Polycarbonate, Clear						
DO NOT SCALE DRAWING						



UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN INCHES
TOLERANCES:
FRACTIONAL $\pm 1/16$
ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$
TWO PLACE DECIMAL $\pm .01$
THREE PLACE DECIMAL $\pm .005$

MATERIAL/FINISH:
1/2" HDPE, blue with matte finish

DO NOT SCALE DRAWING

VEND	NAME	DATE
DRAWN	DF	10/2/2024

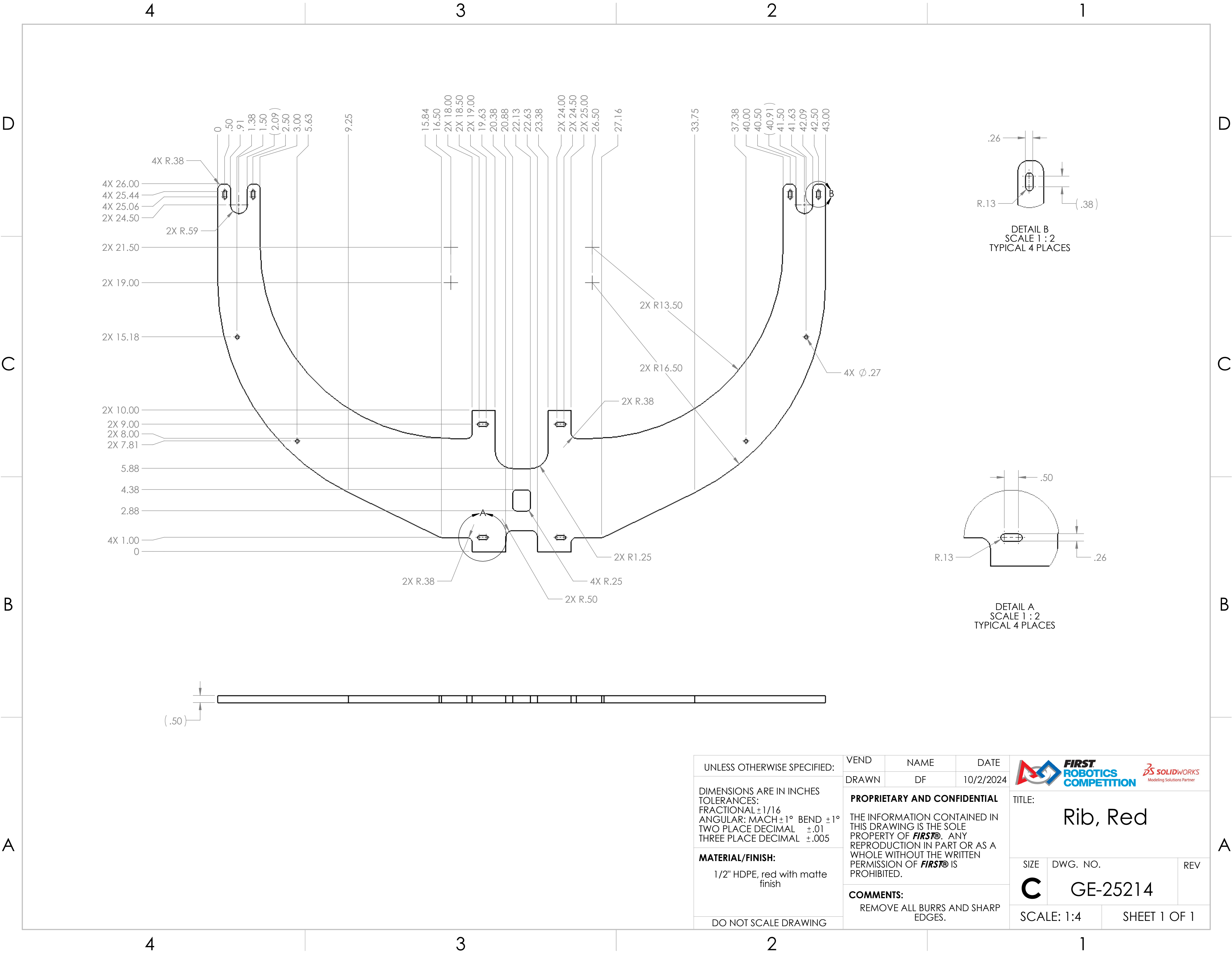
PROPRIETARY AND CONFIDENTIAL

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF **FIRST®**. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF **FIRST®** IS PROHIBITED.

COMMENTS:
REMOVE ALL BURRS AND SHARP EDGES.

TITLE:		
Rib, Blue		
SIZE	DWG. NO.	REV
C	GE-25213	
SCALE: 1:4		SHEET 1 OF 1







UNLESS OTHERWISE SPECIFIED:

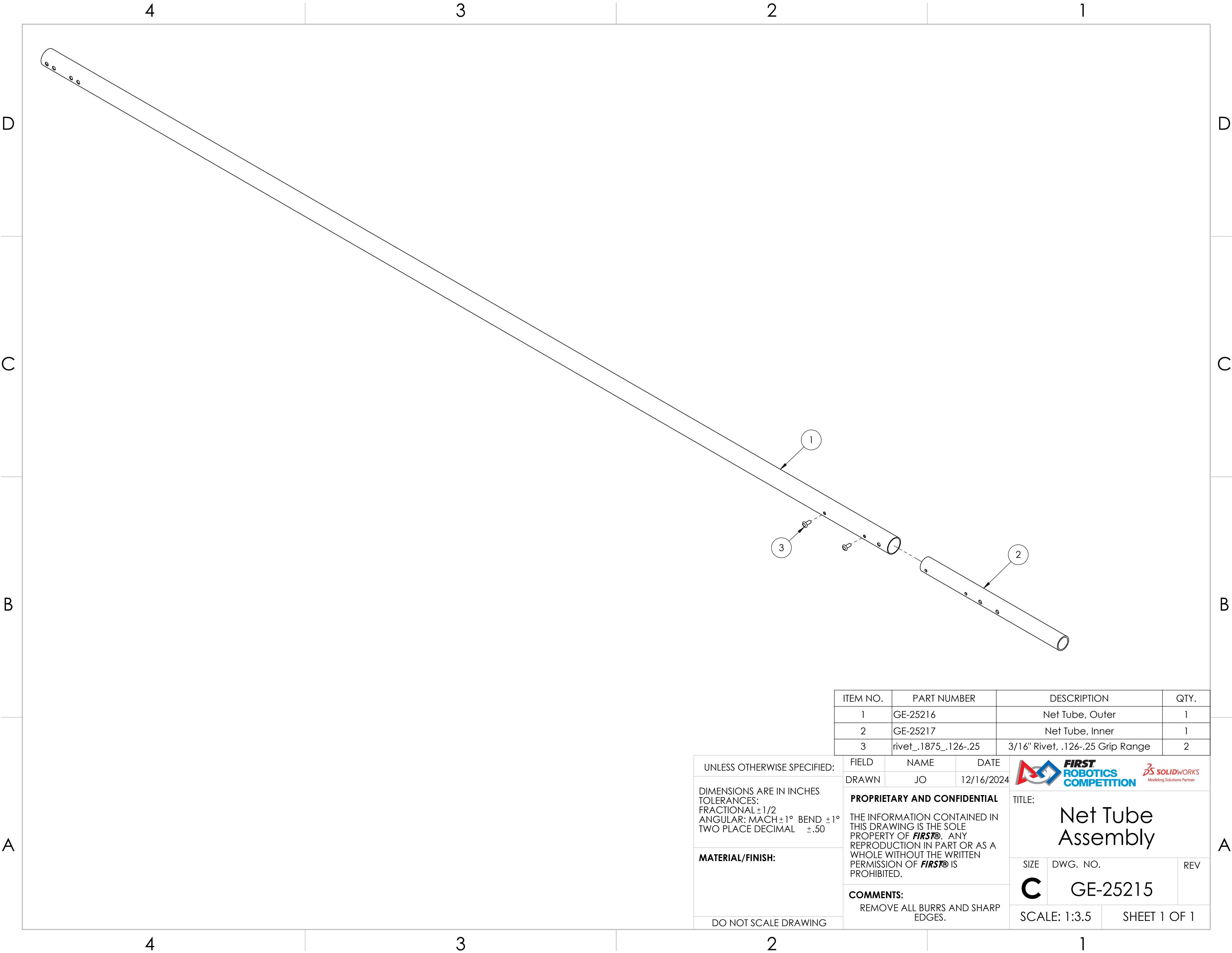
DIMENSIONS ARE IN INCHES
TOLERANCES:
FRACTIONAL $\pm 1/16$
ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$
TWO PLACE DECIMAL $\pm .01$
THREE PLACE DECIMAL $\pm .005$

MATERIAL/FINISH:
1/2" HDPE, red with matte finish



DO NOT SCALE DRAWING

VEND	NAME	DATE
DRAWN	DF	10/2/2024
PROPRIETARY AND CONFIDENTIAL THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF FIRST® . ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FIRST® IS PROHIBITED.		
COMMENTS: REMOVE ALL BURRS AND SHARP EDGES.		

 		
TITLE: Rib, Red		
SIZE C	DWG. NO. GE-25214	REV
SCALE: 1:4		SHEET 1 OF 1



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	GE-25216	Net Tube, Outer	1
2	GE-25217	Net Tube, Inner	1
3	rivet_.1875_.126-.25	3/16" Rivet, .126-.25 Grip Range	2

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL $\pm 1/2$ ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$ TWO PLACE DECIMAL $\pm .50$ MATERIAL/FINISH: DO NOT SCALE DRAWING	FIELD DRAWN	NAME JO	DATE 12/16/2024	 		
	PROPRIETARY AND CONFIDENTIAL THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF FIRST® . ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FIRST® IS PROHIBITED.			TITLE: Net Tube Assembly		
	COMMENTS: REMOVE ALL BURRS AND SHARP EDGES.			SIZE C	DWG. NO. GE-25215	REV
				SCALE: 1:3.5		SHEET 1 OF 1

4

3

2

1

D

D

C

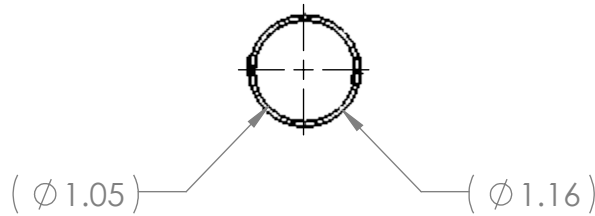
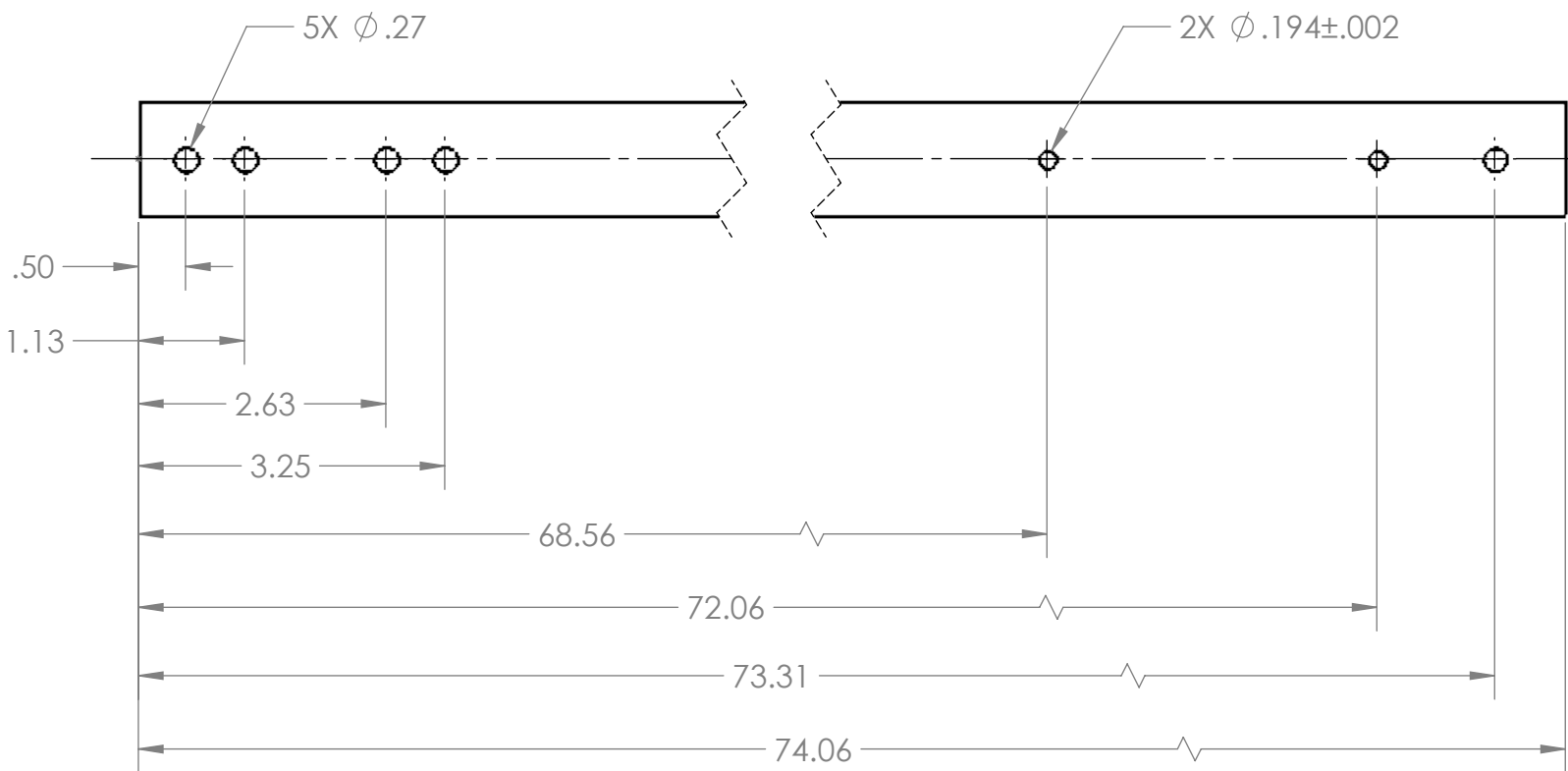
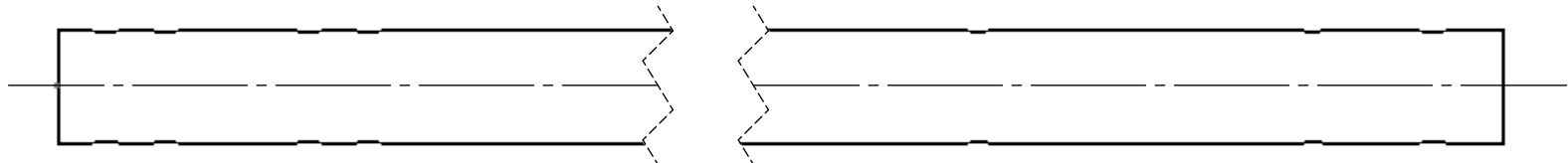
C



B

B

A

A



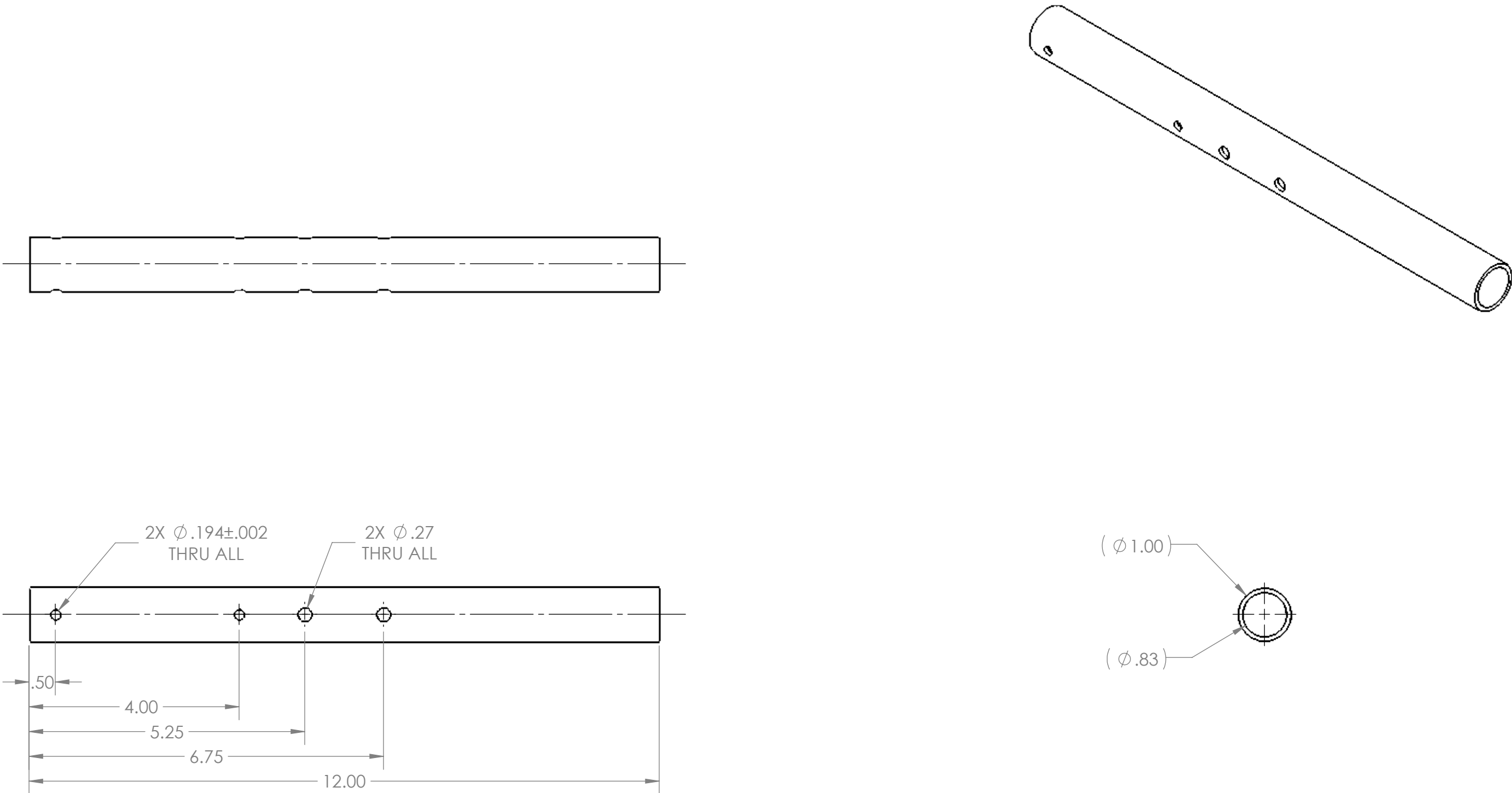
UNLESS OTHERWISE SPECIFIED:	VEND	NAME	DATE	<div><div>FIRST ROBOTICS COMPETITION</div><div>SOLIDWORKS Modeling Solutions Partner</div></div>		
	DRAWN	DF	10/2/2024			
DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ±1/16 ANGULAR: MACH ±1° BEND ±1° TWO PLACE DECIMAL ±.01 THREE PLACE DECIMAL ±.005	PROPRIETARY AND CONFIDENTIAL			TITLE:		
	THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF FIRST® . ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FIRST® IS PROHIBITED.			Net Tube, Outer		
MATERIAL/FINISH: 1" EMT Conduit, Galvanized	COMMENTS: REMOVE ALL BURRS AND SHARP EDGES.			SIZE	DWG. NO.	REV
				C	GE-25216	
DO NOT SCALE DRAWING				SCALE: 1:2		SHEET 1 OF 1



4

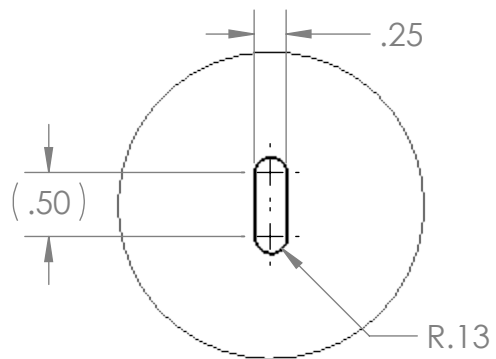
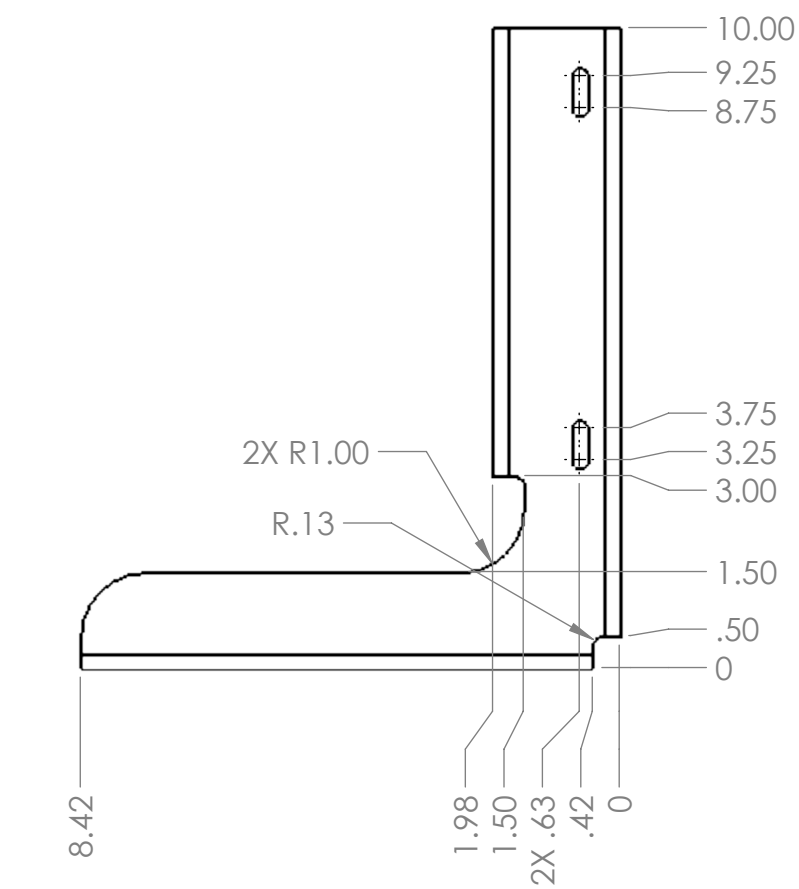
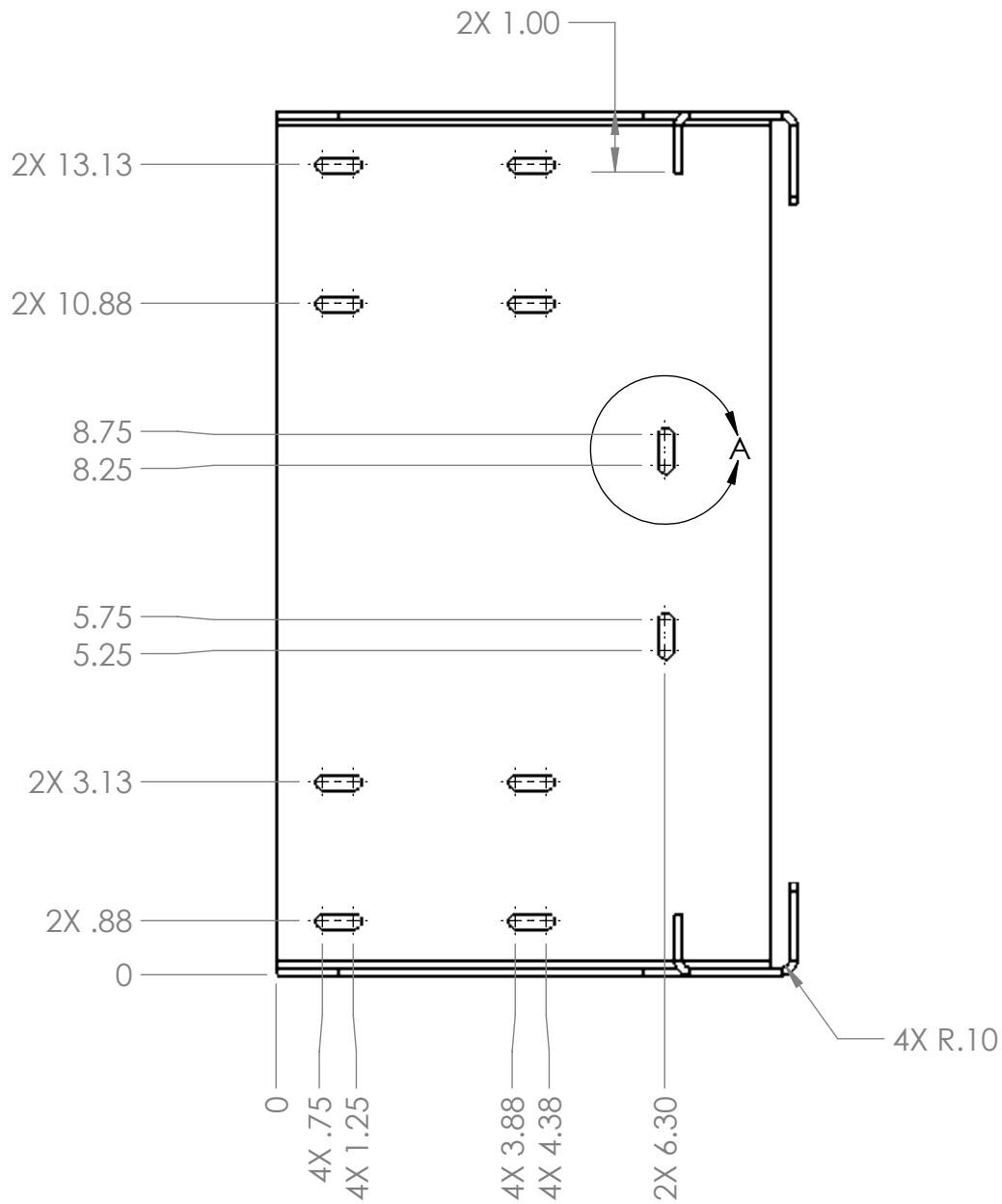
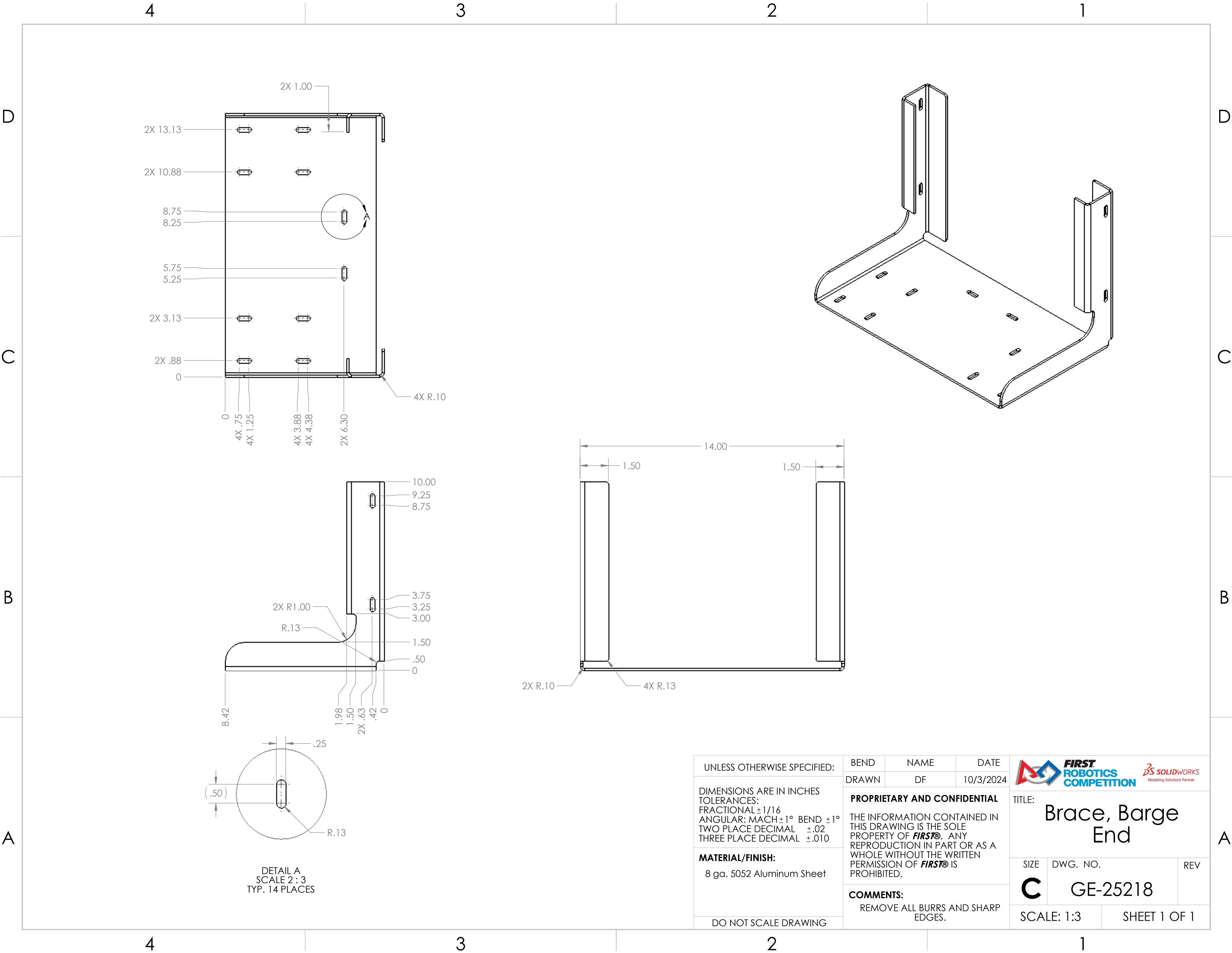
3

2

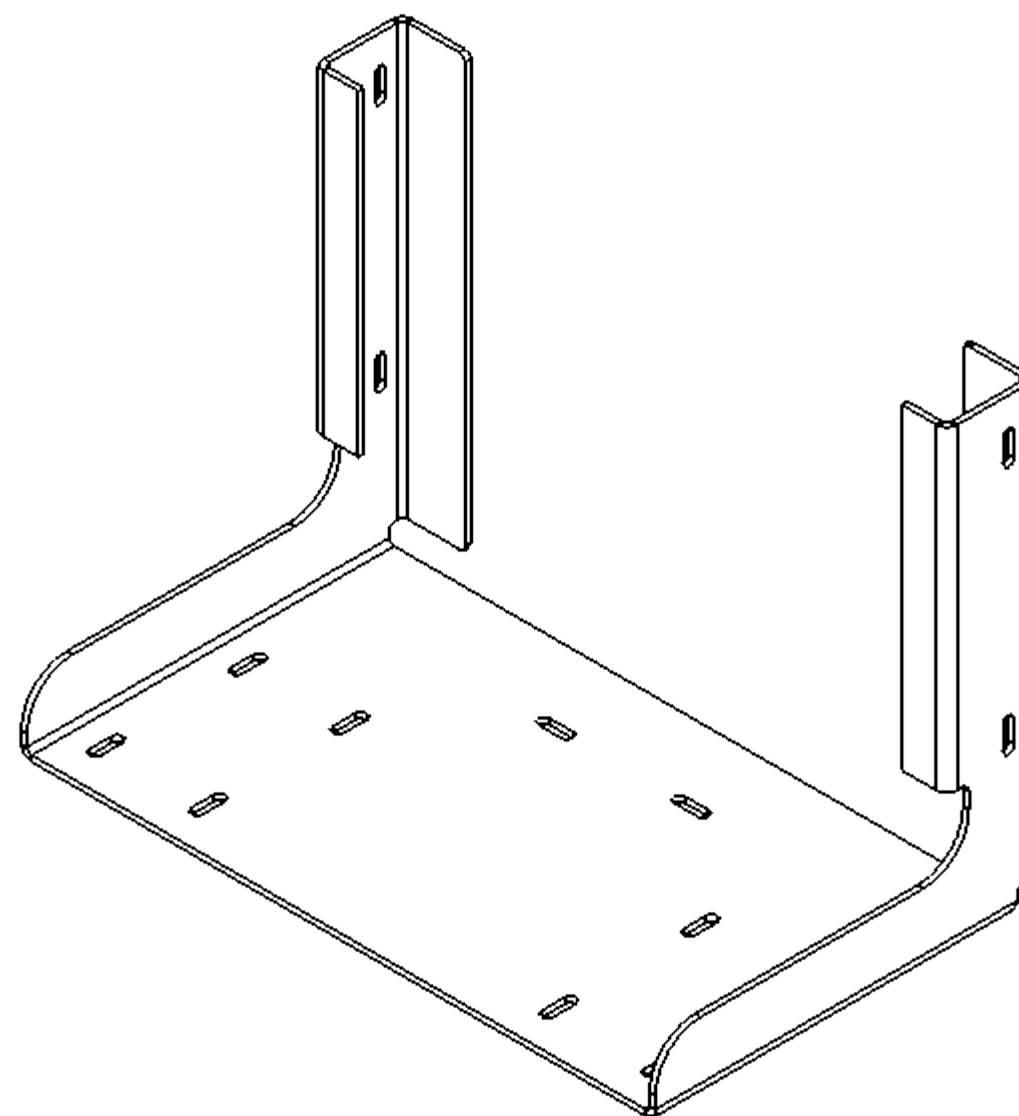
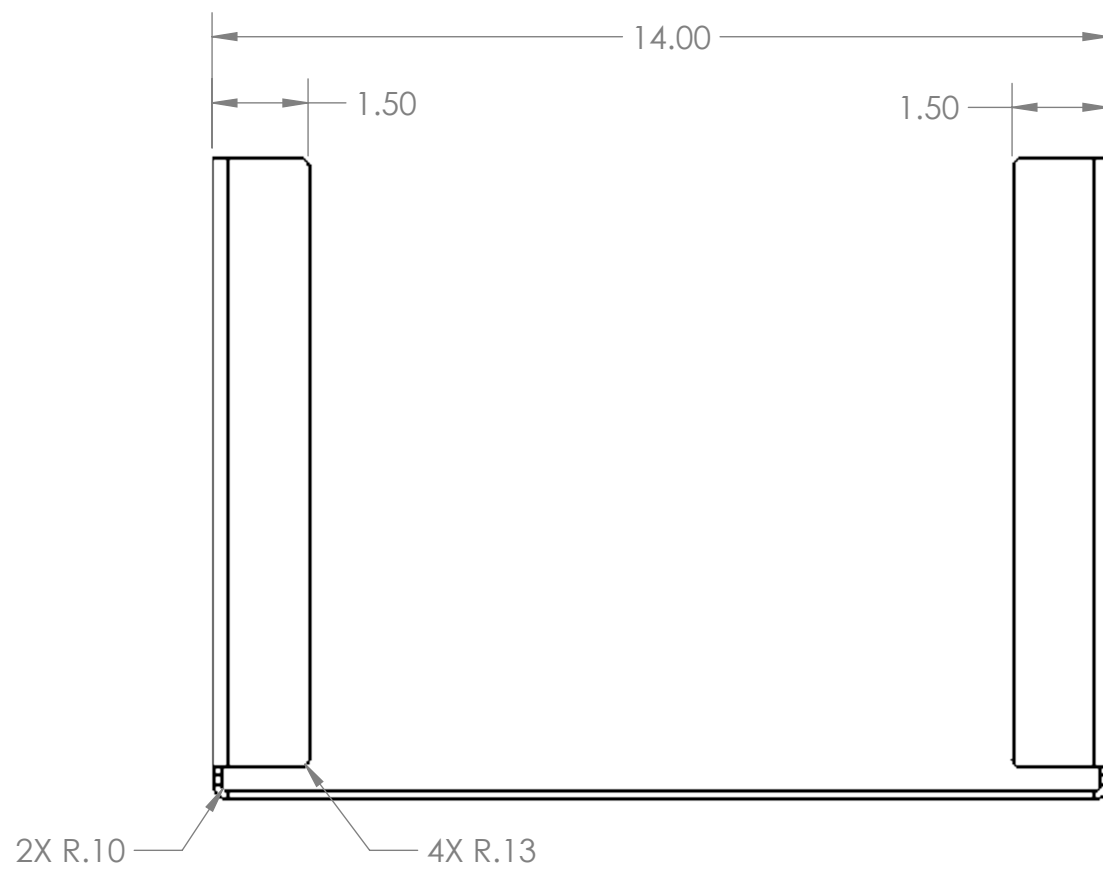
1






UNLESS OTHERWISE SPECIFIED:	VEND	NAME	DATE	<div><div></div><div>TITLE: Net Tube, Inner</div></div>		
	DRAWN	DF	10/2/2024			
DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ±1/16 ANGULAR: MACH ±1° BEND ±1° TWO PLACE DECIMAL ±.01 THREE PLACE DECIMAL ±.005	PROPRIETARY AND CONFIDENTIAL					
	THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF FIRST® . ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FIRST® IS PROHIBITED.					
	COMMENTS:					
MATERIAL/FINISH:	REMOVE ALL BURRS AND SHARP EDGES.					
	1" OD x 0.083" Wall x 0.834" ID Carbon Steel Round Tube					
DO NOT SCALE DRAWING				SIZE	DWG. NO.	REV
				C	GE-25217	
				SCALE: 1:2		SHEET 1 OF 1

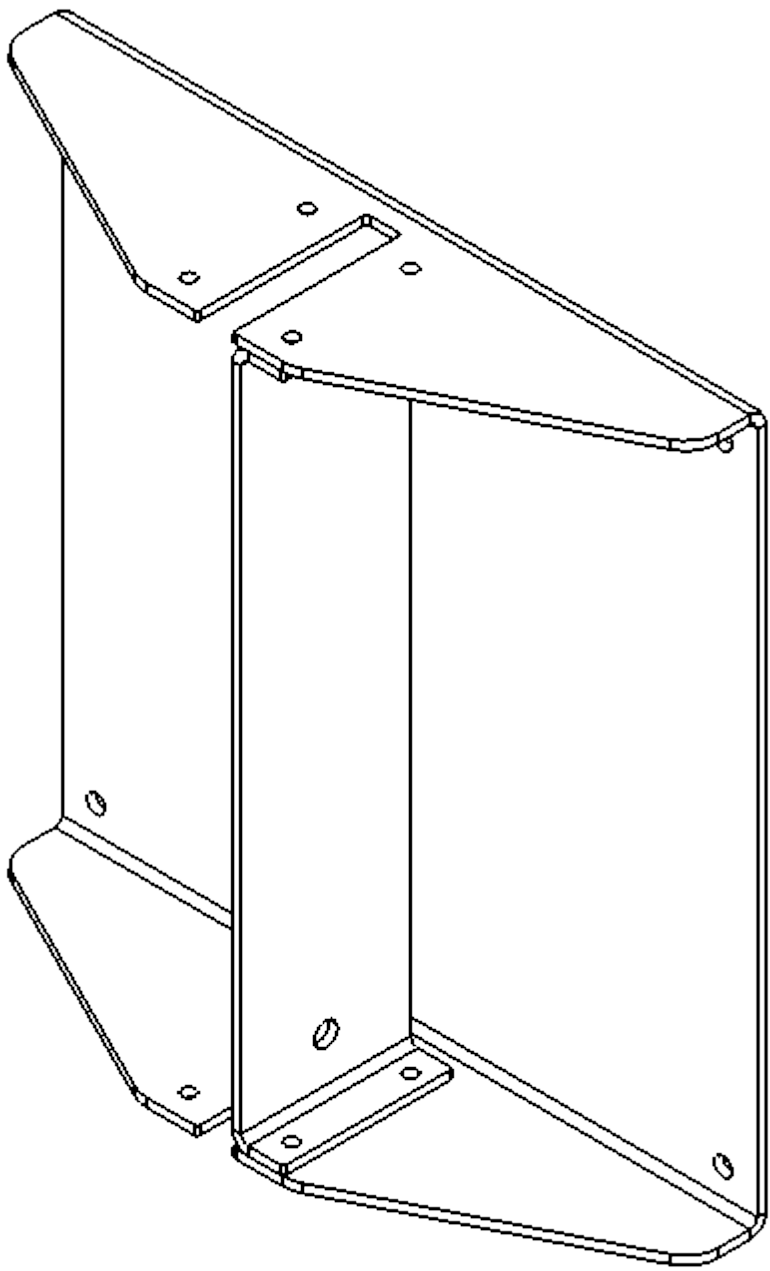
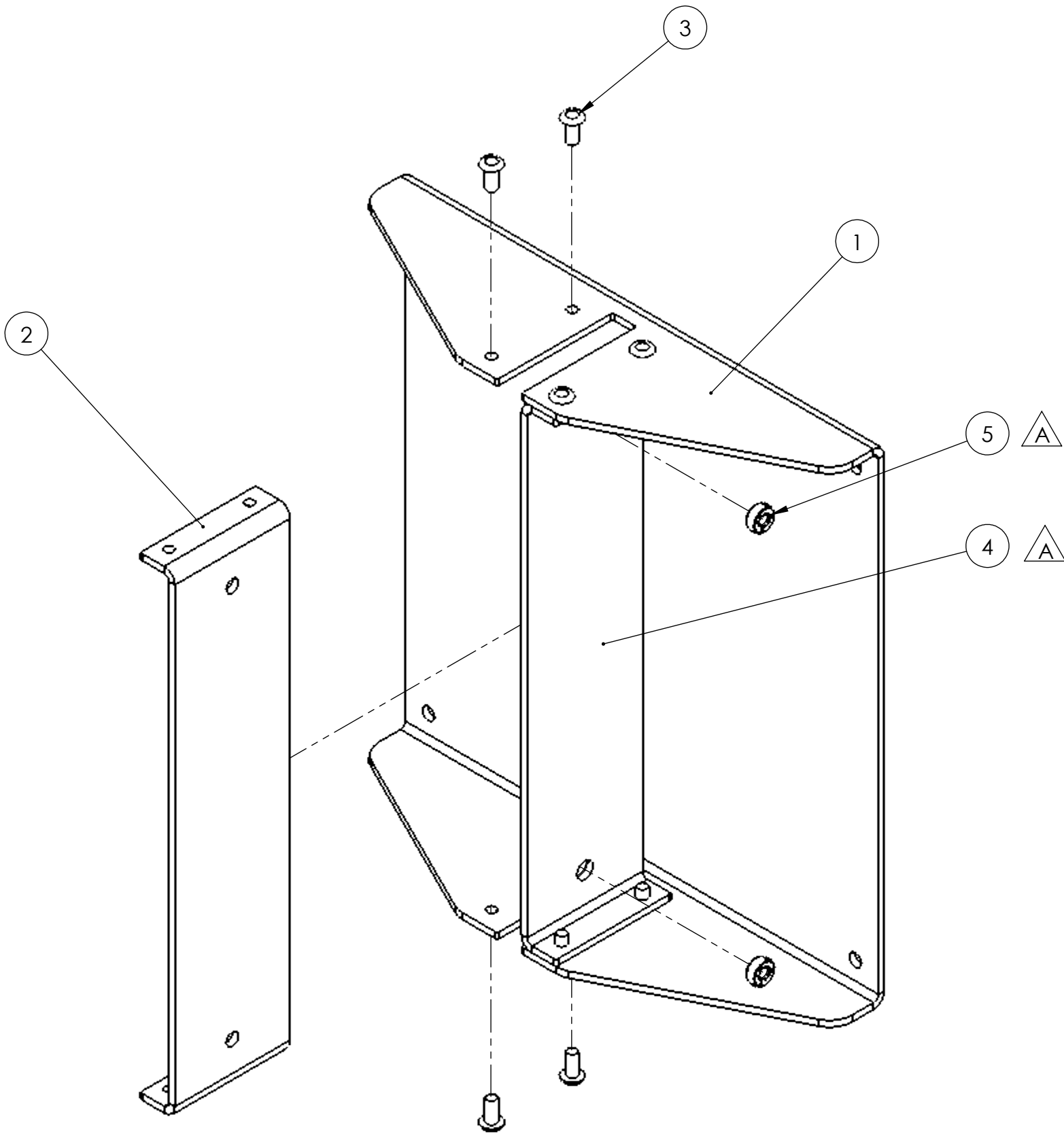


DETAIL A
SCALE 2 : 3
TYP. 14 PLACES



UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ±1/16 ANGULAR: MACH±1° BEND ±1° TWO PLACE DECIMAL ±.02 THREE PLACE DECIMAL ±.010 MATERIAL/FINISH: 8 ga. 5052 Aluminum Sheet DO NOT SCALE DRAWING	BEND	NAME	DATE	  	
	DRAWN	DF	10/3/2024		
	PROPRIETARY AND CONFIDENTIAL THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF FIRST® . ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FIRST® IS PROHIBITED.			TITLE: Brace, Barge End	
	COMMENTS: REMOVE ALL BURRS AND SHARP EDGES.			SIZE C	DWG. NO. GE-25218
			SCALE: 1:3		SHEET 1 OF 1

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
C2, 4-B3	A	Added Items 4 and 5. Added detail views of Item 4 to Sheet 4.	10/10/2024	DAF



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	GE-25219-01	Mount Face	1
2	GE-25219-02	Bracket	1
3	rivet_.1875_.126-.25	3/16" Rivet, .126-.25 Grip Range	8
4	GE-25219-03	Bracket with PEM nuts	1
5	pem_clinchnut_.25_20_.054	1/4-20 self-clinching nut, .054 shank	2

UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN INCHES
TOLERANCES:
FRACTIONAL $\pm 1/16$
ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$
TWO PLACE DECIMAL $\pm .02$
THREE PLACE DECIMAL $\pm .010$

MATERIAL/FINISH:
8 ga. 5052 Aluminum Sheet

DO NOT SCALE DRAWING

BEND
DRAWN



NAME
DF

DATE
10/3/2024

PROPRIETARY AND CONFIDENTIAL

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF **FIRST®**. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF **FIRST®** IS PROHIBITED.

COMMENTS:
REMOVE ALL BURRS AND SHARP EDGES.



