



# MEBT MEETING AGENDA

April 12, 2001

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## Mechanical Systems Update

1. **Fabrication and Procurement Updates**
  - Chopper Target Beambox (**Photos**)
  - Chopper Vacuum Enclosures (**Photos**)
  - BPM's (**Photos**)
2. **Raft & Frame Design** (**Raft, Frame, MEBT**)
3. **Wire Scanner Beambox** (**PM2 Detail**)

## Electrical Systems Update

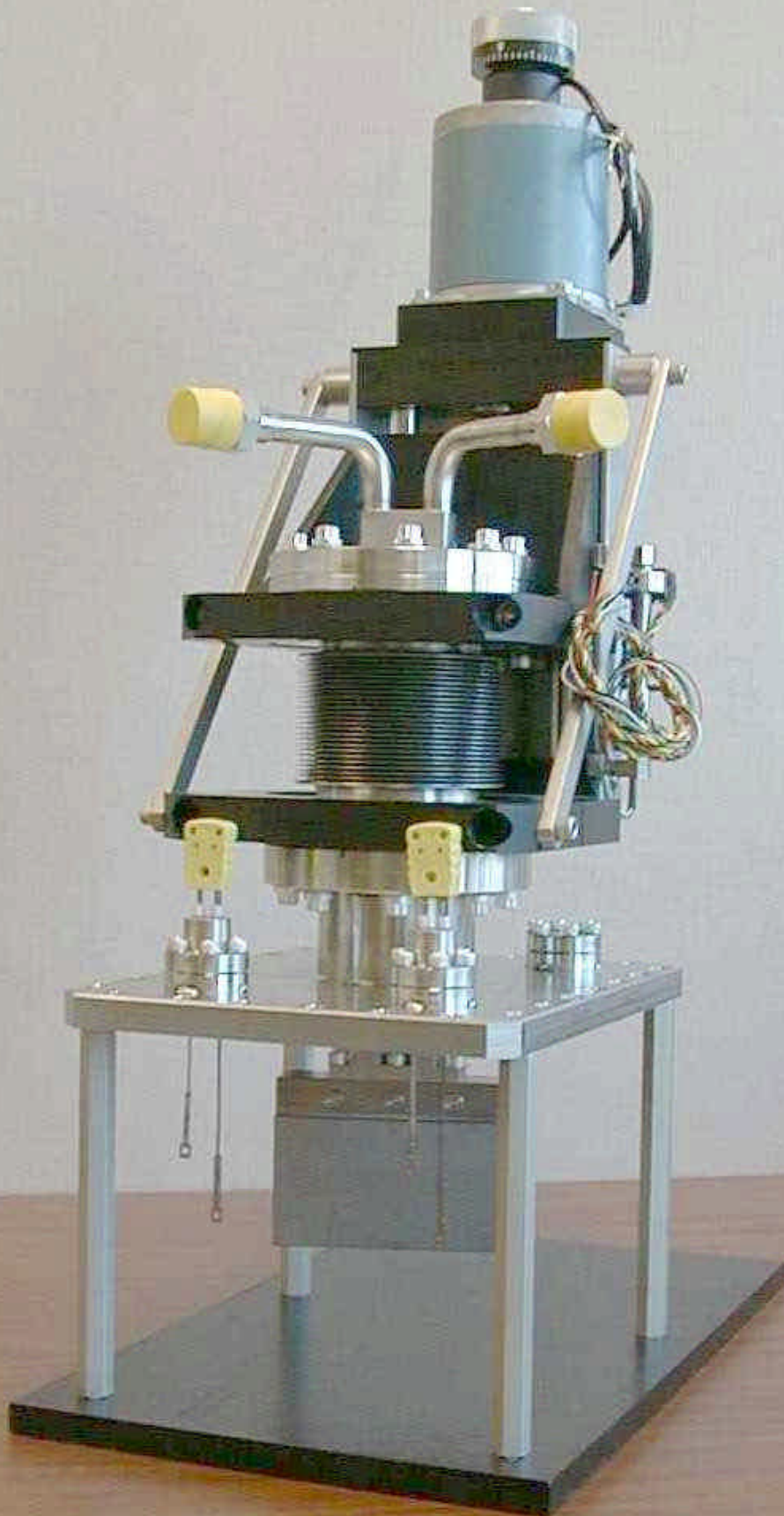
1. **Low Level RF**
2. **Rebuncher System**
3. **Beam Diagnostics**