TITLE:
Holder, April Tag

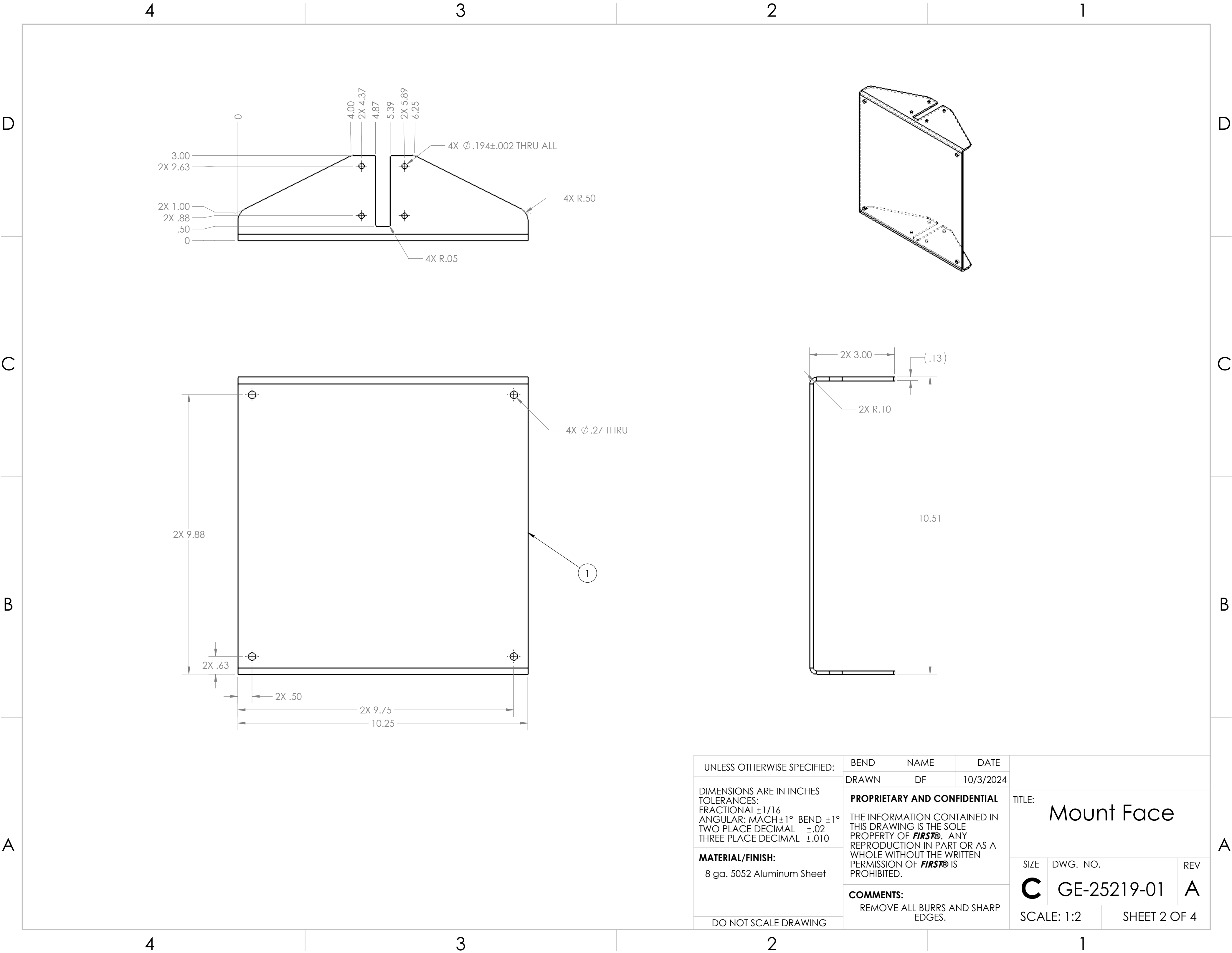
SIZE
C

DWG. NO.
GE-25219

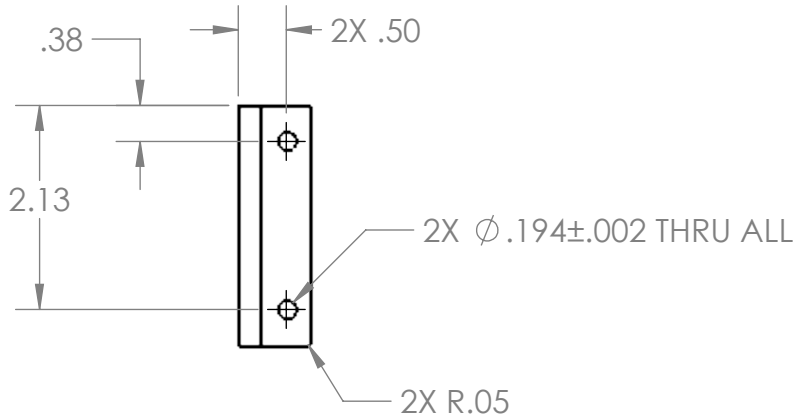
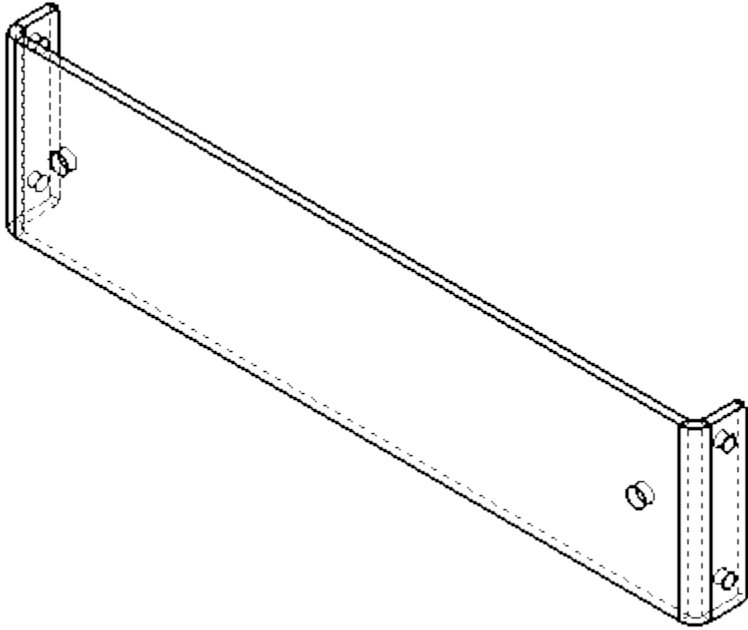
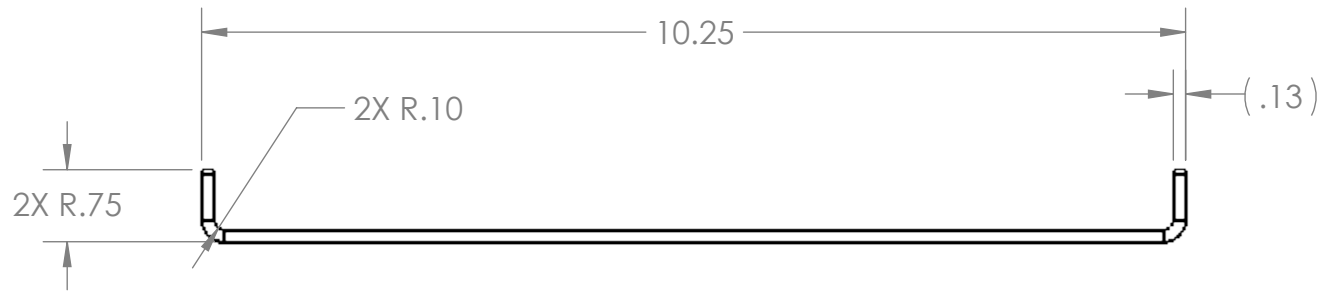
REV
A

SCALE: 1:2

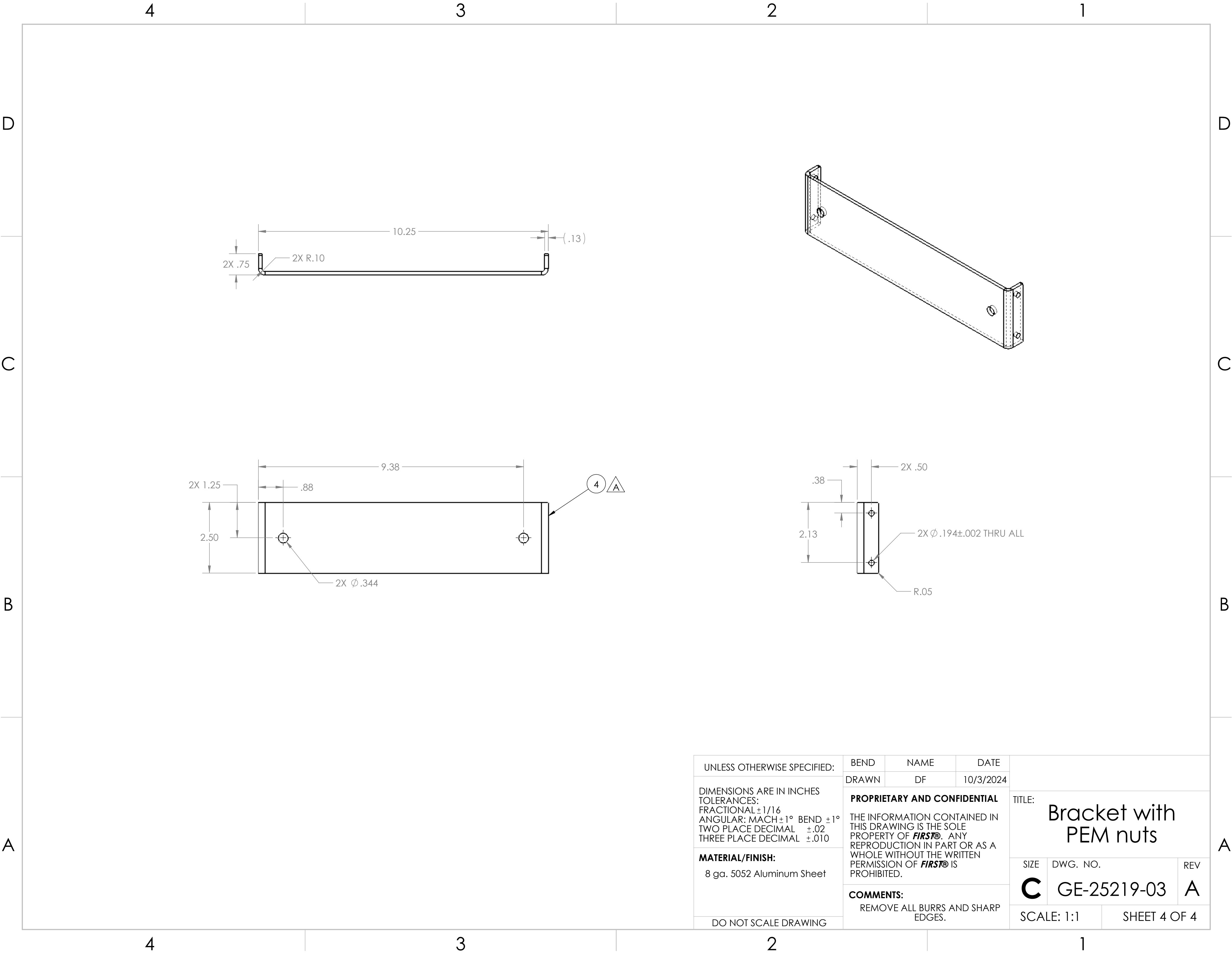
SHEET 1 OF 4



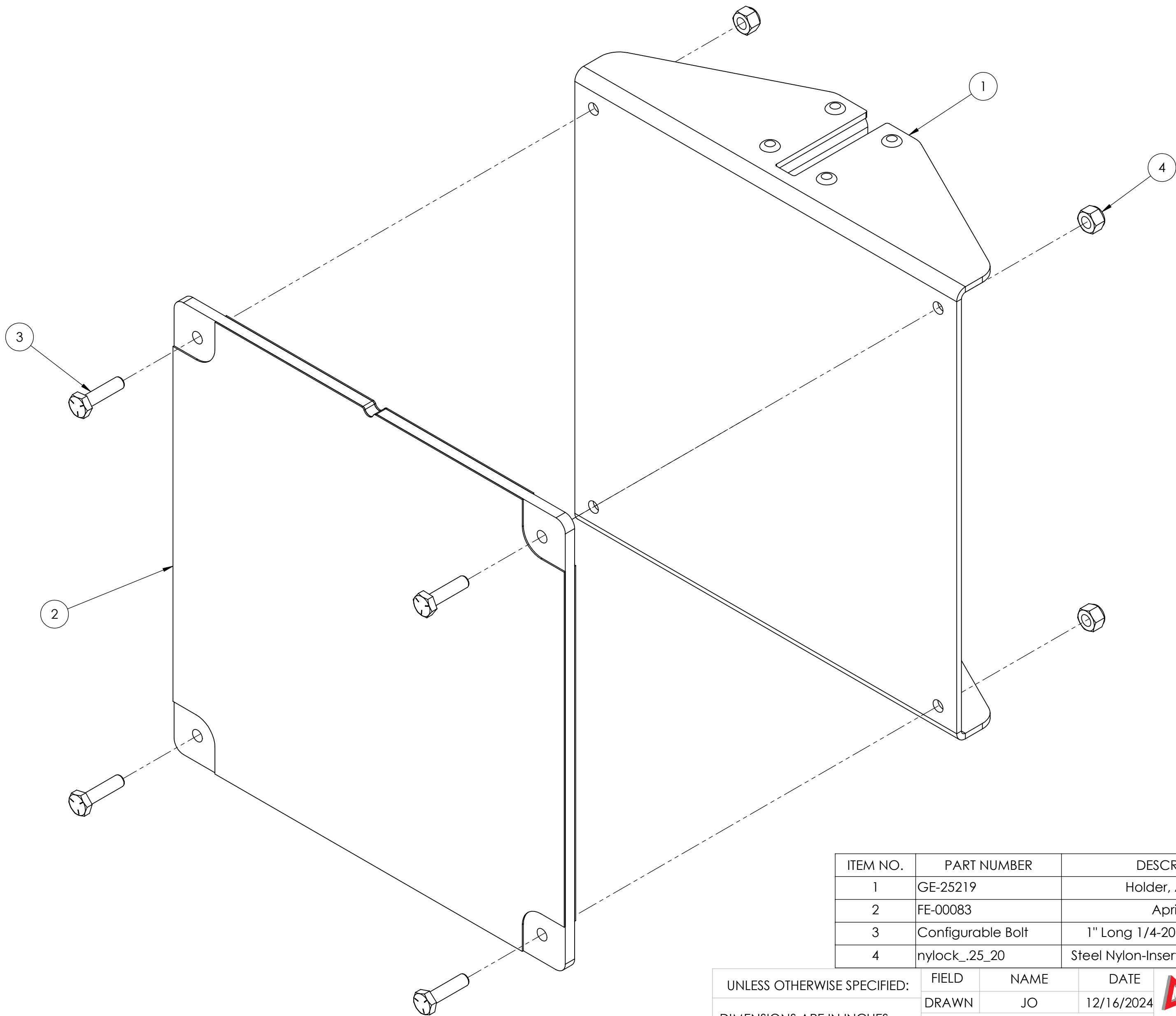
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ±1/16 ANGULAR: MACH ±1° BEND ±1° TWO PLACE DECIMAL ±.02 THREE PLACE DECIMAL ±.010 MATERIAL/FINISH: 8 ga. 5052 Aluminum Sheet DO NOT SCALE DRAWING	BEND	NAME	DATE	TITLE: Mount Face		
	DRAWN	DF	10/3/2024			
	PROPRIETARY AND CONFIDENTIAL THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF FIRST® . ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FIRST® IS PROHIBITED.					
	COMMENTS: REMOVE ALL BURRS AND SHARP EDGES.			SIZE C	DWG. NO. GE-25219-01	REV A
				SCALE: 1:2		SHEET 2 OF 4



UNLESS OTHERWISE SPECIFIED:	BEND	NAME	DATE	TITLE: Bracket				
	DRAWN	DF	10/3/2024					
DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ±1/16 ANGULAR: MACH ±1° BEND ±1° TWO PLACE DECIMAL ±.02 THREE PLACE DECIMAL ±.010	PROPRIETARY AND CONFIDENTIAL			SIZE C				
	THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF FIRST® . ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FIRST® IS PROHIBITED.						DWG. NO.	
							REV	
MATERIAL/FINISH:	COMMENTS: REMOVE ALL BURRS AND SHARP EDGES.			GE-25219-02		A		
8 ga. 5052 Aluminum Sheet				SCALE: 1:1		SHEET 3 OF 4		
DO NOT SCALE DRAWING								





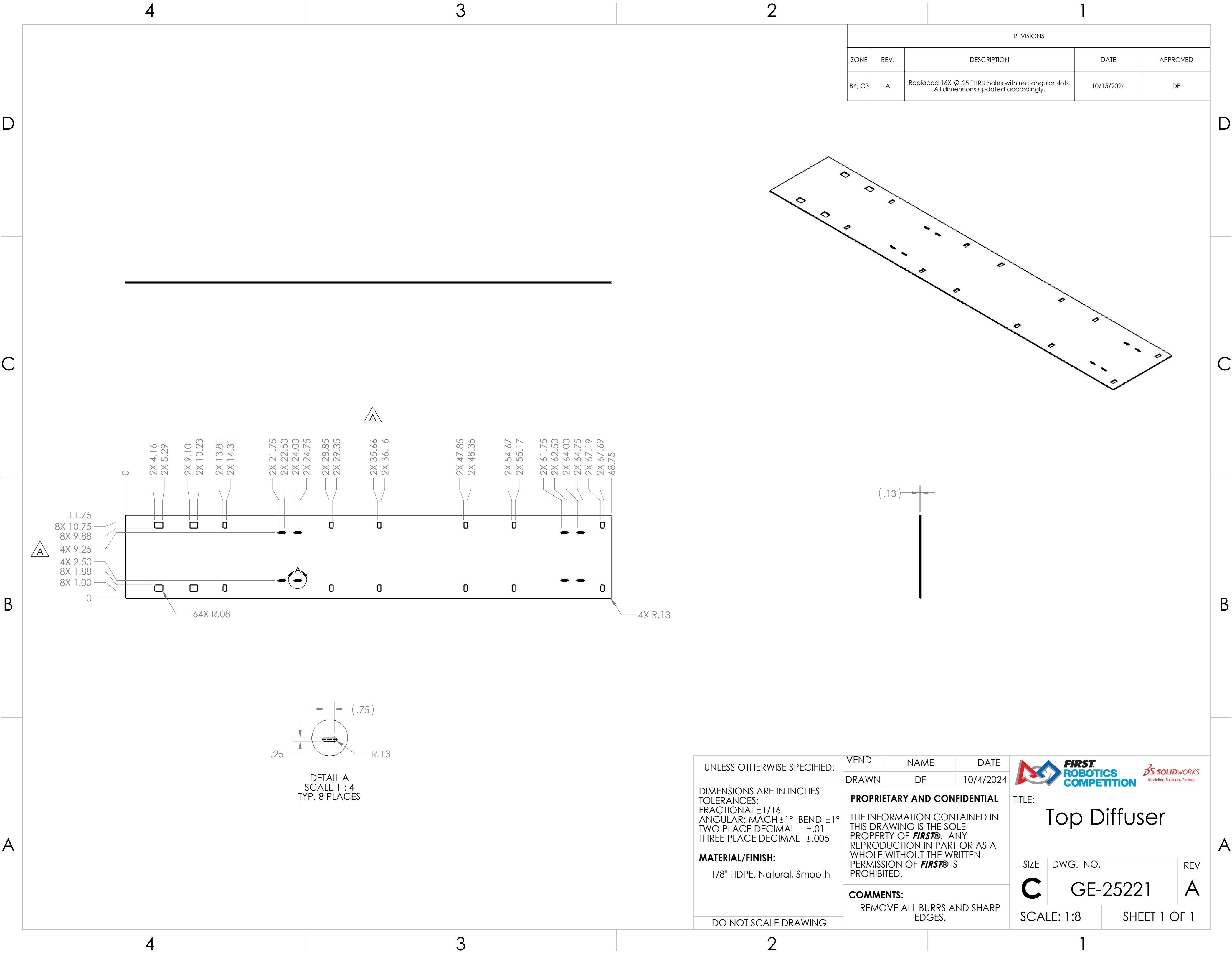
UNLESS OTHERWISE SPECIFIED:	BEND	NAME	DATE	TITLE: Bracket with PEM nuts		
	DRAWN	DF	10/3/2024			
DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ±1/16 ANGULAR: MACH ±1° BEND ±1° TWO PLACE DECIMAL ±.02 THREE PLACE DECIMAL ±.010	PROPRIETARY AND CONFIDENTIAL			SIZE C DWG. NO. GE-25219-03 REV A		
	THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF FIRST® . ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FIRST® IS PROHIBITED.					
	COMMENTS: REMOVE ALL BURRS AND SHARP EDGES.					
MATERIAL/FINISH: 8 ga. 5052 Aluminum Sheet				SCALE: 1:1		SHEET 4 OF 4
DO NOT SCALE DRAWING						





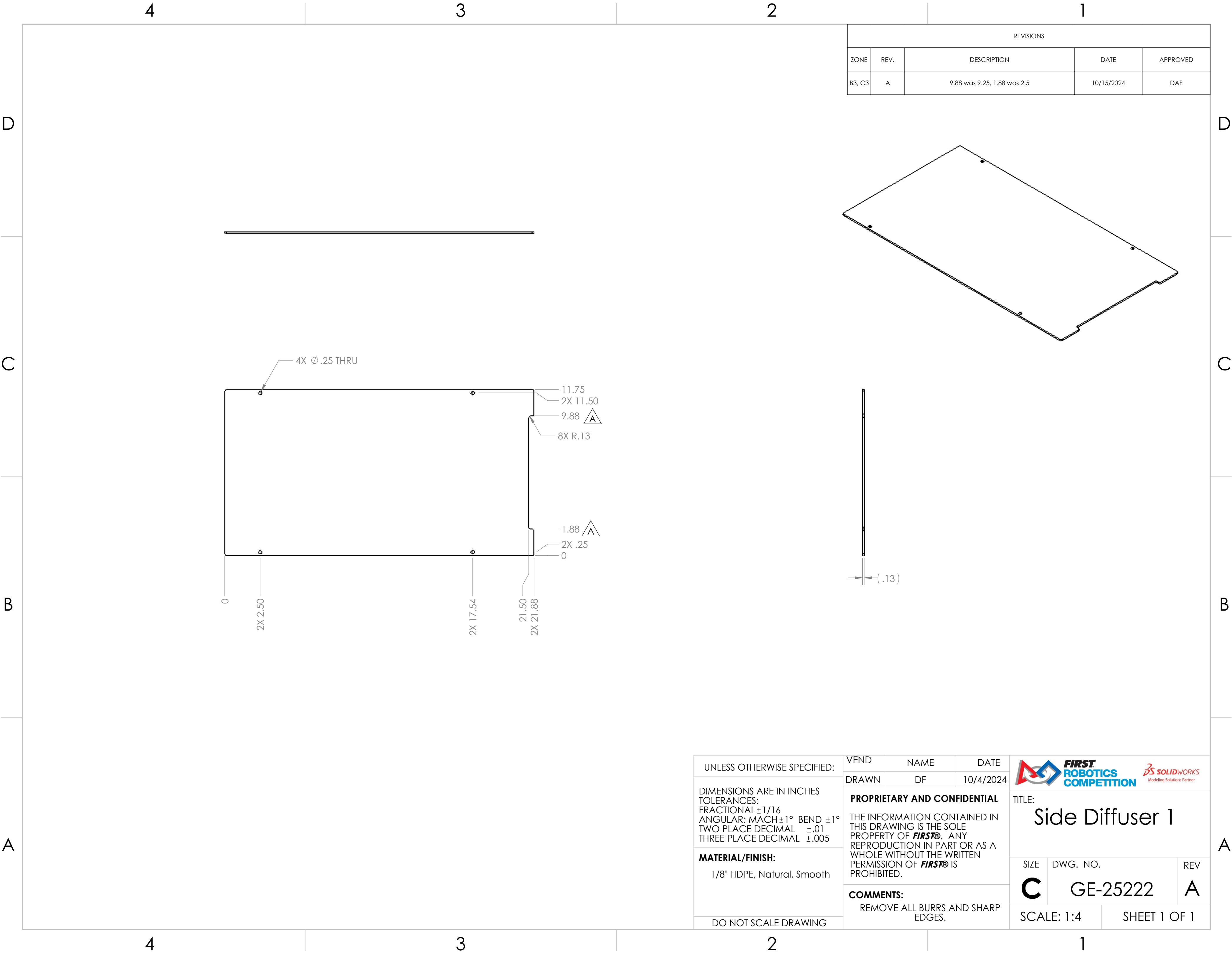
Notes:
1. AprilTag ID#'s 4, 5, 14, 15 will be used in this assembly.

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	GE-25219	Holder, April Tag	1
2	FE-00083	AprilTag	1
3	Configurable Bolt	1" Long 1/4-20 Hex Head Bolt	4
4	nylock_.25_20	Steel Nylon-Insert Locknut, 1/4"-20	4



UNLESS OTHERWISE SPECIFIED:	FIELD	NAME	DATE	<div></div>	
	DRAWN	JO	12/16/2024		
DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ±1/2 ANGULAR: MACH ±1° BEND ±1° TWO PLACE DECIMAL ±.50	PROPRIETARY AND CONFIDENTIAL			TITLE:	
	THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF FIRST® . ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FIRST® IS PROHIBITED.			April Tag Assembly, Truss	
MATERIAL/FINISH:	COMMENTS:			SIZE	DWG. NO.
	REMOVE ALL BURRS AND SHARP EDGES.			C	GE-25220
DO NOT SCALE DRAWING				SCALE: 2:3	
			SHEET 1 OF 1		

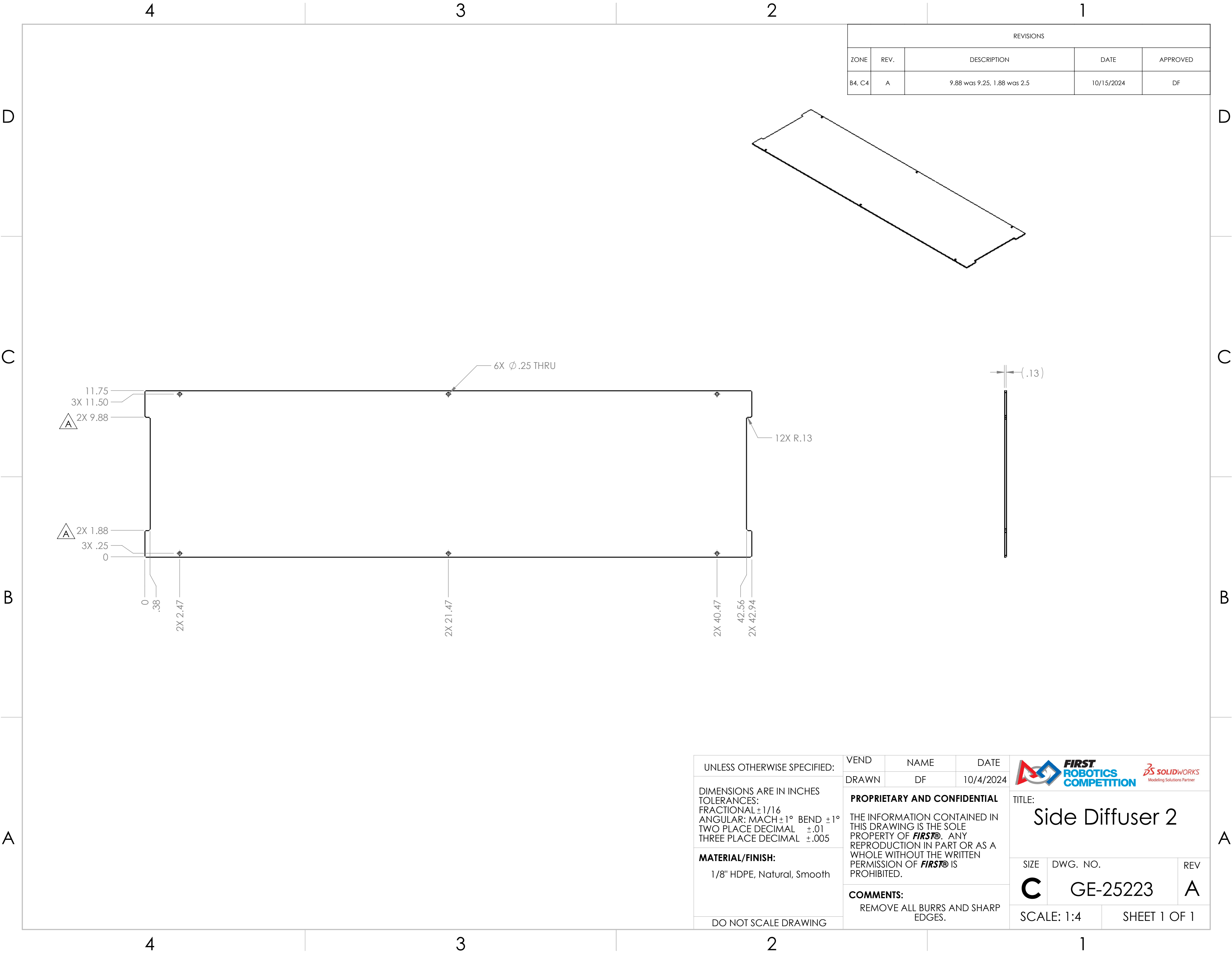


UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ±1/16 ANGULAR: MACH ±1° BEND ±1° TWO PLACE DECIMAL ±.01 THREE PLACE DECIMAL ±.005 MATERIAL/FINISH: 1/8" HDPE, Natural, Smooth DO NOT SCALE DRAWING	VEND	NAME	DATE	<div><div></div><div>TITLE: <h1>Top Diffuser</h1></div></div>		
	DRAWN	DF	10/4/2024			
	PROPRIETARY AND CONFIDENTIAL THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF FIRST® . ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FIRST® IS PROHIBITED. COMMENTS: REMOVE ALL BURRS AND SHARP EDGES.				SIZE	DWG. NO.
				C	GE-25221	A
				SCALE: 1:8		SHEET 1 OF 1





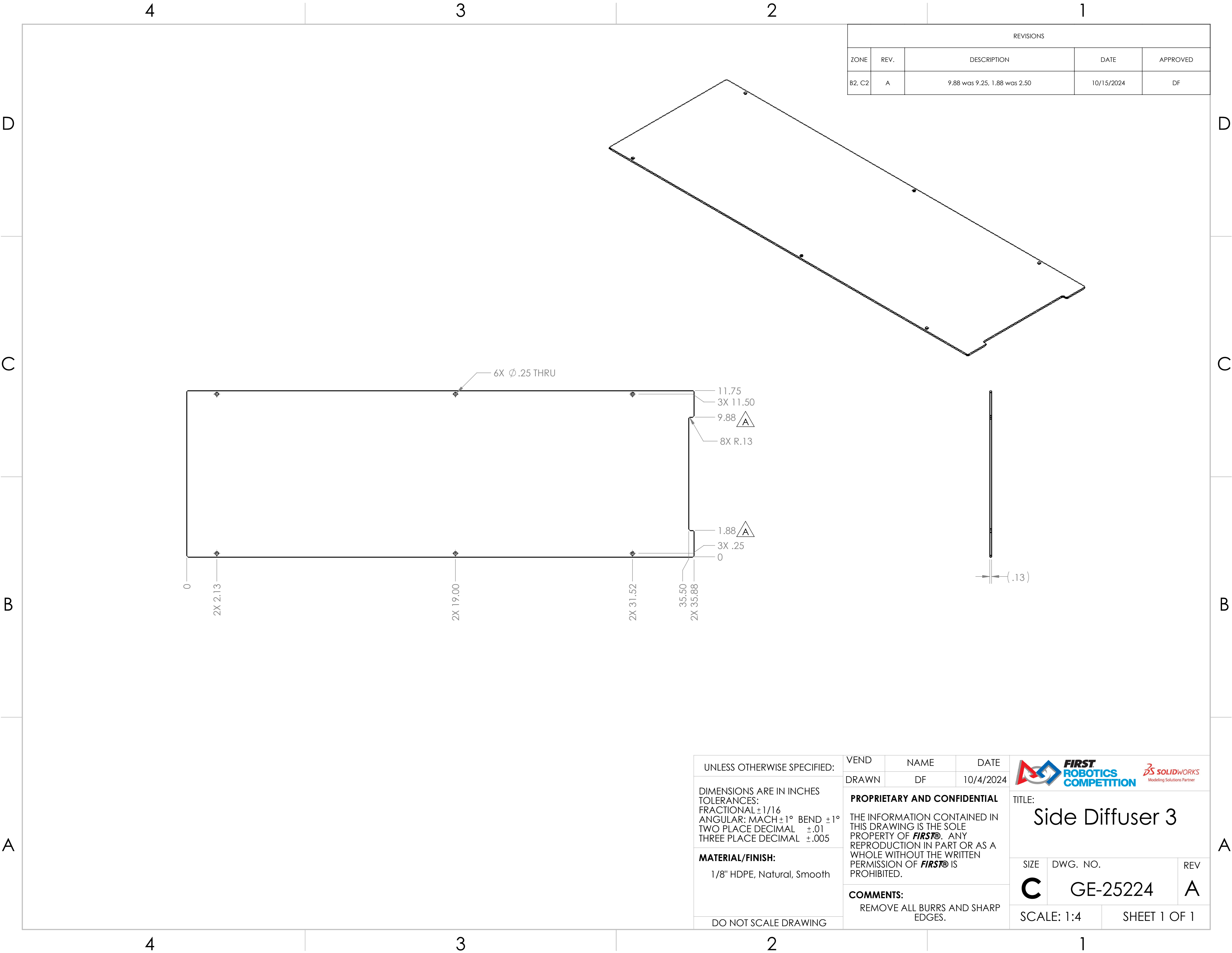
REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
B3, C3	A	9.88 was 9.25, 1.88 was 2.5	10/15/2024	DAF

UNLESS OTHERWISE SPECIFIED:	VEND		NAME		DATE		<div></div>				
	DRAWN		DF		10/4/2024						
DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ±1/16 ANGULAR: MACH ±1° BEND ±1° TWO PLACE DECIMAL ±.01 THREE PLACE DECIMAL ±.005	PROPRIETARY AND CONFIDENTIAL						TITLE:				
	THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF FIRST® . ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FIRST® IS PROHIBITED.						Side Diffuser 1				
MATERIAL/FINISH: 1/8" HDPE, Natural, Smooth	COMMENTS: REMOVE ALL BURRS AND SHARP EDGES.						SIZE	DWG. NO.		REV	
							C	GE-25222		A	
DO NOT SCALE DRAWING							SCALE: 1:4		SHEET 1 OF 1		





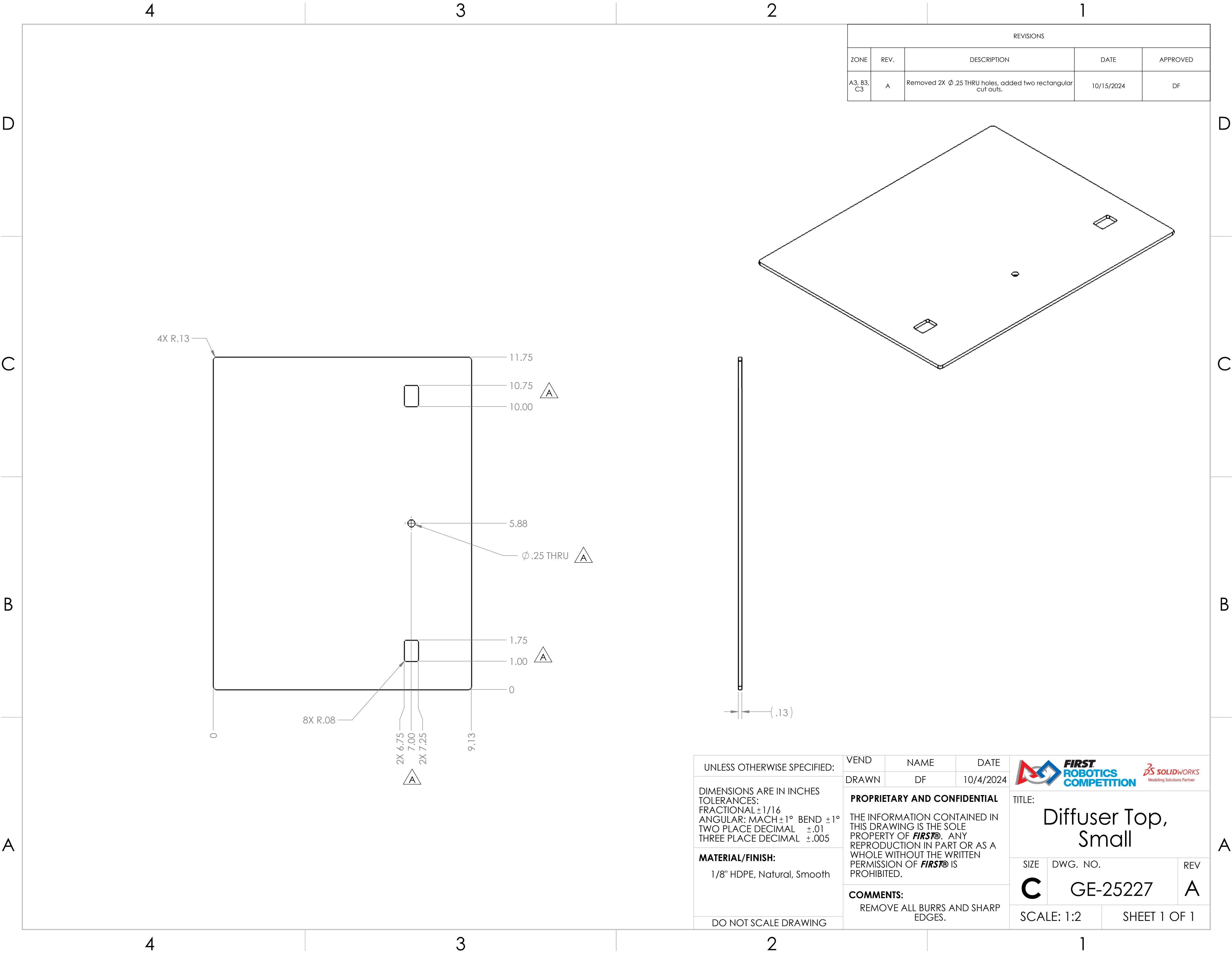
REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
B4, C4	A	9.88 was 9.25, 1.88 was 2.5	10/15/2024	DF

UNLESS OTHERWISE SPECIFIED:	VEND	NAME	DATE	<div></div> <div>TITLE: <h1>Side Diffuser 2</h1></div>	
	DRAWN	DF	10/4/2024		
DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ±1/16 ANGULAR: MACH ±1° BEND ±1° TWO PLACE DECIMAL ±.01 THREE PLACE DECIMAL ±.005	PROPRIETARY AND CONFIDENTIAL			SIZE C	
	THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF FIRST® . ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FIRST® IS PROHIBITED.				
MATERIAL/FINISH: 1/8" HDPE, Natural, Smooth	COMMENTS:			DWG. NO.	
	REMOVE ALL BURRS AND SHARP EDGES.			REV A	
DO NOT SCALE DRAWING				SCALE: 1:4	
			SHEET 1 OF 1		





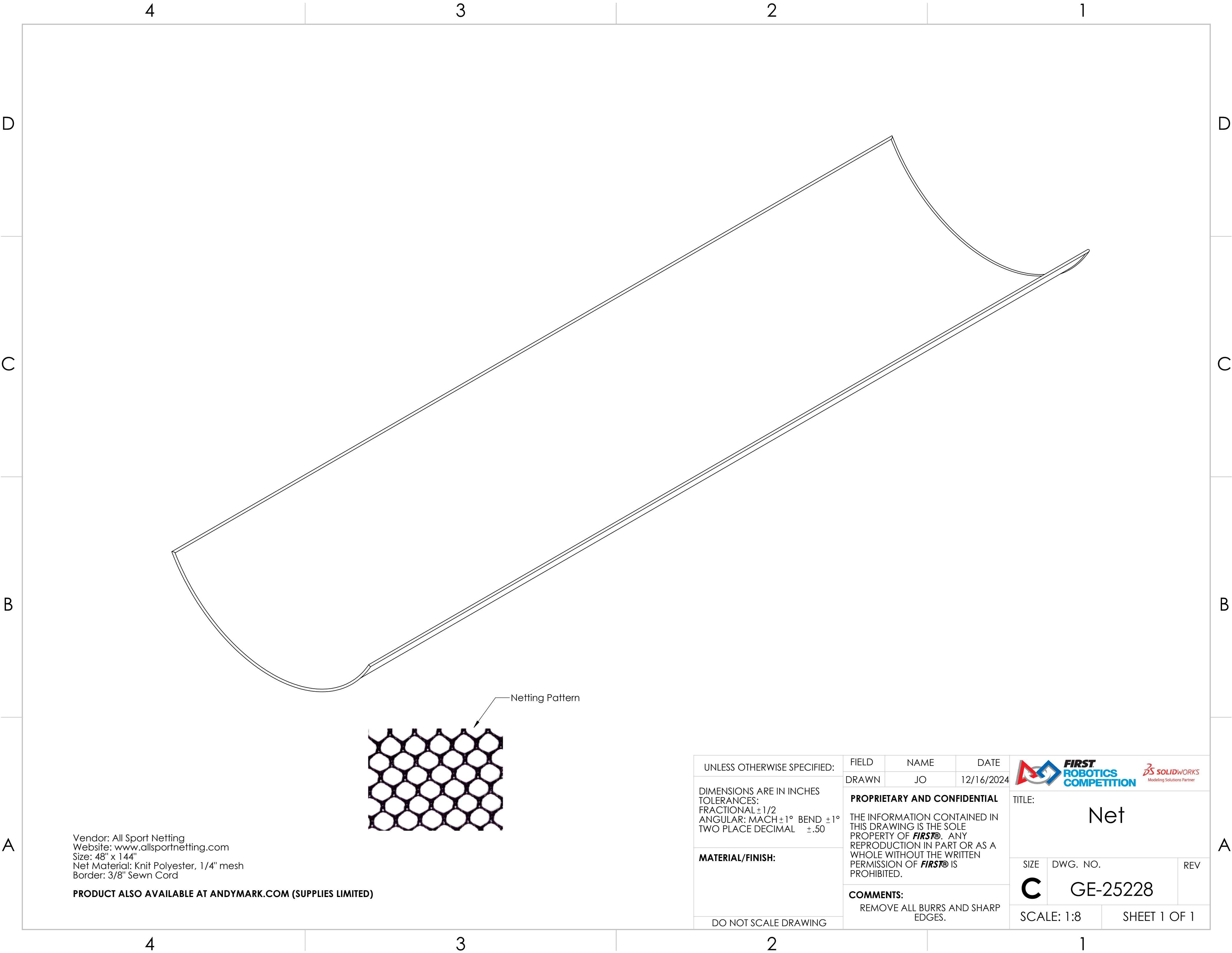
REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
B2, C2	A	9.88 was 9.25, 1.88 was 2.50	10/15/2024	DF

UNLESS OTHERWISE SPECIFIED:	VEND	NAME	DATE	<div></div>		
	DRAWN	DF	10/4/2024			
DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ±1/16 ANGULAR: MACH ±1° BEND ±1° TWO PLACE DECIMAL ±.01 THREE PLACE DECIMAL ±.005	PROPRIETARY AND CONFIDENTIAL			TITLE: Side Diffuser 3		
	THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF FIRST® . ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FIRST® IS PROHIBITED.					
	MATERIAL/FINISH: 1/8" HDPE, Natural, Smooth	COMMENTS: REMOVE ALL BURRS AND SHARP EDGES.			SIZE C	DWG. NO. GE-25224
DO NOT SCALE DRAWING				SCALE: 1:4		SHEET 1 OF 1



REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
A3, B3, C3	A	Removed 2X Ø.25 THRU holes, added two rectangular cut outs.	10/15/2024	DF

UNLESS OTHERWISE SPECIFIED:	VEND	NAME	DATE	<div></div>		
	DRAWN	DF	10/4/2024			
DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ±1/16 ANGULAR: MACH ±1° BEND ±1° TWO PLACE DECIMAL ±.01 THREE PLACE DECIMAL ±.005	PROPRIETARY AND CONFIDENTIAL			TITLE: Diffuser Top, Small		
	THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF FIRST® . ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FIRST® IS PROHIBITED.					
	MATERIAL/FINISH: 1/8" HDPE, Natural, Smooth	COMMENTS: REMOVE ALL BURRS AND SHARP EDGES.			SIZE C	DWG. NO. GE-25227
DO NOT SCALE DRAWING				SCALE: 1:2		SHEET 1 OF 1



Vendor: All Sport Netting
Website: www.allsportnetting.com
Size: 48" x 144"
Net Material: Knit Polyester, 1/4" mesh
Border: 3/8" Sewn Cord

PRODUCT ALSO AVAILABLE AT ANDYMARK.COM (SUPPLIES LIMITED)

UNLESS OTHERWISE SPECIFIED:
DIMENSIONS ARE IN INCHES
TOLERANCES:
FRACTIONAL $\pm 1/2$
ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$
TWO PLACE DECIMAL $\pm .50$

MATERIAL/FINISH:

DO NOT SCALE DRAWING

FIELD	NAME	DATE
DRAWN	JO	12/16/2024

PROPRIETARY AND CONFIDENTIAL
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF **FIRST®**. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF **FIRST®** IS PROHIBITED.

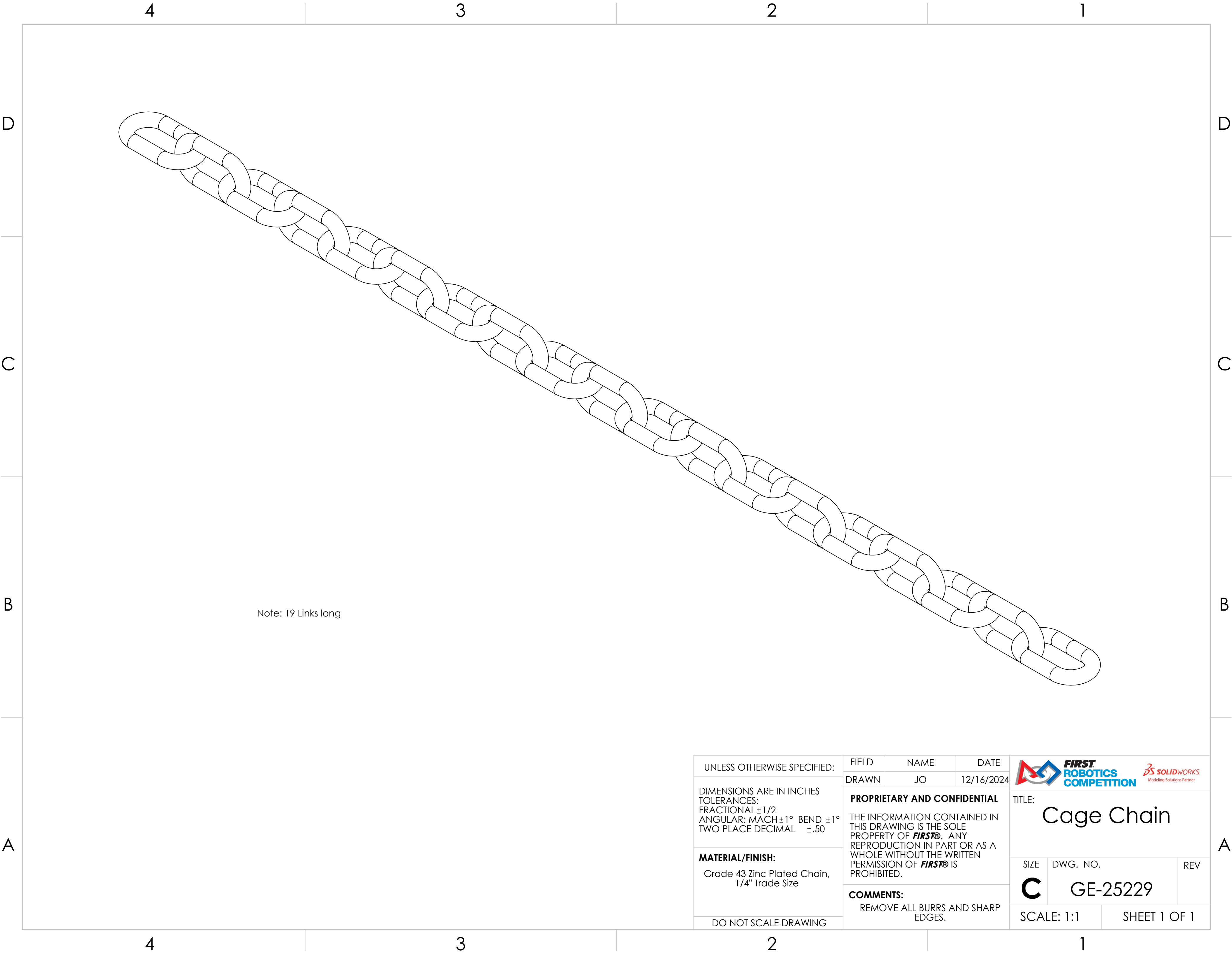
COMMENTS:
REMOVE ALL BURRS AND SHARP EDGES.





TITLE: Net

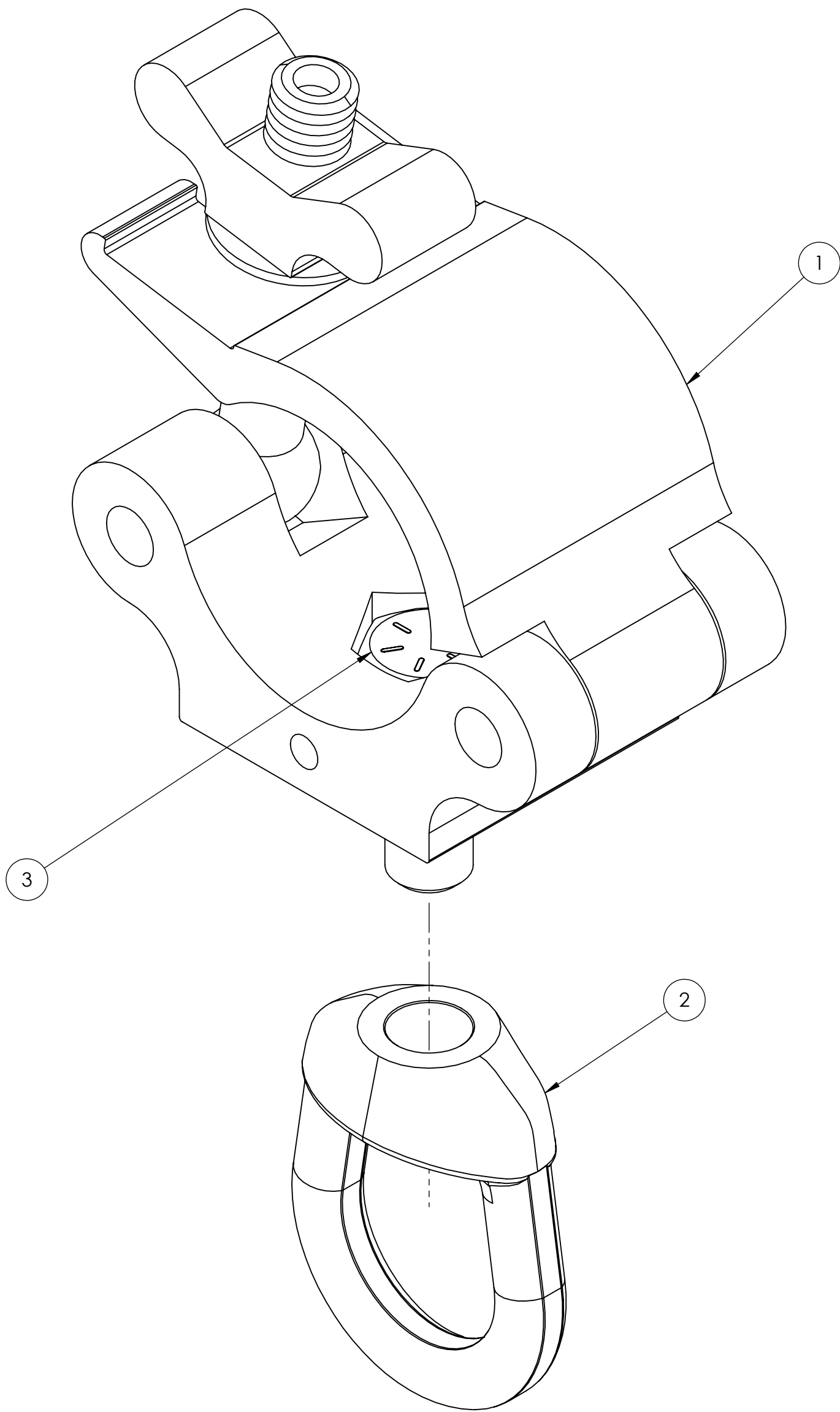
SIZE	DWG. NO.	REV
C	GE-25228	

SCALE: 1:8 SHEET 1 OF 1



Note: 19 Links long

UNLESS OTHERWISE SPECIFIED:	FIELD	NAME	DATE	<div></div> <div>TITLE: <h1>Cage Chain</h1></div>		
DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL $\pm 1/2$ ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$ TWO PLACE DECIMAL $\pm .50$	DRAWN	JO	12/16/2024			
MATERIAL/FINISH: Grade 43 Zinc Plated Chain, 1/4" Trade Size	PROPRIETARY AND CONFIDENTIAL THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF FIRST® . ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FIRST® IS PROHIBITED.			SIZE	DWG. NO.	REV
	COMMENTS: REMOVE ALL BURRS AND SHARP EDGES.			C	GE-25229	
DO NOT SCALE DRAWING				SCALE: 1:1		SHEET 1 OF 1



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	FE-01016	Cheeseborough for Truss _ Single	1
2	3019T18	1/2-13 Galvanized Steel Eye Nut - for Lifting	1
3	hex_.5_13_1.25	Steel Hex Head Screw, 1/2"-13 x 1.25" long, fully threaded	1

UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN INCHES
TOLERANCES:
FRACTIONAL $\pm 1/2$
ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$
TWO PLACE DECIMAL $\pm .50$

MATERIAL/FINISH:

DO NOT SCALE DRAWING

FIELD

DRAWN

NAME

JO

DATE



12/16/2024

PROPRIETARY AND CONFIDENTIAL

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF **FIRST®**. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF **FIRST®** IS PROHIBITED.

COMMENTS:

REMOVE ALL BURRS AND SHARP EDGES.



TITLE:

Eye Nut Assembly

SIZE

DWG. NO.

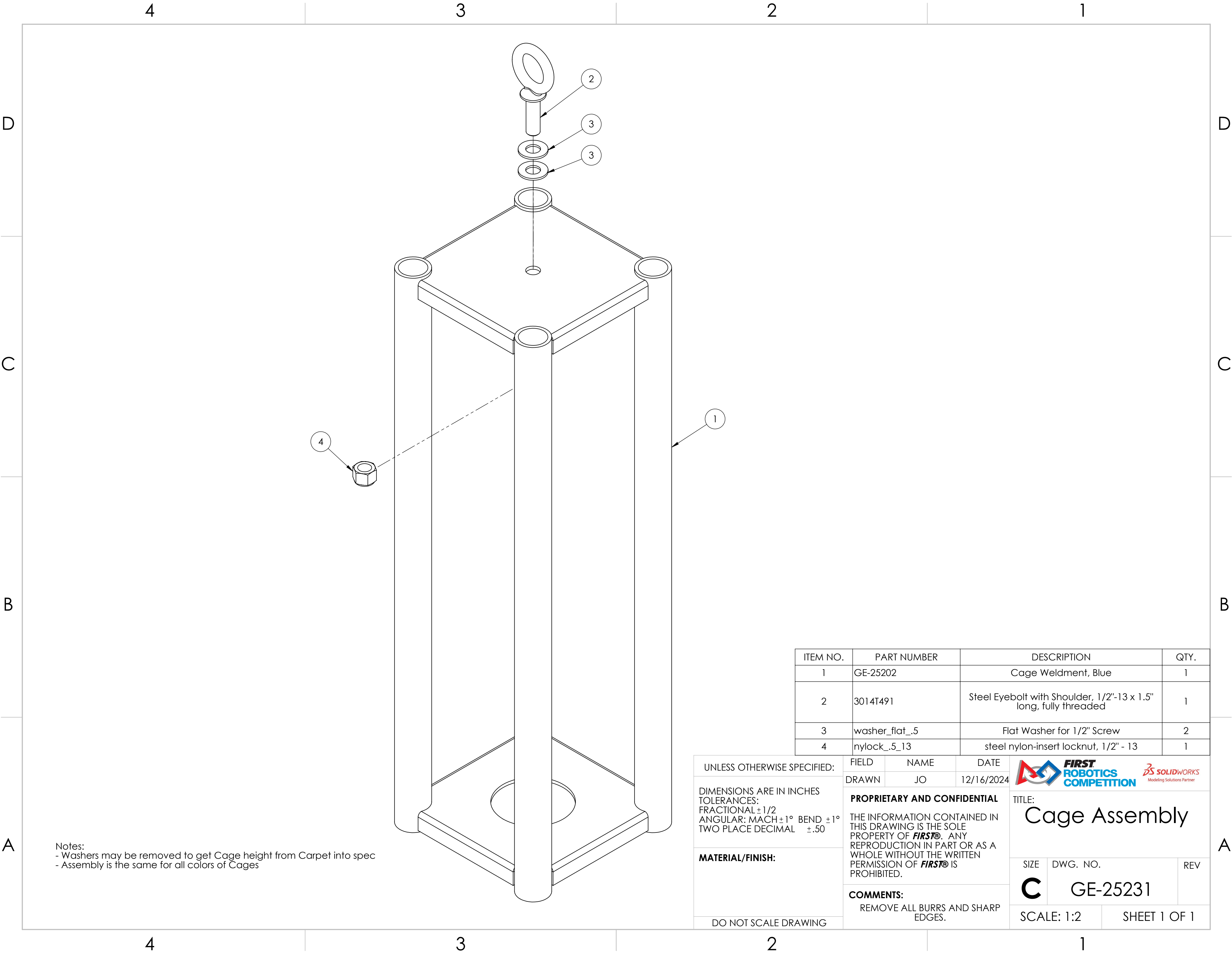
REV

C

GE-25230



SCALE: 3:2

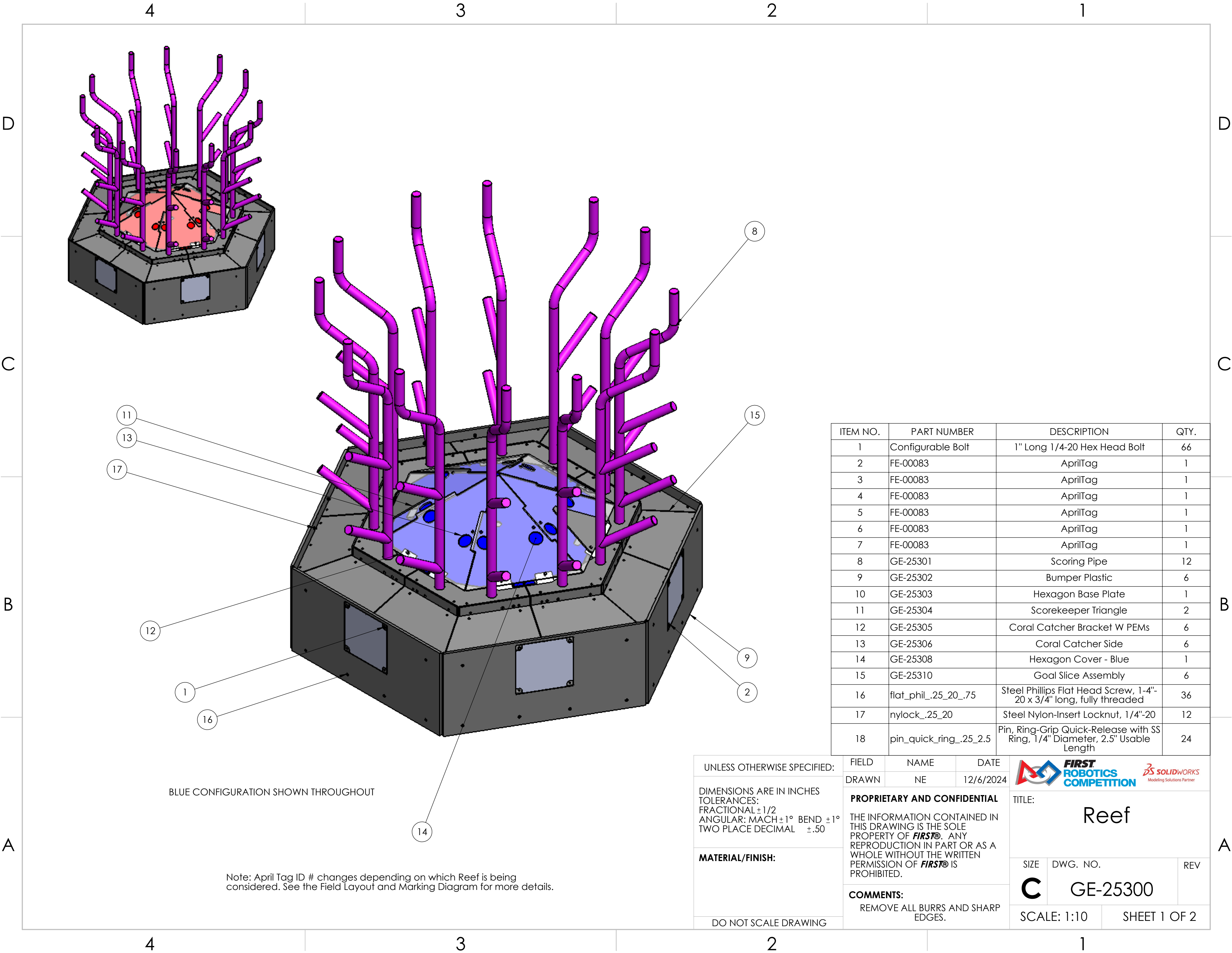
SHEET 1 OF 1



Notes:
- Washers may be removed to get Cage height from Carpet into spec
- Assembly is the same for all colors of Cages

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	GE-25202	Cage Weldment, Blue	1
2	3014T491	Steel Eyebolt with Shoulder, 1/2"-13 x 1.5" long, fully threaded	1
3	washer_flat_.5	Flat Washer for 1/2" Screw	2
4	nylock_.5_13	steel nylon-insert locknut, 1/2" - 13	1



UNLESS OTHERWISE SPECIFIED:		FIELD	NAME	DATE	 		
DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ±1/2 ANGULAR: MACH ±1° BEND ±1° TWO PLACE DECIMAL ±.50		DRAWN	JO	12/16/2024	TITLE: Cage Assembly		
		PROPRIETARY AND CONFIDENTIAL					
		THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF FIRST® . ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FIRST® IS PROHIBITED.			SIZE		DWG. NO.
MATERIAL/FINISH:		COMMENTS: REMOVE ALL BURRS AND SHARP EDGES.			C	GE-25231	
DO NOT SCALE DRAWING					SCALE: 1:2		SHEET 1 OF 1



BLUE CONFIGURATION SHOWN THROUGHOUT

Note: April Tag ID # changes depending on which Reef is being considered. See the Field Layout and Marking Diagram for more details.

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	Configurable Bolt	1" Long 1/4-20 Hex Head Bolt	66
2	FE-00083	AprilTag	1
3	FE-00083	AprilTag	1
4	FE-00083	AprilTag	1
5	FE-00083	AprilTag	1
6	FE-00083	AprilTag	1
7	FE-00083	AprilTag	1
8	GE-25301	Scoring Pipe	12
9	GE-25302	Bumper Plastic	6
10	GE-25303	Hexagon Base Plate	1
11	GE-25304	Scorekeeper Triangle	2
12	GE-25305	Coral Catcher Bracket W PEMs	6
13	GE-25306	Coral Catcher Side	6
14	GE-25308	Hexagon Cover - Blue	1
15	GE-25310	Goal Slice Assembly	6
16	flat_phil_.25_20_.75	Steel Phillips Flat Head Screw, 1-4"-20 x 3/4" long, fully threaded	36
17	nylock_.25_20	Steel Nylon-Insert Locknut, 1/4"-20	12
18	pin_quick_ring_.25_2.5	Pin, Ring-Grip Quick-Release with SS Ring, 1/4" Diameter, 2.5" Usable Length	24

UNLESS OTHERWISE SPECIFIED:		FIELD	NAME	DATE	 		
		DRAWN	NE	12/6/2024			
DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ±1/2 ANGULAR: MACH±1° BEND ±1° TWO PLACE DECIMAL ±.50		PROPRIETARY AND CONFIDENTIAL THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF FIRST® . ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FIRST® IS PROHIBITED.			TITLE: Reef		
MATERIAL/FINISH:		COMMENTS: REMOVE ALL BURRS AND SHARP EDGES.			SIZE	DWG. NO.	REV
					C	GE-25300	
DO NOT SCALE DRAWING					SCALE: 1:10		SHEET 1 OF 2

4

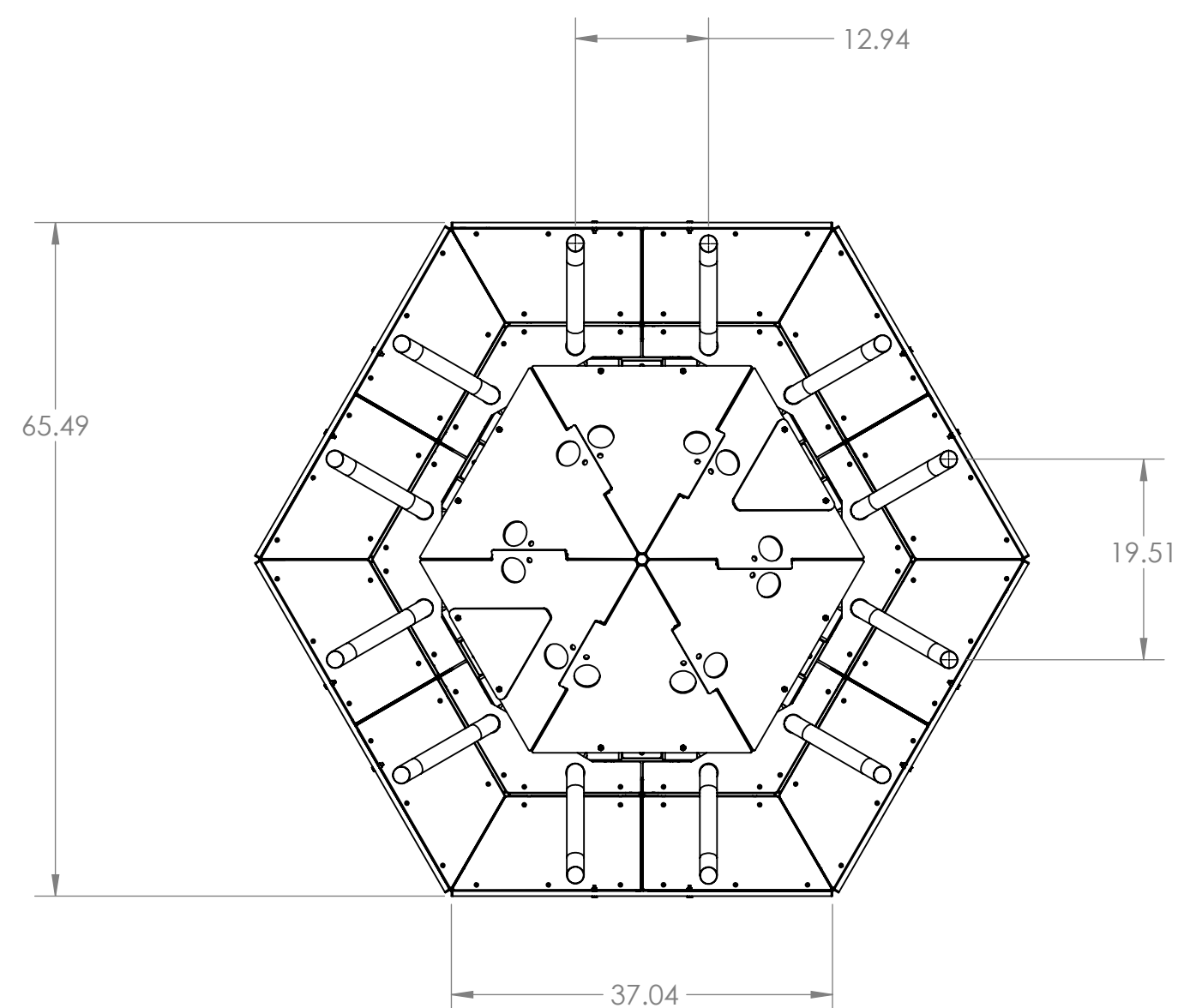
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2

1

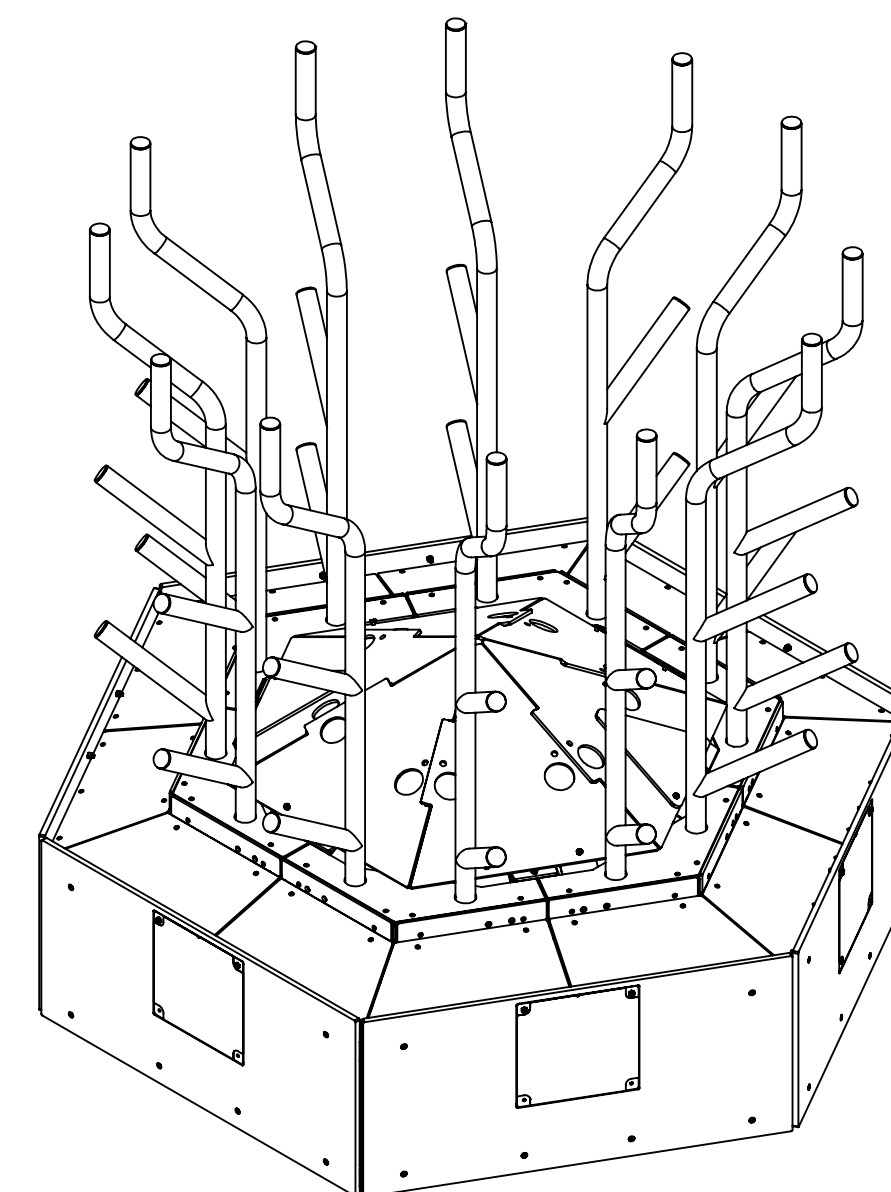
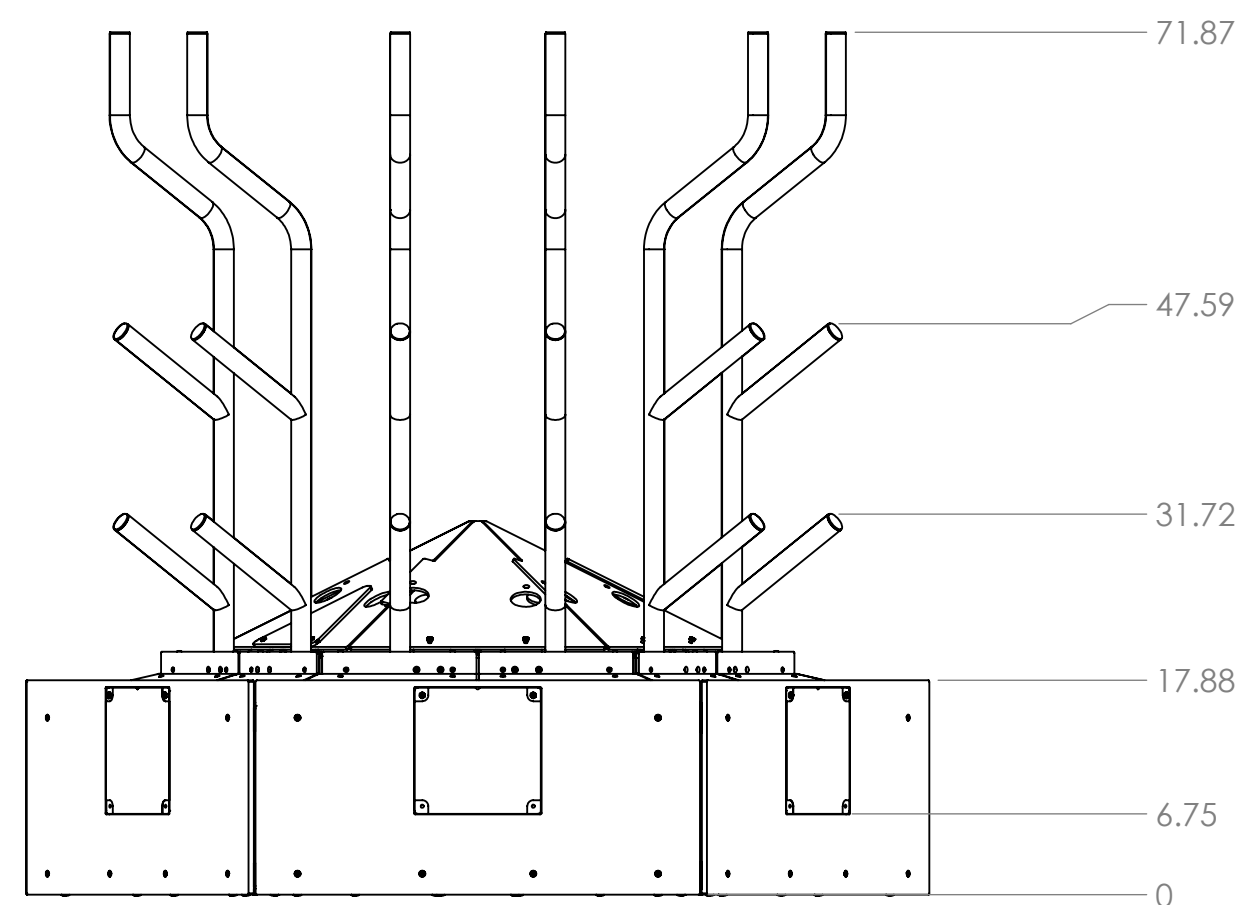
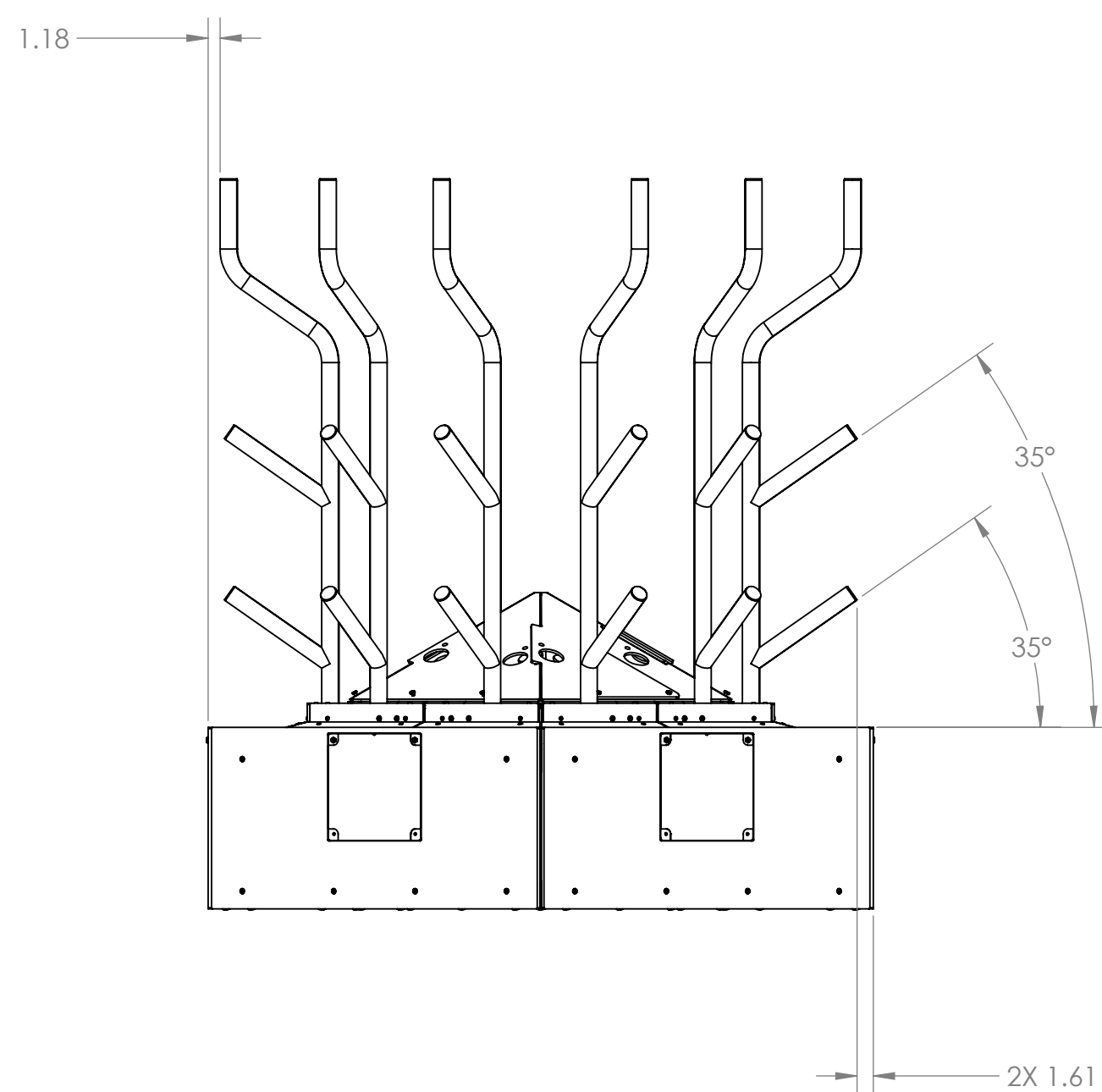
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D



C

C





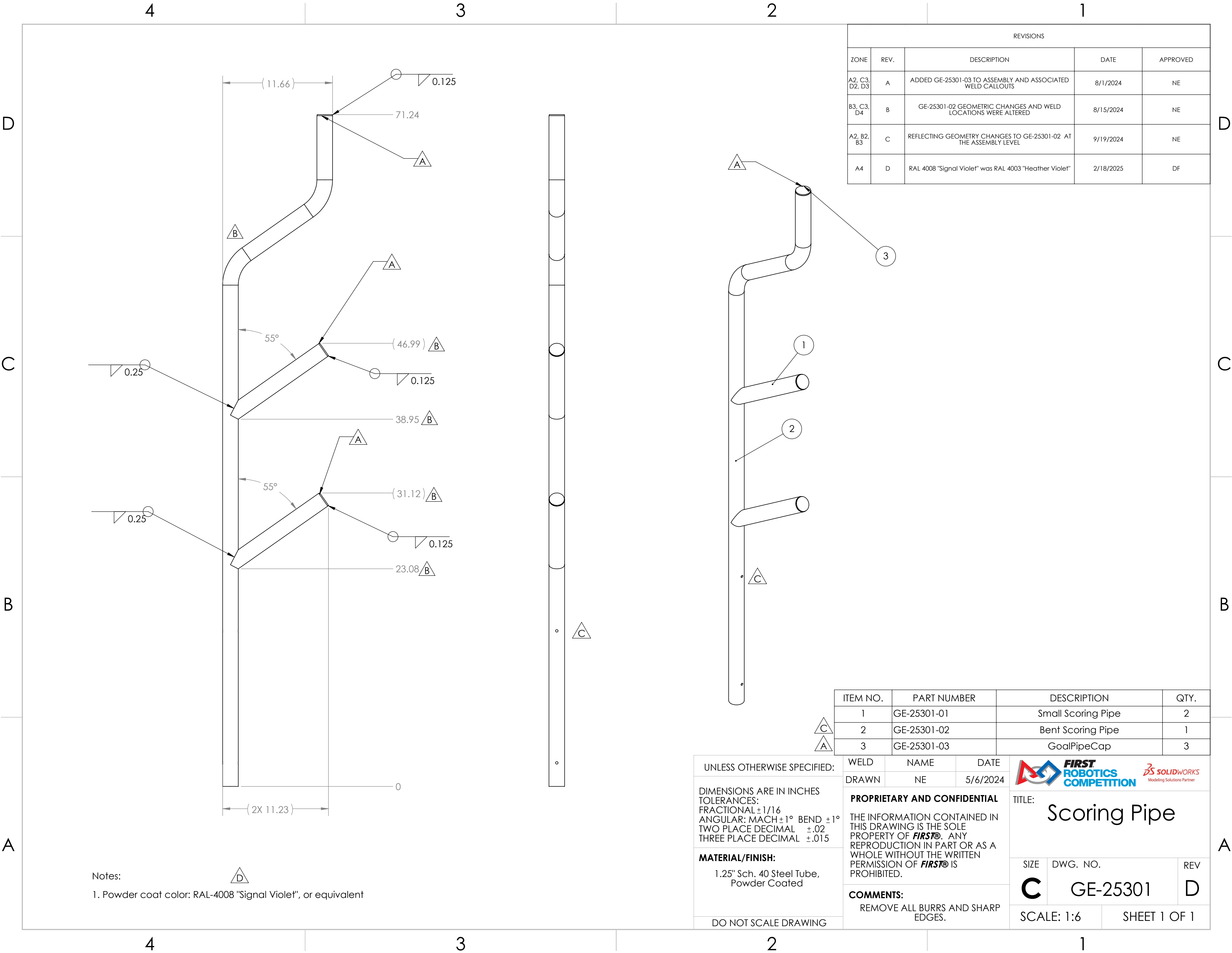
B

B

A



A

UNLESS OTHERWISE SPECIFIED:		FIELD	NAME	DATE	 	
DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL $\pm 1/2$ ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$ TWO PLACE DECIMAL $\pm .50$		DRAWN	NE	12/6/2024	TITLE: Reef	
		PROPRIETARY AND CONFIDENTIAL				
		THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF FIRST® . ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FIRST® IS PROHIBITED.				
MATERIAL/FINISH:		COMMENTS:			SIZE	
DO NOT SCALE DRAWING		REMOVE ALL BURRS AND SHARP EDGES.			DWG. NO.	
					REV	
					C	
					GE-25300	
					SCALE: 1:16	
					SHEET 2 OF 2	



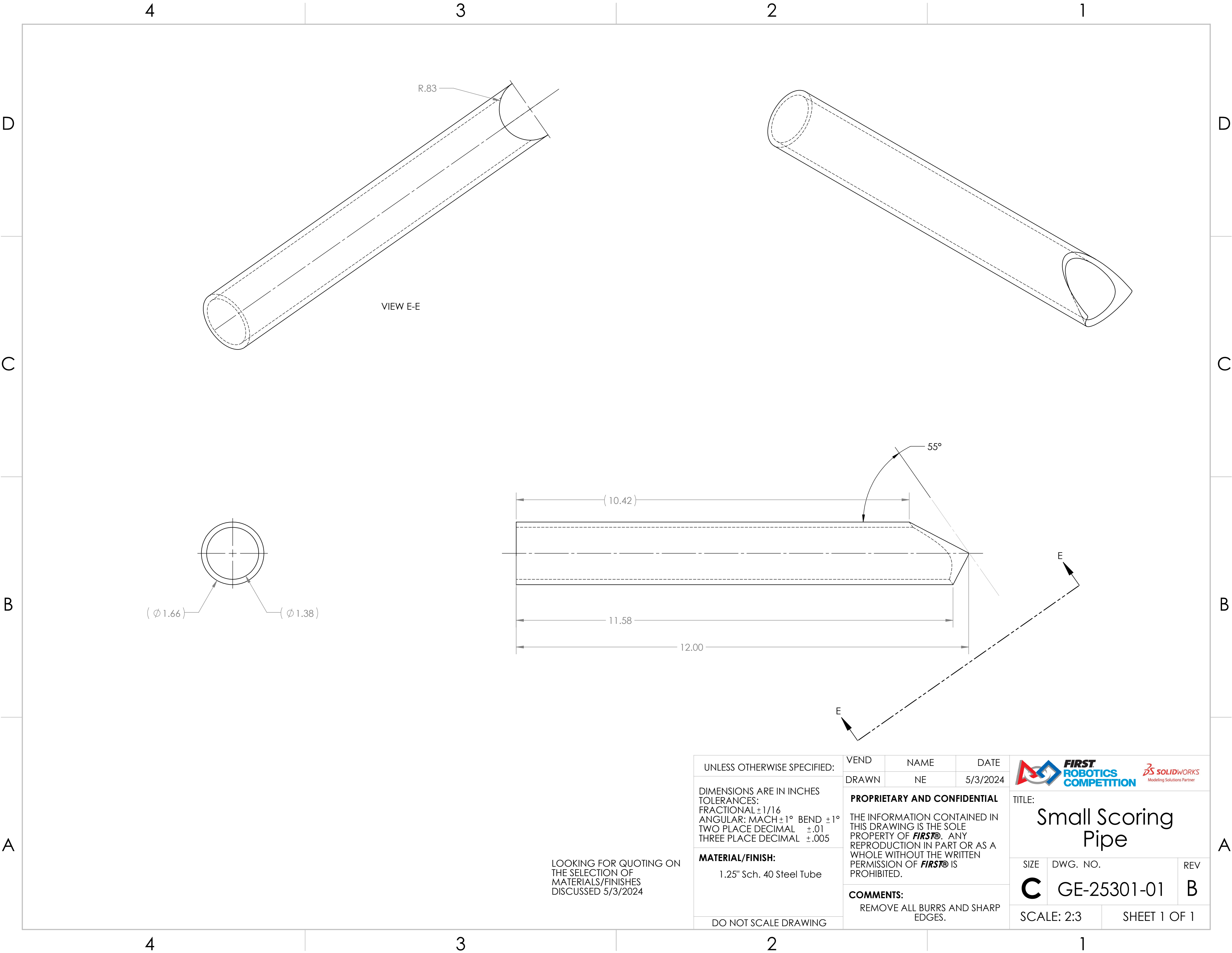
REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
A2, C3, D2, D3	A	ADDED GE-25301-03 TO ASSEMBLY AND ASSOCIATED WELD CALLOUTS	8/1/2024	NE
B3, C3, D4	B	GE-25301-02 GEOMETRIC CHANGES AND WELD LOCATIONS WERE ALTERED	8/15/2024	NE
A2, B2, B3	C	REFLECTING GEOMETRY CHANGES TO GE-25301-02 AT THE ASSEMBLY LEVEL	9/19/2024	NE
A4	D	RAL 4008 "Signal Violet" was RAL 4003 "Heather Violet"	2/18/2025	DF

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	GE-25301-01	Small Scoring Pipe	2
2	GE-25301-02	Bent Scoring Pipe	1
3	GE-25301-03	GoalPipeCap	3



UNLESS OTHERWISE SPECIFIED:		WELD		NAME		DATE		<div></div>												
		DRAWN		NE		5/6/2024														
<div>DIMENSIONS ARE IN INCHES</div> <div>TOLERANCES:</div> <div>FRACTIONAL $\pm 1/16$</div> <div>ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$</div> <div>TWO PLACE DECIMAL $\pm .02$</div> <div>THREE PLACE DECIMAL $\pm .015$</div> <div>MATERIAL/FINISH:</div> <div>1.25" Sch. 40 Steel Tube, Powder Coated</div> <div>DO NOT SCALE DRAWING</div>		<div>PROPRIETARY AND CONFIDENTIAL</div> <div>THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF FIRST®. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FIRST® IS PROHIBITED.</div> <div>COMMENTS:</div> <div>REMOVE ALL BURRS AND SHARP EDGES.</div>						<div>TITLE:</div> <div>Scoring Pipe</div> <table><tr><td>SIZE</td><td>DWG. NO.</td><td>REV</td></tr><tr><td>C</td><td>GE-25301</td><td>D</td></tr><tr><td colspan="2">SCALE: 1:6</td><td>SHEET 1 OF 1</td></tr></table>				SIZE	DWG. NO.	REV	C	GE-25301	D	SCALE: 1:6		SHEET 1 OF 1
		SIZE	DWG. NO.	REV																
		C	GE-25301	D																
SCALE: 1:6		SHEET 1 OF 1																		

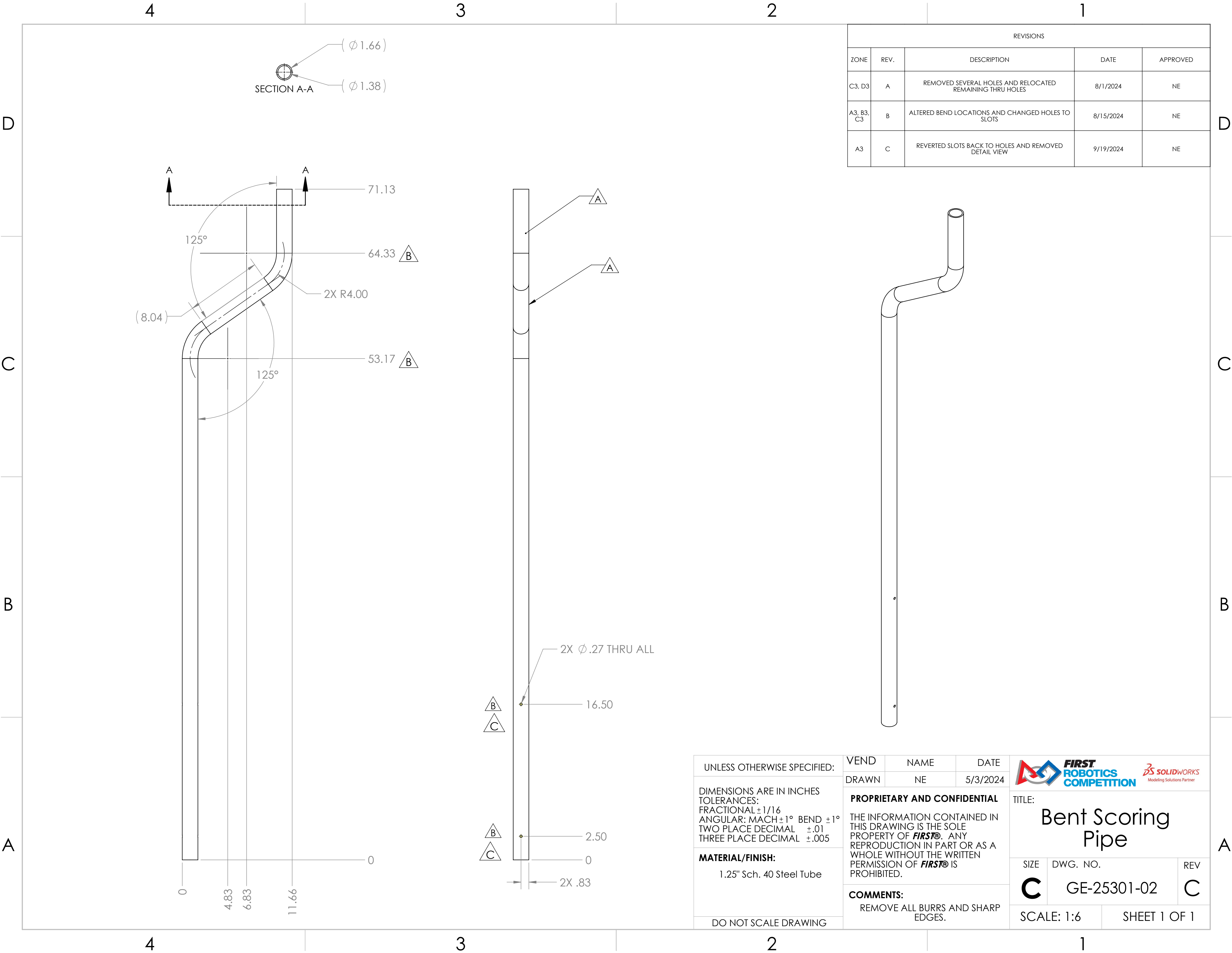
Notes:

1. Powder coat color: RAL-4008 "Signal Violet", or equivalent





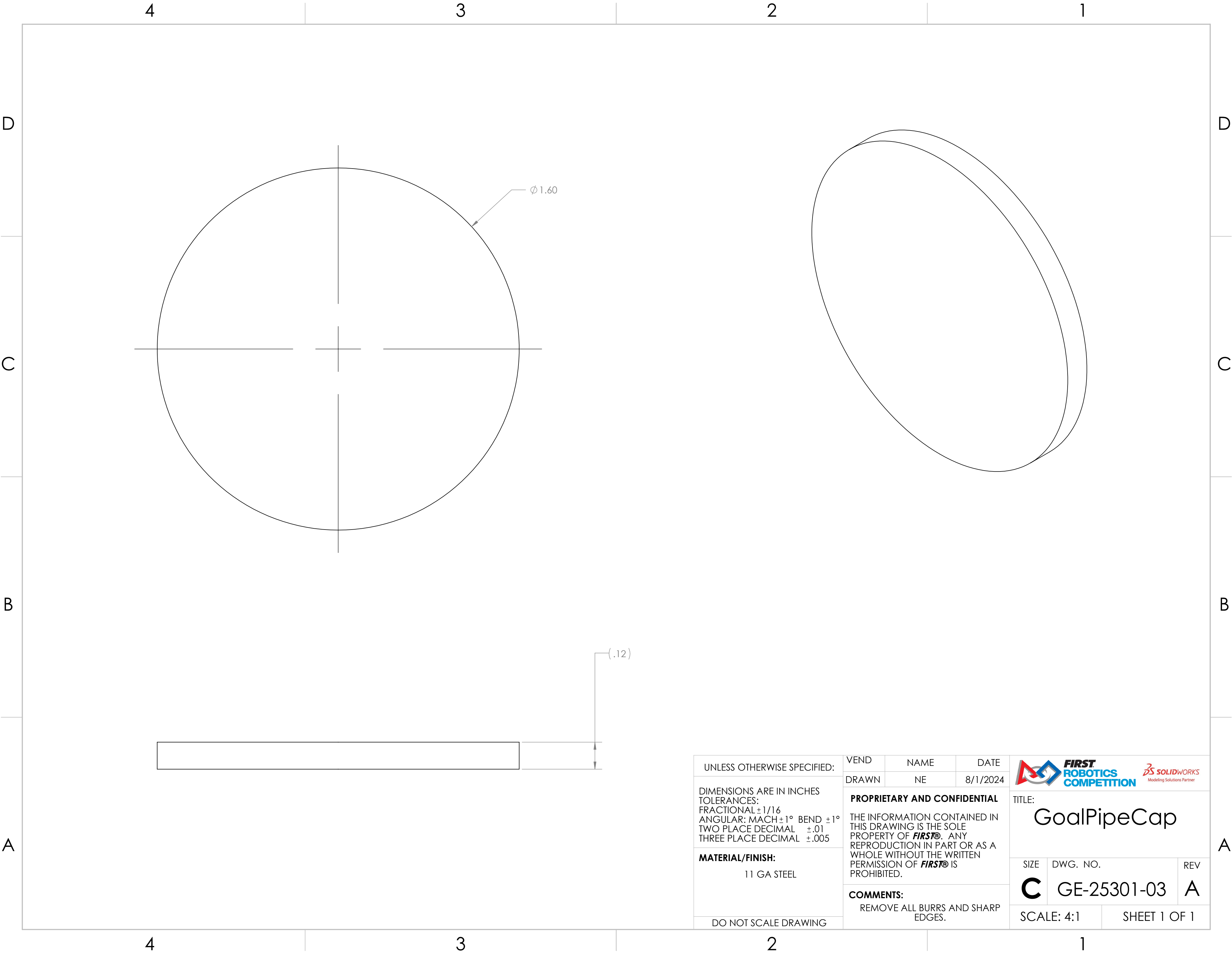
LOOKING FOR QUOTING ON
THE SELECTION OF
MATERIALS/FINISHES
DISCUSSED 5/3/2024

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ±1/16 ANGULAR: MACH ±1° BEND ±1° TWO PLACE DECIMAL ±.01 THREE PLACE DECIMAL ±.005	VEND	NAME	DATE	<div></div> <div>TITLE: <h1>Small Scoring Pipe</h1></div>			
	DRAWN	NE	5/3/2024				
MATERIAL/FINISH: 1.25" Sch. 40 Steel Tube	PROPRIETARY AND CONFIDENTIAL THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF FIRST® . ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FIRST® IS PROHIBITED.			SIZE		DWG. NO.	REV
				C		GE-25301-01	B
DO NOT SCALE DRAWING	COMMENTS: REMOVE ALL BURRS AND SHARP EDGES.			SCALE: 2:3		SHEET 1 OF 1	



REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
C3, D3	A	REMOVED SEVERAL HOLES AND RELOCATED REMAINING THRU HOLES	8/1/2024	NE
A3, B3, C3	B	ALTERED BEND LOCATIONS AND CHANGED HOLES TO SLOTS	8/15/2024	NE
A3	C	REVERTED SLOTS BACK TO HOLES AND REMOVED DETAIL VIEW	9/19/2024	NE

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ±1/16 ANGULAR: MACH ±1° BEND ±1° TWO PLACE DECIMAL ±.01 THREE PLACE DECIMAL ±.005 MATERIAL/FINISH: 1.25" Sch. 40 Steel Tube DO NOT SCALE DRAWING	VEND	NAME	DATE	<div></div>	
	DRAWN	NE	5/3/2024		
	PROPRIETARY AND CONFIDENTIAL THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF FIRST® . ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FIRST® IS PROHIBITED. COMMENTS: REMOVE ALL BURRS AND SHARP EDGES.				
TITLE: Bent Scoring Pipe					
SIZE	DWG. NO.		REV		
C	GE-25301-02		C		
SCALE: 1:6		SHEET 1 OF 1			



UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN INCHES
TOLERANCES:
FRACTIONAL $\pm 1/16$
ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$
TWO PLACE DECIMAL $\pm .01$
THREE PLACE DECIMAL $\pm .005$

MATERIAL/FINISH:
11 GA STEEL

DO NOT SCALE DRAWING

VEND

NAME

DATE

DRAWN

NE

8/1/2024

PROPRIETARY AND CONFIDENTIAL

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COMMENTS:

REMOVE ALL BURRS AND SHARP EDGES.



**FIRST
ROBOTICS
COMPETITION**



TITLE:

GoalPipeCap

SIZE

C

DWG. NO.

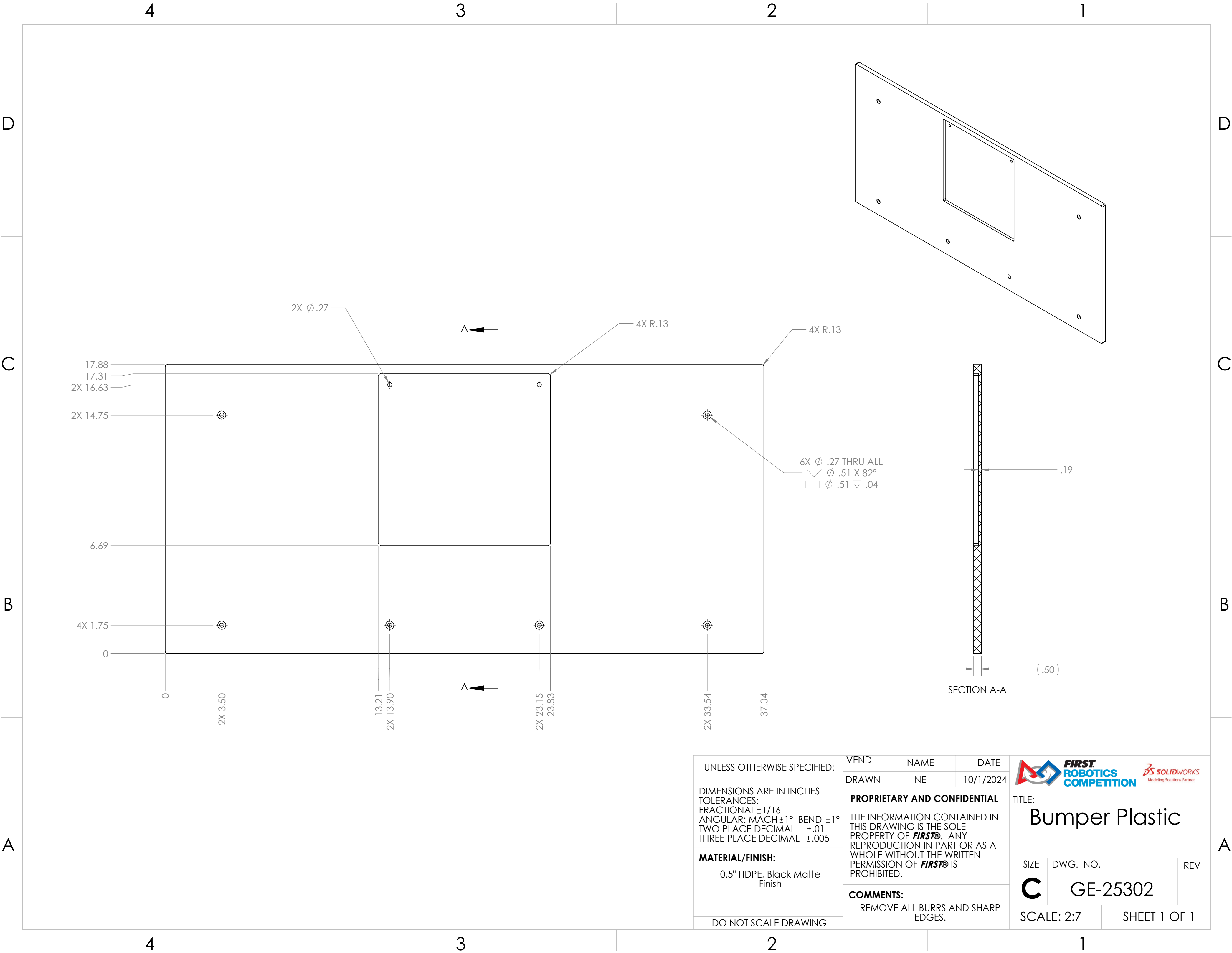
GE-25301-03



REV

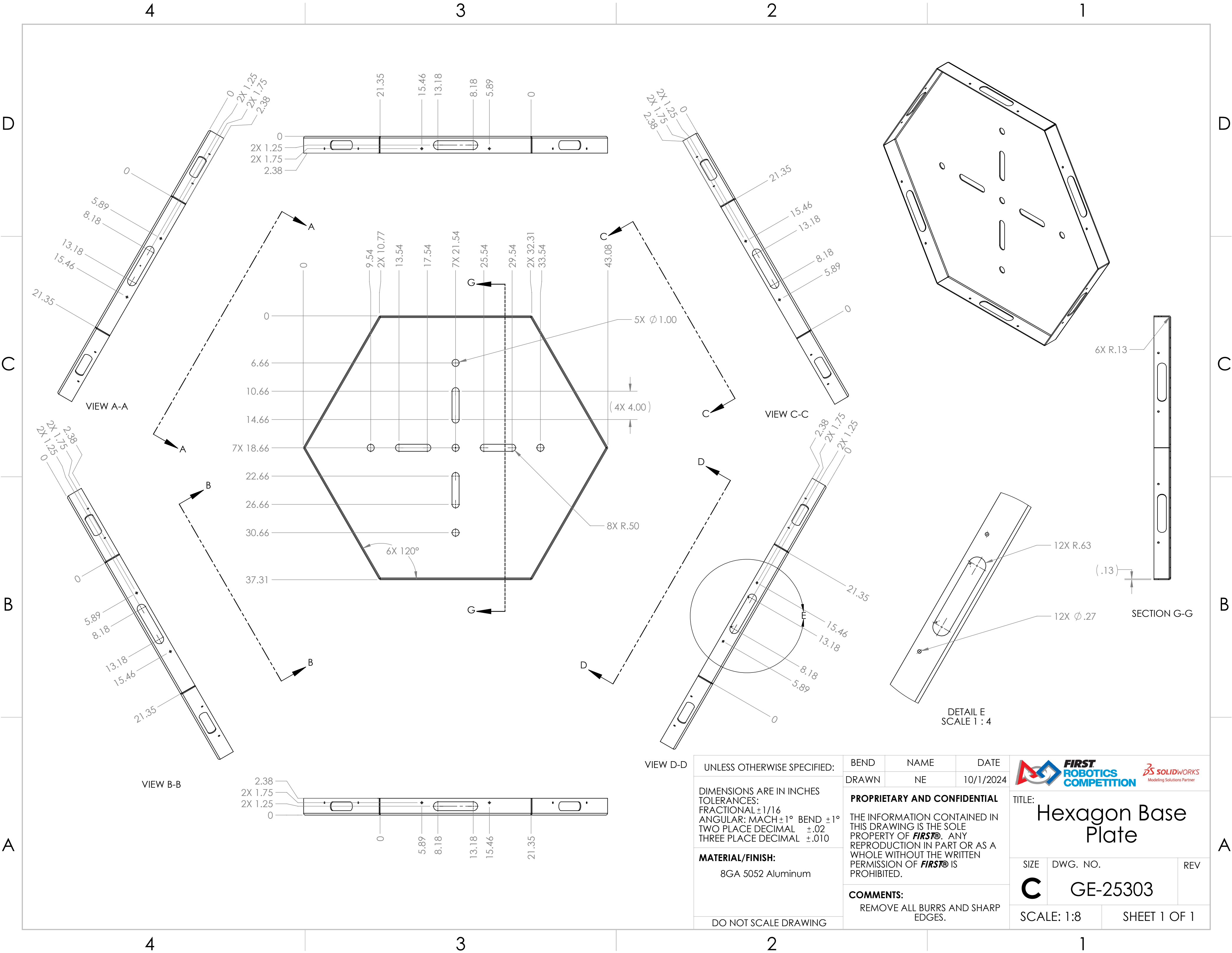
A

SCALE: 4:1

SHEET 1 OF 1



UNLESS OTHERWISE SPECIFIED:	VEND	NAME	DATE	<div></div> <div>TITLE: Bumper Plastic</div>		
	DRAWN	NE	10/1/2024			
DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ±1/16 ANGULAR: MACH ±1° BEND ±1° TWO PLACE DECIMAL ±.01 THREE PLACE DECIMAL ±.005	PROPRIETARY AND CONFIDENTIAL THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF FIRST® . ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FIRST® IS PROHIBITED.			SIZE	DWG. NO.	REV
	COMMENTS: REMOVE ALL BURRS AND SHARP EDGES.			C	GE-25302	
MATERIAL/FINISH: 0.5" HDPE, Black Matte Finish	DO NOT SCALE DRAWING			SCALE: 2:7		SHEET 1 OF 1



UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN INCHES
TOLERANCES:
FRACTIONAL $\pm 1/16$
ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$
TWO PLACE DECIMAL $\pm .02$
THREE PLACE DECIMAL $\pm .010$

MATERIAL/FINISH:
8GA 5052 Aluminum

DO NOT SCALE DRAWING

BEND	NAME	DATE
DRAWN	NE	10/1/2024

PROPRIETARY AND CONFIDENTIAL

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF **FIRST®**. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF **FIRST®** IS PROHIBITED.

COMMENTS:
REMOVE ALL BURRS AND SHARP EDGES.