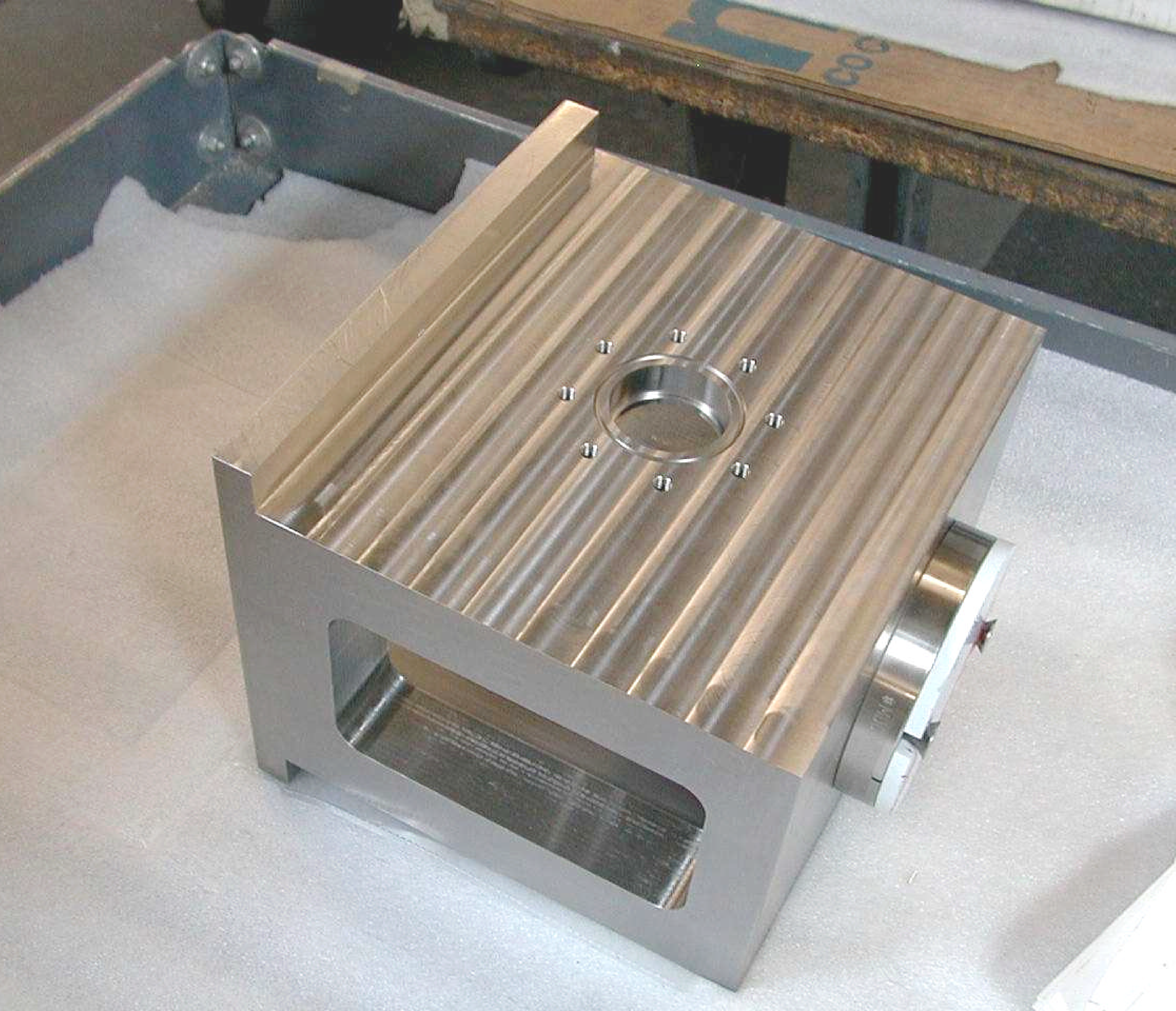
## System Integration / Installation

## Upcoming Tasks and Milestones

- |   |            |
|---|------------|
| ◆ Rebuncher Cavity #1 Received            | 1/31/01 OR |
| ◆ Profile Monitor First Article Complete  | 3/31/01    |
| ◆ Power Supply Rack Installation Complete | 3/31/01    |
| ◆ Chopper Target Complete                 | 4/30/01    |
| ◆ Chopper Vacuum Enclosures Complete      | 5/31/01    |
| ◆ Raft and Support Structure Complete     | 5/31/01 OR |
| ◆ Rebuncher Amplifiers #2-6 Received      | 6/30/01    |
| ◆ Rebuncher Cavity #2-4 Received          | 6/30/01    |
| ◆ Profile Monitor all complete            | 7/31/01    |

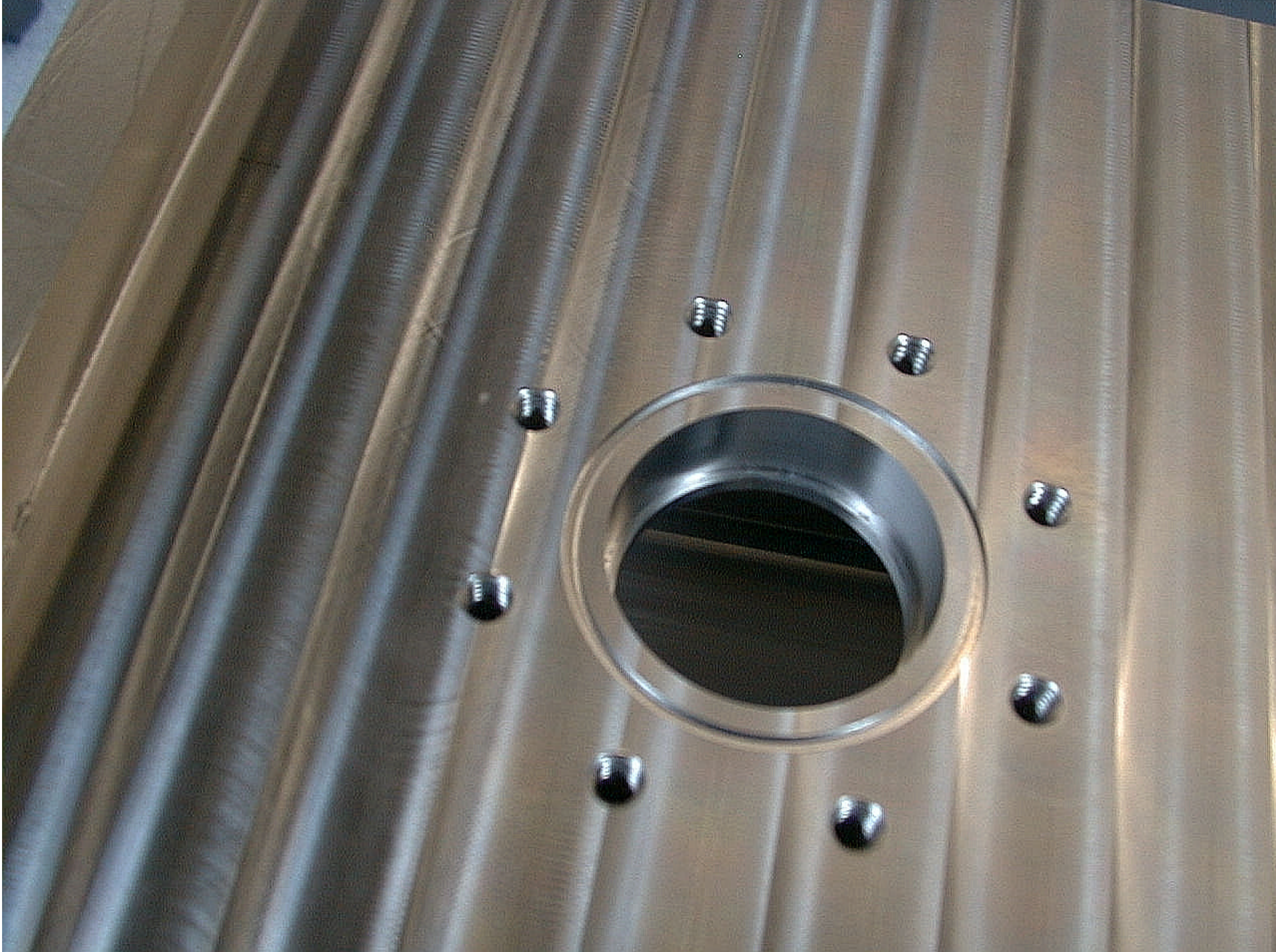
*Next Meeting, Thursday, 4/26/01, 10 AM*







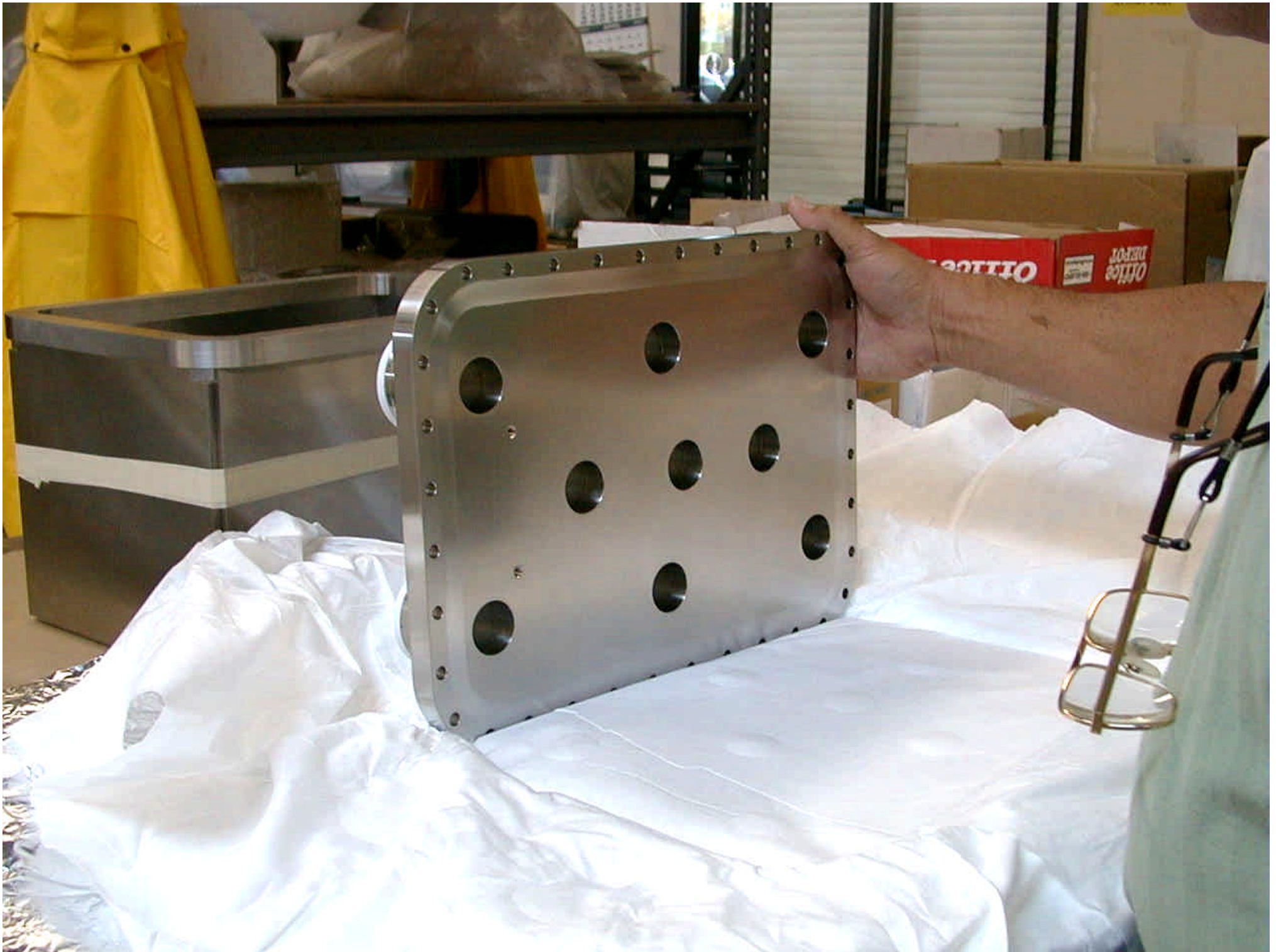








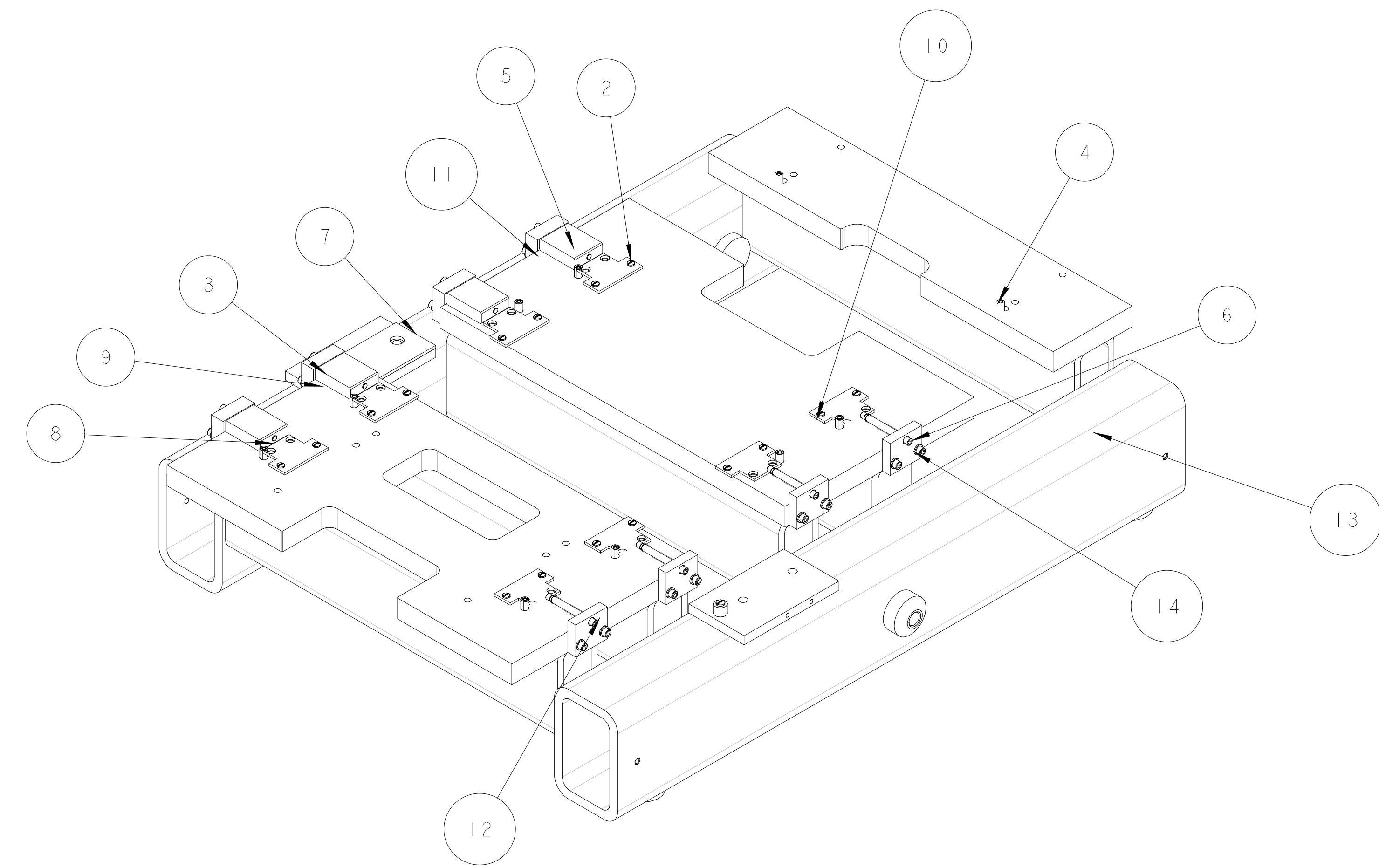
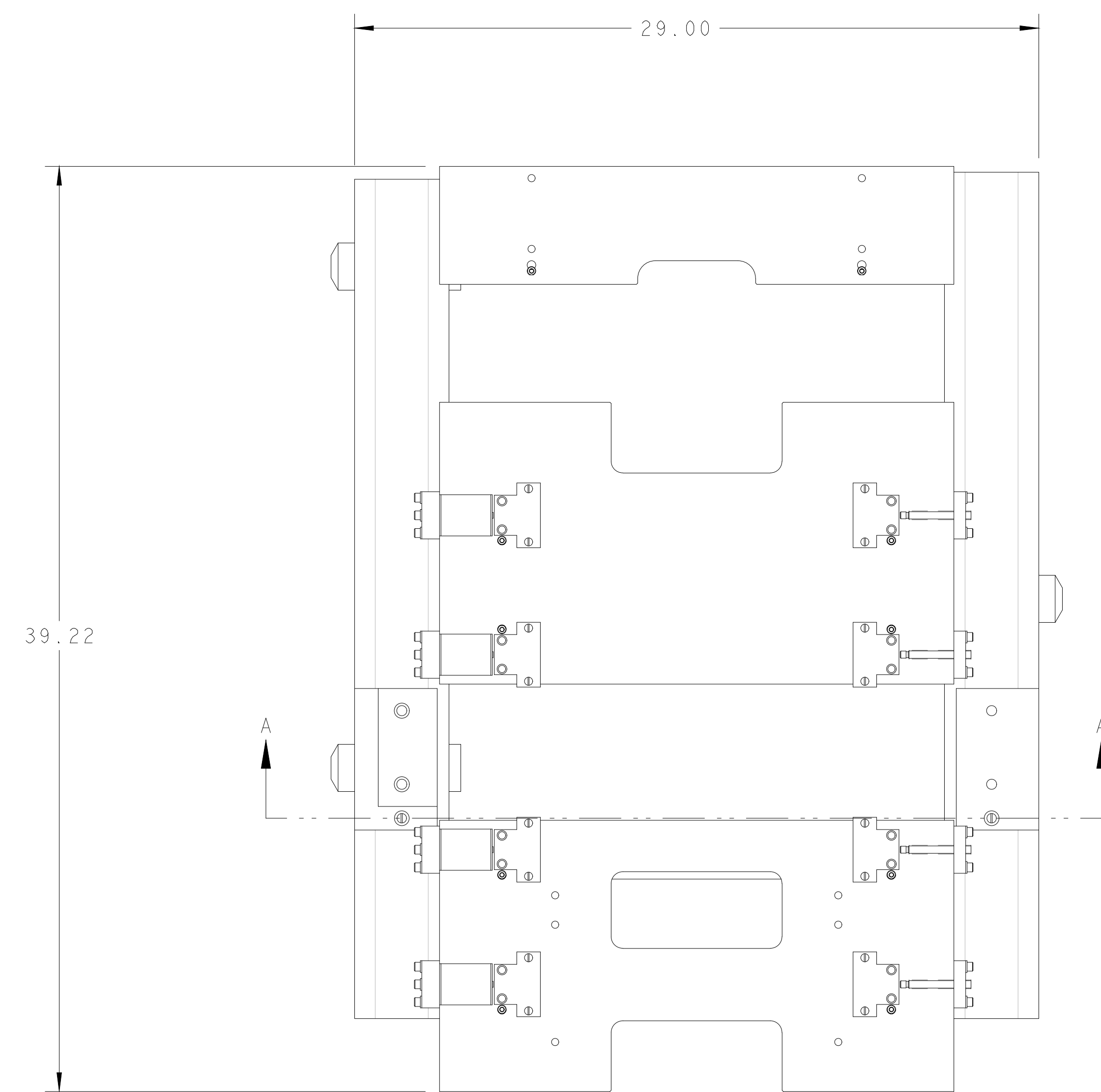