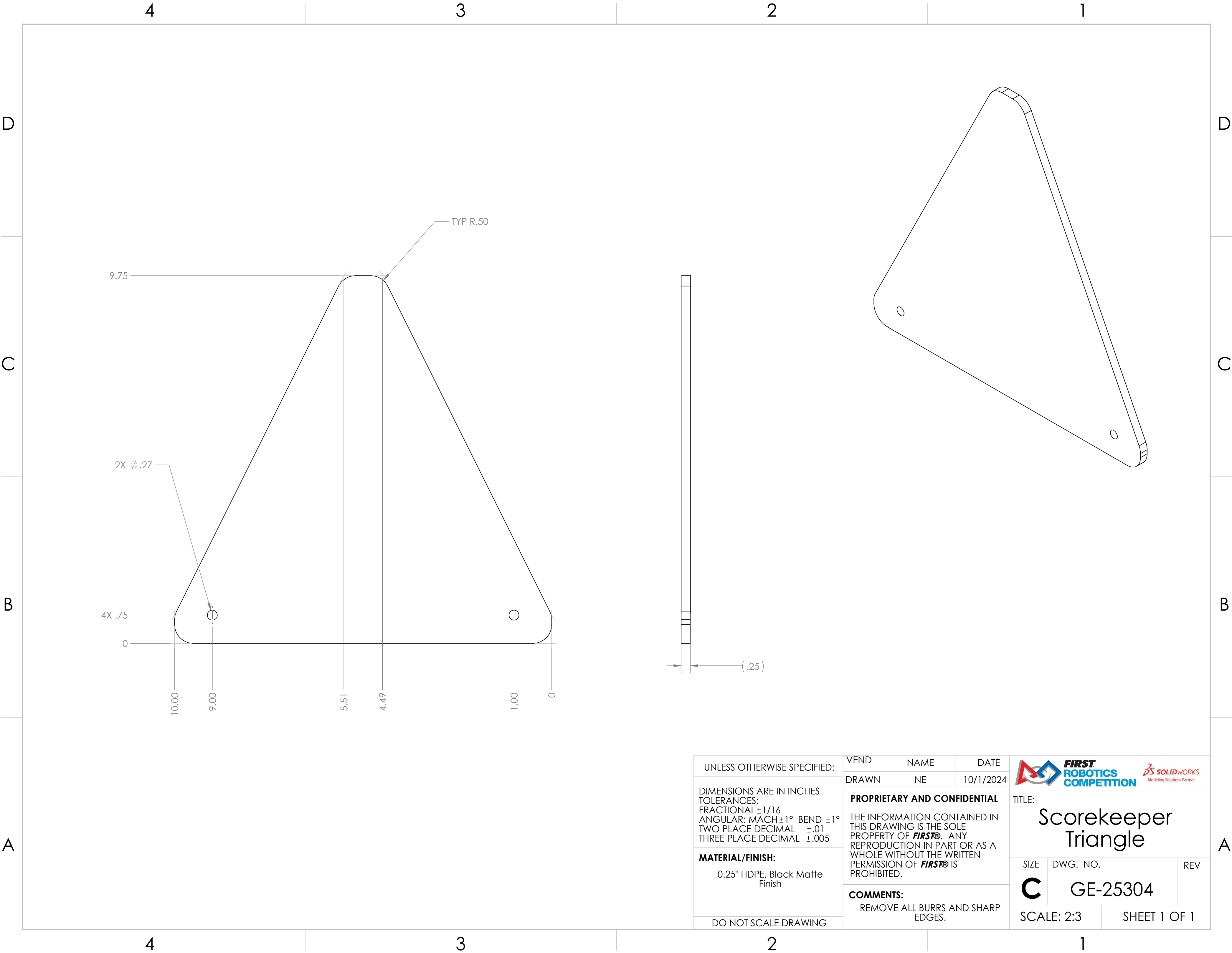




TITLE:
Hexagon Base Plate

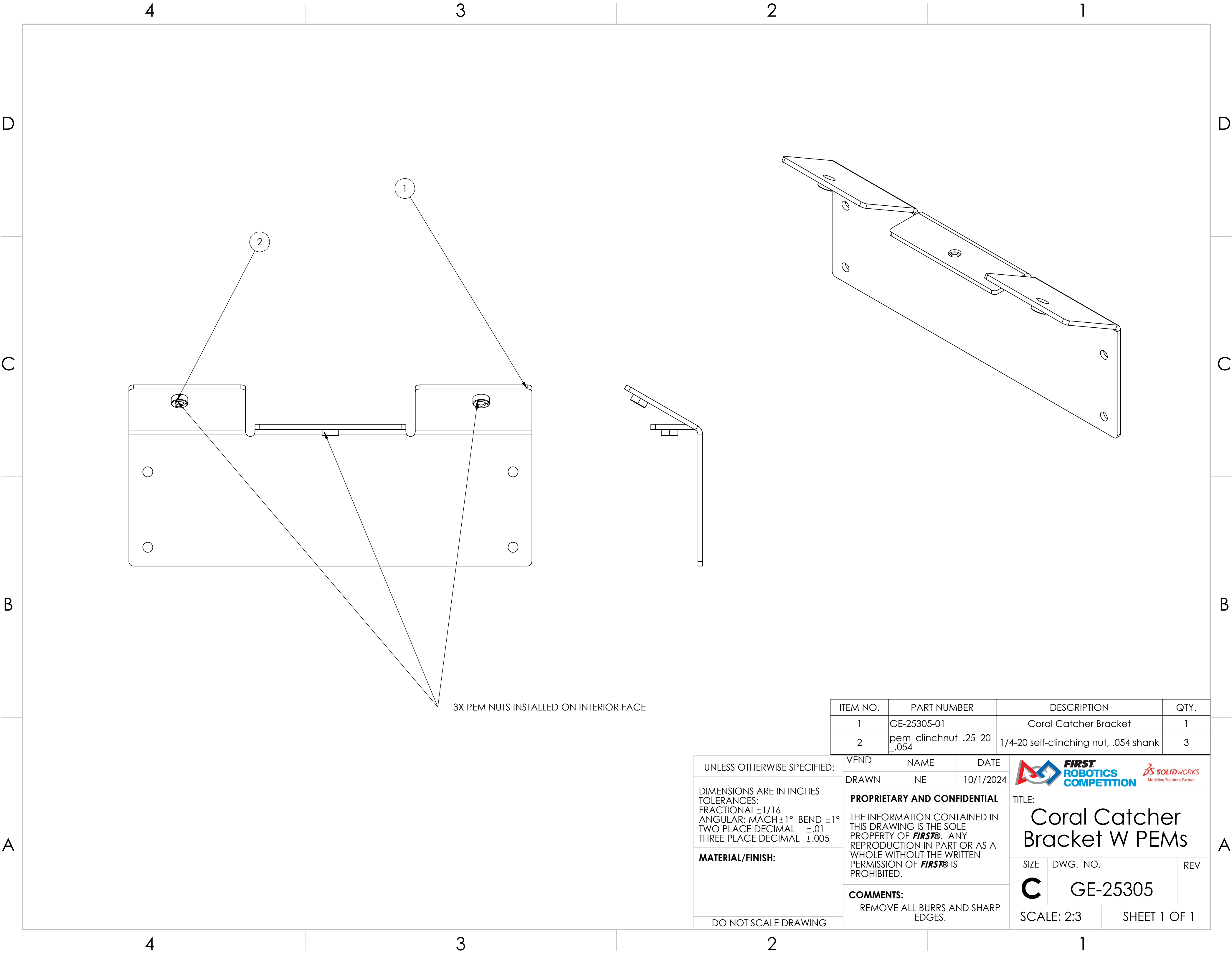
SIZE	DWG. NO.	REV
C	GE-25303	

SCALE: 1:8

SHEET 1 OF 1





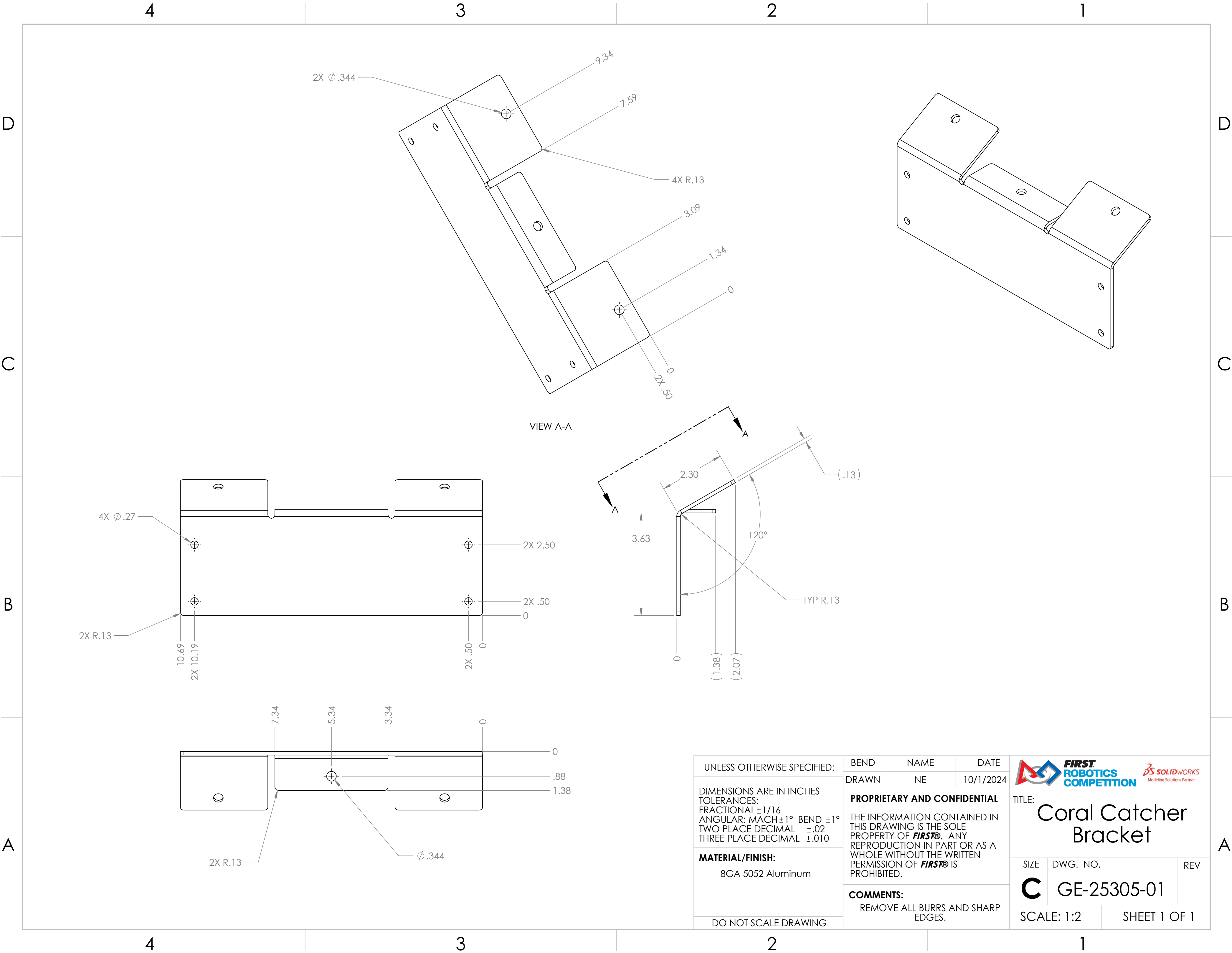
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL $\pm 1/16$ ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$ TWO PLACE DECIMAL $\pm .01$ THREE PLACE DECIMAL $\pm .005$ MATERIAL/FINISH: 0.25" HDPE, Black Matte Finish DO NOT SCALE DRAWING	VEND	NAME	DATE	<div></div> <div>TITLE: <h1>Scorekeeper Triangle</h1></div>		
	DRAWN	NE	10/1/2024			
	PROPRIETARY AND CONFIDENTIAL THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF FIRST® . ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FIRST® IS PROHIBITED.			SIZE	DWG. NO.	REV
	COMMENTS: REMOVE ALL BURRS AND SHARP EDGES.			C	GE-25304	
SCALE: 2:3		SHEET 1 OF 1				



3X PEM NUTS INSTALLED ON INTERIOR FACE

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	GE-25305-01	Coral Catcher Bracket	1
2	pem_clinchnut_.25_20 _.054	1/4-20 self-clinching nut, .054 shank	3

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ±1/16 ANGULAR: MACH ±1° BEND ±1° TWO PLACE DECIMAL ±.01 THREE PLACE DECIMAL ±.005 MATERIAL/FINISH: DO NOT SCALE DRAWING	VEND	NAME	DATE	<div><div></div><div>TITLE: Coral Catcher Bracket W PEMs</div><div><div>SIZE</div><div>DWG. NO.</div><div>REV</div></div><div><div>C</div><div>GE-25305</div></div><div><div>SCALE: 2:3</div><div>SHEET 1 OF 1</div></div></div>					
	DRAWN	NE	10/1/2024						
	PROPRIETARY AND CONFIDENTIAL THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF FIRST® . ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FIRST® IS PROHIBITED.								
	COMMENTS: REMOVE ALL BURRS AND SHARP EDGES.								



UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN INCHES
TOLERANCES:
FRACTIONAL $\pm 1/16$
ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$
TWO PLACE DECIMAL $\pm .02$
THREE PLACE DECIMAL $\pm .010$

MATERIAL/FINISH:
8GA 5052 Aluminum

DO NOT SCALE DRAWING

BEND	NAME	DATE
DRAWN	NE	10/1/2024

PROPRIETARY AND CONFIDENTIAL
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF **FIRST®**. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF **FIRST®** IS PROHIBITED.

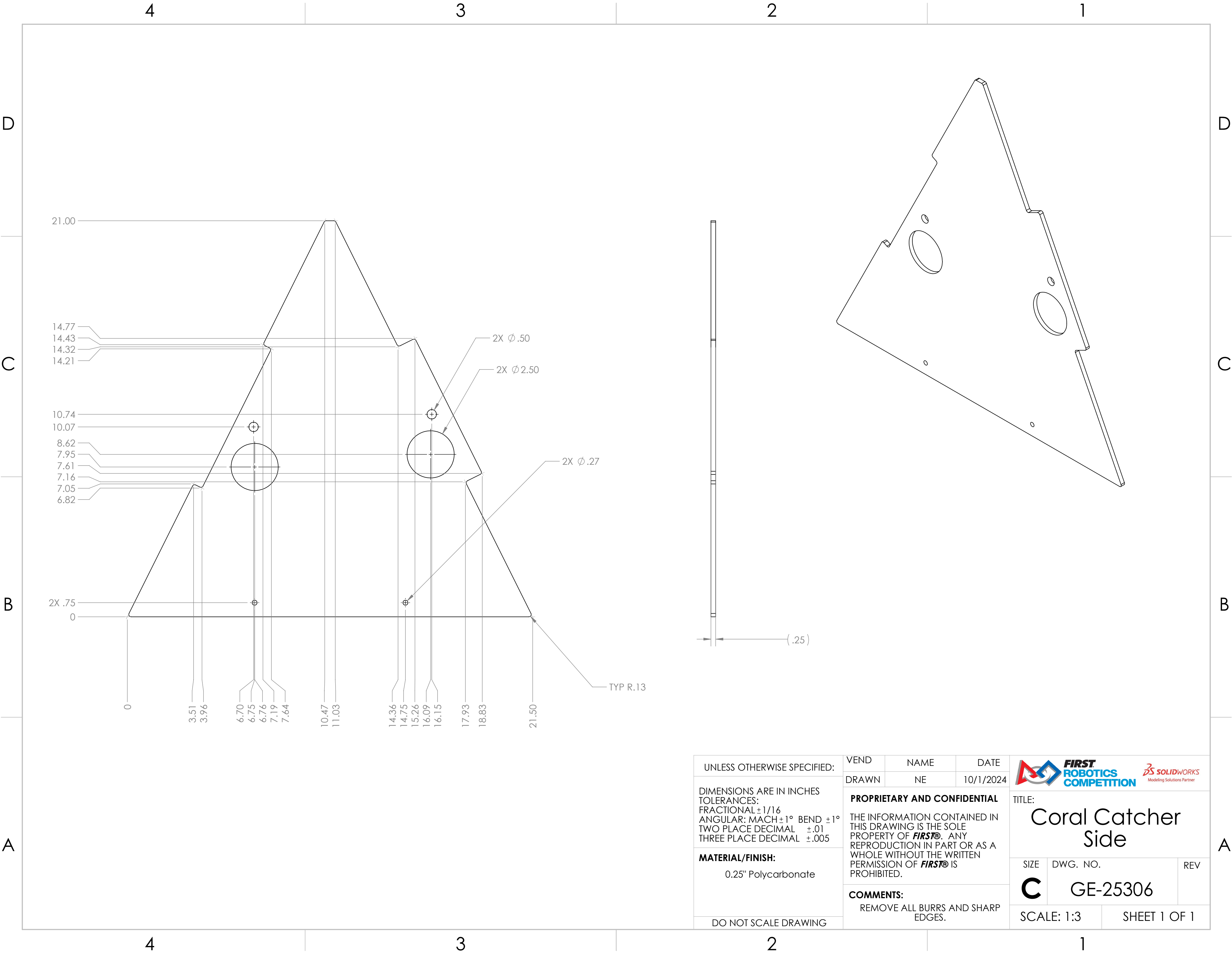
COMMENTS:
REMOVE ALL BURRS AND SHARP EDGES.



TITLE: **Coral Catcher Bracket**

SIZE	DWG. NO.	REV
C	GE-25305-01	

SCALE: 1:2 SHEET 1 OF 1



UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN INCHES
TOLERANCES:
FRACTIONAL $\pm 1/16$
ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$
TWO PLACE DECIMAL $\pm .01$
THREE PLACE DECIMAL $\pm .005$

MATERIAL/FINISH:
0.25" Polycarbonate

DO NOT SCALE DRAWING

VEND	NAME	DATE
DRAWN	NE	10/1/2024

PROPRIETARY AND CONFIDENTIAL

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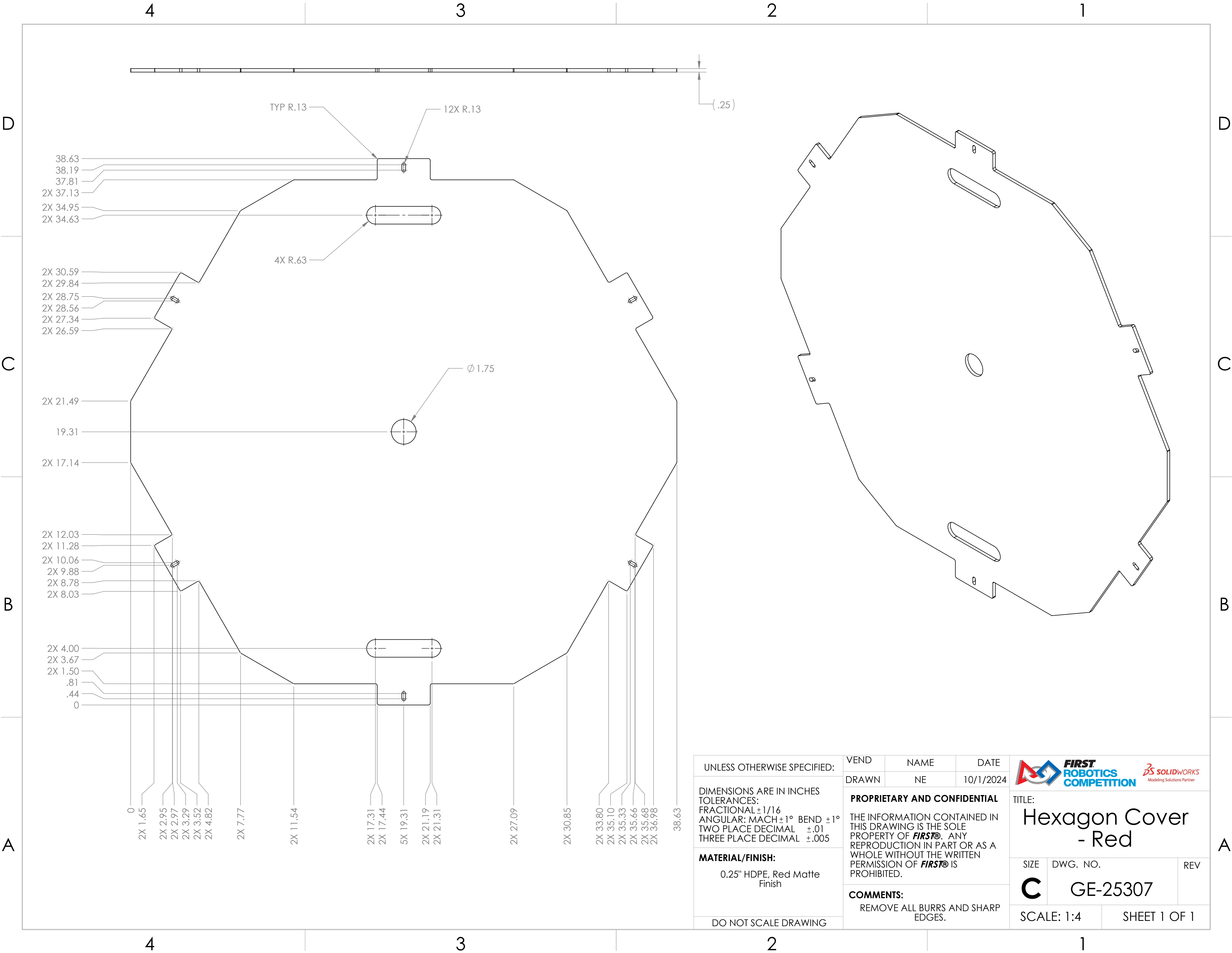
COMMENTS:
REMOVE ALL BURRS AND SHARP EDGES.



TITLE:
Coral Catcher Side

SIZE	DWG. NO.	REV
C	GE-25306	

SCALE: 1:3 SHEET 1 OF 1



UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN INCHES
TOLERANCES:
FRACTIONAL $\pm 1/16$
ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$
TWO PLACE DECIMAL $\pm .01$
THREE PLACE DECIMAL $\pm .005$

MATERIAL/FINISH:
0.25" HDPE, Red Matte Finish

DO NOT SCALE DRAWING

VEND	NAME	DATE
DRAWN	NE	10/1/2024

PROPRIETARY AND CONFIDENTIAL

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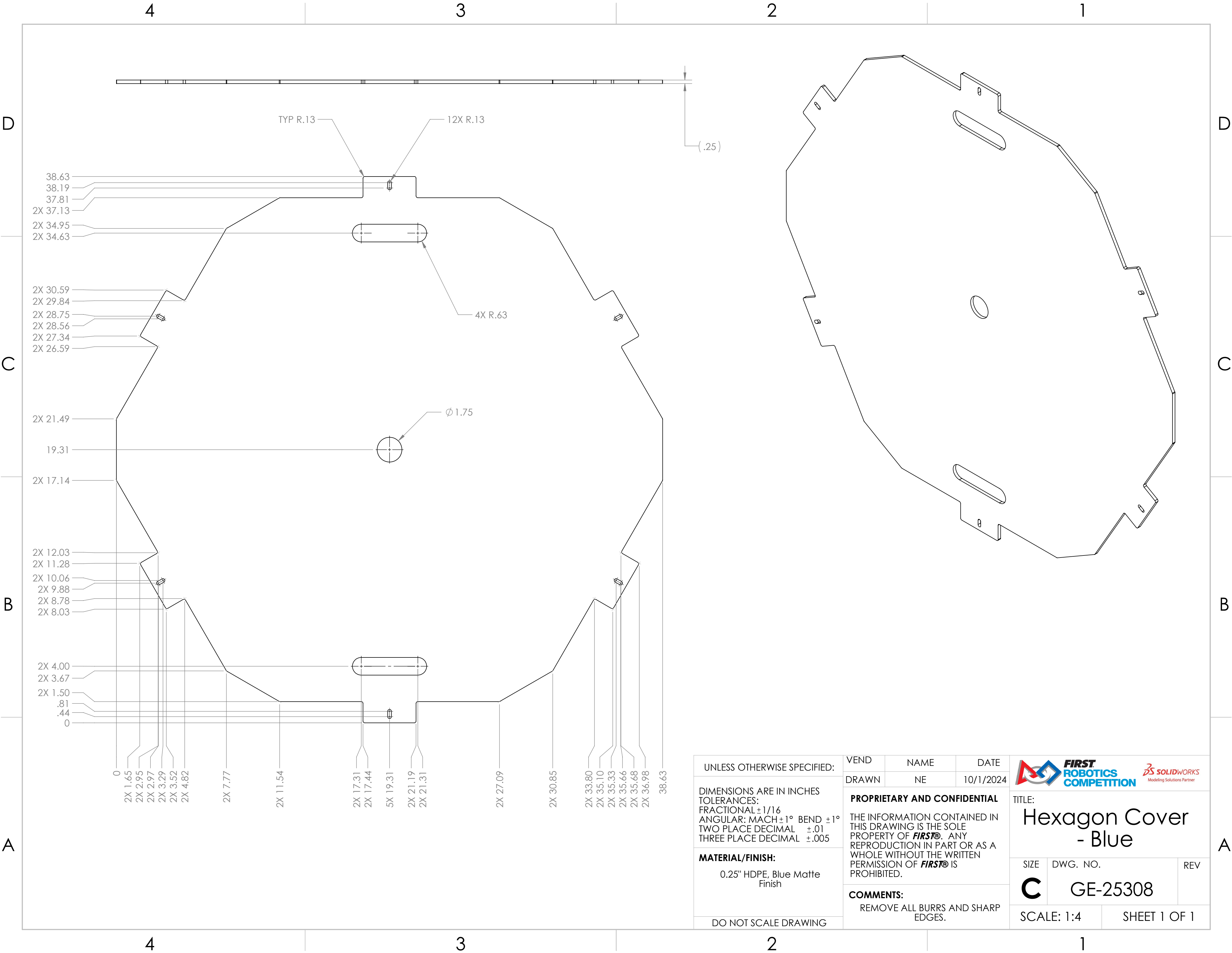
COMMENTS:
REMOVE ALL BURRS AND SHARP EDGES.



TITLE:
Hexagon Cover - Red

SIZE	DWG. NO.	REV
C	GE-25307	

SCALE: 1:4 SHEET 1 OF 1



UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN INCHES
TOLERANCES:
FRACTIONAL $\pm 1/16$
ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$
TWO PLACE DECIMAL $\pm .01$
THREE PLACE DECIMAL $\pm .005$

MATERIAL/FINISH:
0.25" HDPE, Blue Matte Finish

DO NOT SCALE DRAWING

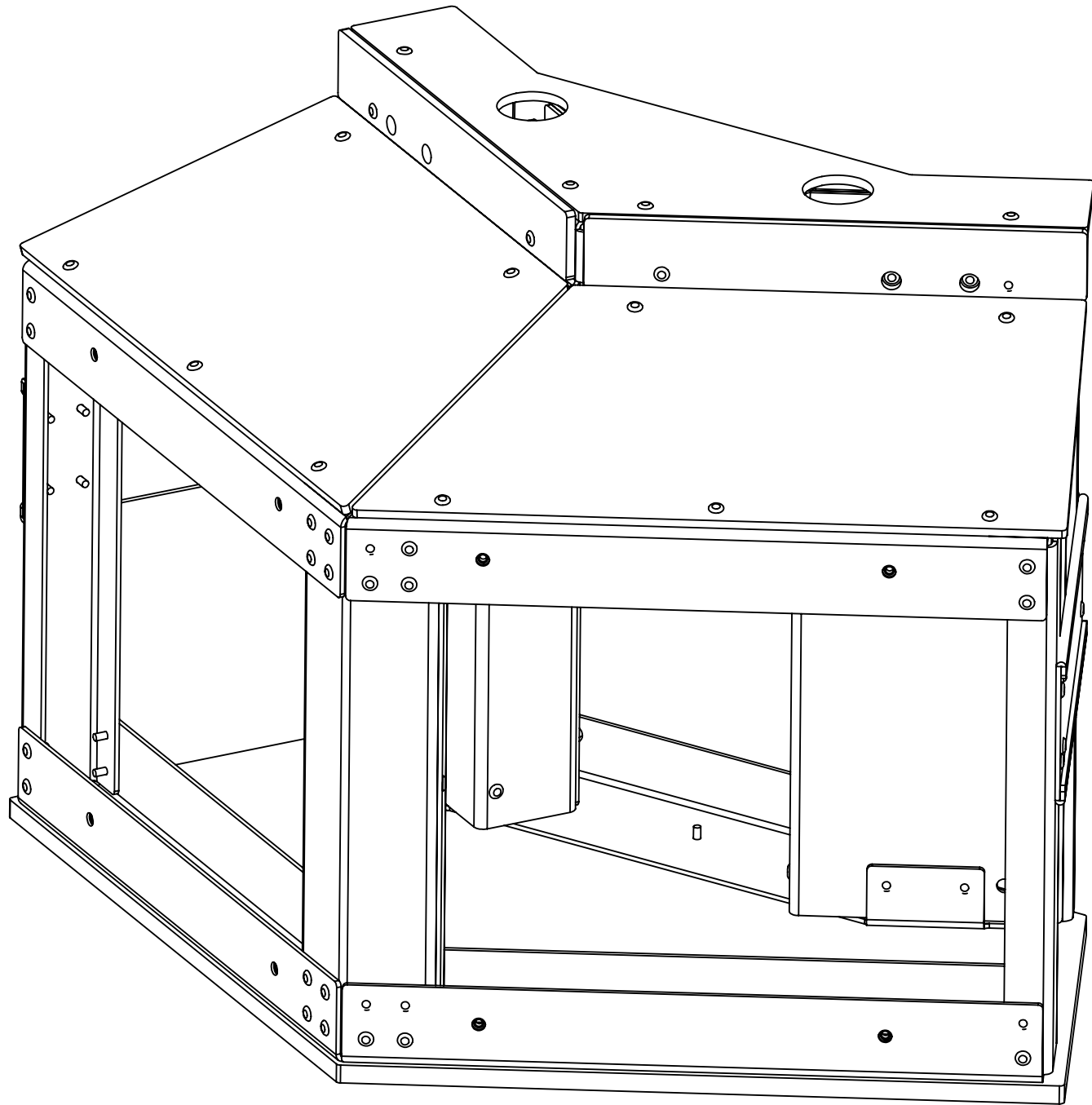
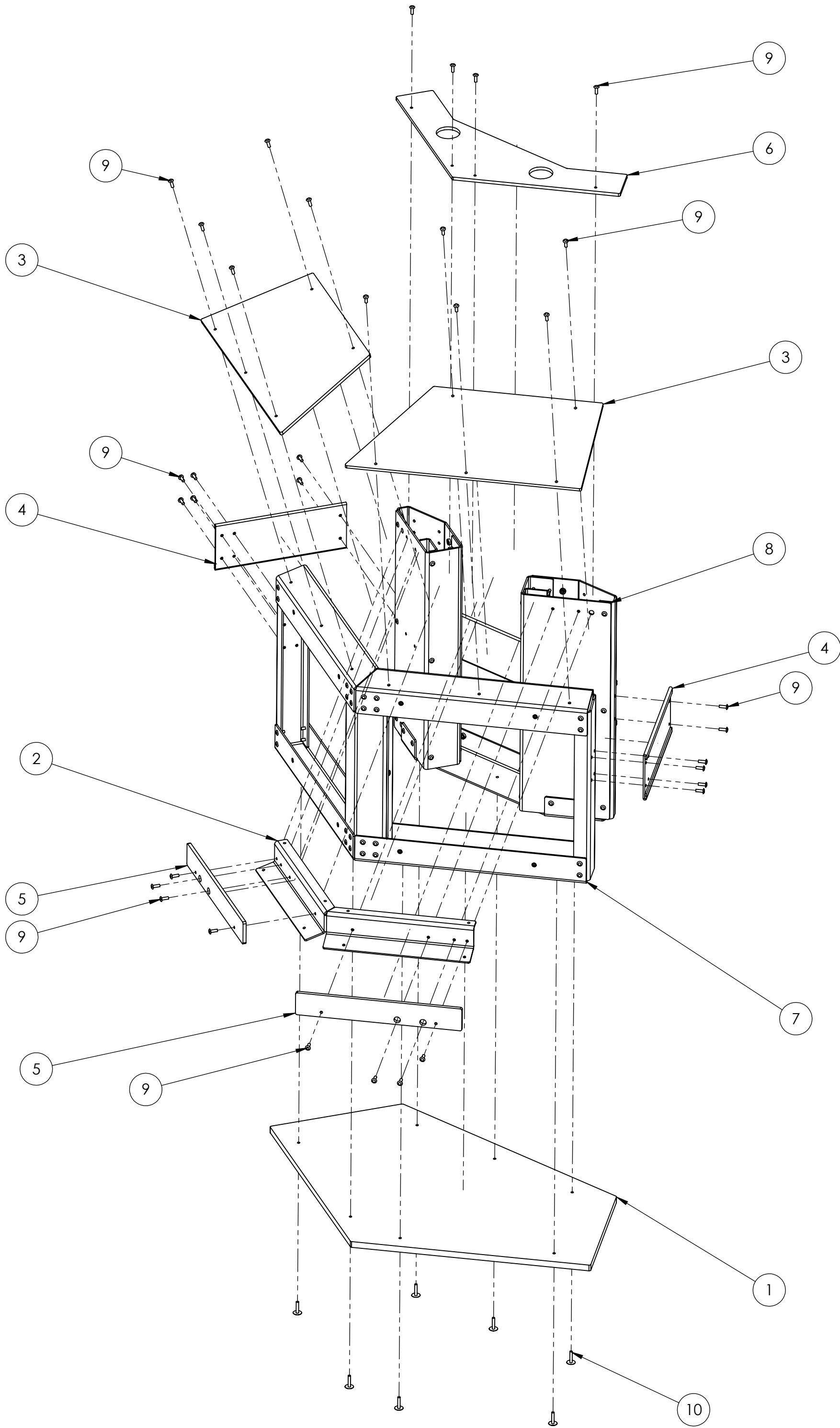
VEND	NAME	DATE
DRAWN	NE	10/1/2024

PROPRIETARY AND CONFIDENTIAL

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COMMENTS:
REMOVE ALL BURRS AND SHARP EDGES.

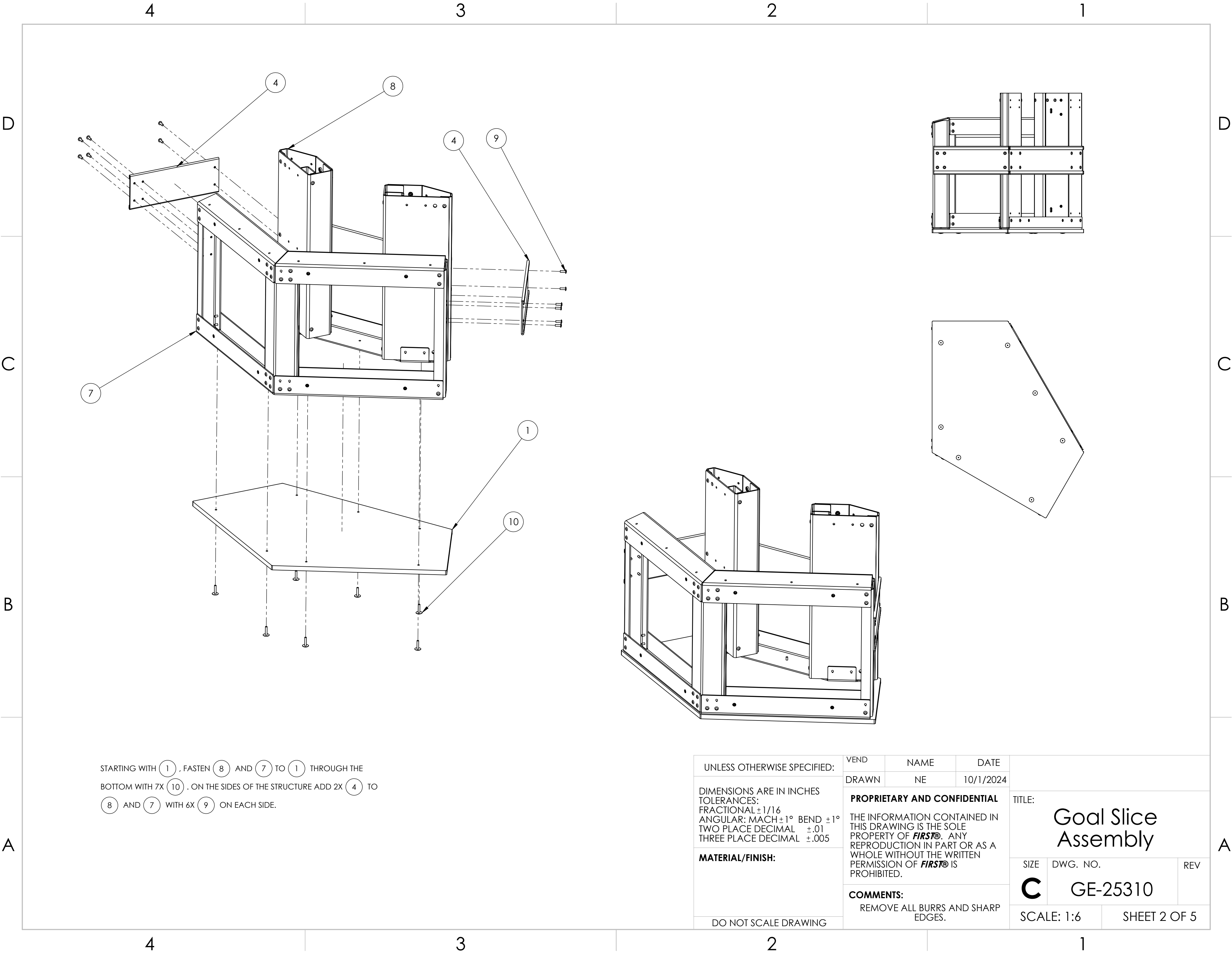
 		
TITLE: Hexagon Cover - Blue		
SIZE C	DWG. NO. GE-25308	REV
SCALE: 1:4		SHEET 1 OF 1



NOTES:
1. ASSEMBLE COMPONENTS IN DISPLAYED ORIENTATION

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	GE-25311	Slice Base	1
2	GE-25312	Trough Floor Bracket	1
3	GE-25313	Trough Floor	2
4	GE-25314	Slice Outside Depth Support	2
5	GE-25315	Trough Back	2
6	GE-25316	Slice Top Cover	1
7	GE-25320	Outer Slice Assembly	1
8	GE-25330	Inner Slice Assembly	1
9	rivet_.1875_.251-.375	3/16" Aluminum Rivet, .251-.375 Grip Range	34
10	rivet_.1875_.625-.0.75_largeHead	rivet_.1875_.625-0.75_largeHead	7

UNLESS OTHERWISE SPECIFIED:			VEND	NAME	DATE
DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL $\pm 1/16$ ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$ TWO PLACE DECIMAL $\pm .01$ THREE PLACE DECIMAL $\pm .005$			DRAWN	NE	10/1/2024
MATERIAL/FINISH:			PROPRIETARY AND CONFIDENTIAL		
			THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF FIRST . ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FIRST IS PROHIBITED.		
DO NOT SCALE DRAWING			COMMENTS: REMOVE ALL BURRS AND SHARP EDGES.		
			TITLE: Goal Slice Assembly		
			SIZE C	DWG. NO. GE-25310	REV
			SCALE: 1:6		SHEET 1 OF 5



STARTING WITH (1) , FASTEN (8) AND (7) TO (1) THROUGH THE
BOTTOM WITH 7X (10) . ON THE SIDES OF THE STRUCTURE ADD 2X (4) TO
(8) AND (7) WITH 6X (9) ON EACH SIDE.

UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN INCHES
TOLERANCES:
FRACTIONAL $\pm 1/16$
ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$
TWO PLACE DECIMAL $\pm .01$
THREE PLACE DECIMAL $\pm .005$

MATERIAL/FINISH:

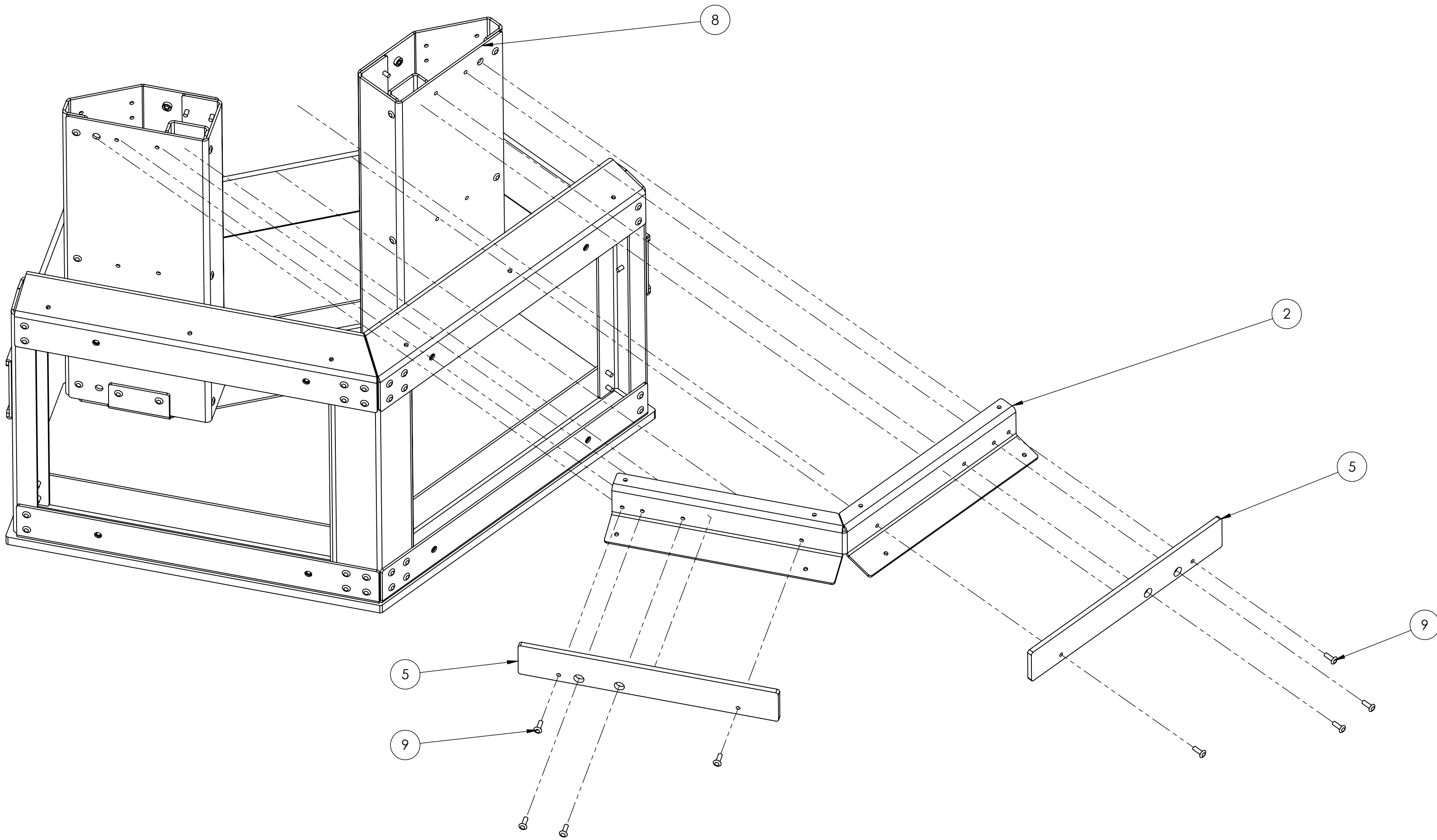
DO NOT SCALE DRAWING

VEND	NAME	DATE
DRAWN	NE	10/1/2024

PROPRIETARY AND CONFIDENTIAL
THE INFORMATION CONTAINED IN
THIS DRAWING IS THE SOLE
PROPERTY OF **FIRST®**. ANY
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WHOLE WITHOUT THE WRITTEN
PERMISSION OF **FIRST®** IS
PROHIBITED.

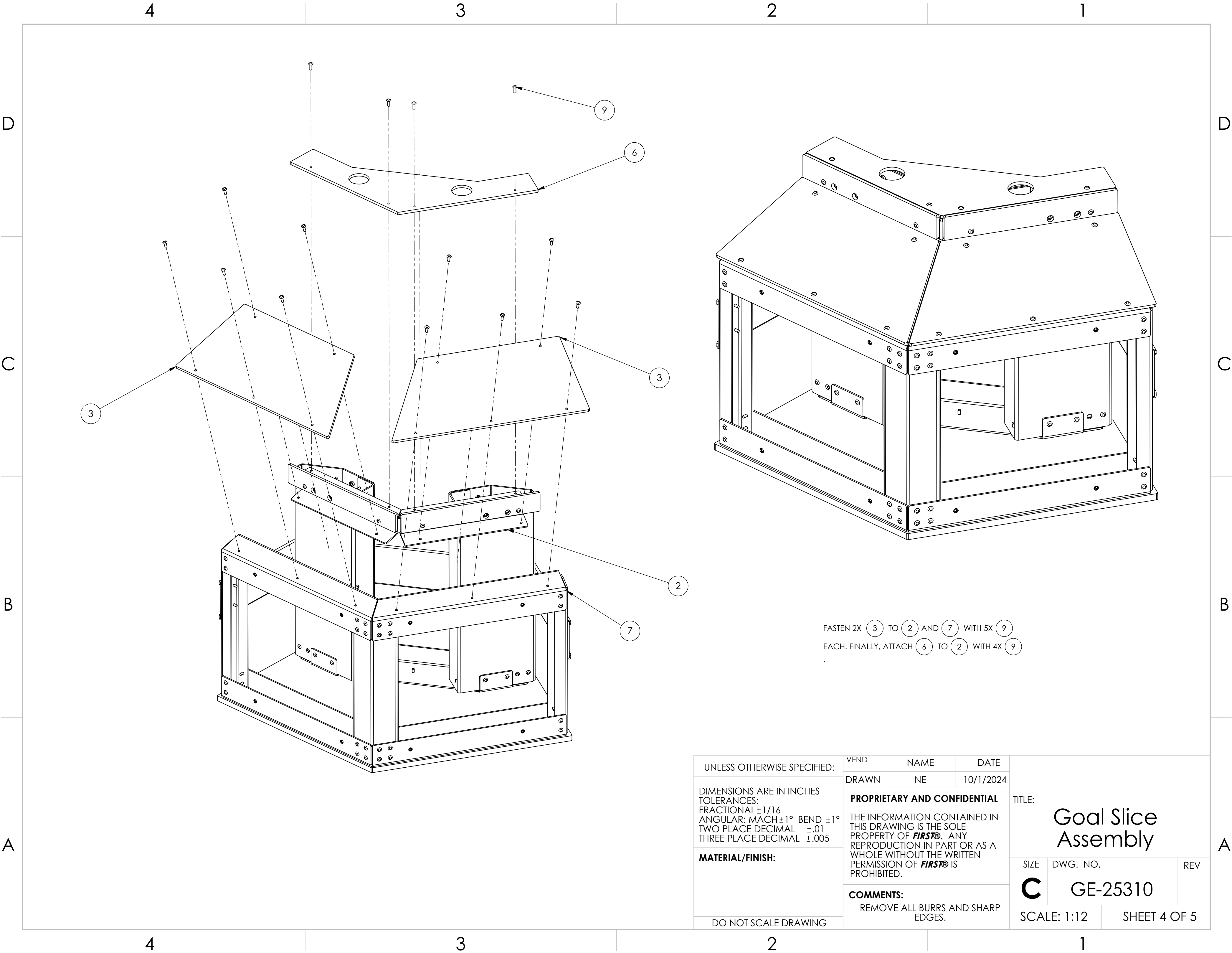
COMMENTS:
REMOVE ALL BURRS AND SHARP
EDGES.

TITLE: Goal Slice Assembly		
SIZE C	DWG. NO. GE-25310	REV
SCALE: 1:6		SHEET 2 OF 5



ATTACH 2X (5) TO (2) WITH 2X (9) EACH. THEN, ATTACH (2) TO (8) WITH 4X MORE (9).

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ±1/16 ANGULAR: MACH ±1° BEND ±1° TWO PLACE DECIMAL ±.01 THREE PLACE DECIMAL ±.005 MATERIAL/FINISH: DO NOT SCALE DRAWING	VEND	NAME	DATE	TITLE: Goal Slice Assembly		
	DRAWN	NE	10/1/2024			
	PROPRIETARY AND CONFIDENTIAL THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF FIRST®. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FIRST® IS PROHIBITED.			SIZE	DWG. NO.	REV
COMMENTS: REMOVE ALL BURRS AND SHARP EDGES.			C	GE-25310		
			SCALE: 1:12		SHEET 3 OF 5	



FASTEN 2X (3) TO (2) AND (7) WITH 5X (9)
EACH. FINALLY, ATTACH (6) TO (2) WITH 4X (9)

UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN INCHES
TOLERANCES:
FRACTIONAL $\pm 1/16$
ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$
TWO PLACE DECIMAL $\pm .01$
THREE PLACE DECIMAL $\pm .005$

MATERIAL/FINISH:

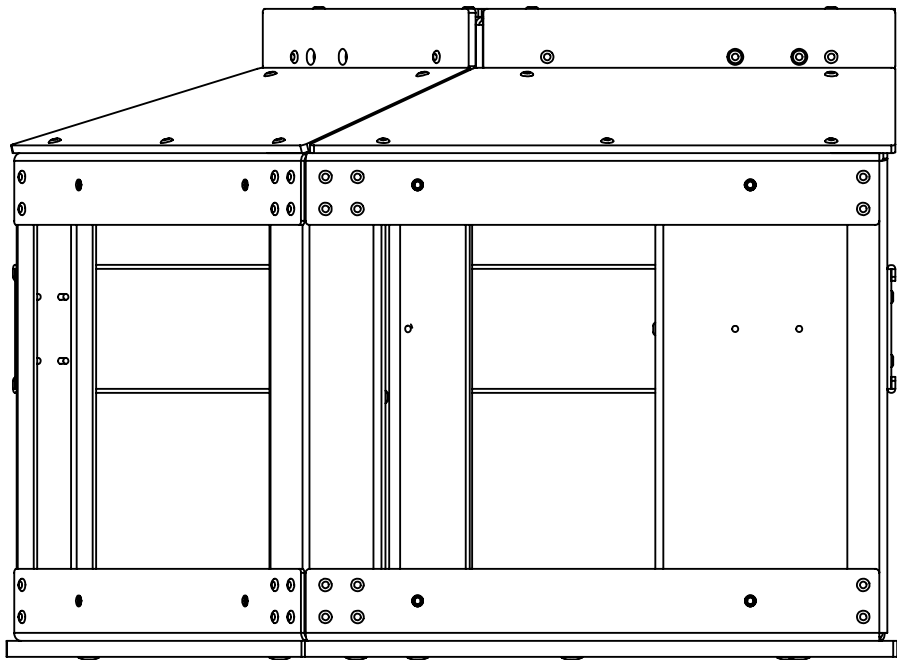
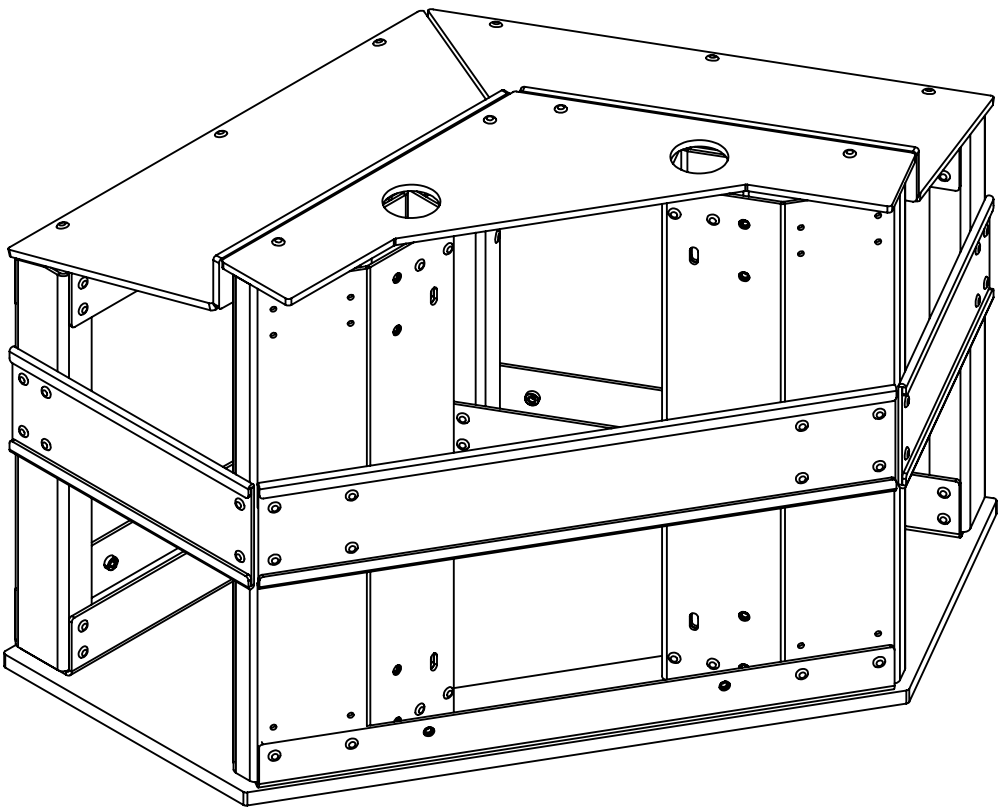
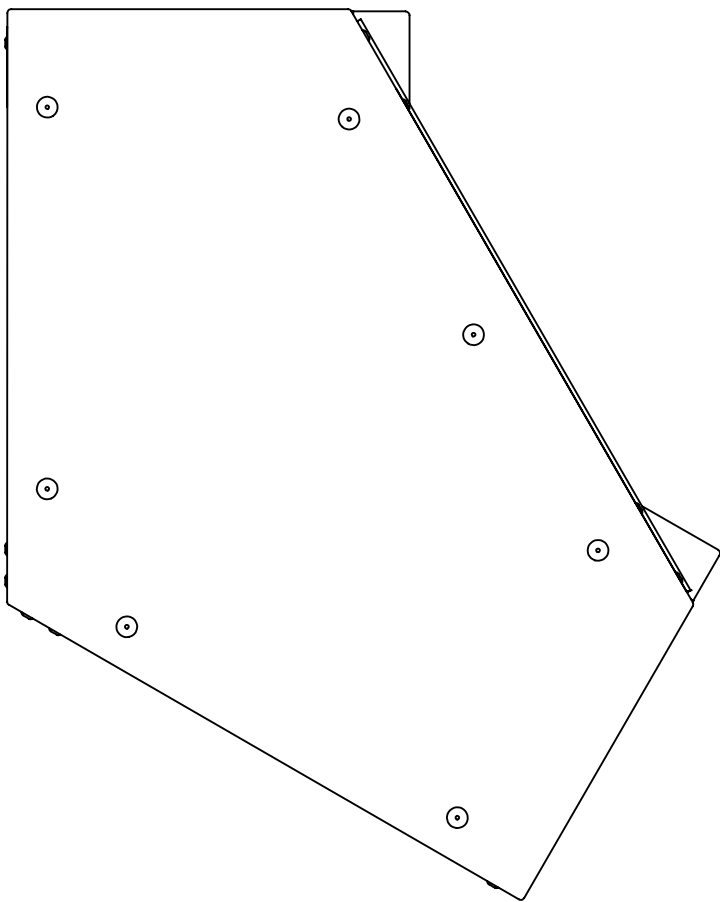
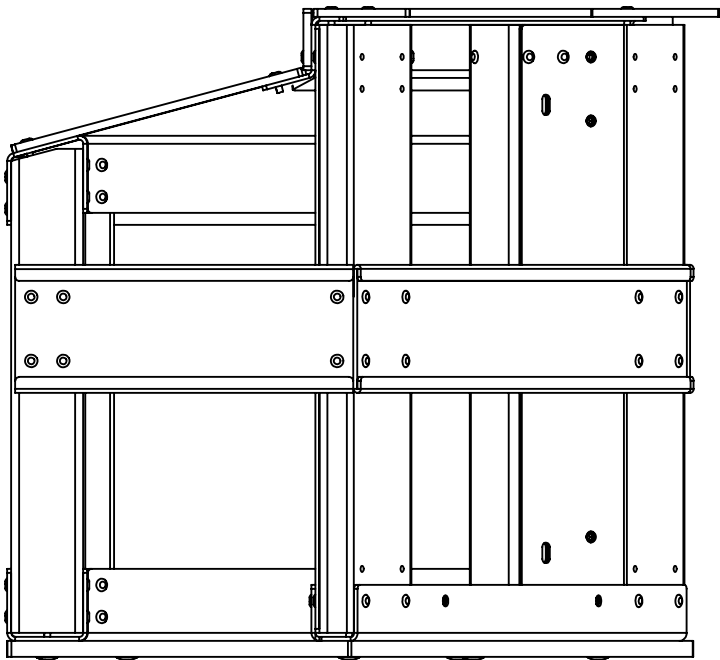
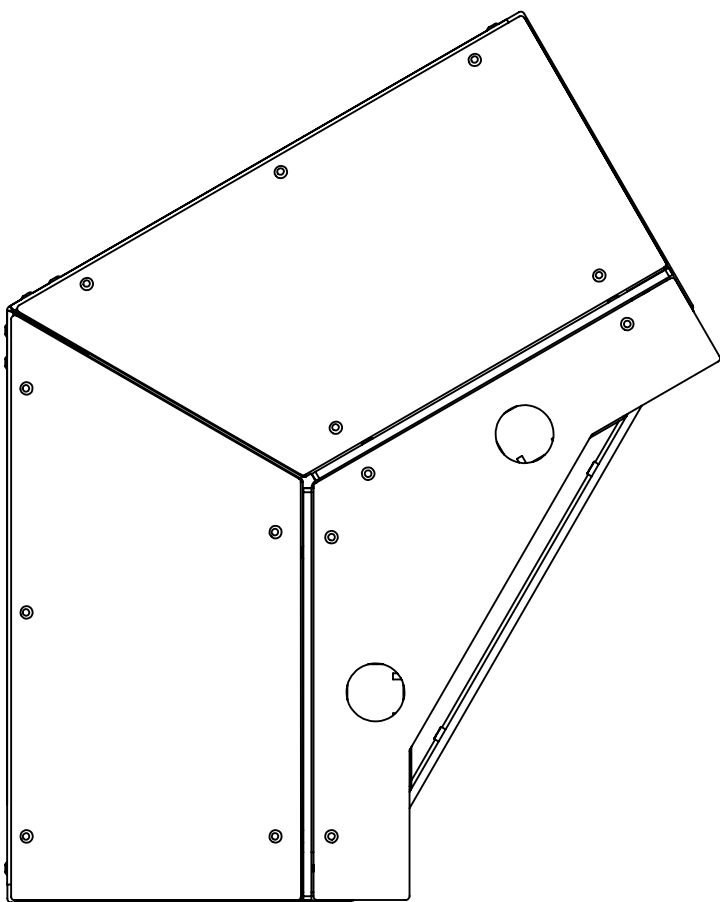
DO NOT SCALE DRAWING