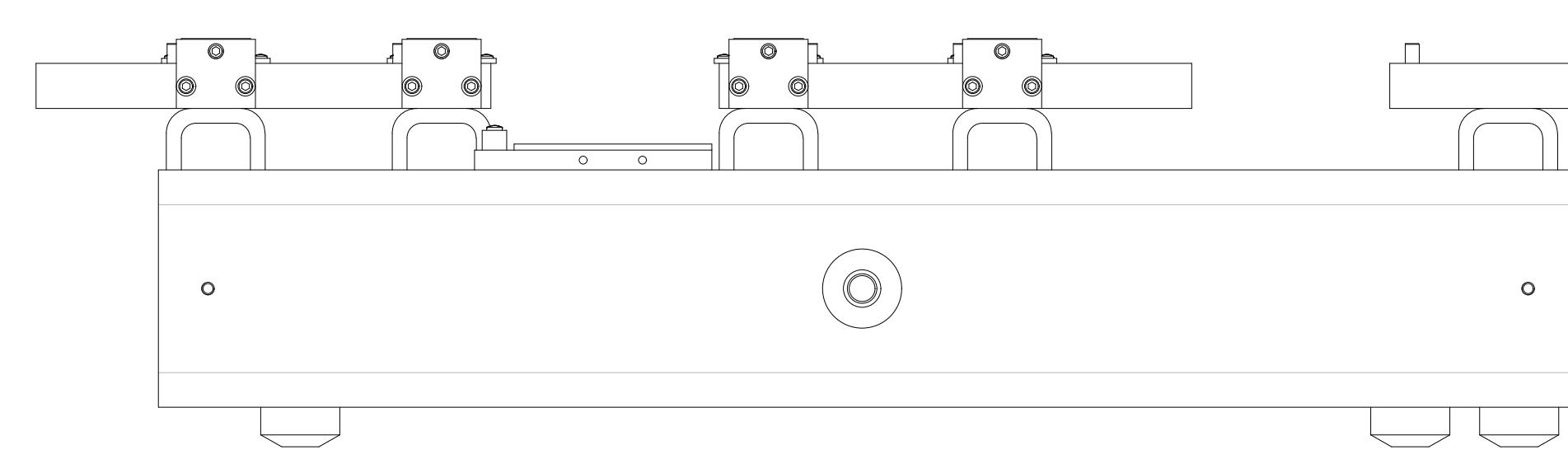
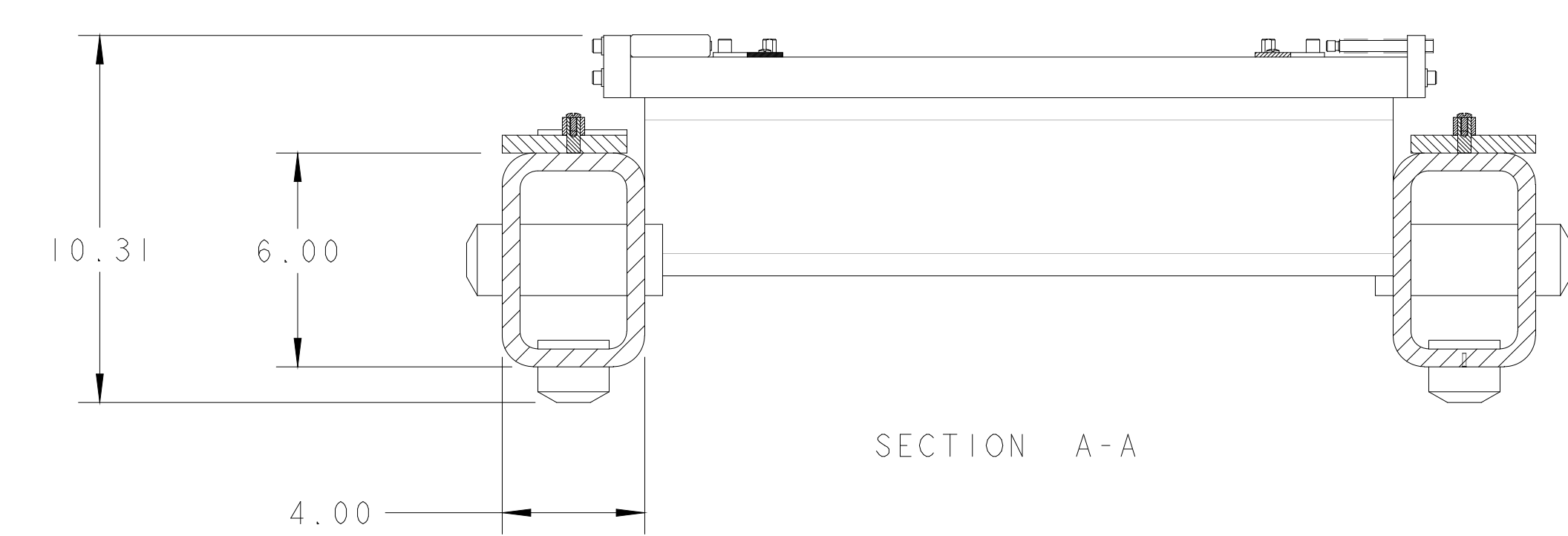
8 7 6 5 4 3 2 1

D



C

B



**PRELIMINARY**

ITEM	PART NO.	QTY	DESCRIPTION	MATERIAL
14	25B455	20	1/4" NARROW FLAT WASHER	STAINLESS STEEL
13	25B459	4	RAFT #3 WELDMENT	CARBON STEEL
12	25B458	4	RAIL JACKING	304 SS PRODEC
11	25B457	4	RAIL X-SHIM	304 SS PRODEC
10	24B460	2	Y-SHIM QUAD	304 SS PRODEC
9	24B460	2	Z-SHIM	304 SS PRODEC
8	25B456	4	Z-SHIM QUAD	304 SS PRODEC
7	25B461	1	Y-SHIM REBUNCHER	304 SS - PRODEC
6	CL-39-SSC-S	4	SWIVEL HEAD JACKING SCREW, 3/16-16	300 SERIES SS
5	SHCS	20	SHCS 1/4-20 X 1.25 SS	18-8 SS
4	MNC 97365A250	12	RAFT 7-PIN, PULL-OUT, FLAT VENT	18-8 SS
3		2	BINDER SCREW - 8-32 X .625, 18-8 SS	18-8 SS
2		16	BINDER SCREW - 8-32 X .625, 18-8 SS	18-8 SS
1		1		

UNLESS OTHERWISE SPECIFIED:  
 PROJECTION:   
 DIMENSIONS: X.XX ± 0.1 FRACTION ± 1/64  
 X.XXX ± 0.03 ANGLES ± 1.0°  
 X.XXX ± 0.010 FINISH 125/  
 DO NOT SCALE PRINT  
 TOLERANCES ARE CLASS 2  
 CHAMFER ENDS OF ALL SCREW THREADS 30°  
 CUT ROUNDS, 1/8" MINIMUM RADIUS UNLESS OTHERWISE SPECIFIED  
 BREAK EDGES .015 MIN. ON MACHINED WORK  
 REMOVE BURRS, WELD SPATTER & LOOSE SCALE  
 IN ACCORDANCE WITH ASME Y14.5M-1994

SHOP ORDERS  
 DATE: 09-Apr-01  
 BY: D. GSHATZ

ERNEST ORLANDO LAWRENCE  
 BERKELEY NATIONAL LABORATORY  
 UNIVERSITY OF CALIFORNIA - BERKELEY

SNS - FES MBT  
 SUPPORT AND ALIGNMENT  
 RAFT 3 SUB-ASSEMBLY

SCALE: 1/4"  
 SHEET 1 OF 1

DESIGN ACCT. NO. FE3313  
 CATEGORY CODE 25B4526

REV	DWG	CHK	ZONE	DATE	CHANGES

8 7 6 5 4 3 2 1

A

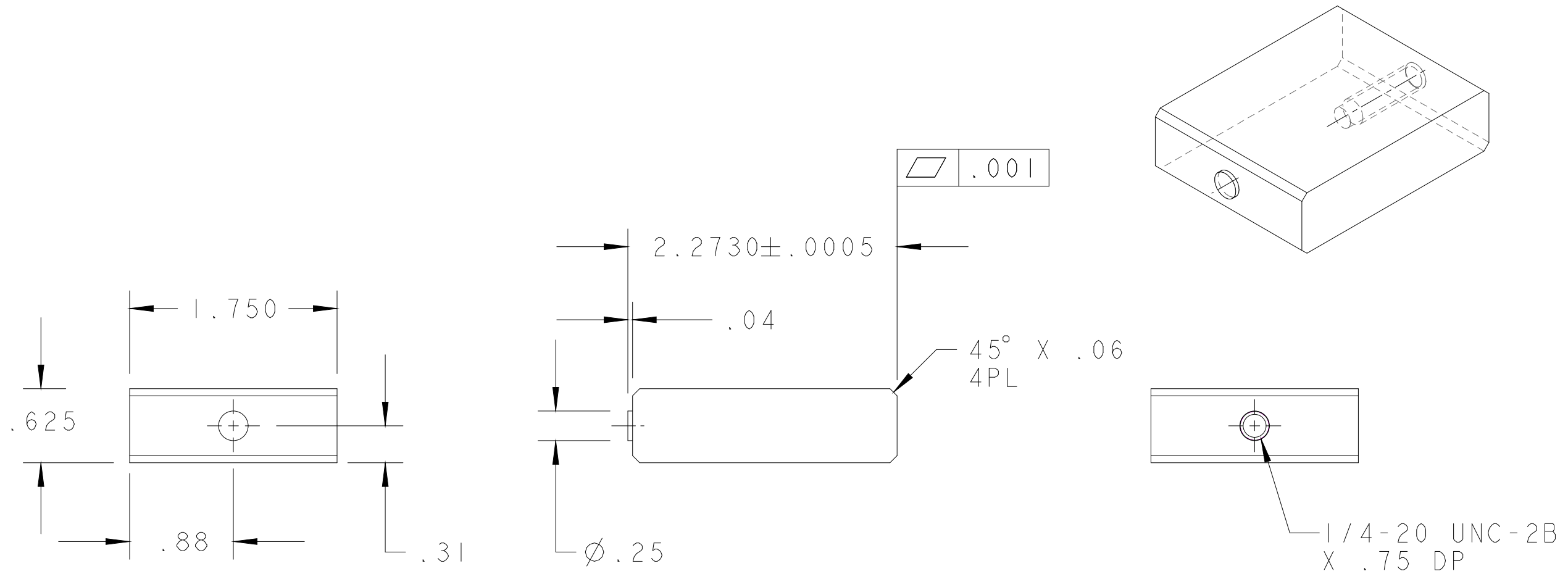
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25B4526 1 1