VEND	NAME	DATE
DRAWN	NE	10/1/2024

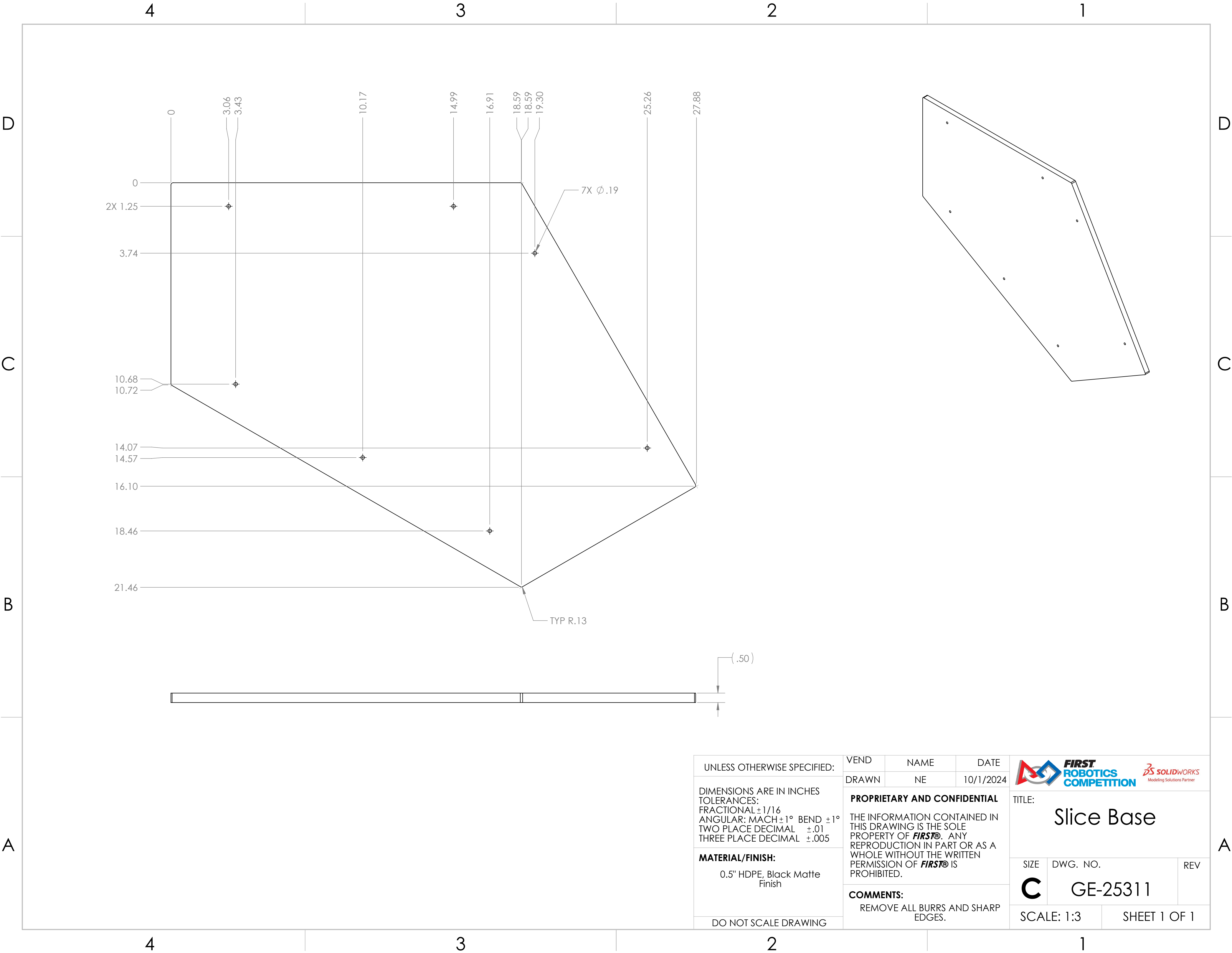
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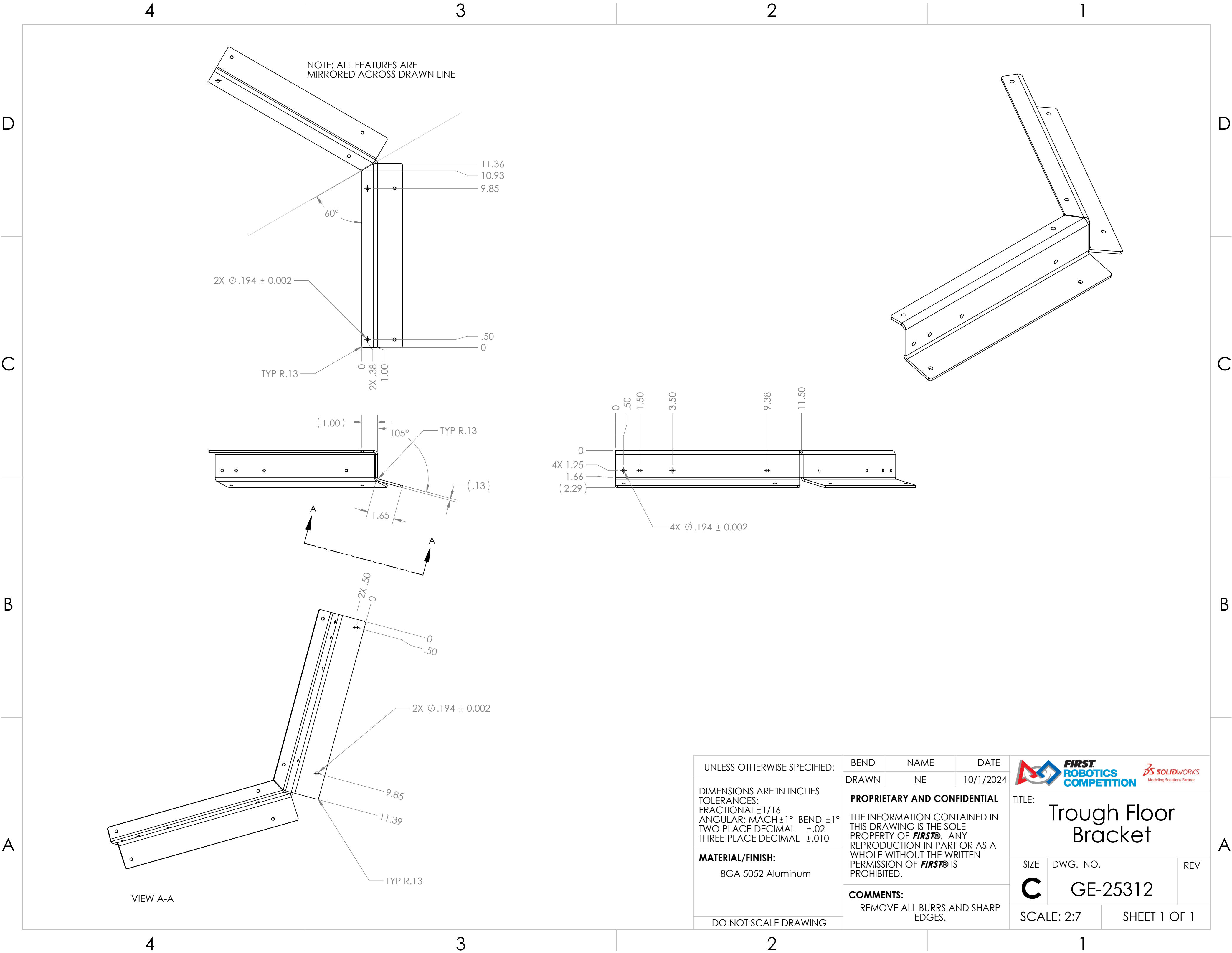
COMMENTS:
REMOVE ALL BURRS AND SHARP EDGES.

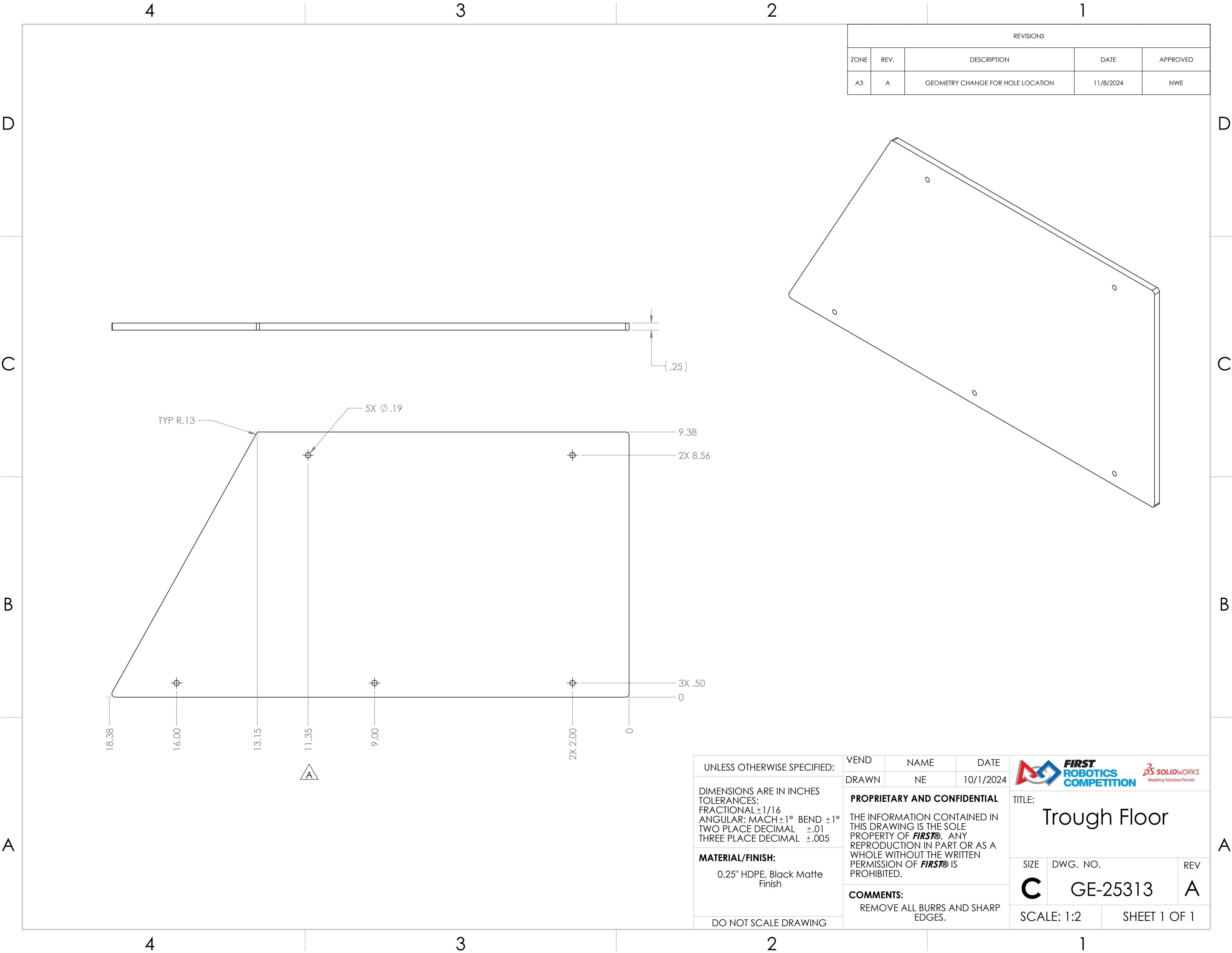
TITLE: Goal Slice Assembly		
SIZE C	DWG. NO. GE-25310	REV
SCALE: 1:12		SHEET 4 OF 5





UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL $\pm 1/16$ ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$ TWO PLACE DECIMAL $\pm .01$ THREE PLACE DECIMAL $\pm .005$ MATERIAL/FINISH: DO NOT SCALE DRAWING	VEND	NAME	DATE	 	
	DRAWN	NE	10/1/2024		
	PROPRIETARY AND CONFIDENTIAL THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF FIRST® . ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FIRST® IS PROHIBITED.			TITLE: Goal Slice Assembly	
	COMMENTS: REMOVE ALL BURRS AND SHARP EDGES.			SIZE C	DWG. NO. GE-25310
			SCALE: 1:6		SHEET 5 OF 5

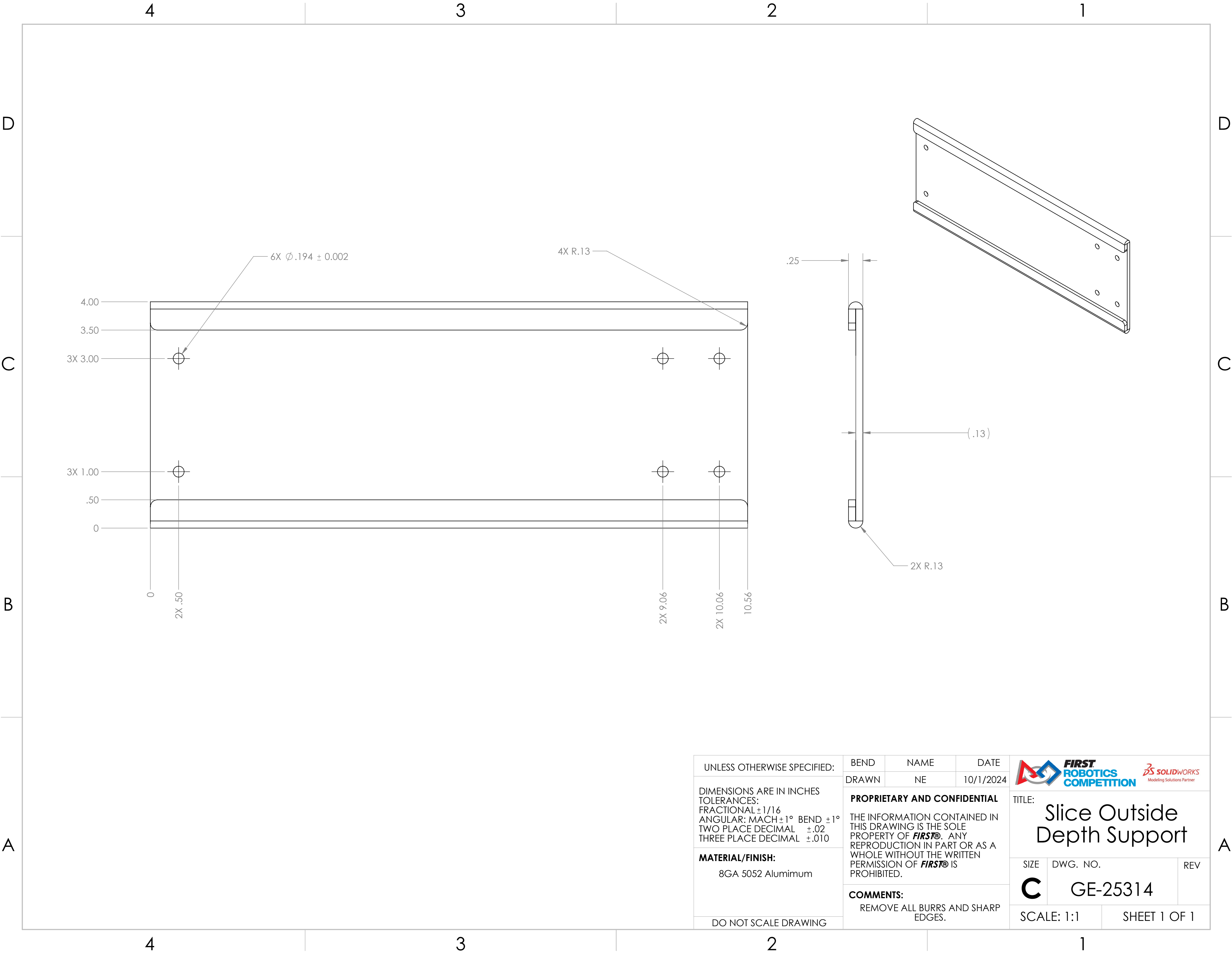






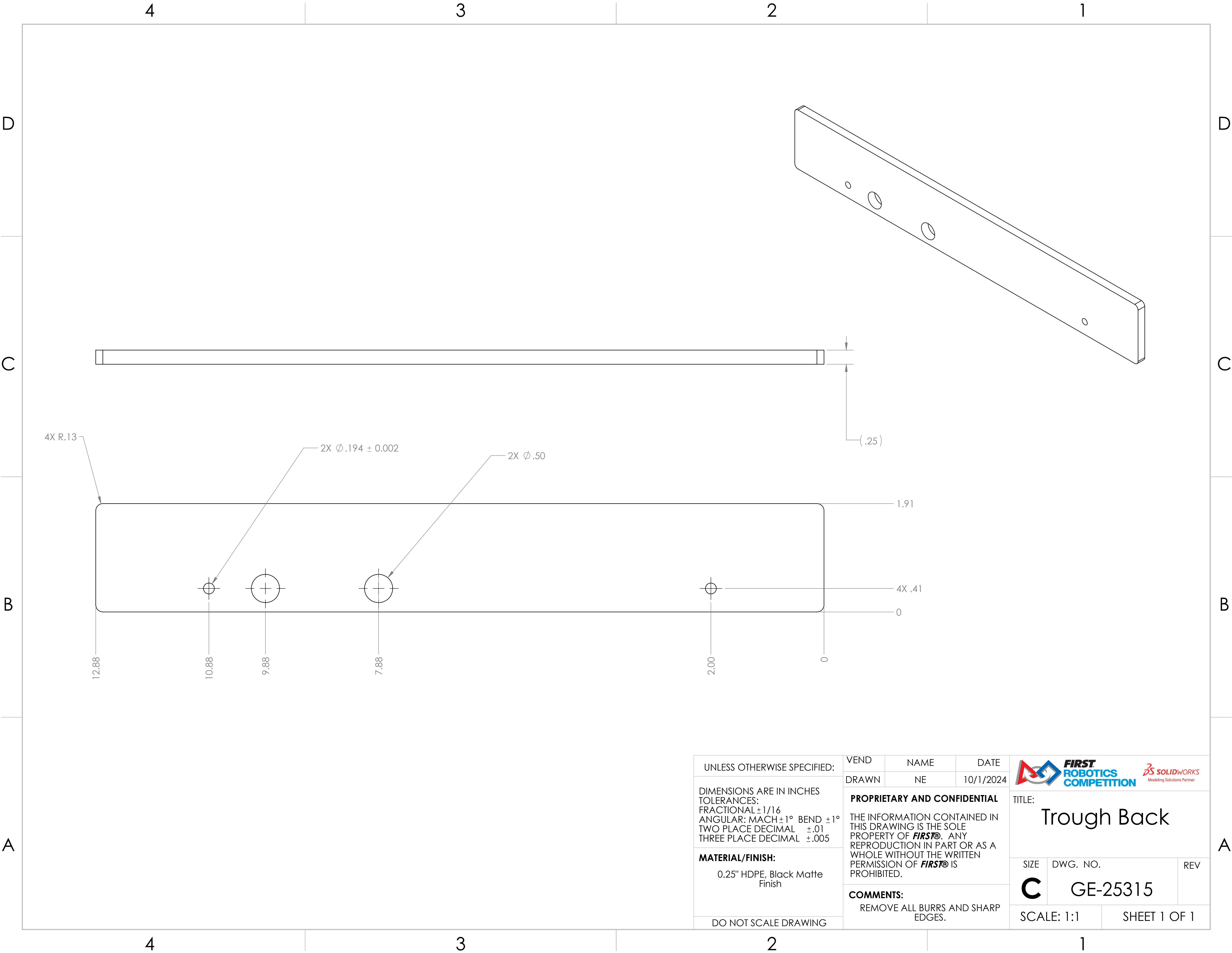


REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
A3	A	GEOMETRY CHANGE FOR HOLE LOCATION	11/8/2024	NWE

UNLESS OTHERWISE SPECIFIED:	VEND	NAME	DATE	<div></div> TITLE: <h1>Trough Floor</h1>		
	DRAWN	NE	10/1/2024			
DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL $\pm 1/16$ ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$ TWO PLACE DECIMAL $\pm .01$ THREE PLACE DECIMAL $\pm .005$	PROPRIETARY AND CONFIDENTIAL THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF FIRST® . ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FIRST® IS PROHIBITED.			SIZE	DWG. NO.	REV
	COMMENTS: REMOVE ALL BURRS AND SHARP EDGES.			C	GE-25313	A
MATERIAL/FINISH: 0.25" HDPE, Black Matte Finish				SCALE: 1:2		SHEET 1 OF 1
DO NOT SCALE DRAWING						



UNLESS OTHERWISE SPECIFIED:		BEND	NAME	DATE	<div></div>	
		DRAWN	NE	10/1/2024		
<p>DIMENSIONS ARE IN INCHES</p> <p>TOLERANCES:</p> <p>FRACTIONAL $\pm 1/16$</p> <p>ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$</p> <p>TWO PLACE DECIMAL $\pm .02$</p> <p>THREE PLACE DECIMAL $\pm .010$</p>		PROPRIETARY AND CONFIDENTIAL			TITLE: <h1>Slice Outside Depth Support</h1>	
		THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF FIRST® . ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FIRST® IS PROHIBITED.				
		MATERIAL/FINISH:		COMMENTS:		
		8GA 5052 Alumimum		REMOVE ALL BURRS AND SHARP EDGES.		
DO NOT SCALE DRAWING					SCALE: 1:1	
					SHEET 1 OF 1	



UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN INCHES
TOLERANCES:
FRACTIONAL $\pm 1/16$
ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$
TWO PLACE DECIMAL $\pm .01$
THREE PLACE DECIMAL $\pm .005$

MATERIAL/FINISH:
0.25" HDPE, Black Matte Finish

DO NOT SCALE DRAWING

VEND	NAME	DATE
DRAWN	NE	10/1/2024

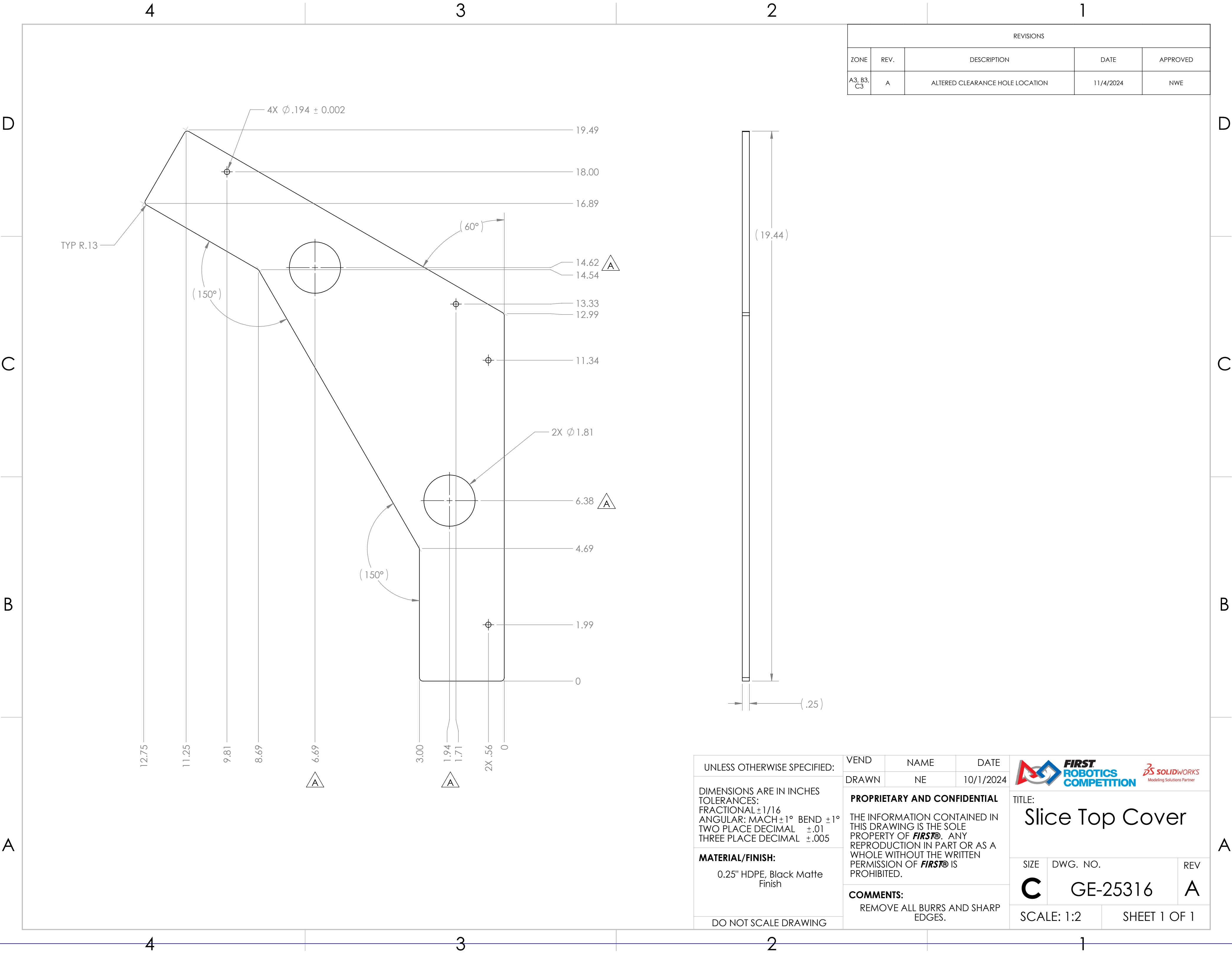
PROPRIETARY AND CONFIDENTIAL
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COMMENTS:
REMOVE ALL BURRS AND SHARP EDGES.



TITLE: Trough Back		
SIZE C	DWG. NO. GE-25315	REV

SCALE: 1:1 SHEET 1 OF 1



UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN INCHES
TOLERANCES:
FRACTIONAL $\pm 1/16$
ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$
TWO PLACE DECIMAL $\pm .01$
THREE PLACE DECIMAL $\pm .005$

MATERIAL/FINISH:
0.25" HDPE, Black Matte Finish

DO NOT SCALE DRAWING

VEND	NAME	DATE
DRAWN	NE	10/1/2024

PROPRIETARY AND CONFIDENTIAL
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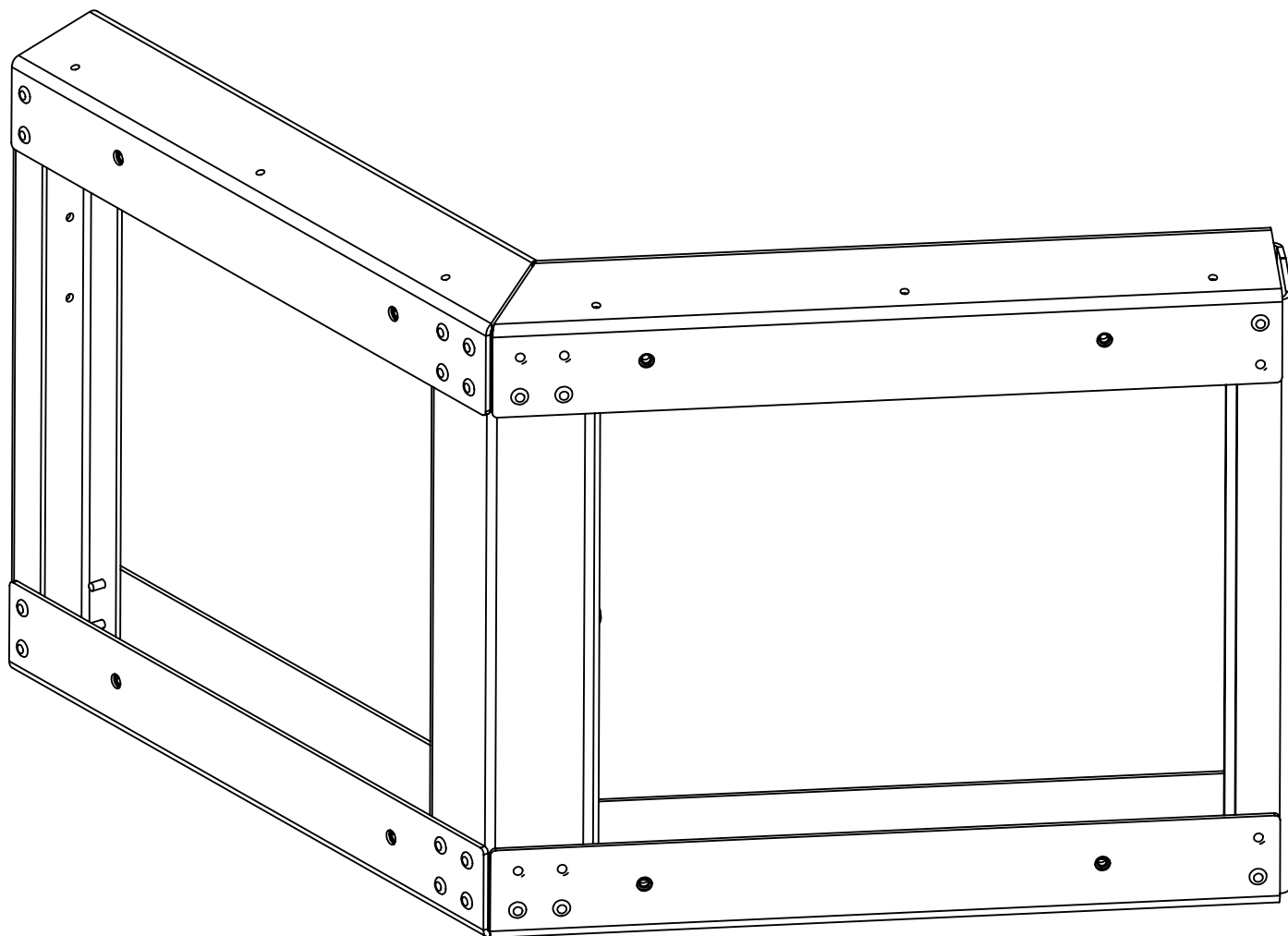
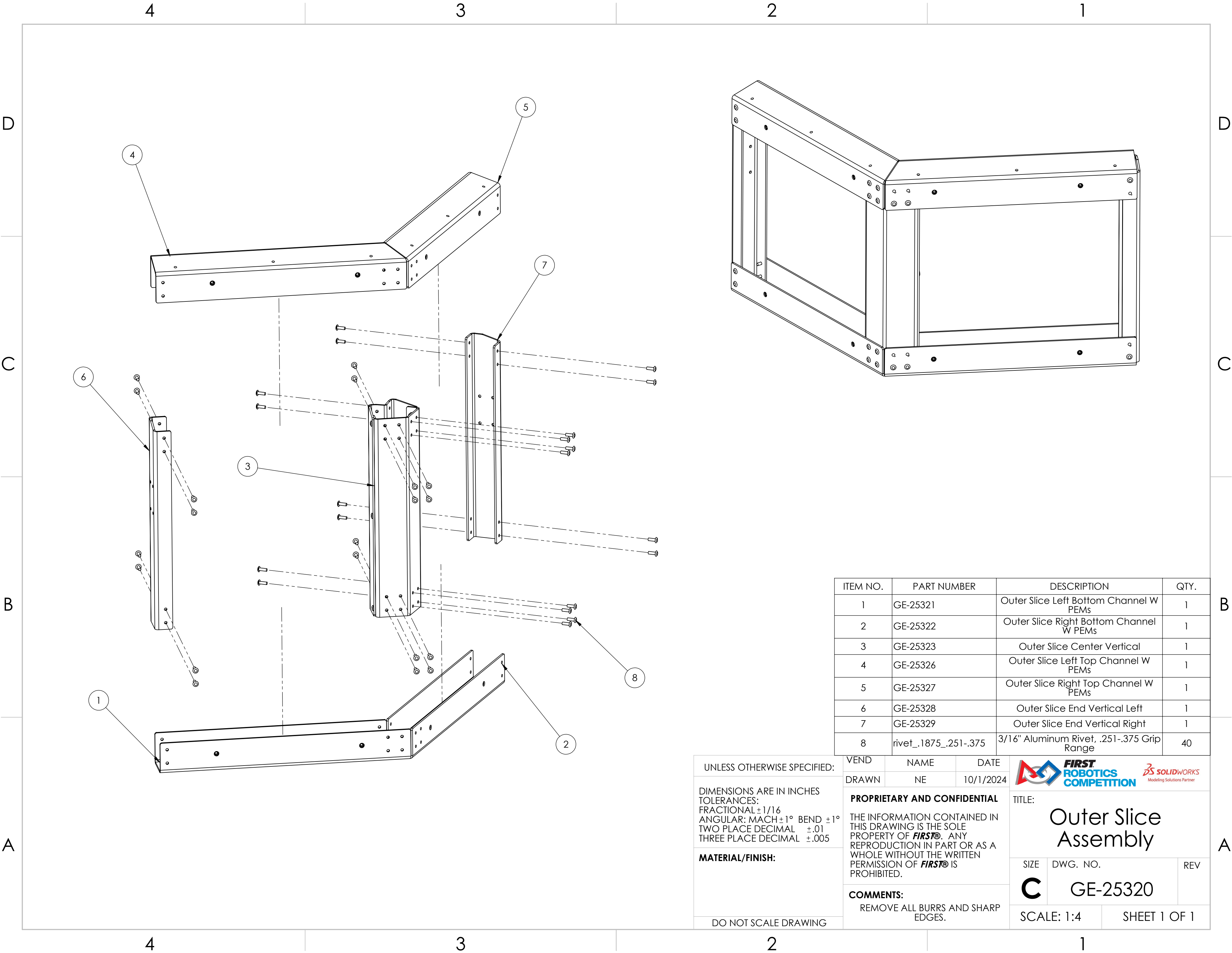
COMMENTS:
REMOVE ALL BURRS AND SHARP EDGES.



TITLE:

Slice Top Cover

SIZE C	DWG. NO. GE-25316	REV A
SCALE: 1:2		SHEET 1 OF 1



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	GE-25321	Outer Slice Left Bottom Channel W PEMs	1
2	GE-25322	Outer Slice Right Bottom Channel W PEMs	1
3	GE-25323	Outer Slice Center Vertical	1
4	GE-25326	Outer Slice Left Top Channel W PEMs	1
5	GE-25327	Outer Slice Right Top Channel W PEMs	1
6	GE-25328	Outer Slice End Vertical Left	1
7	GE-25329	Outer Slice End Vertical Right	1
8	rivet_.1875_.251-.375	3/16" Aluminum Rivet, .251-.375 Grip Range	40

UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN INCHES
TOLERANCES:
FRACTIONAL $\pm 1/16$
ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$
TWO PLACE DECIMAL $\pm .01$
THREE PLACE DECIMAL $\pm .005$

MATERIAL/FINISH:

DO NOT SCALE DRAWING

VEND

NAME

DATE

DRAWN

NE



10/1/2024

PROPRIETARY AND CONFIDENTIAL

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COMMENTS:

REMOVE ALL BURRS AND SHARP EDGES.



TITLE:

Outer Slice Assembly

SIZE

DWG. NO.

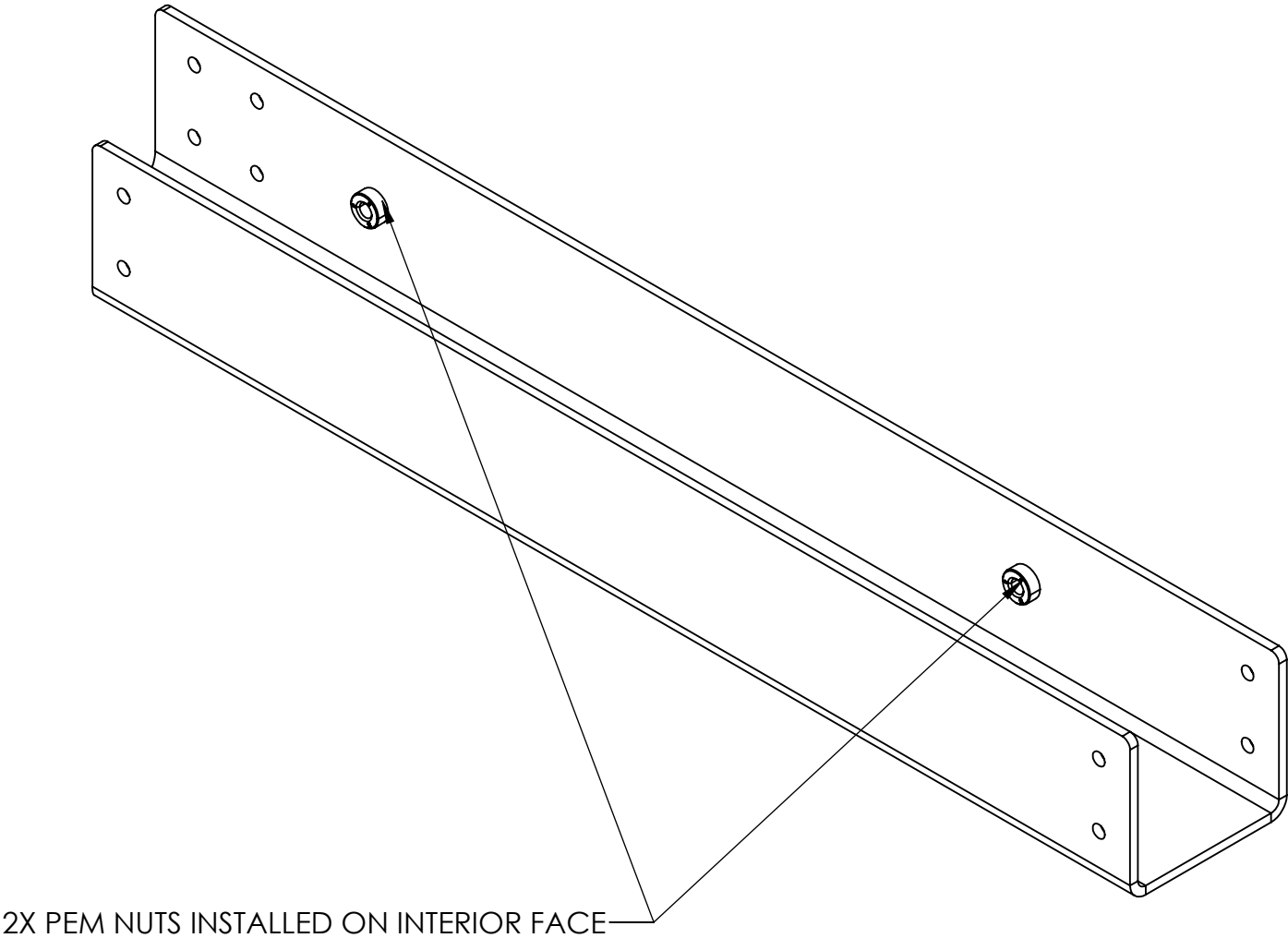
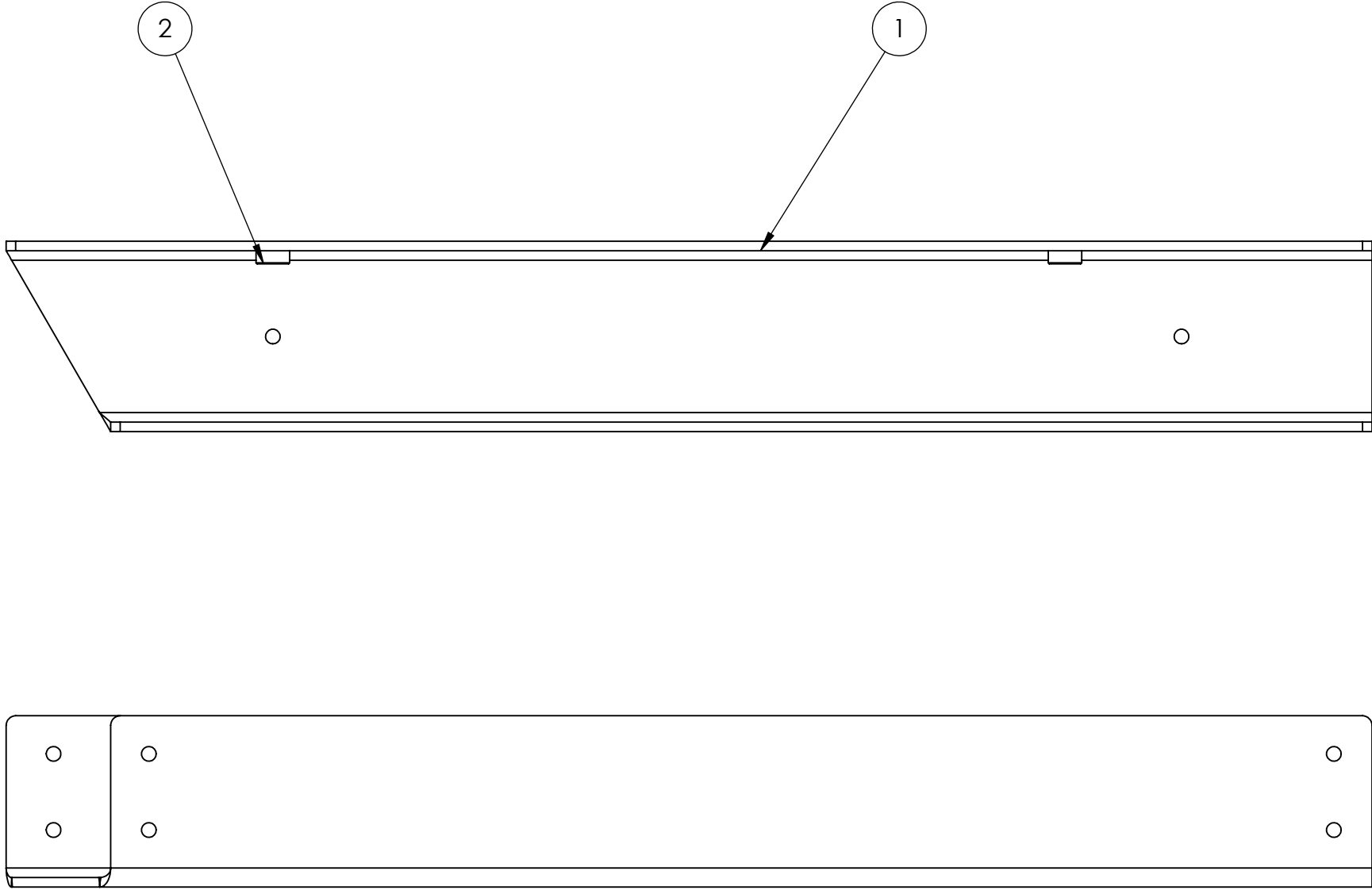
REV

C

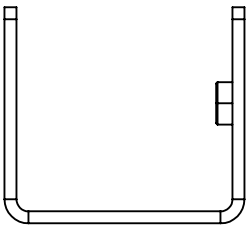
GE-25320

SCALE: 1:4

SHEET 1 OF 1

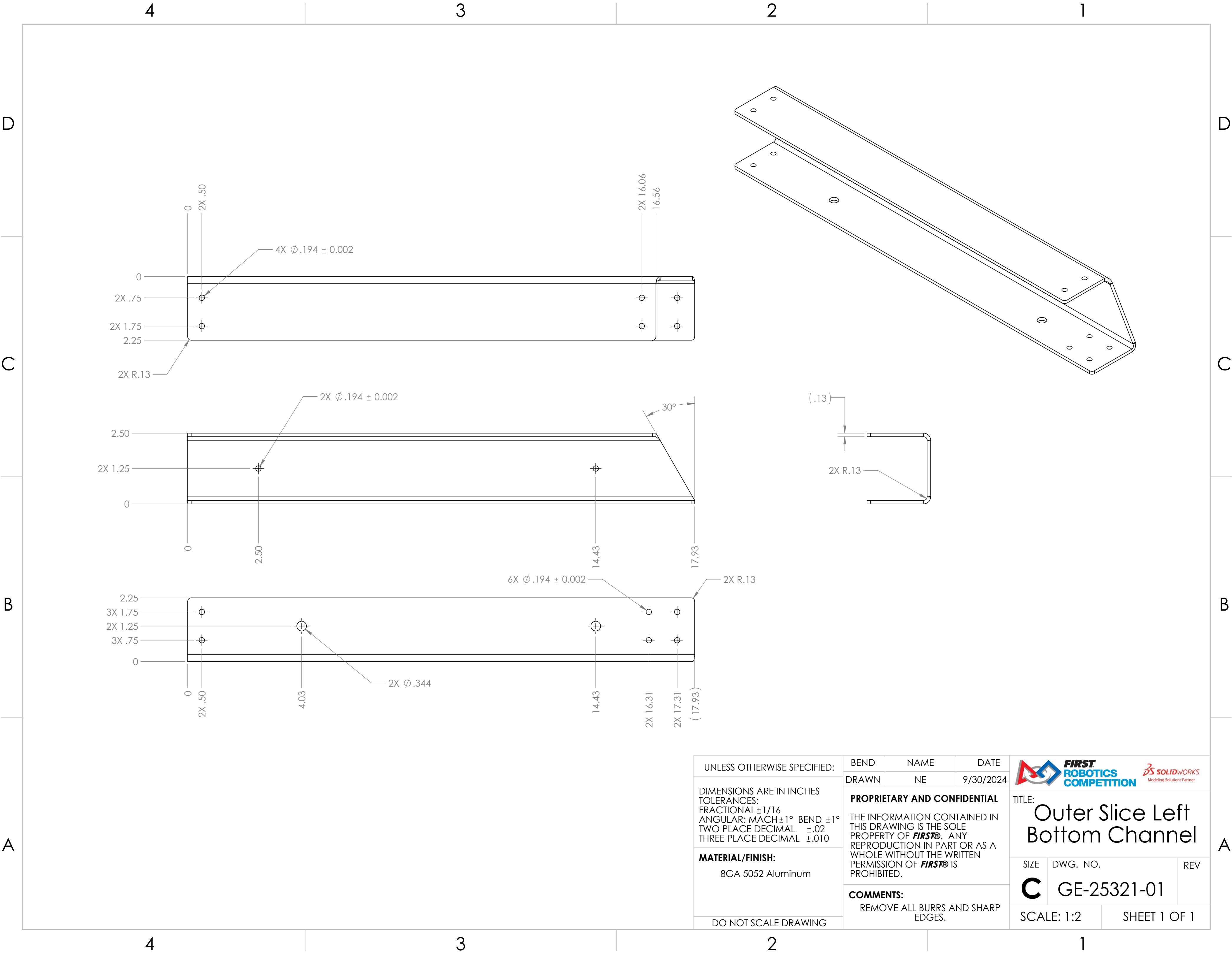




2X PEM NUTS INSTALLED ON INTERIOR FACE

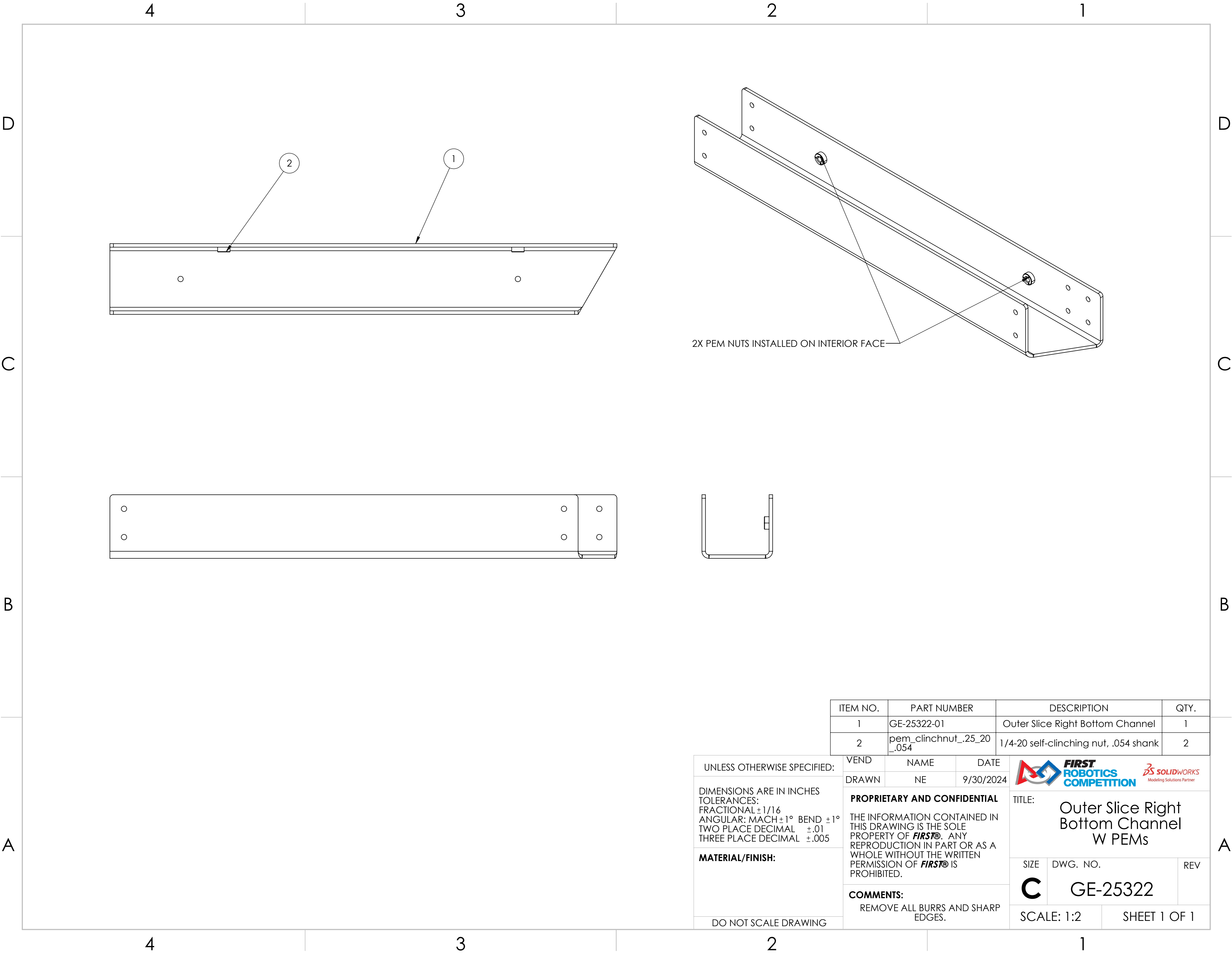


ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	GE-25321-01	Outer Slice Left Bottom Channel	1
2	pem_clinchnut_.25_20 _.054	1/4-20 self-clinching nut, .054 shank	2



UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ±1/16 ANGULAR: MACH ±1° BEND ±1° TWO PLACE DECIMAL ±.01 THREE PLACE DECIMAL ±.005 MATERIAL/FINISH: DO NOT SCALE DRAWING	VEND	NAME	DATE	<div><div><div><div></div><div>FIRST</div><div>ROBOTICS</div><div>COMPETITION</div></div><div><div>3D</div><div>SOLIDWORKS</div><div>Modeling Solutions Partner</div></div></div><div>TITLE: Outer Slice Left Bottom Channel W PEMs</div></div>			
	DRAWN	NE	9/30/2024				
	PROPRIETARY AND CONFIDENTIAL THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF FIRST®. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FIRST® IS PROHIBITED. COMMENTS: REMOVE ALL BURRS AND SHARP EDGES.				SIZE	DWG. NO.	REV
				C	GE-25321		
				SCALE: 1:2		SHEET 1 OF 1	

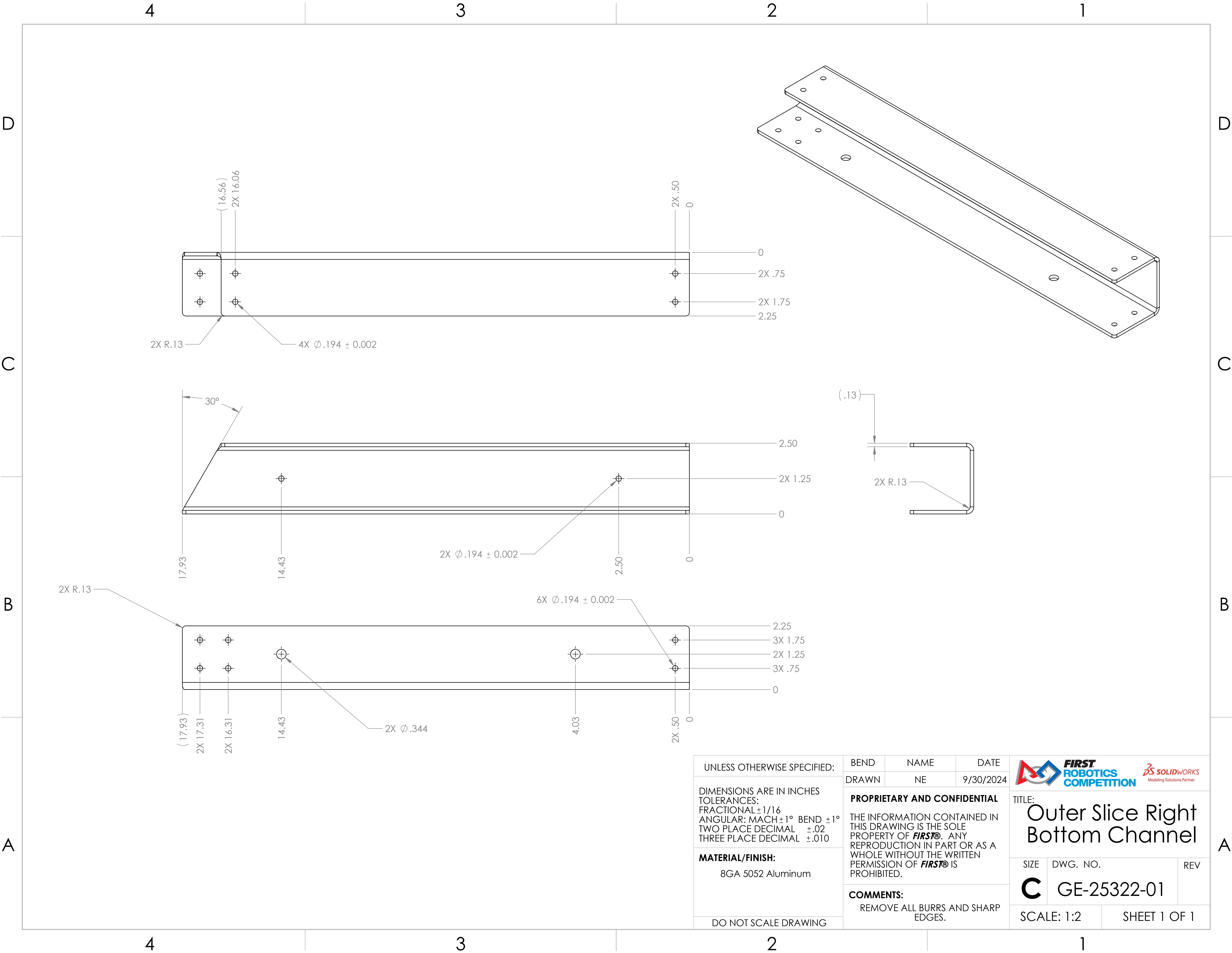




UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL $\pm 1/16$ ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$ TWO PLACE DECIMAL $\pm .02$ THREE PLACE DECIMAL $\pm .010$ MATERIAL/FINISH: 8GA 5052 Aluminum DO NOT SCALE DRAWING	BEND	NAME	DATE	<div></div> <div>TITLE: Outer Slice Left Bottom Channel</div>		
	DRAWN	NE	9/30/2024			
	PROPRIETARY AND CONFIDENTIAL THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF FIRST® . ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FIRST® IS PROHIBITED.			SIZE	DWG. NO.	REV
	COMMENTS: REMOVE ALL BURRS AND SHARP EDGES.			C	GE-25321-01	
SCALE: 1:2			SHEET 1 OF 1			

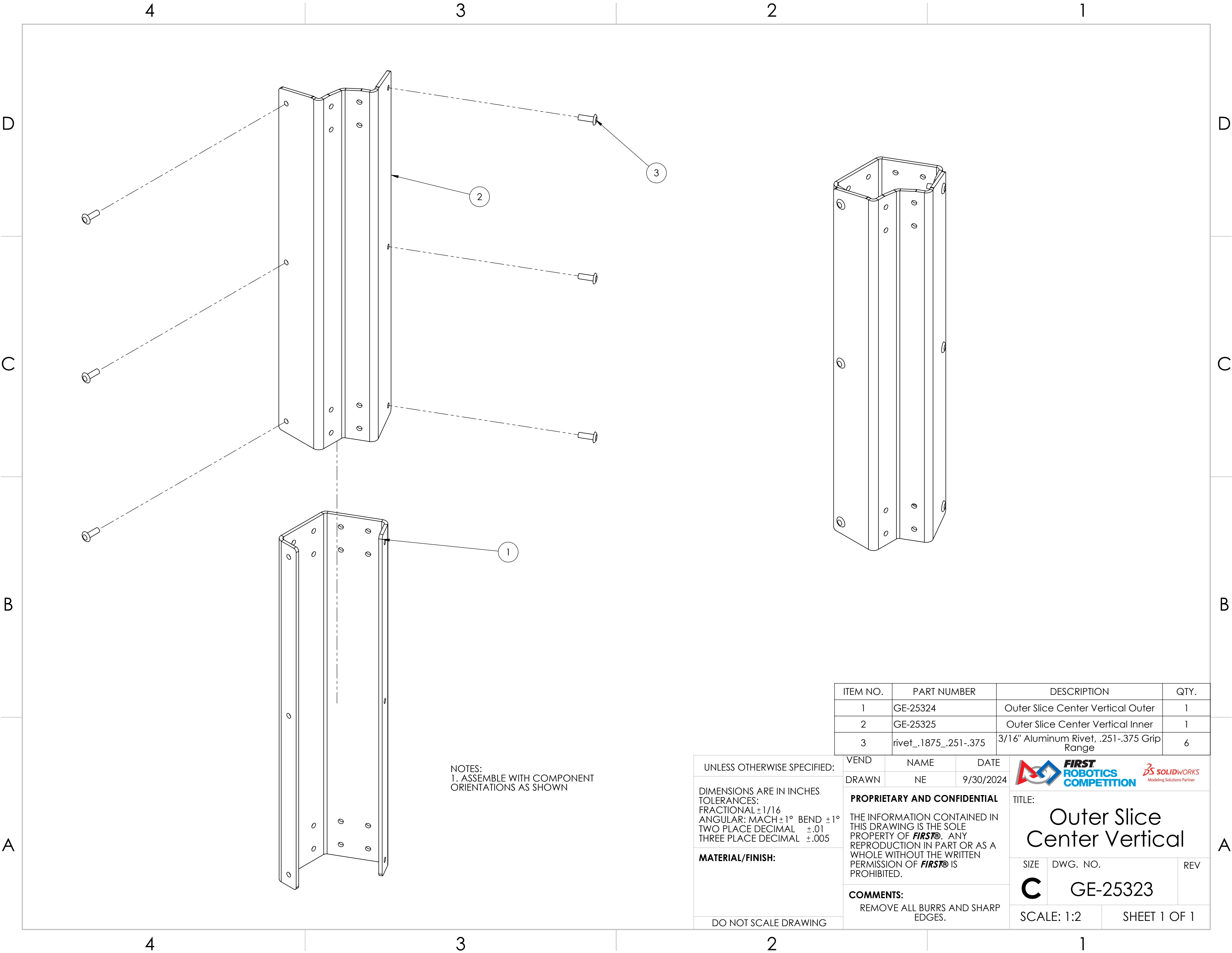


ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	GE-25322-01	Outer Slice Right Bottom Channel	1
2	pem_clinchnut_.25_20_.054	1/4-20 self-clinching nut, .054 shank	2

UNLESS OTHERWISE SPECIFIED:	VEND	NAME	DATE	<div></div>		
	DRAWN	NE	9/30/2024			
DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ±1/16 ANGULAR: MACH ±1° BEND ±1° TWO PLACE DECIMAL ±.01 THREE PLACE DECIMAL ±.005	PROPRIETARY AND CONFIDENTIAL			TITLE: Outer Slice Right Bottom Channel W PEMs		
	THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF FIRST® . ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FIRST® IS PROHIBITED.					
MATERIAL/FINISH:	COMMENTS:			SIZE	DWG. NO.	REV
	REMOVE ALL BURRS AND SHARP EDGES.			C	GE-25322	
DO NOT SCALE DRAWING				SCALE: 1:2		SHEET 1 OF 1





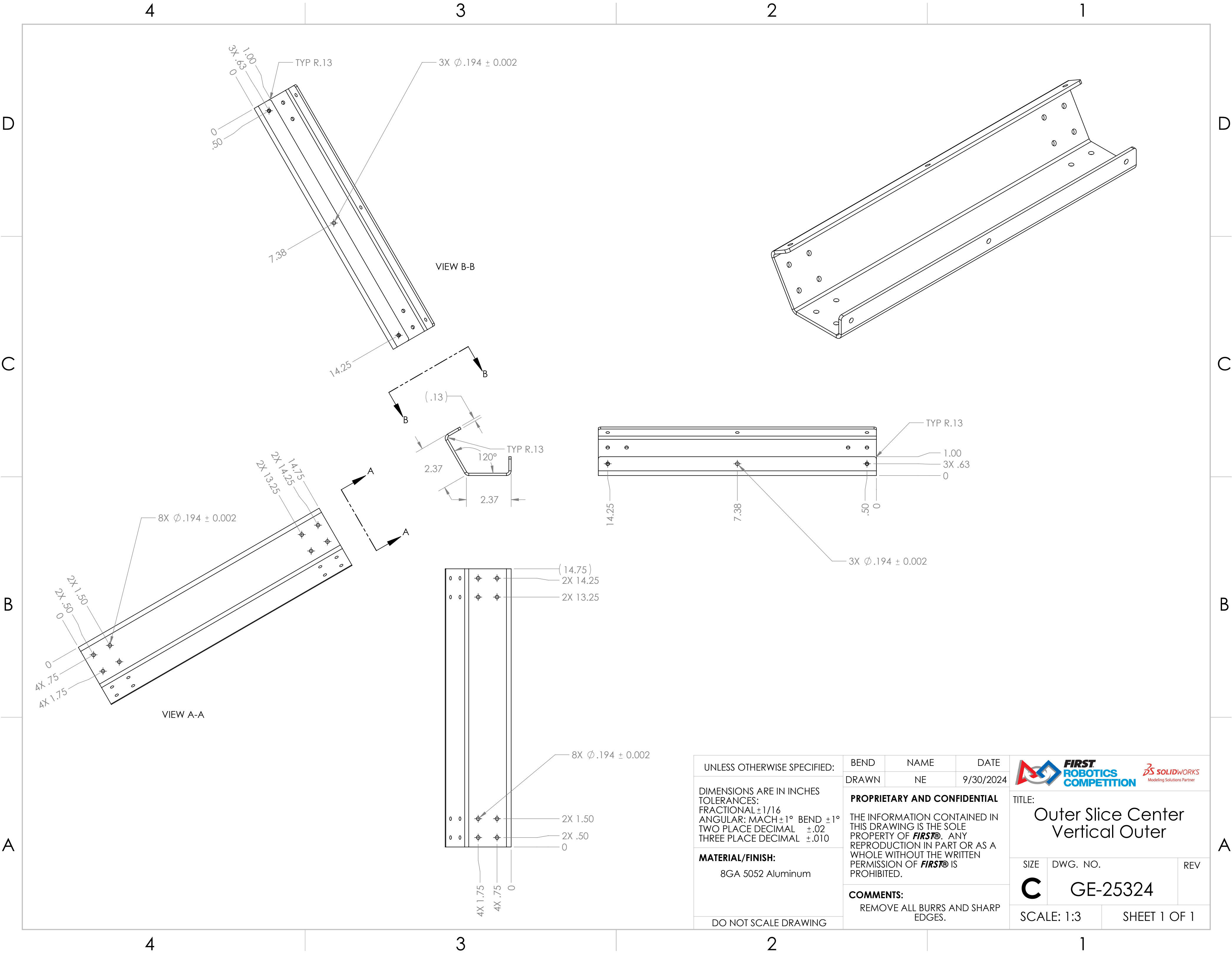
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL $\pm 1/16$ ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$ TWO PLACE DECIMAL $\pm .02$ THREE PLACE DECIMAL $\pm .010$ MATERIAL/FINISH: 8GA 5052 Aluminum DO NOT SCALE DRAWING	BEND	NAME	DATE	<div></div> <div>TITLE: Outer Slice Right Bottom Channel</div>	
	DRAWN	NE	9/30/2024		
	PROPRIETARY AND CONFIDENTIAL THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF FIRST® . ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FIRST® IS PROHIBITED.			SIZE	DWG. NO.
	COMMENTS: REMOVE ALL BURRS AND SHARP EDGES.			C	GE-25322-01
SCALE: 1:2		SHEET 1 OF 1			



NOTES:
1. ASSEMBLE WITH COMPONENT
ORIENTATIONS AS SHOWN

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	GE-25324	Outer Slice Center Vertical Outer	1
2	GE-25325	Outer Slice Center Vertical Inner	1
3	rivet_.1875_.251-.375	3/16" Aluminum Rivet, .251-.375 Grip Range	6

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ±1/16 ANGULAR: MACH ±1° BEND ±1° TWO PLACE DECIMAL ±.01 THREE PLACE DECIMAL ±.005 MATERIAL/FINISH: DO NOT SCALE DRAWING	VEND	NAME	DATE	<div></div>		
	DRAWN	NE	9/30/2024			
	PROPRIETARY AND CONFIDENTIAL THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF FIRST® . ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FIRST® IS PROHIBITED. COMMENTS: REMOVE ALL BURRS AND SHARP EDGES.				TITLE: Outer Slice Center Vertical	
				SIZE	DWG. NO.	REV
				C	GE-25323	
				SCALE: 1:2		SHEET 1 OF 1



UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN INCHES
TOLERANCES:
FRACTIONAL $\pm 1/16$
ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$
TWO PLACE DECIMAL $\pm .02$
THREE PLACE DECIMAL $\pm .010$


MATERIAL/FINISH:
8GA 5052 Aluminum

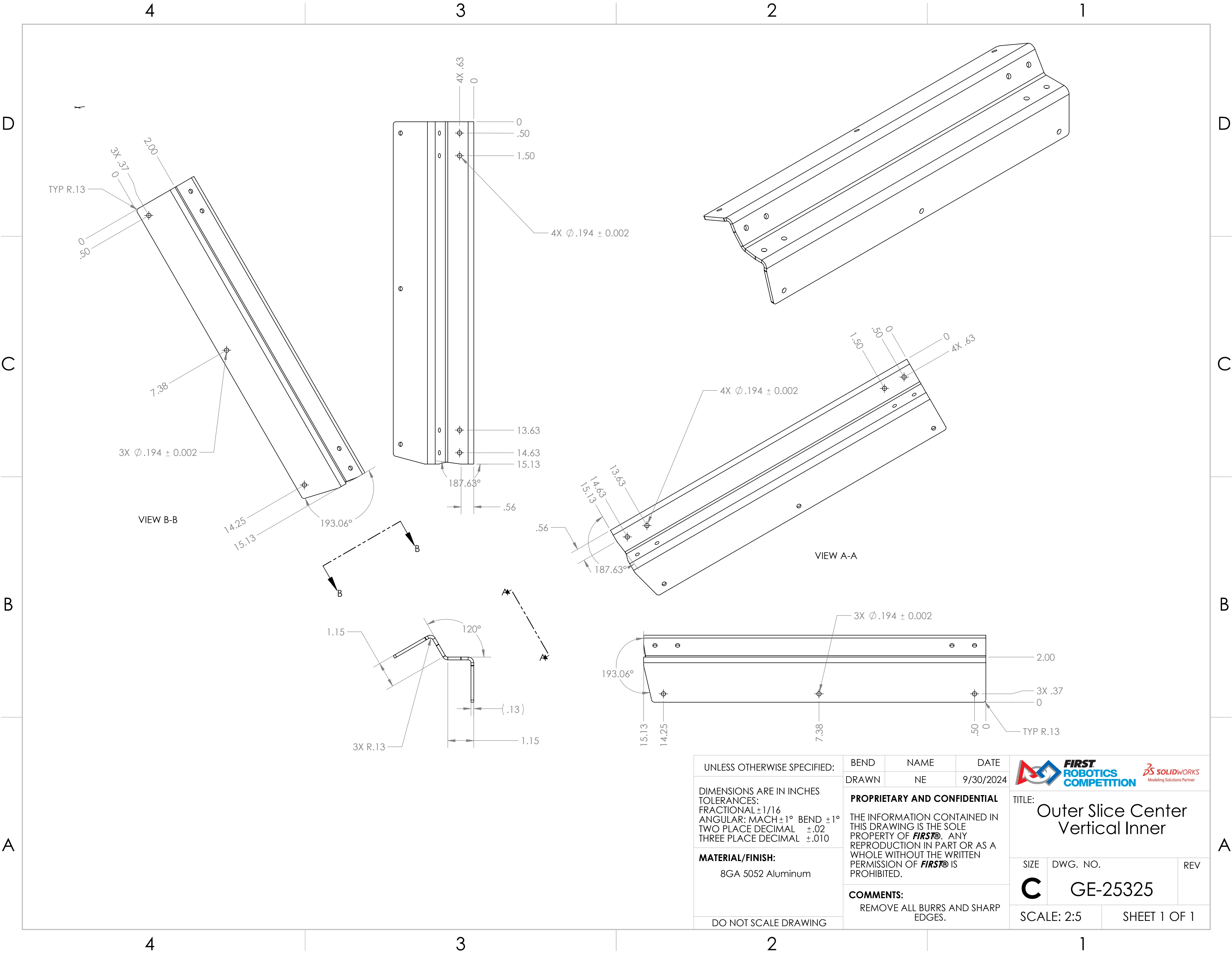
DO NOT SCALE DRAWING



BEND	NAME	DATE
DRAWN	NE	9/30/2024

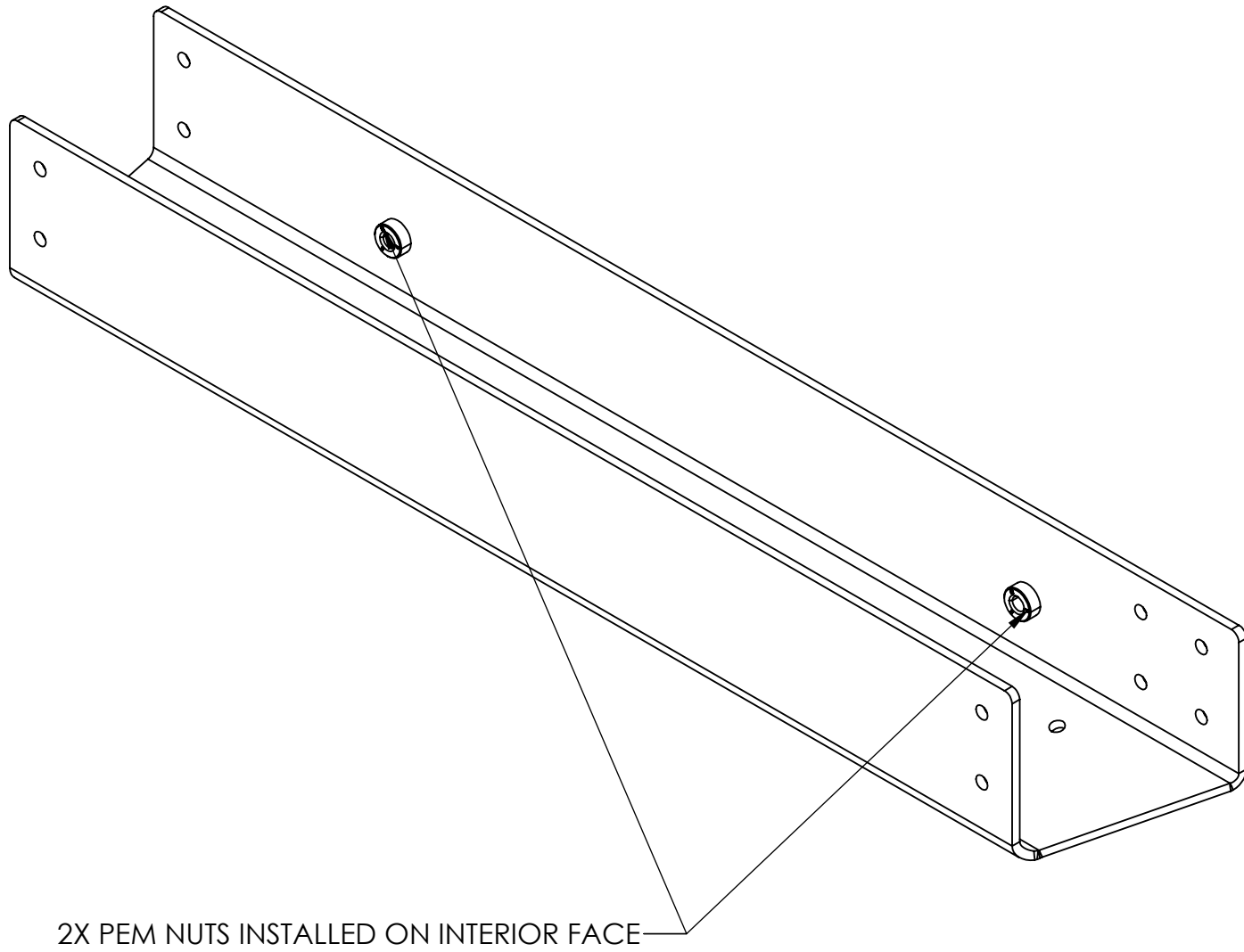
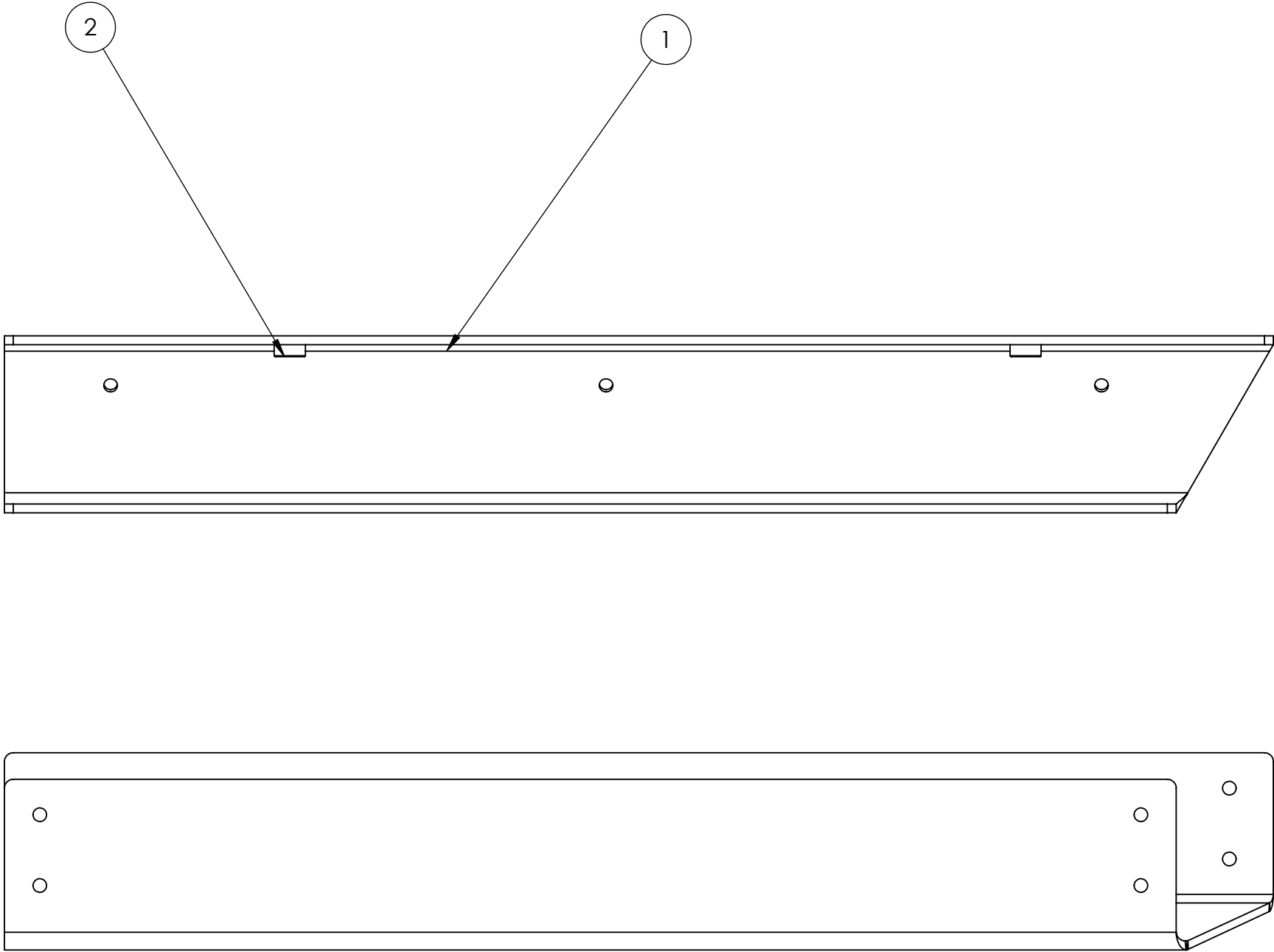
PROPRIETARY AND CONFIDENTIAL
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF **FIRST®**. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF **FIRST®** IS PROHIBITED.



COMMENTS:
REMOVE ALL BURRS AND SHARP EDGES.

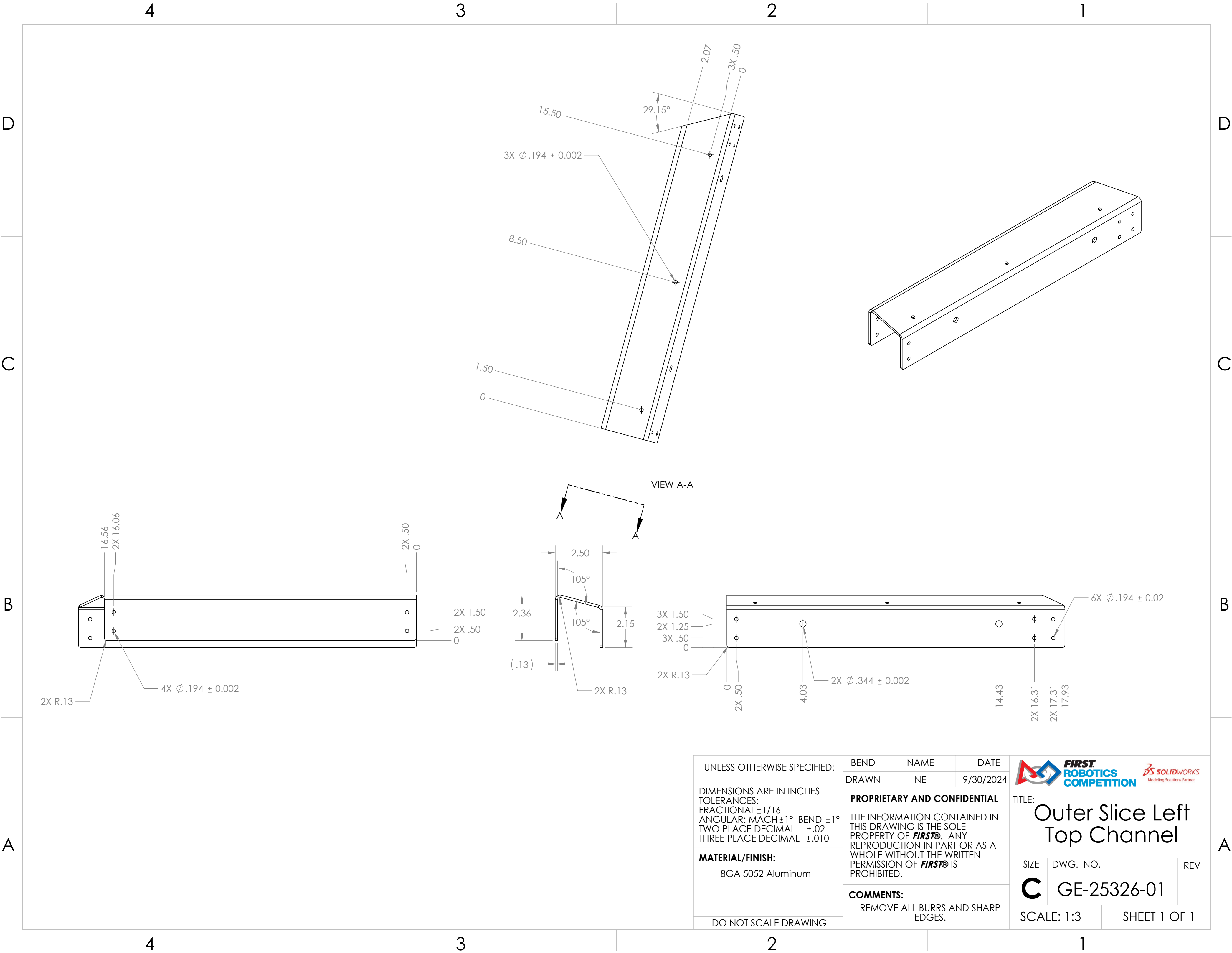
		
TITLE: Outer Slice Center Vertical Outer		
SIZE C	DWG. NO. GE-25324	REV
SCALE: 1:3		SHEET 1 OF 1



UNLESS OTHERWISE SPECIFIED:	BEND	NAME	DATE	<div><div></div><div>TITLE: Outer Slice Center Vertical Inner</div></div>	
	DRAWN	NE	9/30/2024		
DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ±1/16 ANGULAR: MACH ±1° BEND ±1° TWO PLACE DECIMAL ±.02 THREE PLACE DECIMAL ±.010	PROPRIETARY AND CONFIDENTIAL			SIZE	
	THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF FIRST® . ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FIRST® IS PROHIBITED.				
MATERIAL/FINISH: 8GA 5052 Aluminum	COMMENTS:			DWG. NO.	
	REMOVE ALL BURRS AND SHARP EDGES.			REV	
DO NOT SCALE DRAWING				C	GE-25325
				SCALE: 2:5	
				SHEET 1 OF 1	



		ITEM NO.		PART NUMBER		DESCRIPTION		QTY.			
		1		GE-25326-01		Outer Slice Left Top Channel		1			
		2		pem_clinchnut_.25_20_.054		1/4-20 self-clinching nut, .054 shank		2			
UNLESS OTHERWISE SPECIFIED:				VEND		NAME		DATE			
<p>DIMENSIONS ARE IN INCHES</p> <p>TOLERANCES:</p> <p>FRACTIONAL $\pm 1/16$</p> <p>ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$</p> <p>TWO PLACE DECIMAL $\pm .01$</p> <p>THREE PLACE DECIMAL $\pm .005$</p>				DRAWN		NE		9/30/2024			
				<p>PROPRIETARY AND CONFIDENTIAL</p> <p>THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF FIRST®. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FIRST® IS PROHIBITED.</p>						<p>TITLE:</p> <p>Outer Slice Left Top Channel W PEMs</p>	
				<p>COMMENTS:</p> <p>REMOVE ALL BURRS AND SHARP EDGES.</p>							
				MATERIAL/FINISH:							
DO NOT SCALE DRAWING											
											
SIZE		DWG. NO.				REV					
C		GE-25326									
SCALE: 1:2				SHEET 1 OF 1							



UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN INCHES
TOLERANCES:
FRACTIONAL $\pm 1/16$
ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$
TWO PLACE DECIMAL $\pm .02$
THREE PLACE DECIMAL $\pm .010$

MATERIAL/FINISH:
8GA 5052 Aluminum

DO NOT SCALE DRAWING

BEND

DRAWN

PROPRIETARY AND CONFIDENTIAL
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF **FIRST®**. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF **FIRST®** IS PROHIBITED.

COMMENTS:
REMOVE ALL BURRS AND SHARP EDGES.

NAME

NE

DATE

9/30/2024

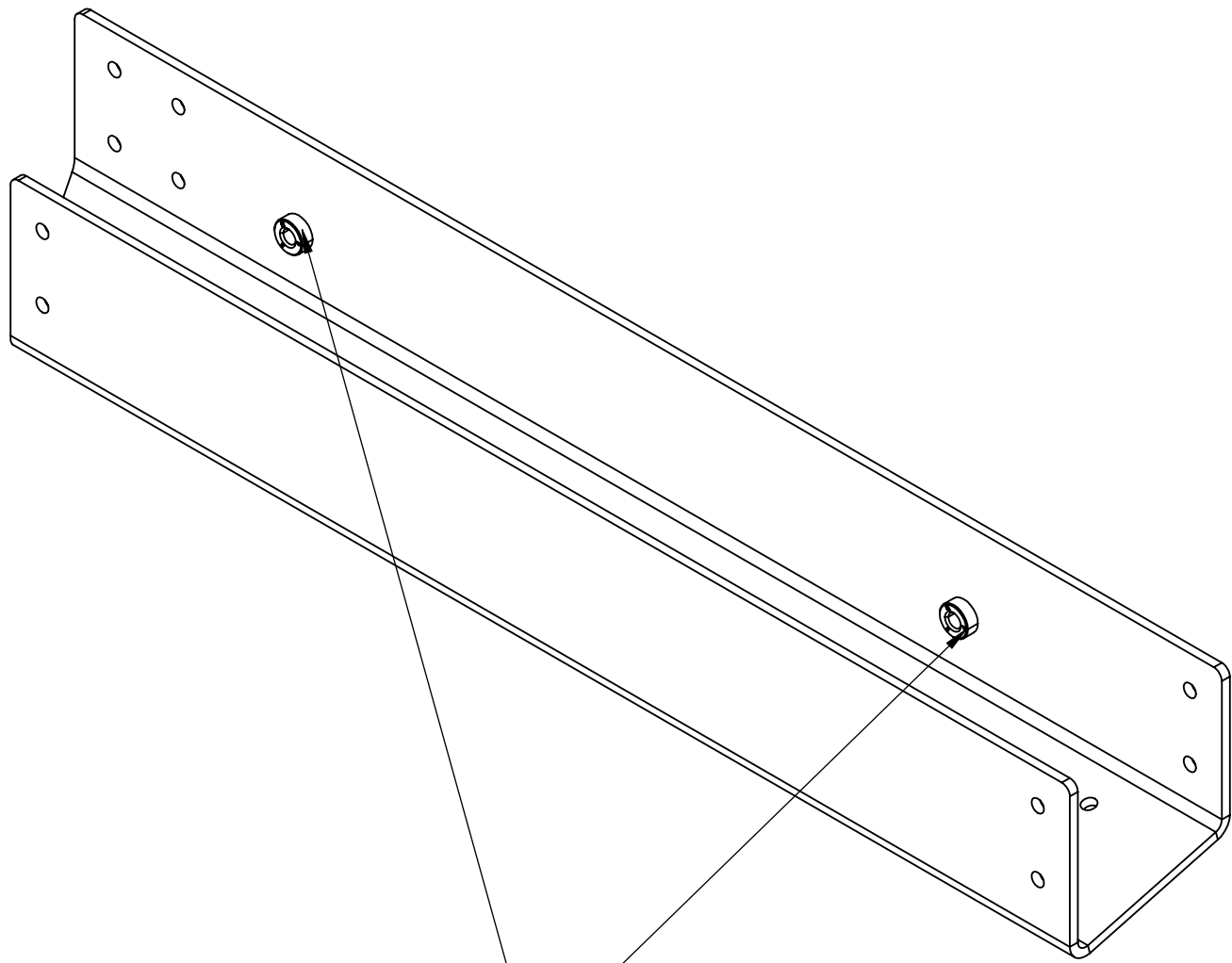
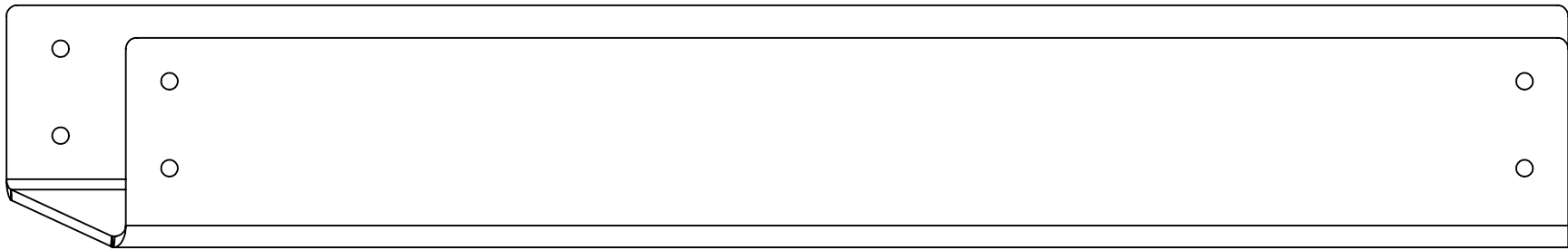
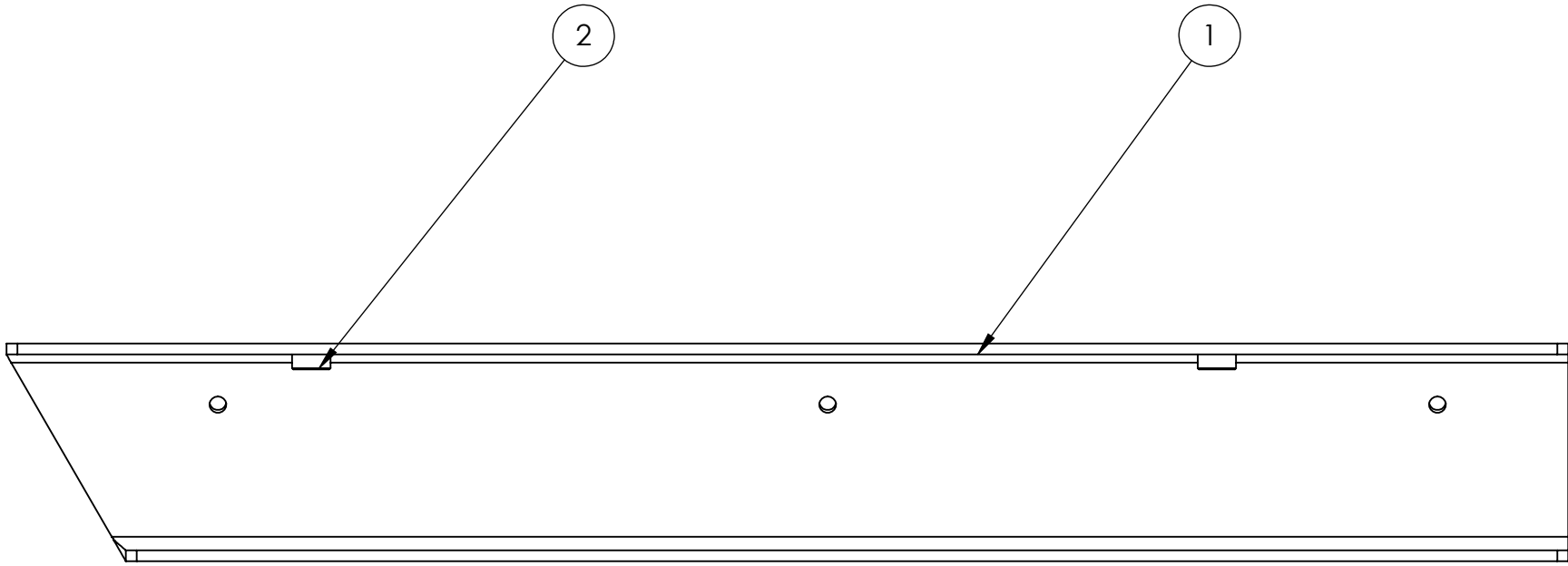


TITLE:
Outer Slice Left Top Channel

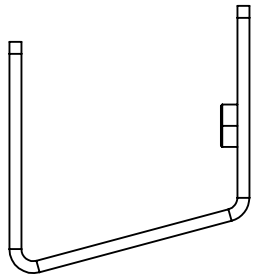
SIZE DWG. NO. REV

C GE-25326-01



SCALE: 1:3 SHEET 1 OF 1

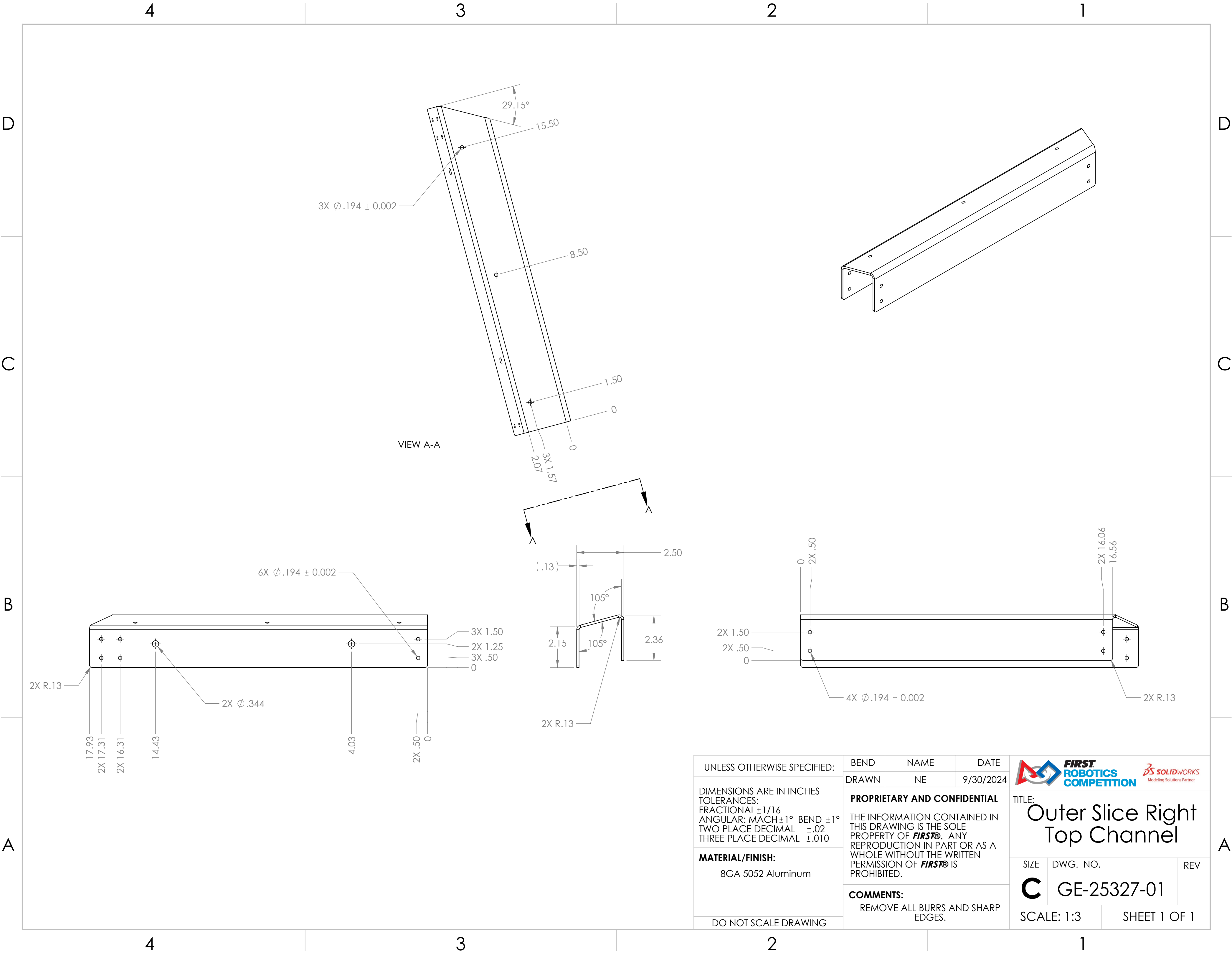


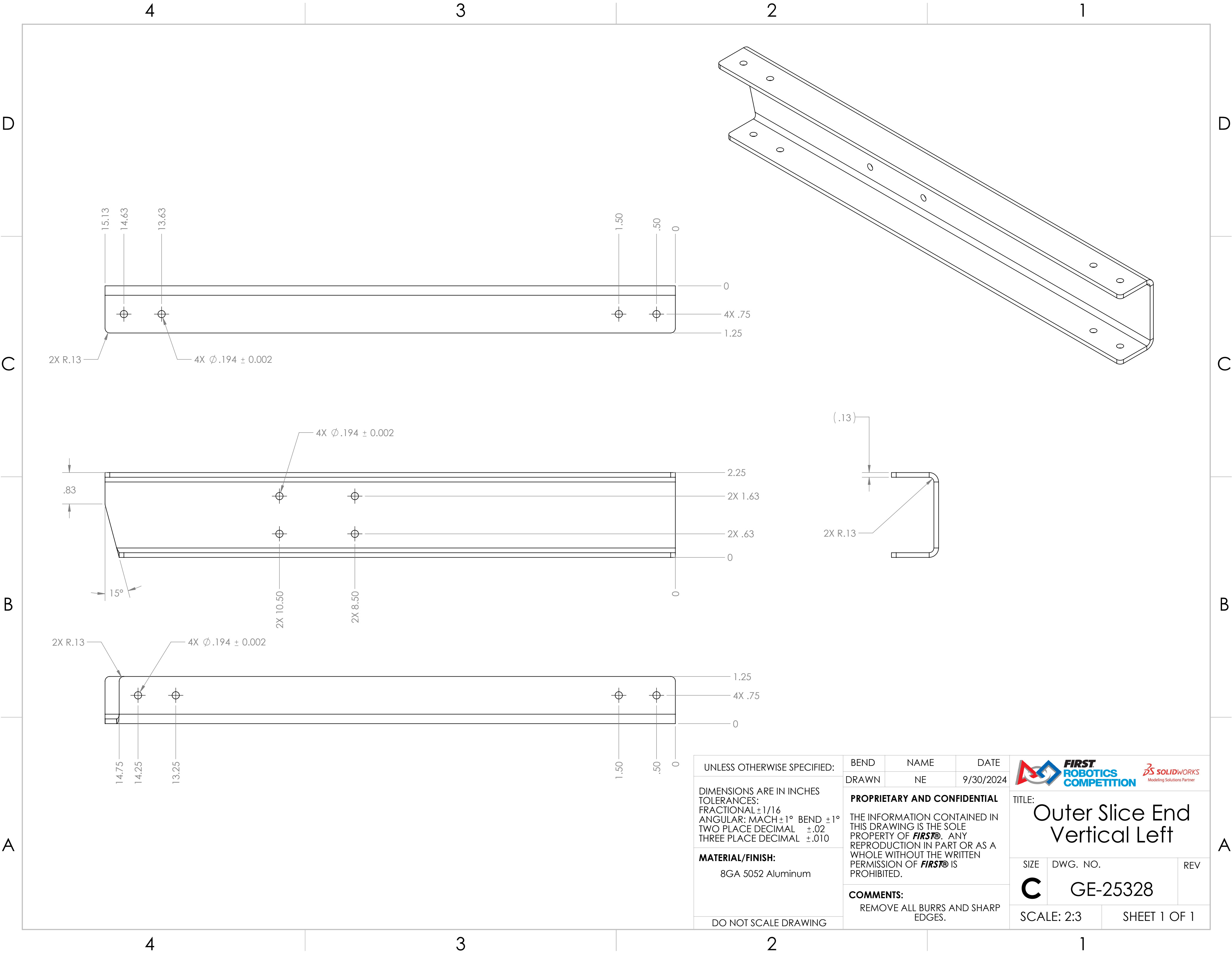
2X PEM NUTS INSTALLED ON INTERIOR FACE





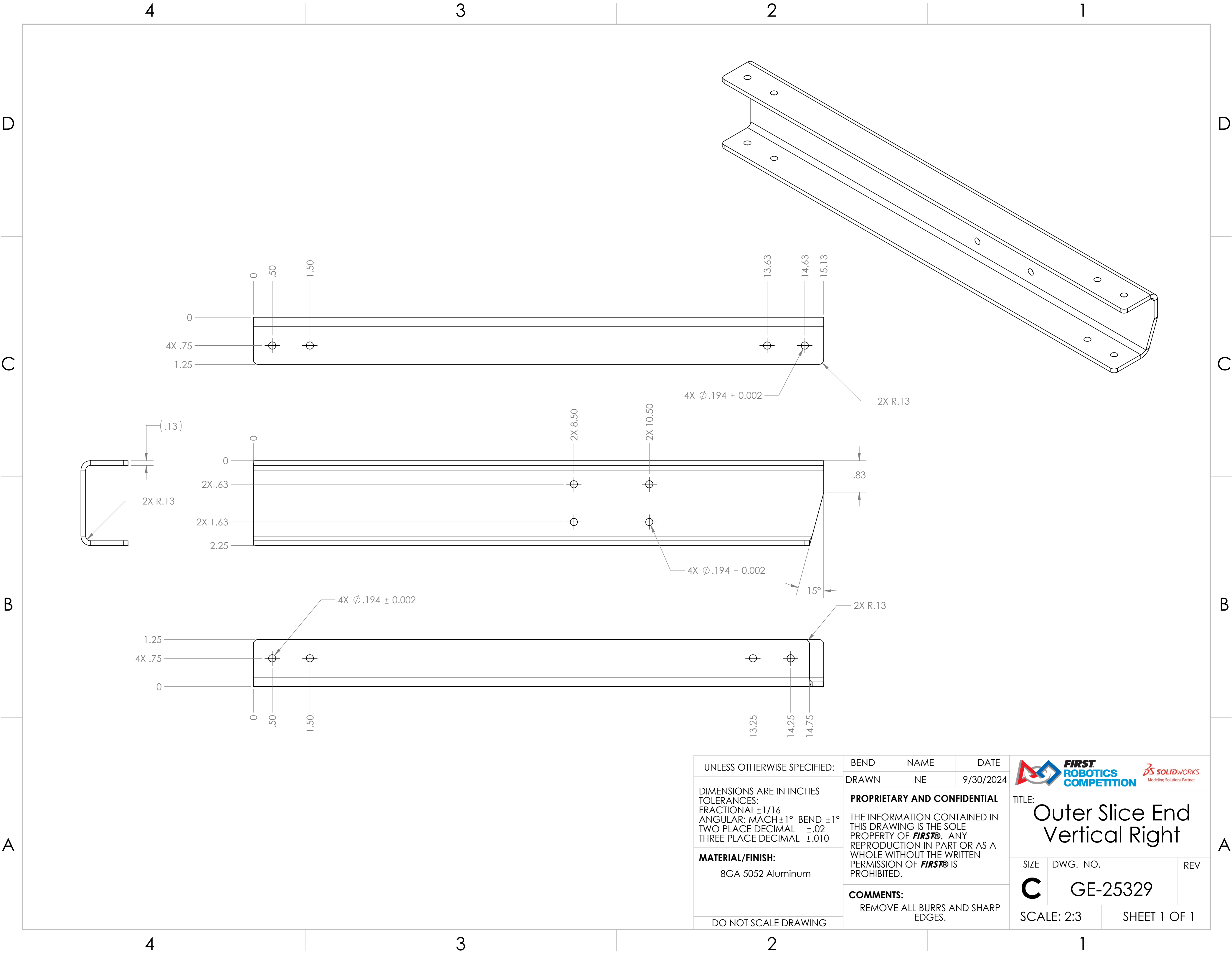
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	GE-25327-01	Outer Slice Right Top Channel	1
2	pem_clinchnut_.25_20_.054	1/4-20 self-clinching nut, .054 shank	2



UNLESS OTHERWISE SPECIFIED:	VEND	NAME	DATE	<div><div></div><div>TITLE: Outer Slice Right Top Channel W PEMs</div></div>	
	DRAWN	NE	9/30/2024		
DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ±1/16 ANGULAR: MACH ±1° BEND ±1° TWO PLACE DECIMAL ±.01 THREE PLACE DECIMAL ±.005	PROPRIETARY AND CONFIDENTIAL			SIZE C	
	THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF FIRST® . ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FIRST® IS PROHIBITED.				
MATERIAL/FINISH:	COMMENTS:			DWG. NO.	
	REMOVE ALL BURRS AND SHARP EDGES.			GE-25327	
DO NOT SCALE DRAWING				REV	
				SCALE: 1:2	
			SHEET 1 OF 1		

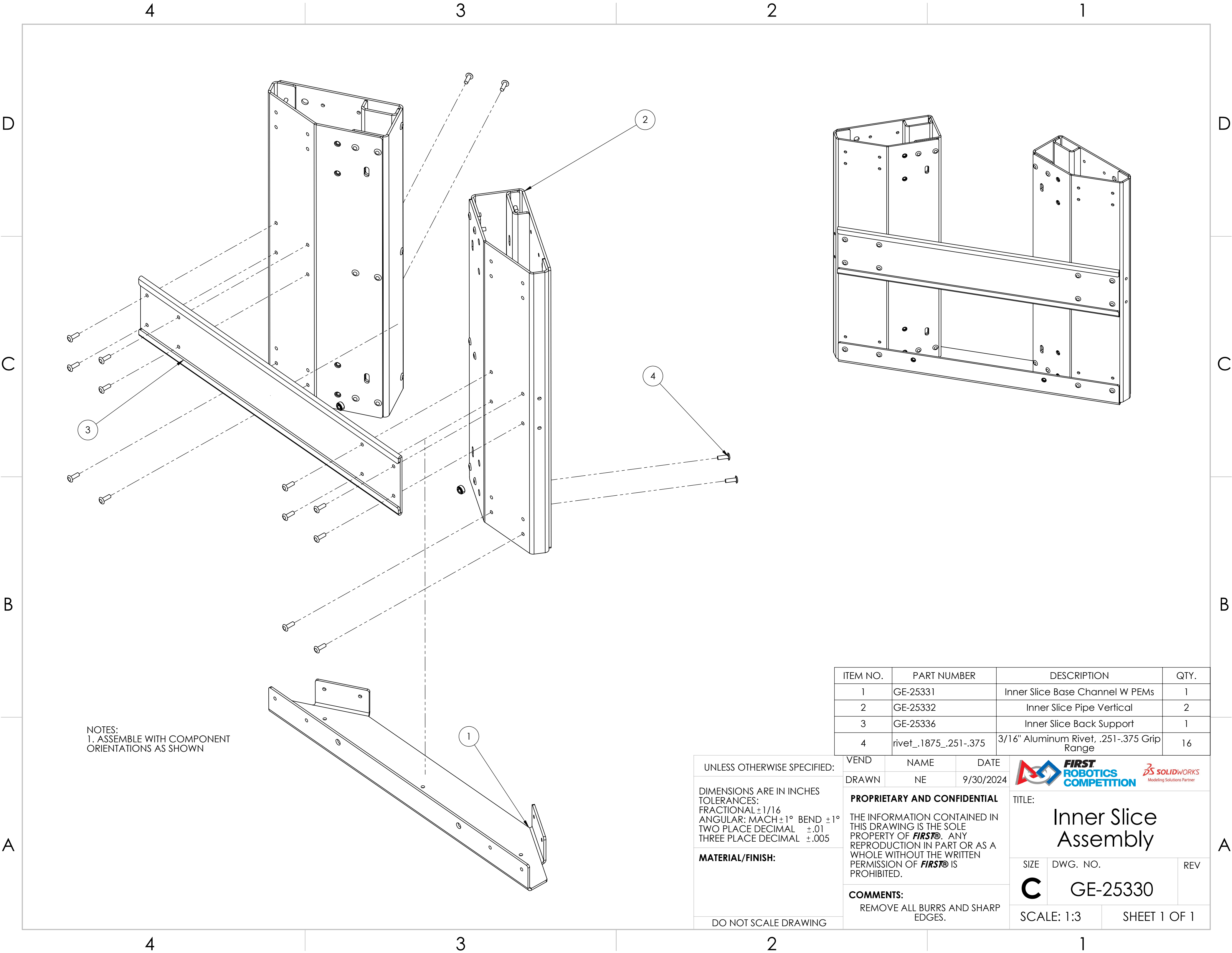




UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL $\pm 1/16$ ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$ TWO PLACE DECIMAL $\pm .02$ THREE PLACE DECIMAL $\pm .010$ MATERIAL/FINISH: 8GA 5052 Aluminum DO NOT SCALE DRAWING	BEND	NAME	DATE	<div></div> <div>TITLE: Outer Slice End Vertical Left</div>		
	DRAWN	NE	9/30/2024			
	PROPRIETARY AND CONFIDENTIAL THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF FIRST® . ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FIRST® IS PROHIBITED.			SIZE	DWG. NO.	REV
	COMMENTS: REMOVE ALL BURRS AND SHARP EDGES.			C	GE-25328	
			SCALE: 2:3		SHEET 1 OF 1	





UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ±1/16 ANGULAR: MACH ±1° BEND ±1° TWO PLACE DECIMAL ±.02 THREE PLACE DECIMAL ±.010 MATERIAL/FINISH: 8GA 5052 Aluminum DO NOT SCALE DRAWING	BEND	NAME	DATE	<div></div> <div>TITLE: <h1>Outer Slice End Vertical Right</h1></div>			
	DRAWN	NE	9/30/2024				
	PROPRIETARY AND CONFIDENTIAL THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF FIRST® . ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FIRST® IS PROHIBITED.				SIZE	DWG. NO.	REV
	COMMENTS: REMOVE ALL BURRS AND SHARP EDGES.				C	GE-25329	
				SCALE: 2:3		SHEET 1 OF 1	



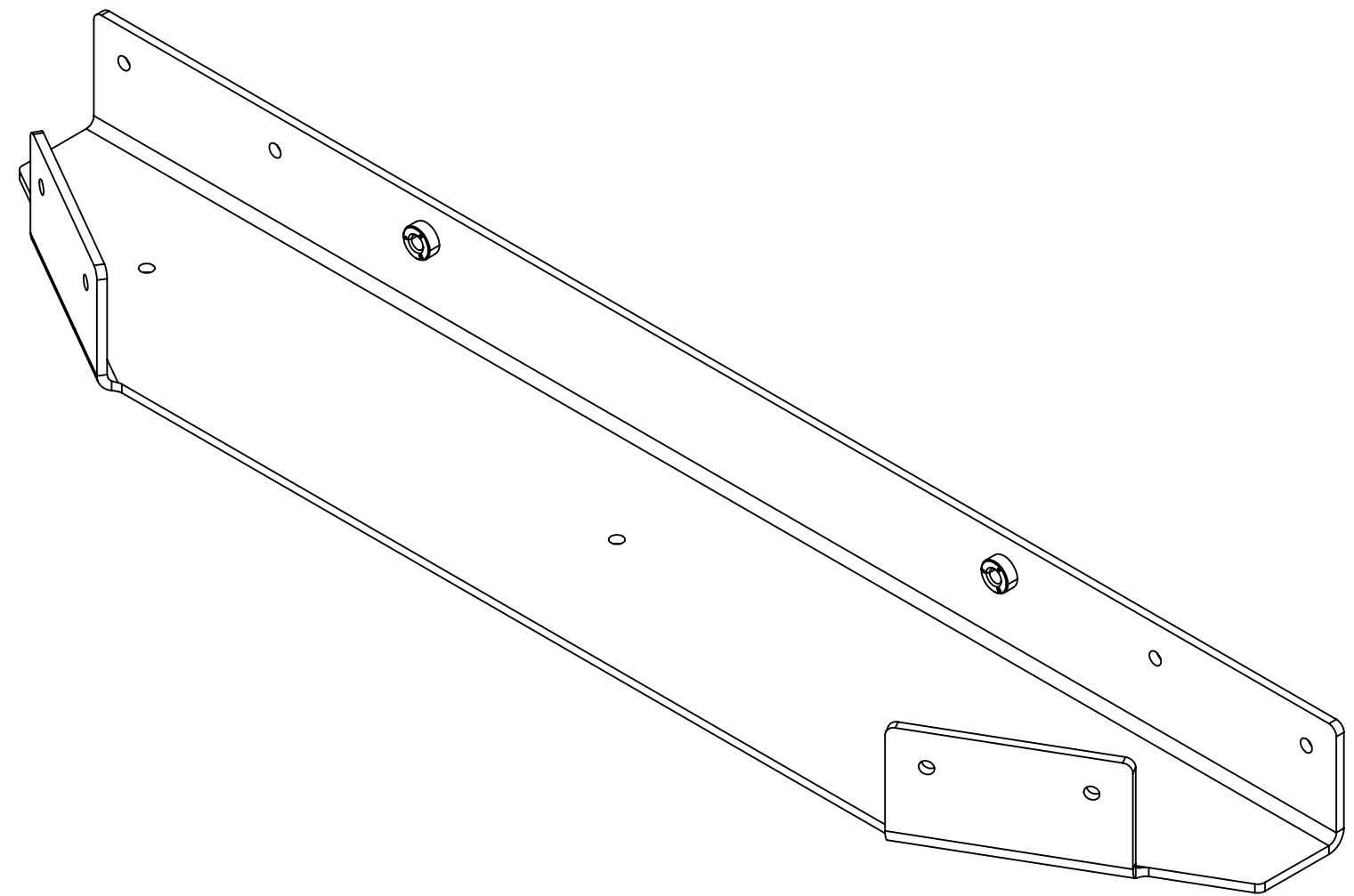
NOTES:
1. ASSEMBLE WITH COMPONENT
ORIENTATIONS AS SHOWN

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	GE-25331	Inner Slice Base Channel W PEMs	1
2	GE-25332	Inner Slice Pipe Vertical	2
3	GE-25336	Inner Slice Back Support	1
4	rivet_.1875_.251-.375	3/16" Aluminum Rivet, .251-.375 Grip Range	16

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ±1/16 ANGULAR: MACH ±1° BEND ±1° TWO PLACE DECIMAL ±.01 THREE PLACE DECIMAL ±.005 MATERIAL/FINISH: DO NOT SCALE DRAWING	VEND	NAME	DATE	<div></div>	
	DRAWN	NE	9/30/2024		
	PROPRIETARY AND CONFIDENTIAL			TITLE: Inner Slice Assembly	
	THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF FIRST® . ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FIRST® IS PROHIBITED.				
COMMENTS: REMOVE ALL BURRS AND SHARP EDGES.			SIZE	DWG. NO.	REV
			C	GE-25330	
			SCALE: 1:3		SHEET 1 OF 1



1

D



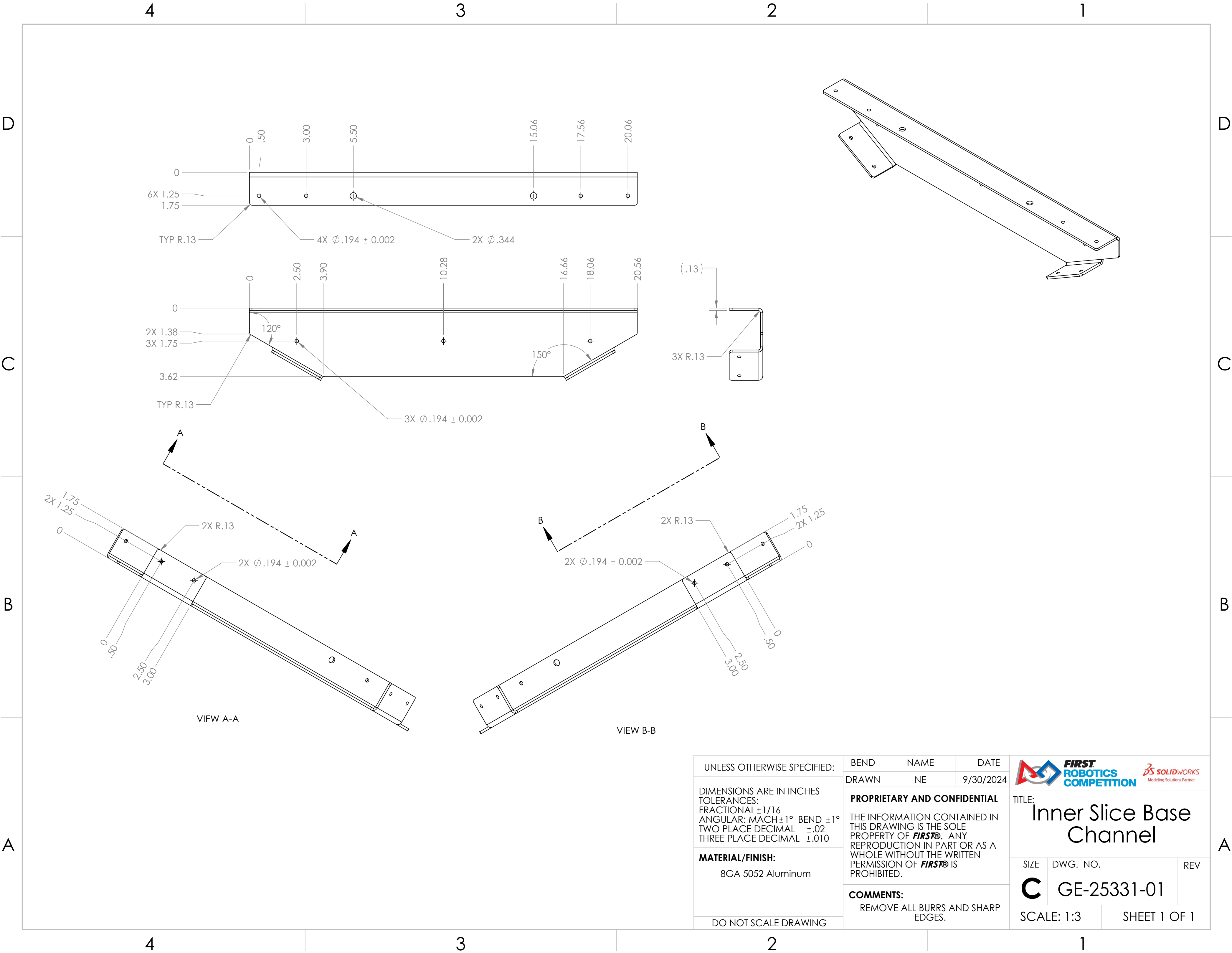
C



B

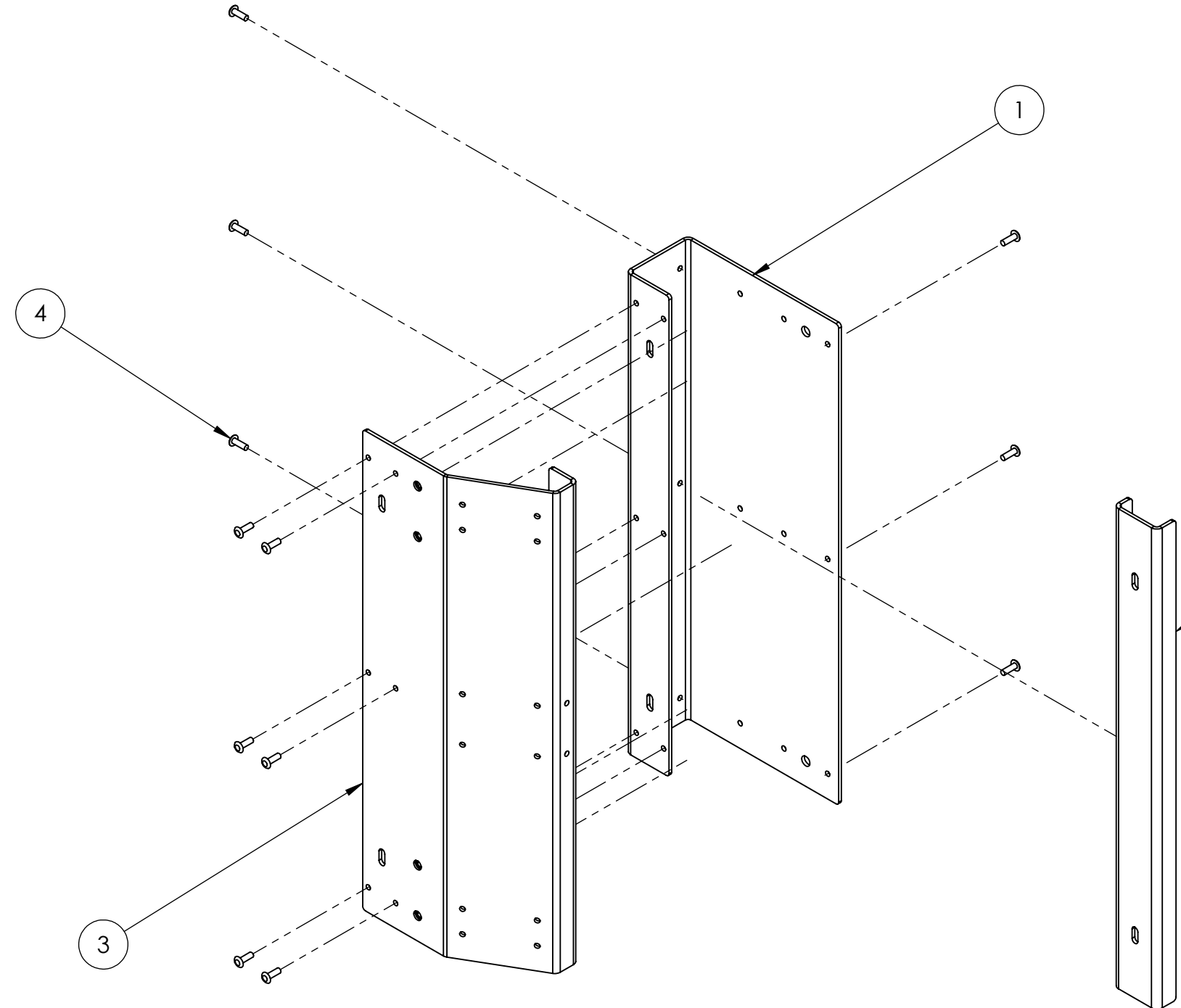
UNLESS OTHERWISE SPECIFIED:		VEND		NAME		DATE		 	
DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL $\pm 1/16$ ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$ TWO PLACE DECIMAL $\pm .01$ THREE PLACE DECIMAL $\pm .005$		DRAWN		NE		9/30/2024		TITLE: <h1>Inner Slice Base Channel W PEMs</h1>	
		PROPRIETARY AND CONFIDENTIAL THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF FIRST® . ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FIRST® IS PROHIBITED.							
		COMMENTS: REMOVE ALL BURRS AND SHARP EDGES.							
MATERIAL/FINISH:									
DO NOT SCALE DRAWING		SIZE		DWG. NO.				REV	
		C		GE-25331					
		SCALE: 1:2				SHEET 1 OF 1			

A

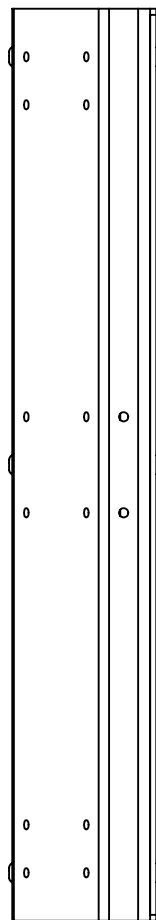
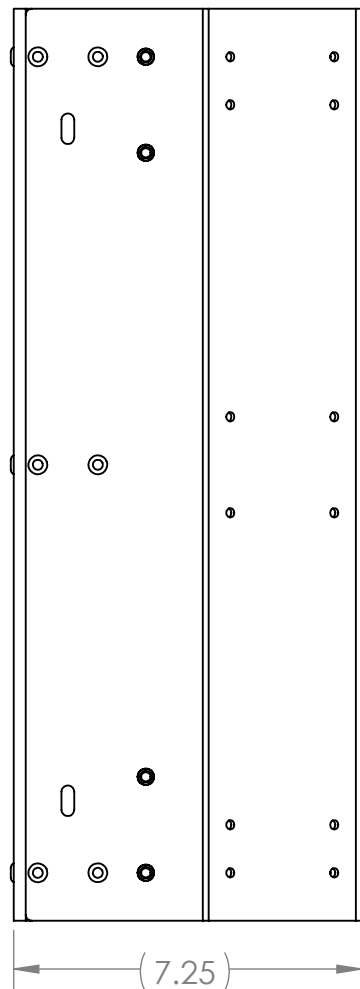
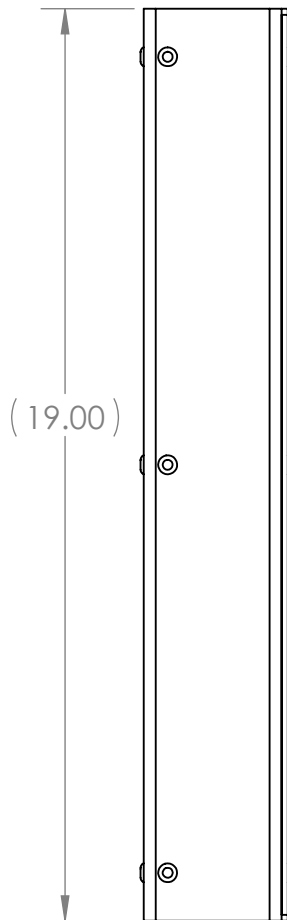
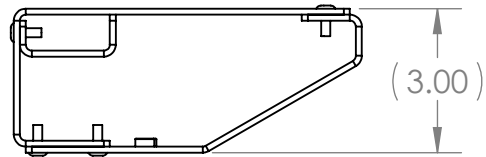
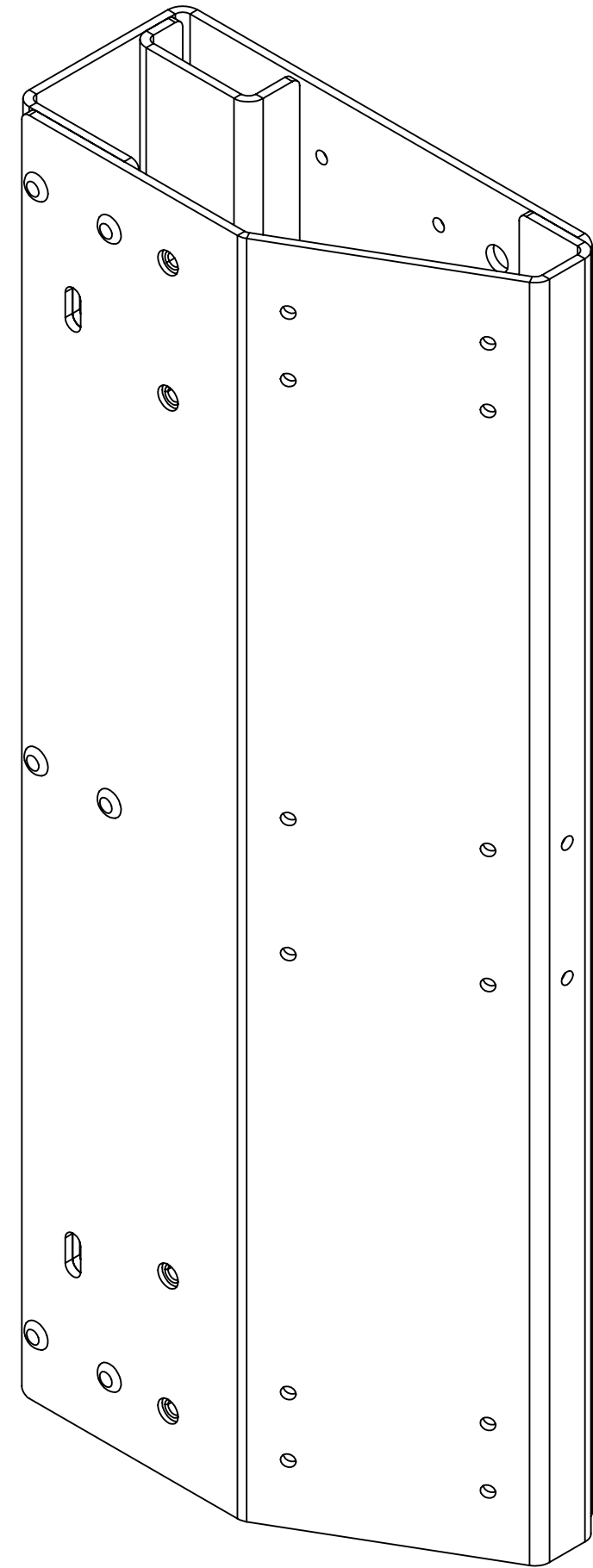
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UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ±1/16 ANGULAR: MACH ±1° BEND ±1° TWO PLACE DECIMAL ±.02 THREE PLACE DECIMAL ±.010 MATERIAL/FINISH: 8GA 5052 Aluminum DO NOT SCALE DRAWING	BEND	NAME	DATE	<div></div> <div>TITLE: Inner Slice Base Channel</div>		
	DRAWN	NE	9/30/2024			
	PROPRIETARY AND CONFIDENTIAL THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF FIRST® . ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FIRST® IS PROHIBITED. COMMENTS: REMOVE ALL BURRS AND SHARP EDGES.				SIZE	DWG. NO.
				C	GE-25331-01	
				SCALE: 1:3		SHEET 1 OF 1

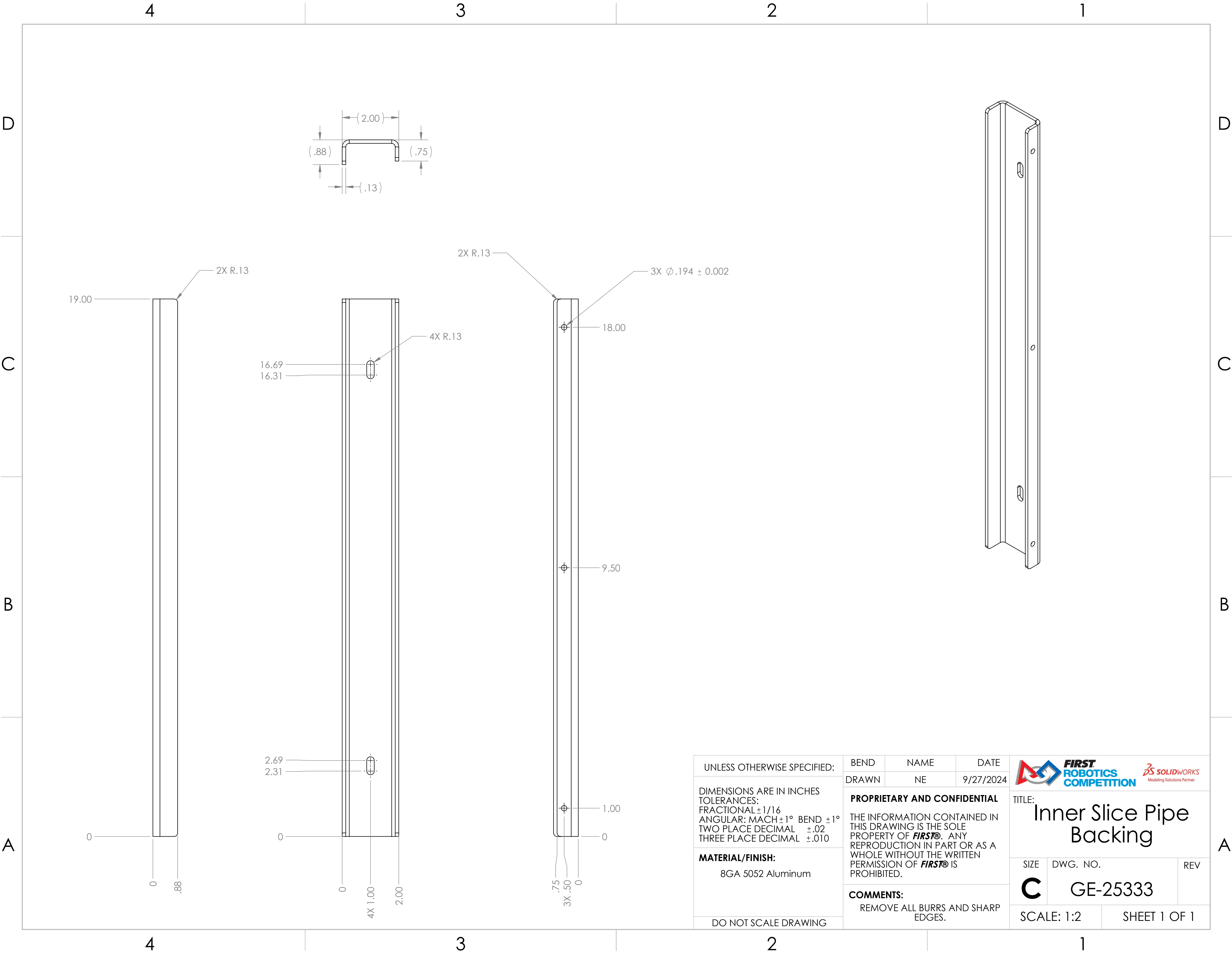


NOTES:
1. ASSEMBLE WITH COMPONENT
ORIENTATIONS AS SHOWN



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	GE-25335	Inner Slice Pipe Vertical Inner Shell	1
2	GE-25333	Inner Slice Pipe Backing	1
3	GE-25334	Inner Slice Pipe Vertical Outer Shell w PEMs	1
4	rivet_.1875_.251-.375	3/16" Aluminum Rivet, .251-.375 Grip Range	12

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ±1/16 ANGULAR: MACH ±1° BEND ±1° TWO PLACE DECIMAL ±.01 THREE PLACE DECIMAL ±.005 MATERIAL/FINISH: DO NOT SCALE DRAWING	VEND	NAME	DATE	<div><div></div><div>TITLE: Inner Slice Pipe Vertical</div><div><div>SIZE</div><div>DWG. NO.</div><div>REV</div></div><div><div>C</div><div>GE-25332</div></div><div><div>SCALE: 1:4</div><div>SHEET 1 OF 1</div></div></div>					
	DRAWN	NE	9/27/2024						
	PROPRIETARY AND CONFIDENTIAL THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF FIRST® . ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FIRST® IS PROHIBITED.								
	COMMENTS: REMOVE ALL BURRS AND SHARP EDGES.								



UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN INCHES
TOLERANCES:
FRACTIONAL $\pm 1/16$
ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$
TWO PLACE DECIMAL $\pm .02$
THREE PLACE DECIMAL $\pm .010$

MATERIAL/FINISH:
8GA 5052 Aluminum

DO NOT SCALE DRAWING

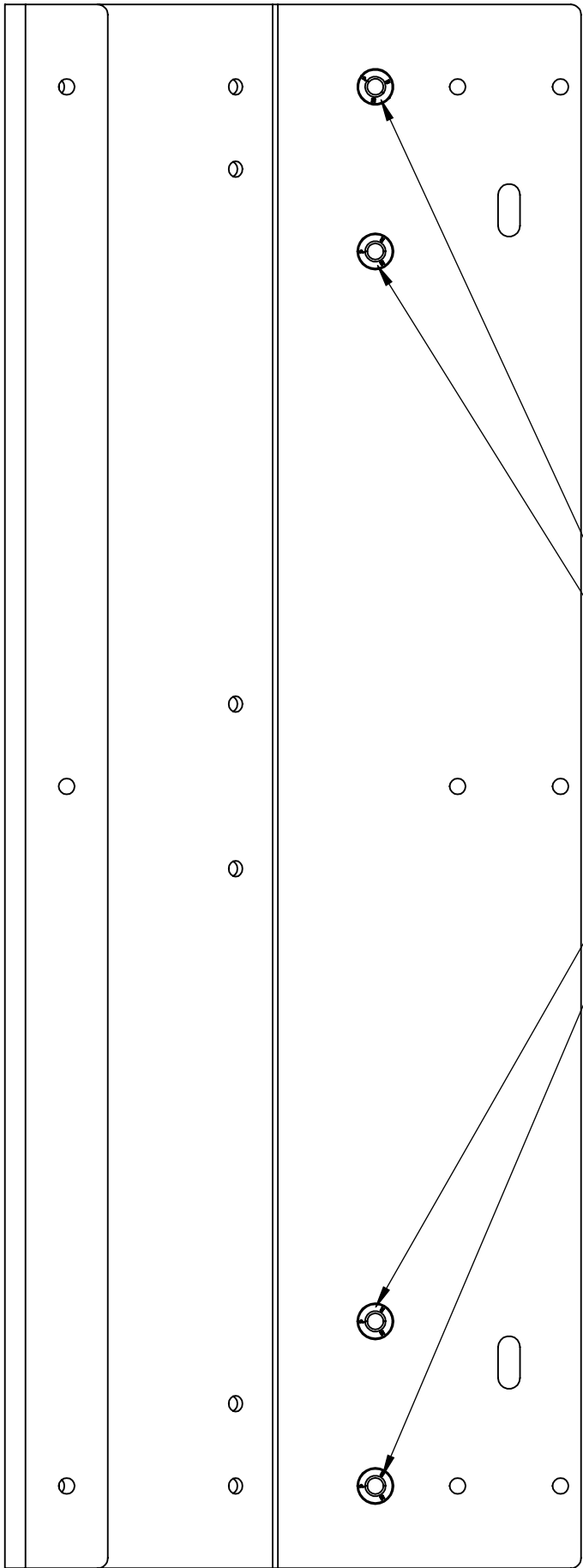
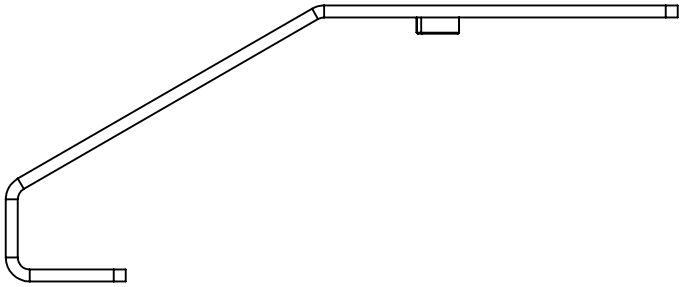
BEND	NAME	DATE
DRAWN	NE	9/27/2024

PROPRIETARY AND CONFIDENTIAL
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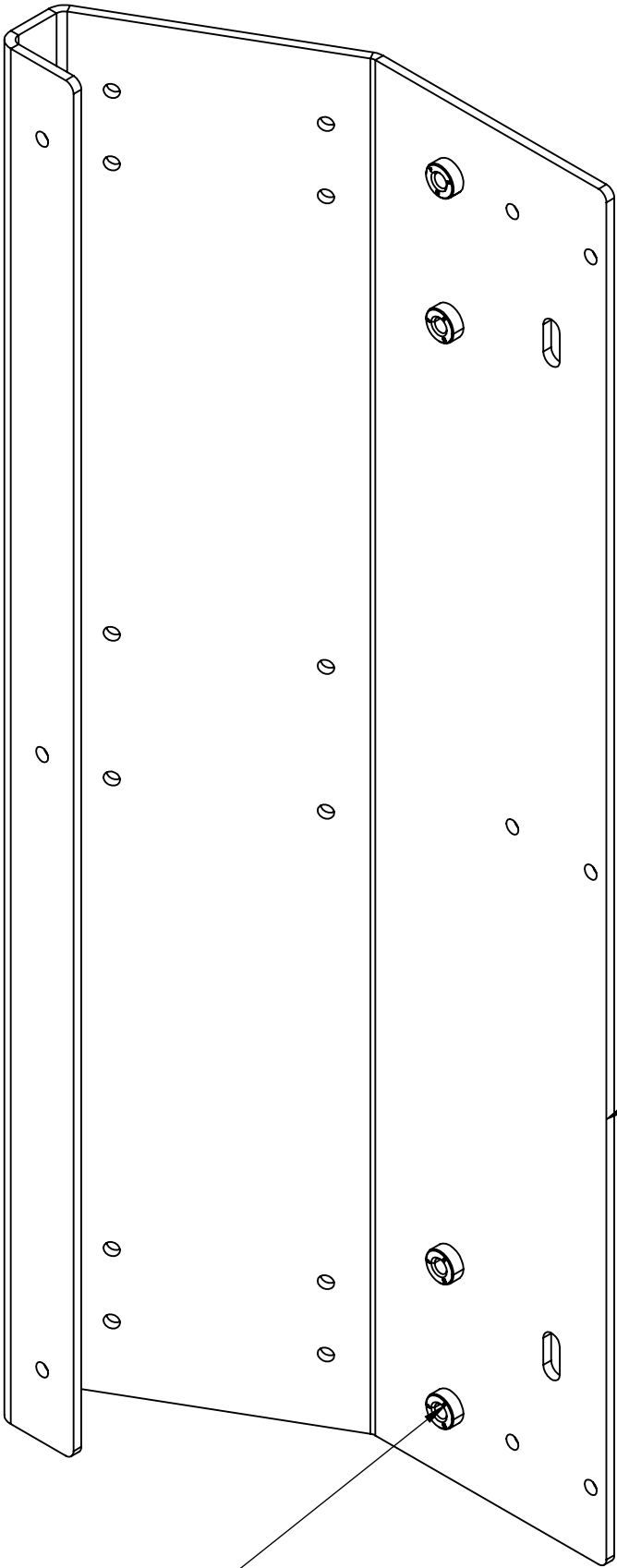
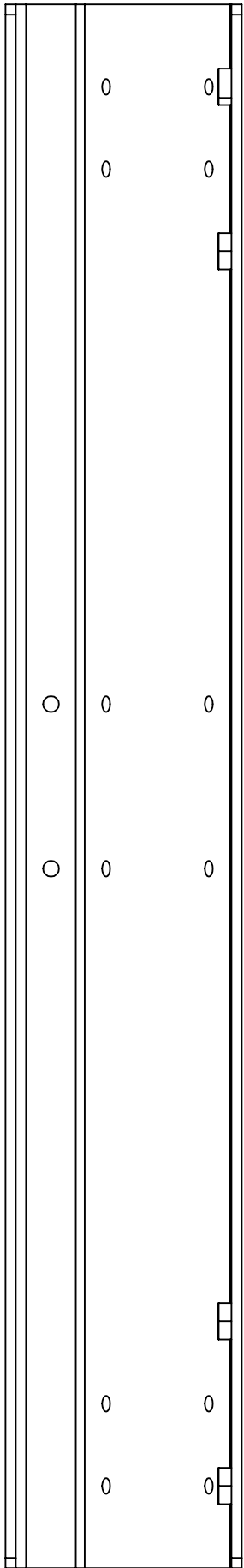
COMMENTS:
REMOVE ALL BURRS AND SHARP EDGES.



TITLE: Inner Slice Pipe Backing		
SIZE C	DWG. NO. GE-25333	REV



4X INSTALL PEMS ON INTERIOR FACE



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	GE-25334-01	Inner Slice Pipe Vertical Outer Shell	1
2	pem_clinchnut_.25_20_.054	1/4-20 self-clinching nut, .054 shank	4


UNLESS OTHERWISE SPECIFIED:
DIMENSIONS ARE IN INCHES
TOLERANCES:
FRACTIONAL $\pm 1/16$
ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$
TWO PLACE DECIMAL $\pm .01$
THREE PLACE DECIMAL $\pm .005$
MATERIAL/FINISH:
DO NOT SCALE DRAWING


VEND
DRAWN

NAME
NE

DATE
9/27/2024

PROPRIETARY AND CONFIDENTIAL
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COMMENTS:
REMOVE ALL BURRS AND SHARP EDGES.





TITLE:
Inner Slice Pipe Vertical Outer Shell W PEMS

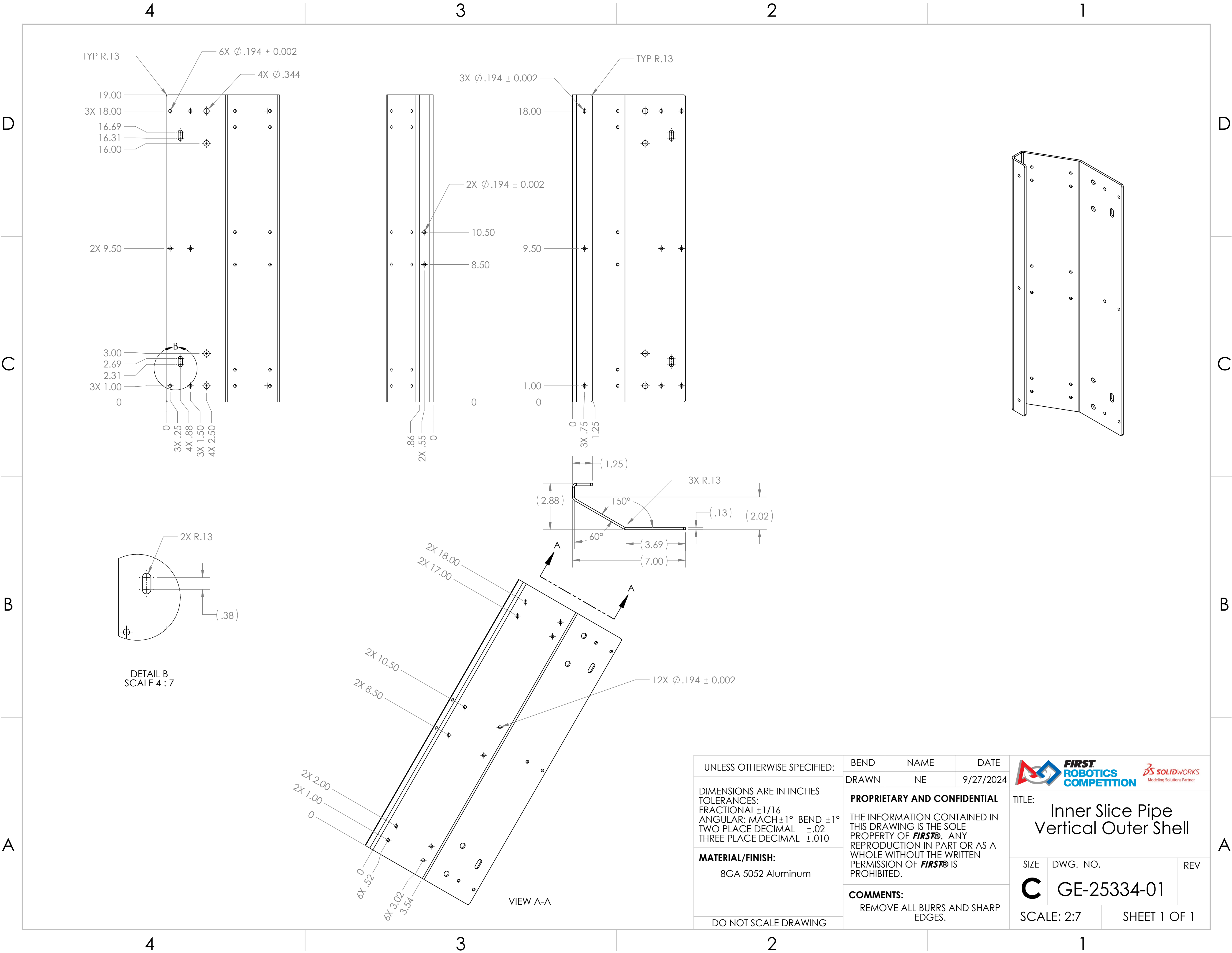
SIZE
C

DWG. NO.
GE-25334

REV

SCALE: 1:2

SHEET 1 OF 1



UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN INCHES
TOLERANCES:
FRACTIONAL $\pm 1/16$
ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$
TWO PLACE DECIMAL $\pm .02$
THREE PLACE DECIMAL $\pm .010$

MATERIAL/FINISH:
8GA 5052 Aluminum

DO NOT SCALE DRAWING

BEND	NAME	DATE
DRAWN	NE	9/27/2024

PROPRIETARY AND CONFIDENTIAL

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF **FIRST**. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF **FIRST** IS PROHIBITED.

COMMENTS:
REMOVE ALL BURRS AND SHARP EDGES.

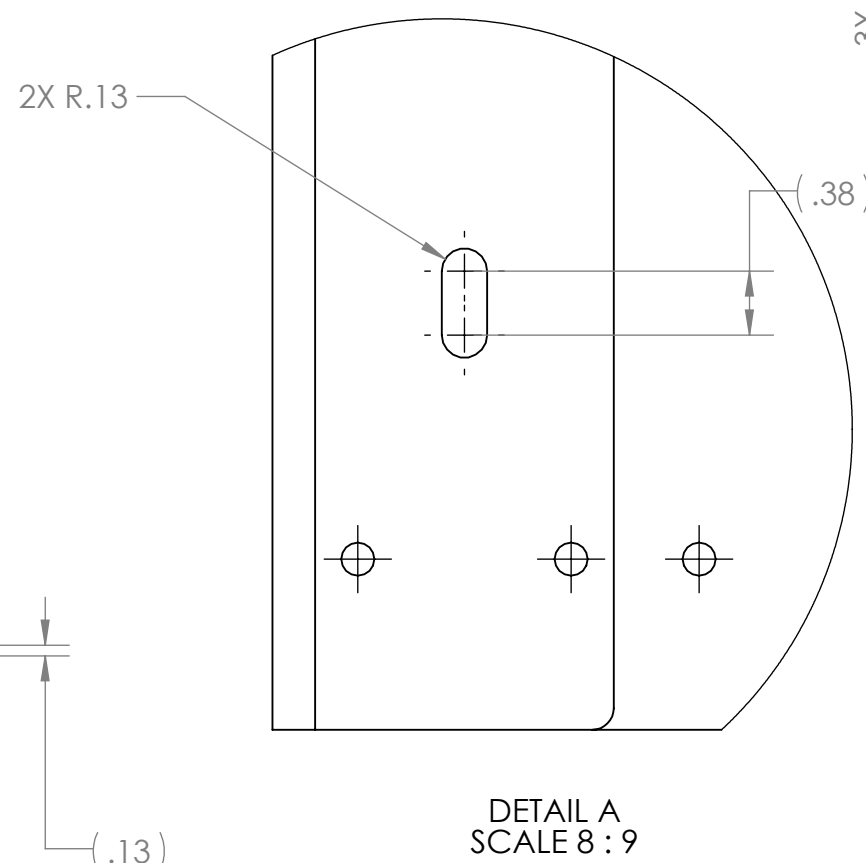
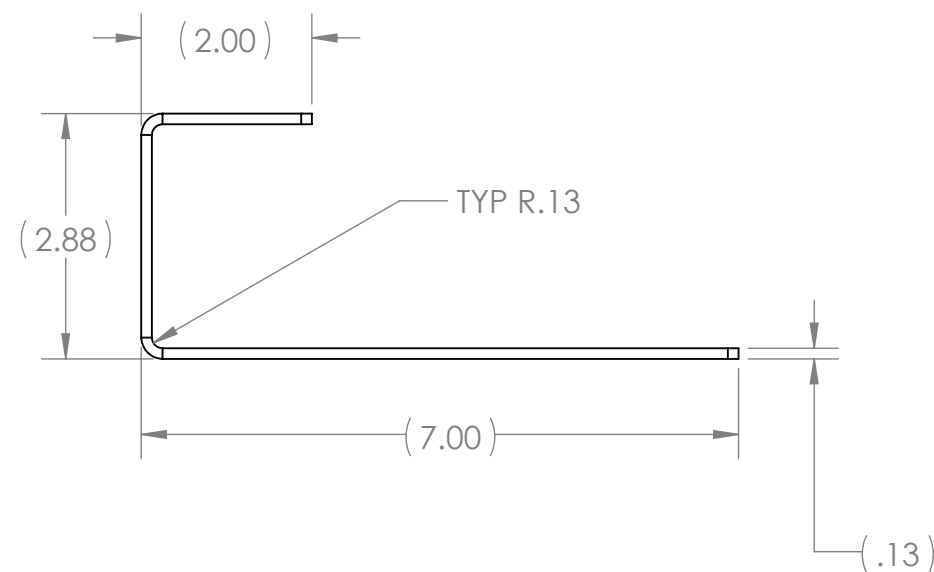
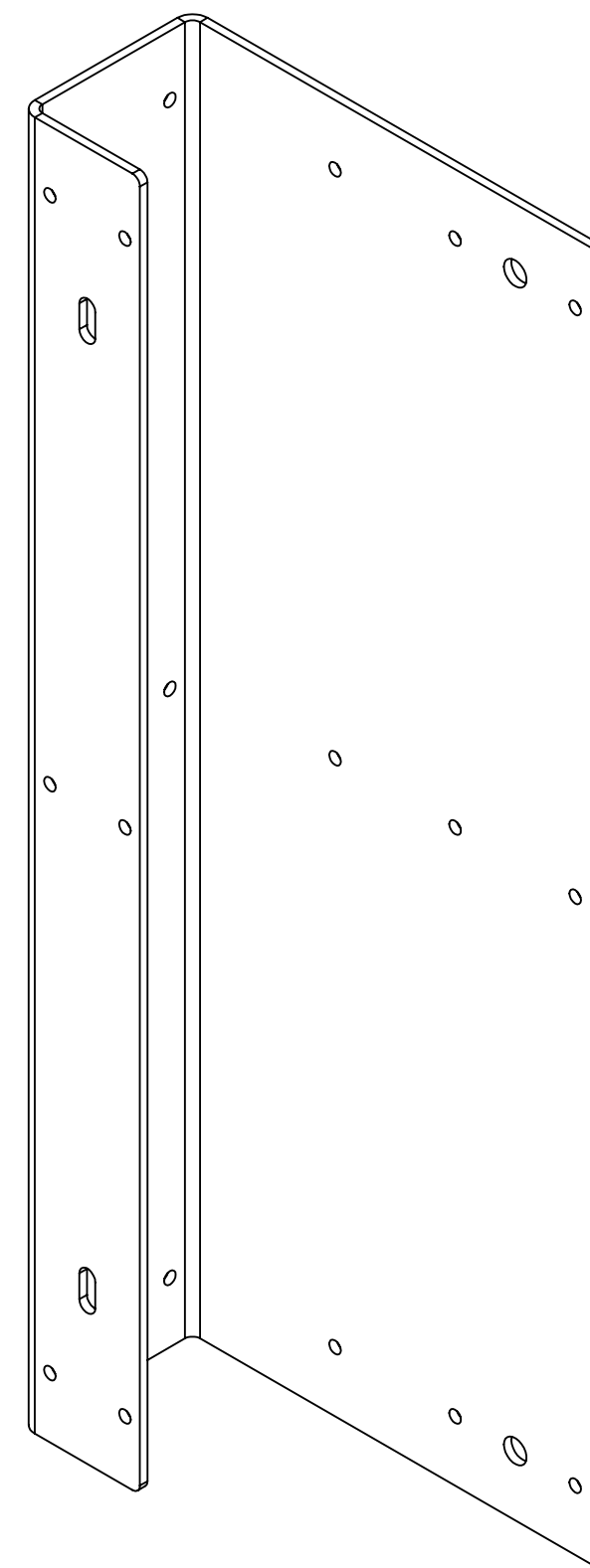
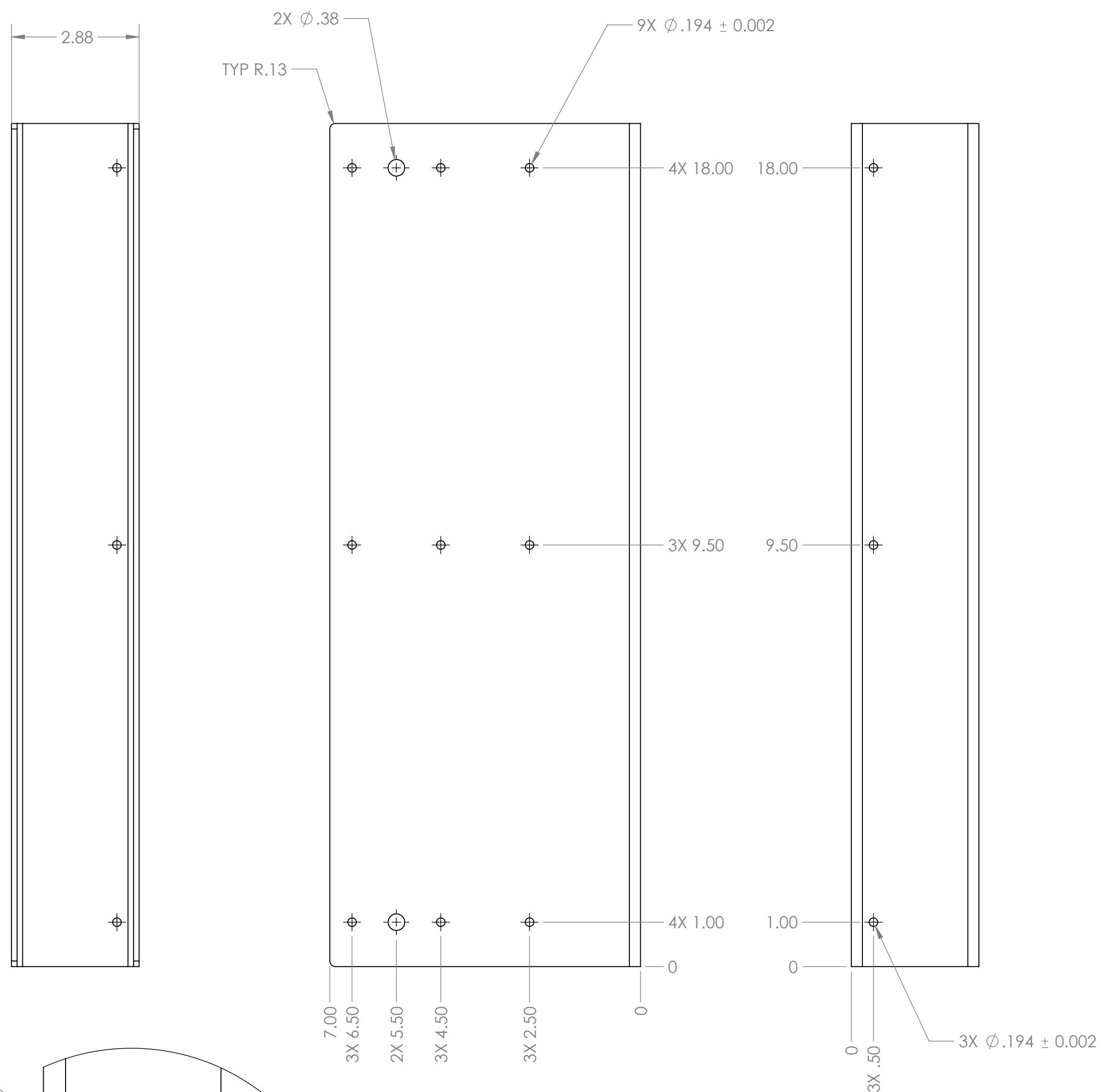
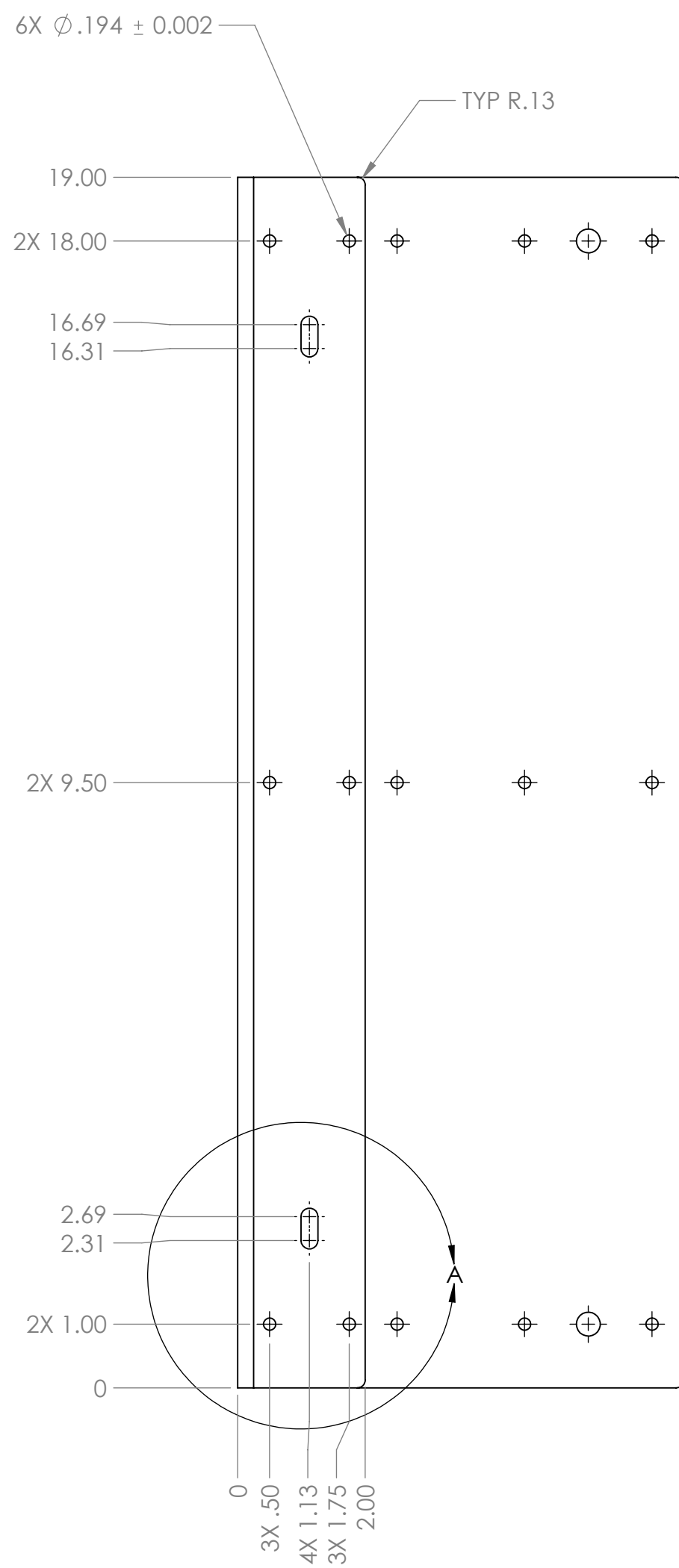




TITLE: Inner Slice Pipe Vertical Outer Shell

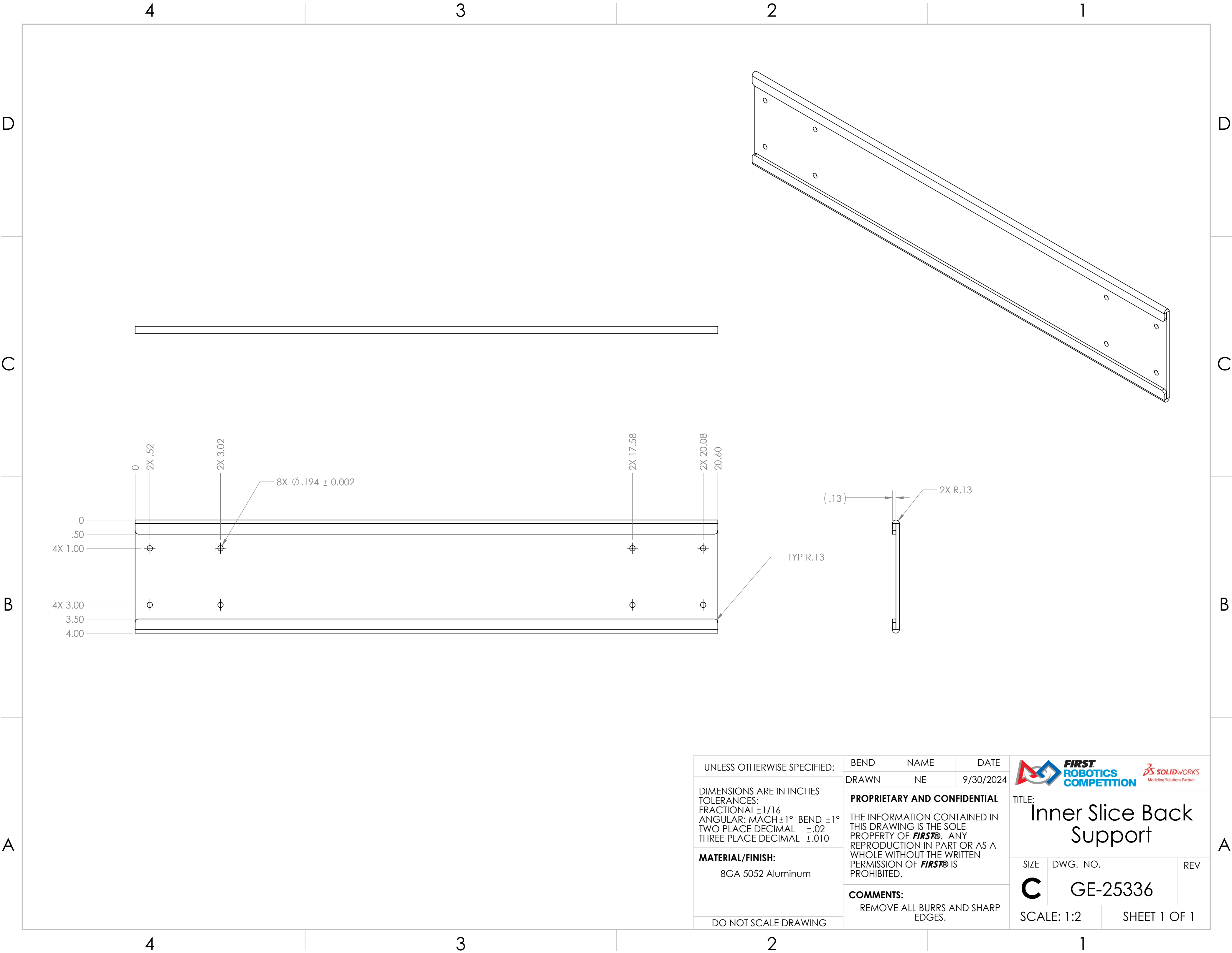
SIZE DWG. NO. REV



C GE-25334-01

SCALE: 2:7 SHEET 1 OF 1



UNLESS OTHERWISE SPECIFIED:	BEND	NAME	DATE	 	
DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL $\pm 1/16$ ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$ TWO PLACE DECIMAL $\pm .02$ THREE PLACE DECIMAL $\pm .010$	DRAWN	NE	9/26/2024	TITLE: Inner Slice Pipe Vertical Inner Shell	
MATERIAL/FINISH: 8GA 5052 Aluminum	PROPRIETARY AND CONFIDENTIAL THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF FIRST® . ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FIRST® IS PROHIBITED.			SIZE DWG. NO. REV	
	COMMENTS: REMOVE ALL BURRS AND SHARP EDGES.			C GE-25335	
DO NOT SCALE DRAWING				SCALE: 4:9 SHEET 1 OF 1	



UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL $\pm 1/16$ ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$ TWO PLACE DECIMAL $\pm .02$ THREE PLACE DECIMAL $\pm .010$ MATERIAL/FINISH: 8GA 5052 Aluminum DO NOT SCALE DRAWING	BEND	NAME	DATE	<div></div> <div>TITLE: Inner Slice Back Support</div>		
	DRAWN	NE	9/30/2024			
	PROPRIETARY AND CONFIDENTIAL THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF FIRST® . ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FIRST® IS PROHIBITED.			SIZE	DWG. NO.	REV
	COMMENTS: REMOVE ALL BURRS AND SHARP EDGES.			C	GE-25336	
SCALE: 1:2		SHEET 1 OF 1				

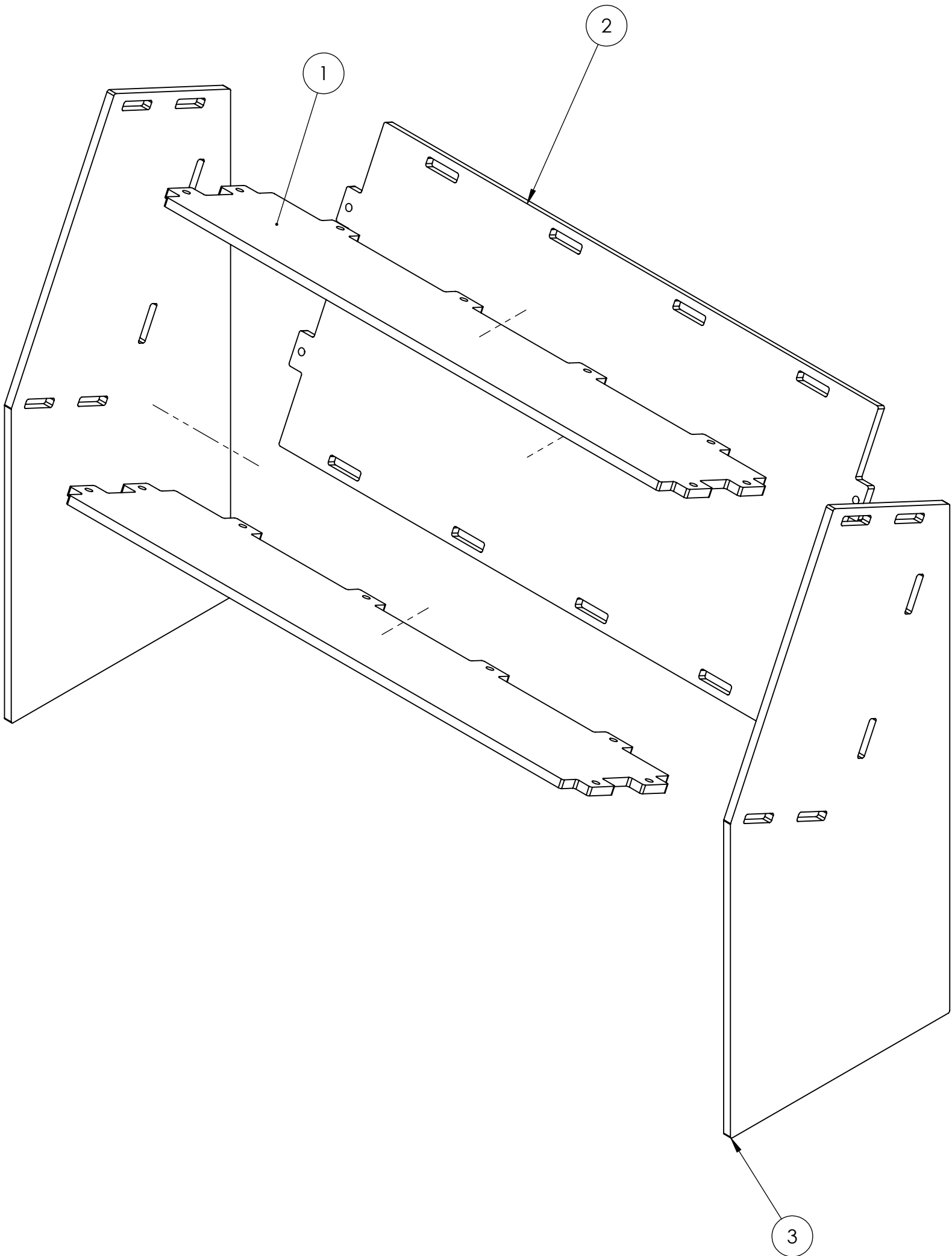
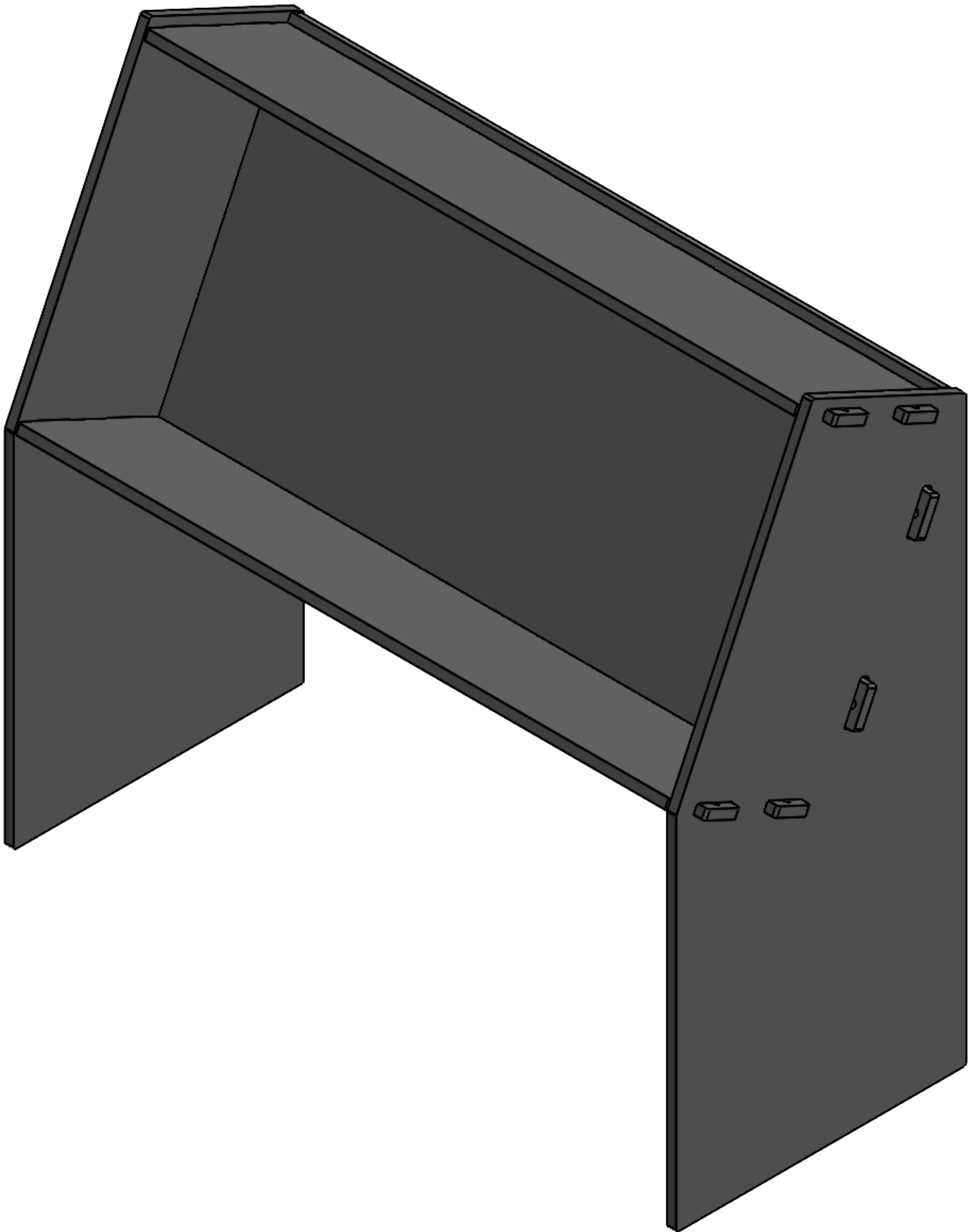
4

3



2

1

Assemble with 120 lb. cable ties



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	GE-25411	Coral Holder Top & Bottom Panel	2
2	GE-25412	Coral Holder Back Panel	1
3	GE-25413	Coral Holder Side Panel	2

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ±1/16 ANGULAR: MACH ±1° BEND ±1° TWO PLACE DECIMAL ±.01 THREE PLACE DECIMAL ±.005 MATERIAL/FINISH: DO NOT SCALE DRAWING	VEND	NAME	DATE	 	
	DRAWN	BB	7/23/2024		
	PROPRIETARY AND CONFIDENTIAL THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF FIRST® . ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FIRST® IS PROHIBITED.			TITLE: Coral Holder	
	COMMENTS: REMOVE ALL BURRS AND SHARP EDGES.			SIZE	DWG. NO.
C				GE-25410	
			SCALE: 1:12		SHEET 1 OF 1

4

3

2

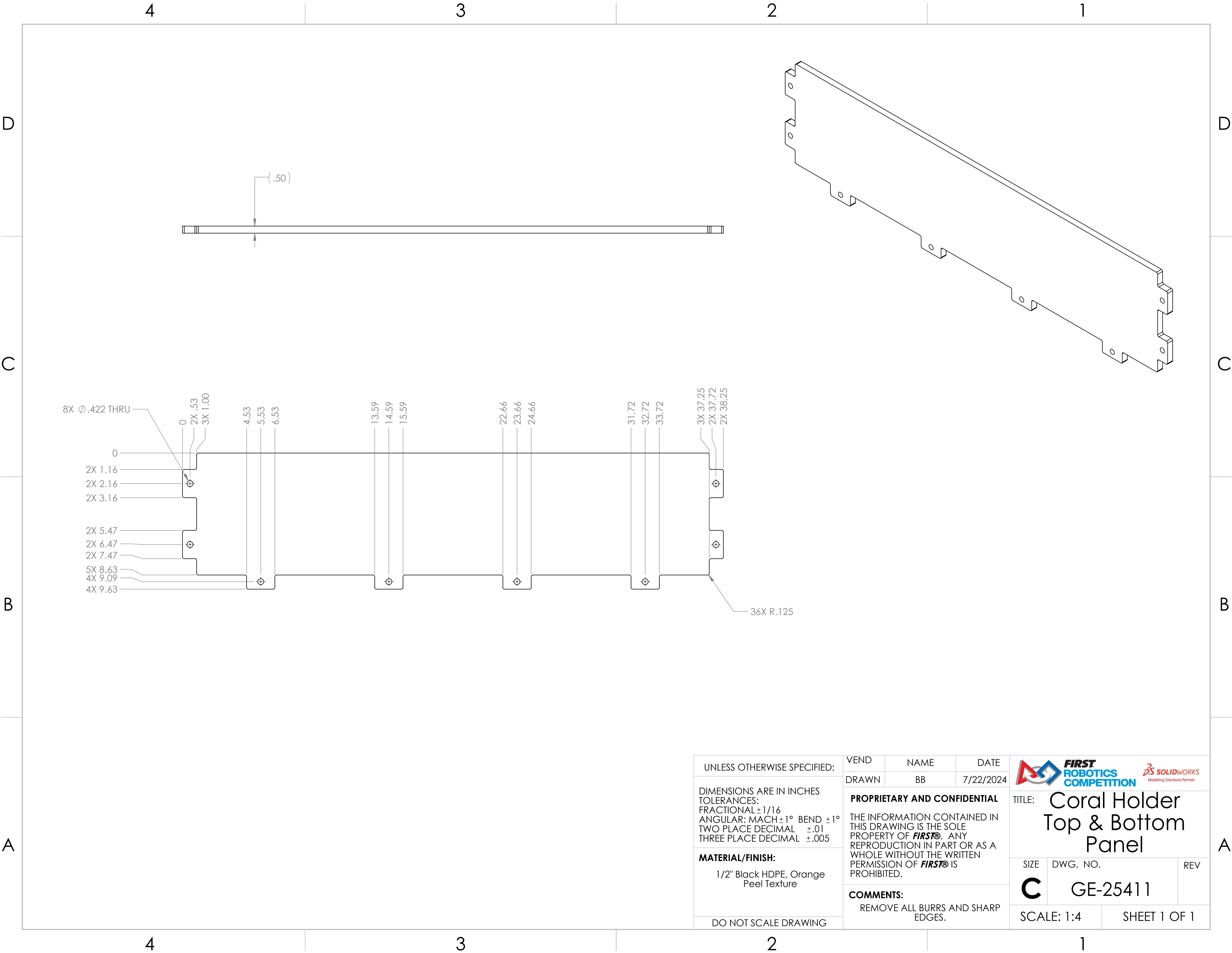
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D

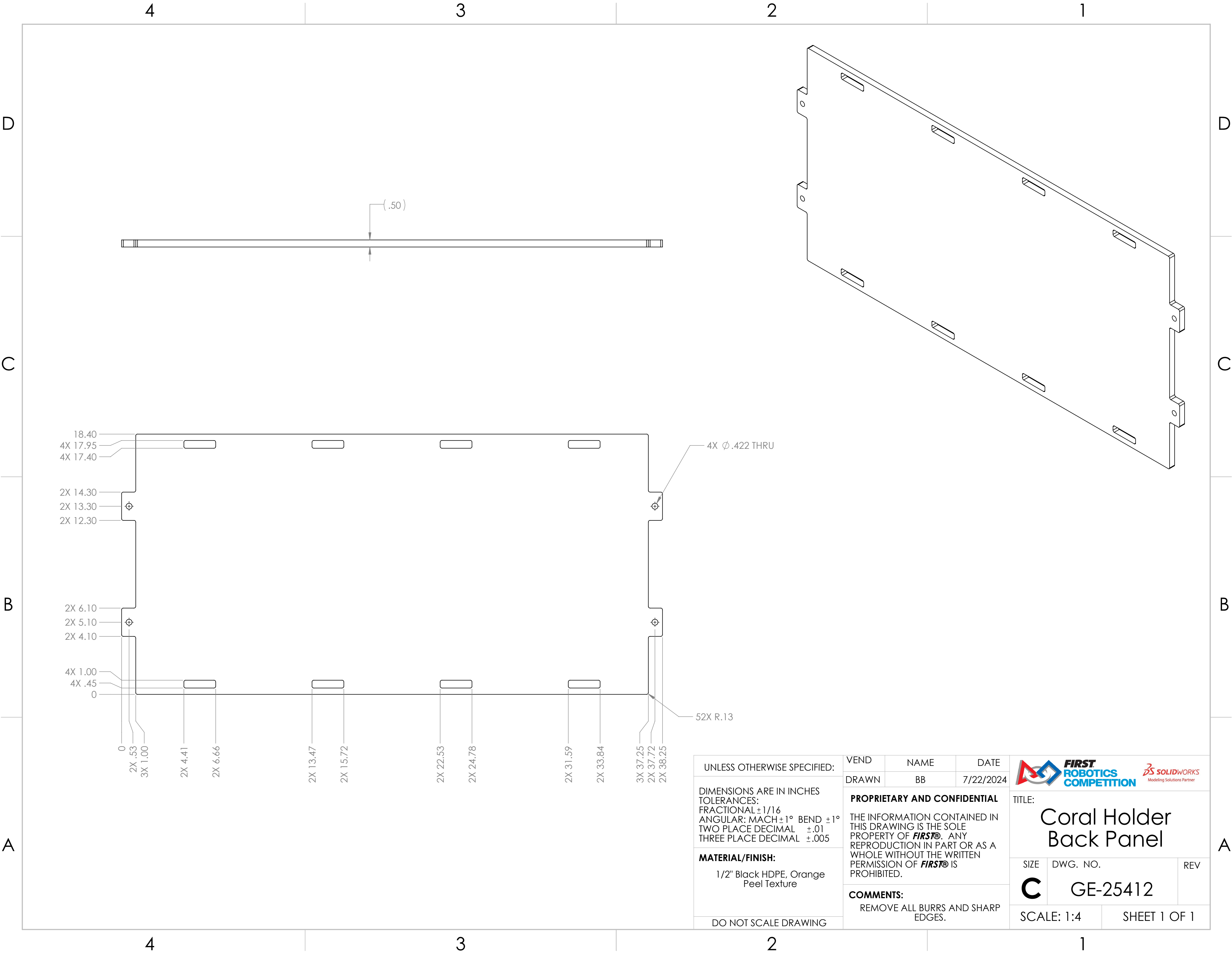
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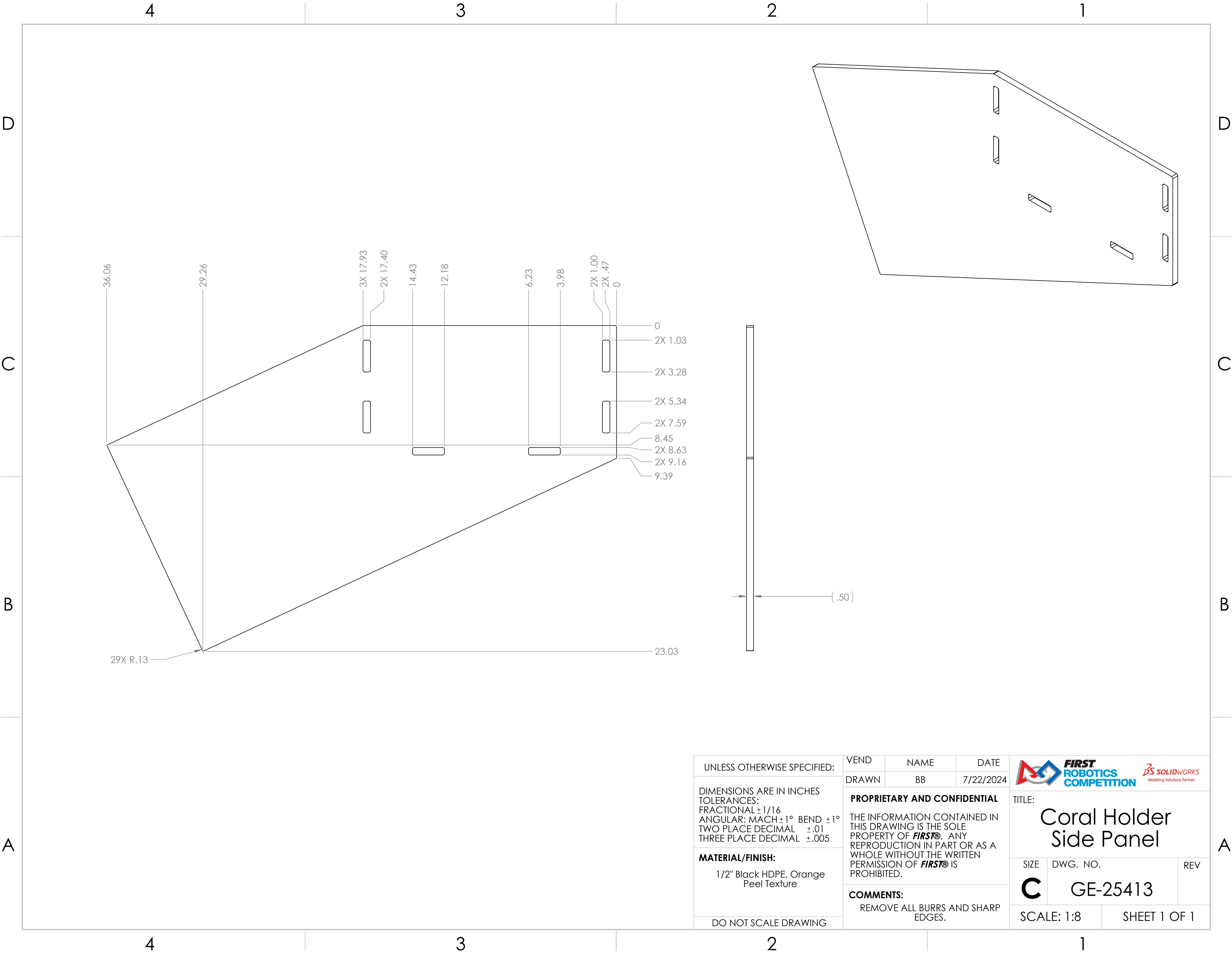
B



A



UNLESS OTHERWISE SPECIFIED:	VEND	NAME	DATE	<div><div>FIRST ROBOTICS COMPETITION</div><div>SOLIDWORKS Modeling Solutions Partner</div></div>	
	DRAWN	BB	7/22/2024		
DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ±1/16 ANGULAR: MACH ±1° BEND ±1° TWO PLACE DECIMAL ±.01 THREE PLACE DECIMAL ±.005	PROPRIETARY AND CONFIDENTIAL			TITLE: Coral Holder Top & Bottom Panel	
	THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF FIRST® . ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FIRST® IS PROHIBITED.			SIZE DWG. NO. REV	
	COMMENTS: REMOVE ALL BURRS AND SHARP EDGES.			C GE-25411	
MATERIAL/FINISH: 1/2" Black HDPE, Orange Peel Texture				SCALE: 1:4	
DO NOT SCALE DRAWING				SHEET 1 OF 1	





UNLESS OTHERWISE SPECIFIED:	VEND	NAME	DATE	<div></div> <div>TITLE: <h1>Coral Holder Side Panel</h1></div>		
	DRAWN	BB	7/22/2024			
DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ±1/16 ANGULAR: MACH ±1° BEND ±1° TWO PLACE DECIMAL ±.01 THREE PLACE DECIMAL ±.005	PROPRIETARY AND CONFIDENTIAL THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF FIRST® . ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FIRST® IS PROHIBITED.			SIZE	DWG. NO.	REV
	COMMENTS: REMOVE ALL BURRS AND SHARP EDGES.			C	GE-25413	
	DO NOT SCALE DRAWING			SCALE: 1:8		SHEET 1 OF 1
MATERIAL/FINISH: 1/2" Black HDPE, Orange Peel Texture						

4

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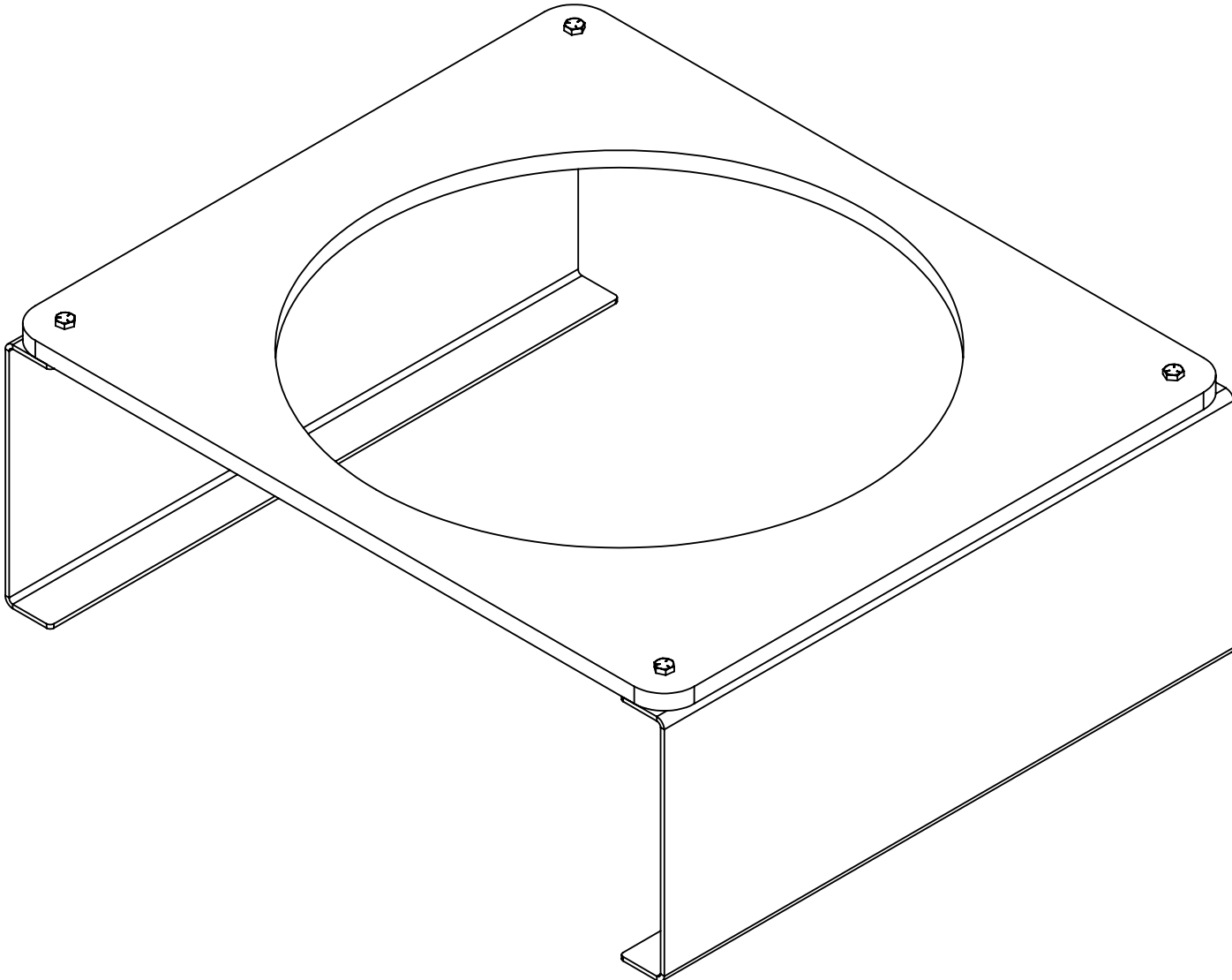
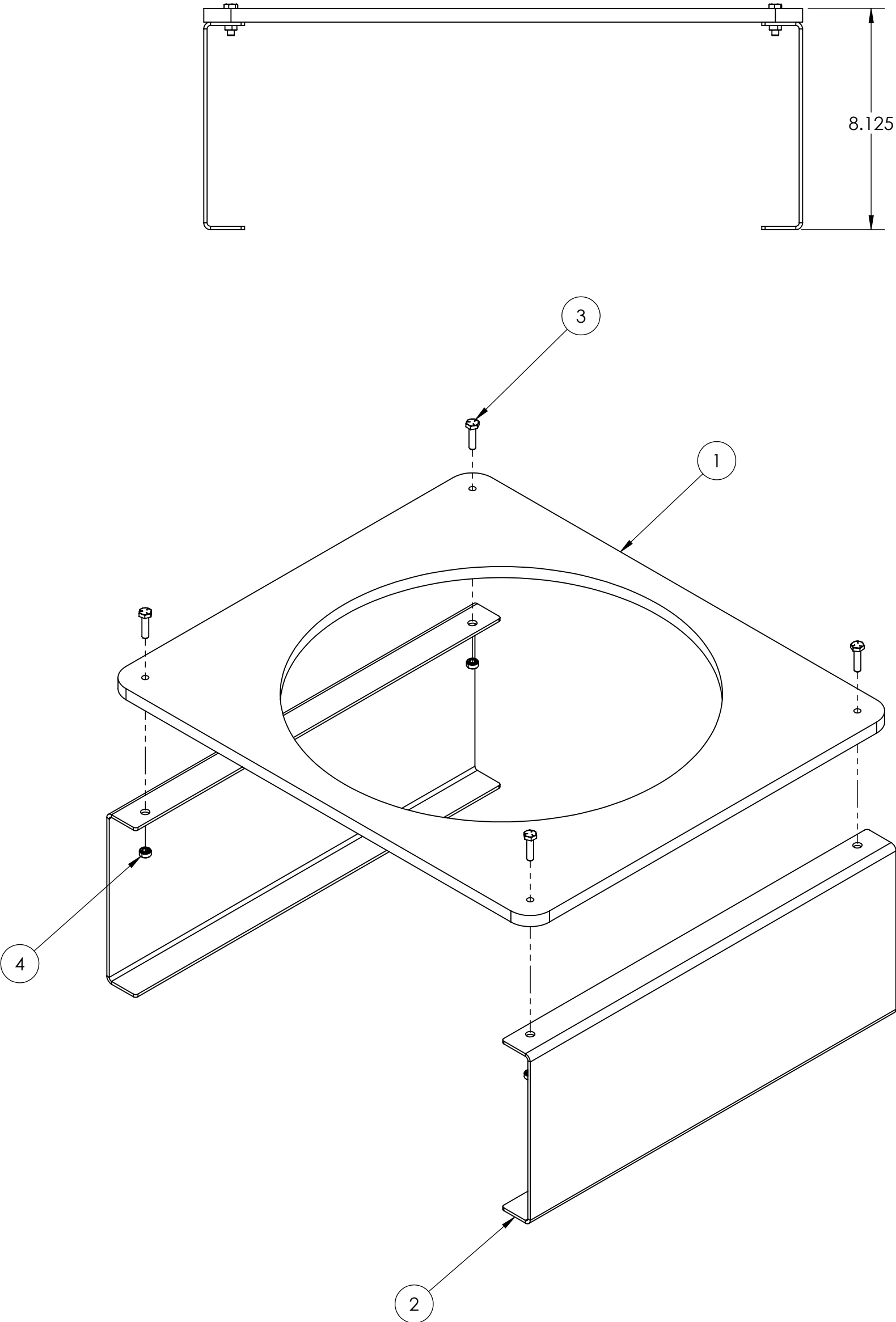
C

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ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	GE-25421	Algae Inflation Jig Panel	1
2	GE-25422	Algae Inflation Jig Foot	2
3	Configurable Bolt	1" Long 1/4-20 Hex Head Bolt	4
4	pem_clinchnut_.25_20_.054	1/4-20 self-clinching nut, .054 shank	4

UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN INCHES
TOLERANCES:
FRACTIONAL $\pm 1/16$
ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$
TWO PLACE DECIMAL $\pm .01$
THREE PLACE DECIMAL $\pm .005$

MATERIAL/FINISH:

DO NOT SCALE DRAWING

VEND

NAME

DATE

DRAWN

JO

1/9/2025

PROPRIETARY AND CONFIDENTIAL

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COMMENTS:

REMOVE ALL BURRS AND SHARP EDGES.



FIRST
ROBOTICS
COMPETITION

3D SOLIDWORKS
Modeling Solutions Partner

TITLE:

Algae Inflation
Jig

SIZE

C

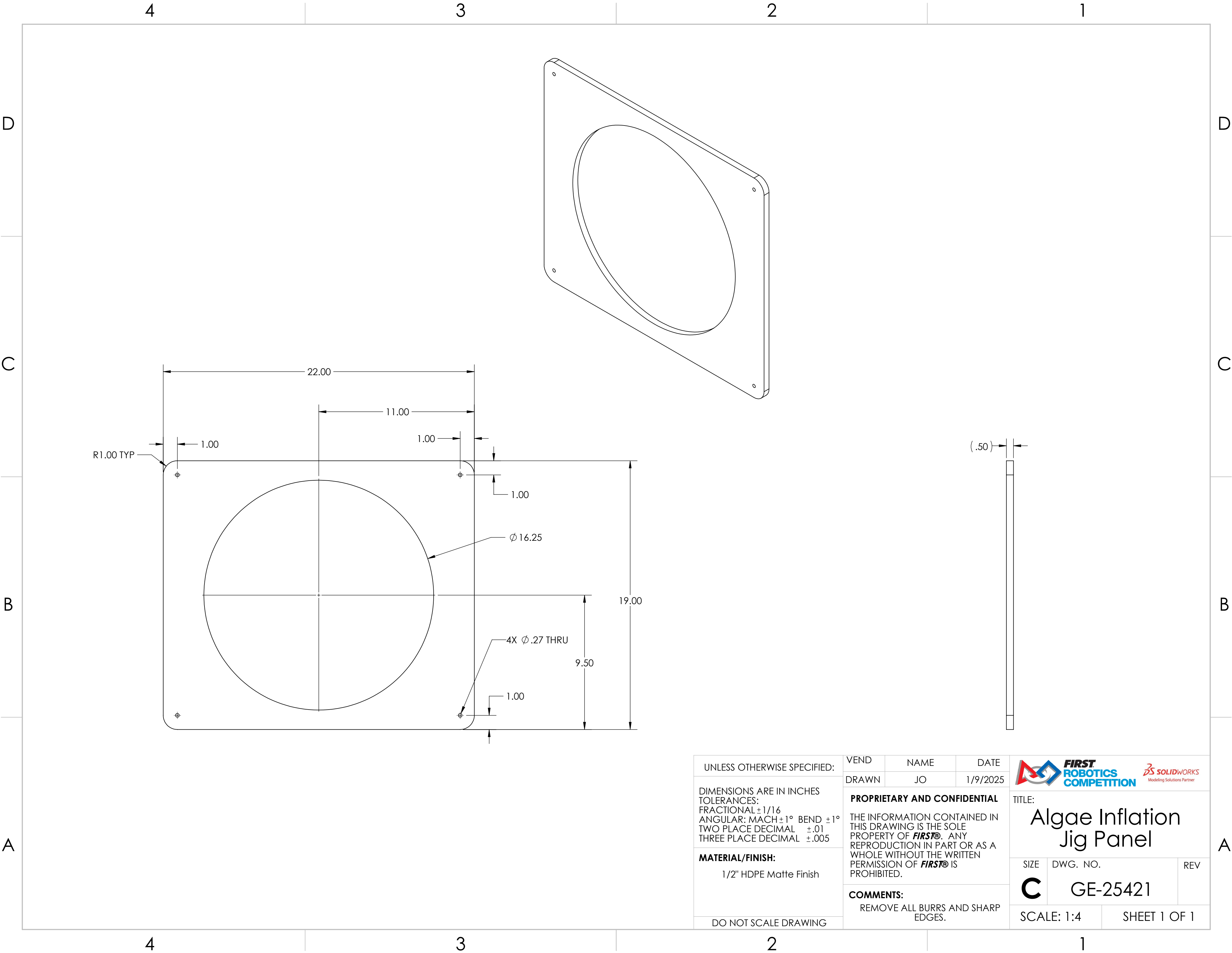
DWG. NO.



GE-25420

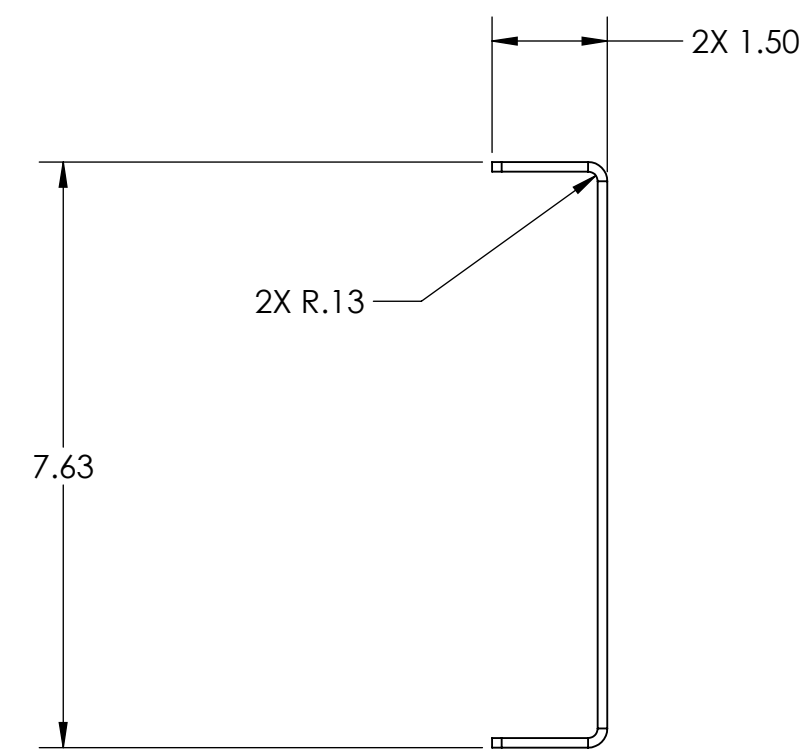
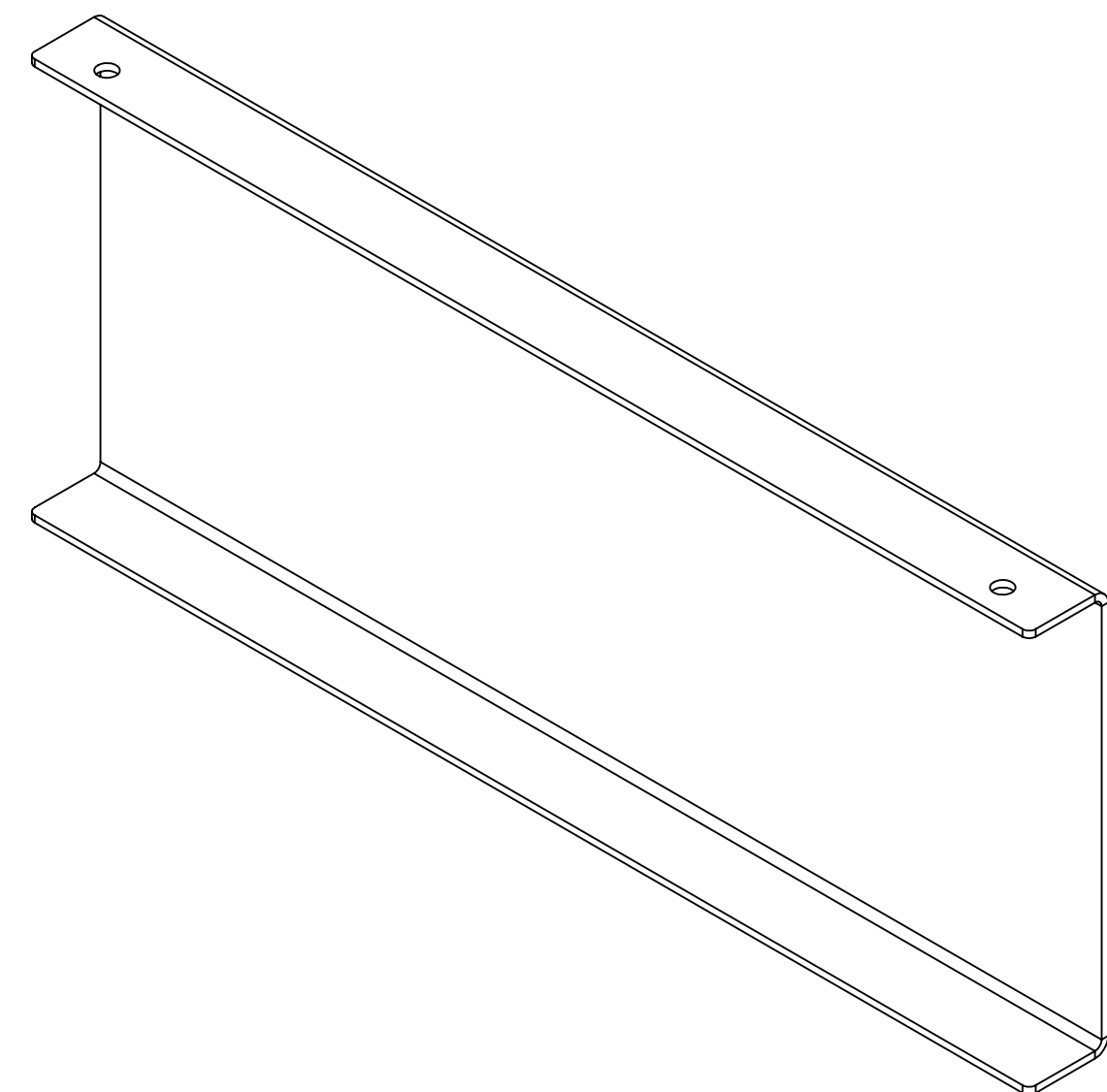
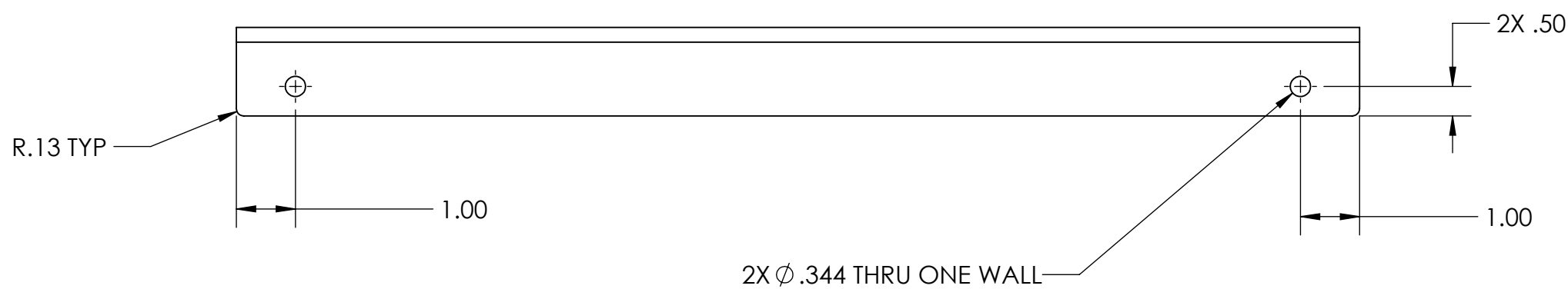
REV



SCALE: 1:4

SHEET 1 OF 1



UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ±1/16 ANGULAR: MACH ±1° BEND ±1° TWO PLACE DECIMAL ±.01 THREE PLACE DECIMAL ±.005 MATERIAL/FINISH: 1/2" HDPE Matte Finish DO NOT SCALE DRAWING	VEND	NAME	DATE	<div></div> <div>TITLE: <h1>Algae Inflation Jig Panel</h1></div> <div><div>SIZE</div><div>DWG. NO.</div><div>REV</div><div>C</div><div>GE-25421</div></div> <div>SCALE: 1:4</div> <div>SHEET 1 OF 1</div>		
	DRAWN	JO	1/9/2025			
	PROPRIETARY AND CONFIDENTIAL THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF FIRST® . ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FIRST® IS PROHIBITED. COMMENTS: REMOVE ALL BURRS AND SHARP EDGES.					



UNLESS OTHERWISE SPECIFIED:	VEND	NAME	DATE	<div></div>		
	DRAWN	JO	1/9/2025			
DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ±1/16 ANGULAR: MACH ±1° BEND ±1° TWO PLACE DECIMAL ±.01 THREE PLACE DECIMAL ±.005	PROPRIETARY AND CONFIDENTIAL			TITLE: Algae Inflation Jig Foot		
	THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF FIRST® . ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FIRST® IS PROHIBITED.					
MATERIAL/FINISH: 1/8" 5052 Aluminum	COMMENTS:			SIZE	DWG. NO.	REV
	REMOVE ALL BURRS AND SHARP EDGES.			C	GE-25422	
DO NOT SCALE DRAWING				SCALE: 2:5		SHEET 1 OF 1