REV	DWG	CHK	ZONE	DATE	CHANGES

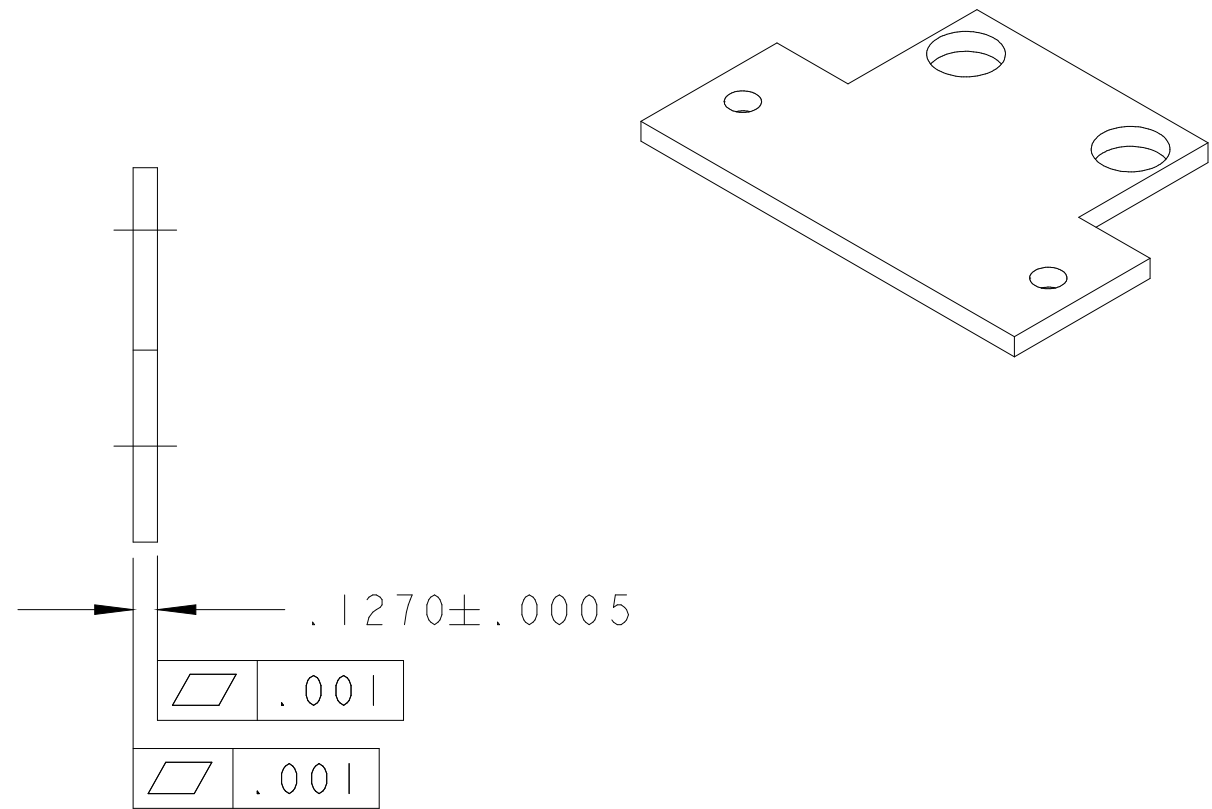
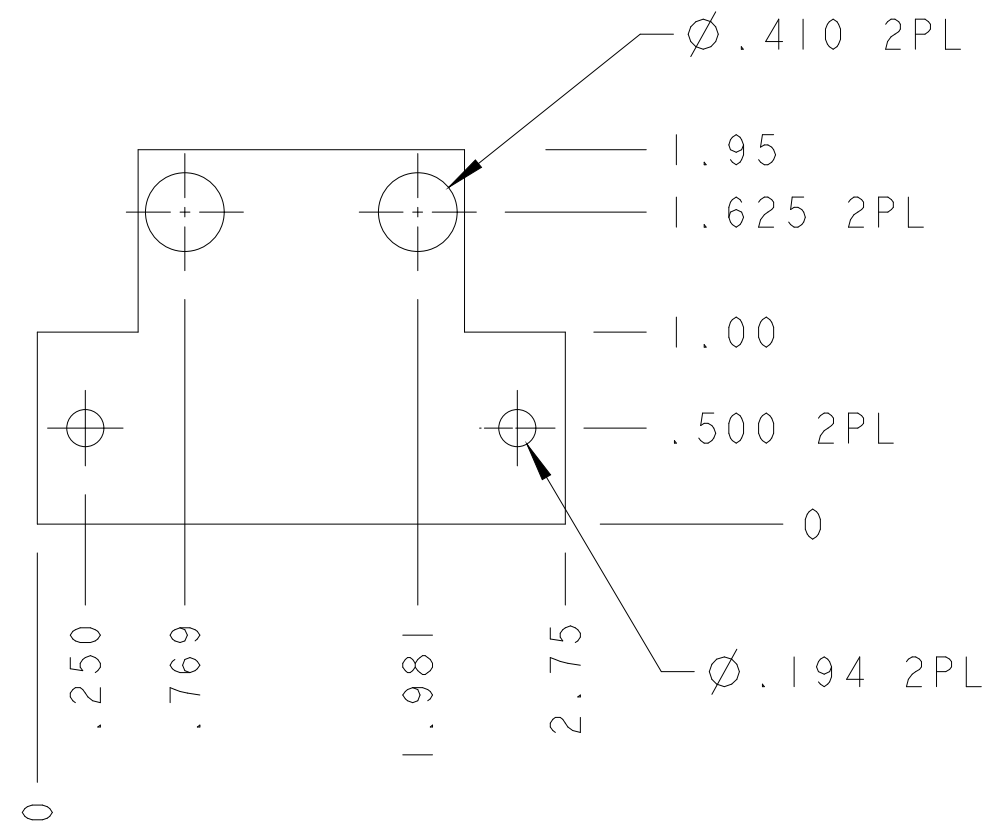
UNLESS OTHERWISE SPECIFIED  
 PROJECTION:

TOLERANCES

X.X ± 0.1	FRAC. ± 1/64
X.XX ± 0.01	Angles ± 1.0°
X.XXX ± 0.005	FINISH

DO NOT SCALE PRINT  
 THREADS ARE CLASS 2  
 CHAMFER ENDS OF ALL SCREW TREADS 30°  
 CUT ROUND, 1.5 THREAD RELIEF ON MACHINED THREADS  
 BREAK EDGES .016 MAX. ON MACHINED WORK  
 REMOVE BURRS, WELD SPLATTER & LOOSE SCALE  
 IN ACCORDANCE WITH ASME Y14.5M & B46.1

DESCRIPTION		MATERIAL		MAT. LOCATION		
-		304 SS PRODEC		-		
<b>SHOP ORDERS</b>		SER NO. -	DATE ISSD -	<b>ERNEST ORLANDO LAWRENCE</b> <b>BERKELEY NATIONAL LABORATORY</b> UNIVERSITY OF CALIFORNIA - BERKELEY		
ACCT NO.	NO. REQD	DATE REQD -				
DEL TO						
SURFACE TREATMT -		SNS -FES MEBT MECHANICAL SUBSYSTEMS - RAFT SYSTEMS X-SHIM, QUAD				
IDENT METHOD TAG						
PROJECT NUMBER N/A						
PROJECT NAME N/A		MICROFILMED:	DWG. TYPE PART	SHOWN ON -	SCALE: 1/1	DO NOT SCALE PRINTS
DWG BY PAL		DATE 06-Apr-01	<b>SHEET 1 OF 1</b> DWG. NO. <b>25B4562</b> SIZE <b>1</b>			
CHK BY -		DATE				
APR BY D. OSHATZ		DATE				
PATENT CLEAR:		DESIGN ACCT. NO. -	CATEGORY CODE FE3313			



REV	DWG	CHK	ZONE	DATE	CHANGES

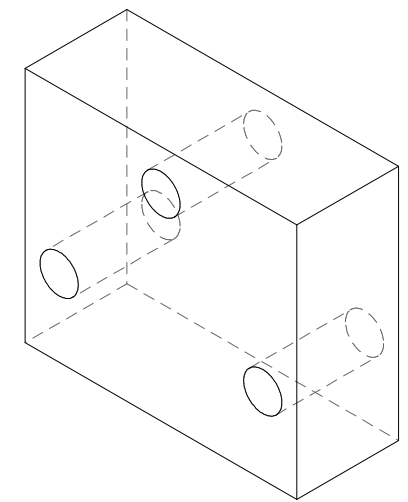
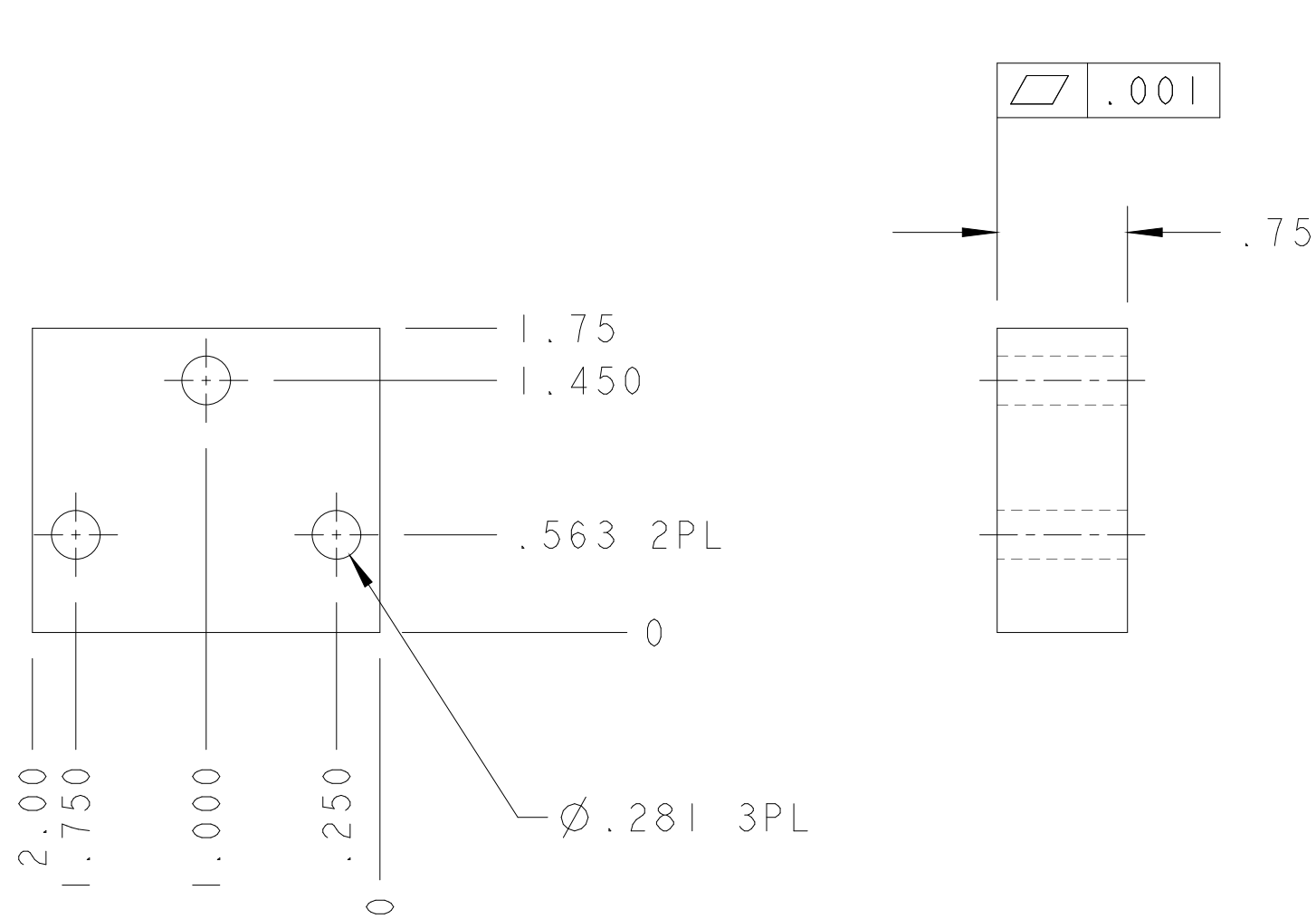
UNLESS OTHERWISE SPECIFIED  
 PROJECTION:

TOLERANCES

X.X ± 0.1	FRAC. ± 1/64
X.XX ± 0.03	Angles ± 1.0°
X.XXX ± 0.010	FINISH

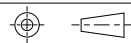

DO NOT SCALE PRINT  
 THREADS ARE CLASS 2  
 CHAMFER ENDS OF ALL SCREW TREADS 30°  
 CUT ROUND, 1.5 THREAD RELIEF ON MACHINED THREADS  
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 REMOVE BURRS, WELD SPLATTER & LOOSE SCALE  
 IN ACCORDANCE WITH ASME Y14.5M & B46.1

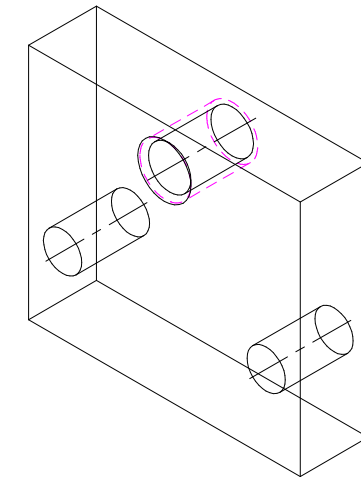
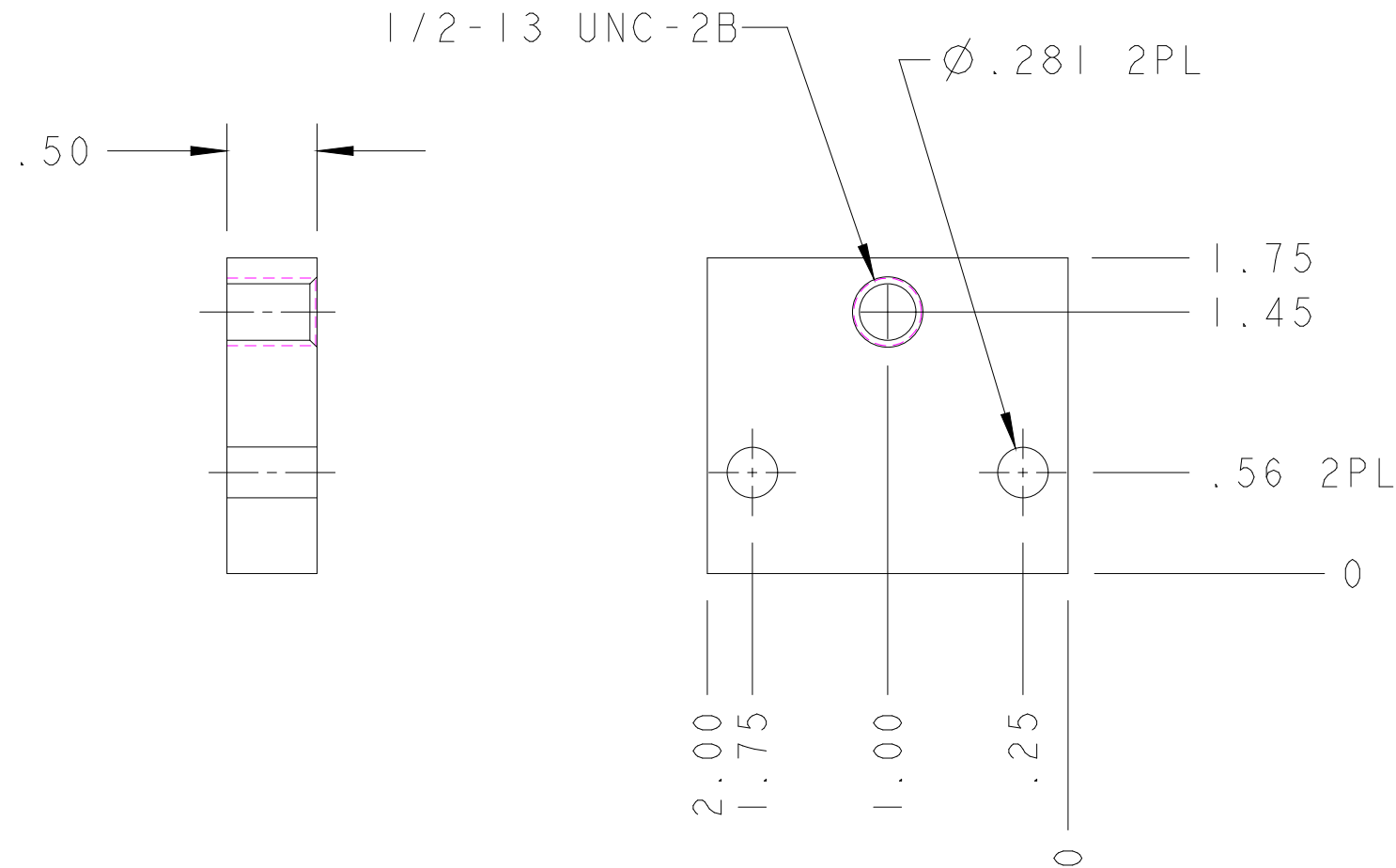
DESCRIPTION		MATERIAL		MAT. LOCATION	
-		304 SS PRODEC		-	
<b>SHOP ORDERS</b>		SER NO. -		<b>ERNEST ORLANDO LAWRENCE</b> <b>BERKELEY NATIONAL LABORATORY</b> UNIVERSITY OF CALIFORNIA - BERKELEY 	
ACCT NO.	NO. REQD	DATE ISSD	DATE REQD		
DEL TO		DATE REQD			
SURFACE TREATMT		-			
IDENT METHOD TAG		-		SNS - FES MEBT MECHANICAL SUBSYSTEMS - RAFT SYSTEMS Y-SHIM, QUAD	
PROJECT NUMBER N/A		-			
PROJECT NAME N/A		-		MICROFILMED:	
DWG BY Unknown		DATE 09-Apr-01		DWG. TYPE: 25B450, 25B451, 25B452 SHOWN ON: 25B450, 25B451, 25B452 SCALE: 1/1 DO NOT SCALE PRINTS	
CHK BY -		DATE		PATENT CLEAR:	
APR BY D. OSHATZ		DATE		DESIGN ACCT. NO.: - CATEGORY CODE: FE3313 DWG. NO.: <b>25B4572</b> SIZE: <b>1</b> REV.: <b>1</b>	



				DESCRIPTION		304 SS PRODEC		MATERIAL		MAT. LOCATION	
				<b>SHOP ORDERS</b>		SER NO. -	<b>ERNEST ORLANDO LAWRENCE</b> <b>BERKELEY NATIONAL LABORATORY</b> UNIVERSITY OF CALIFORNIA - BERKELEY 				
				ACCT NO.	NO. REQD	DATE ISSD -					
				DEL TO		DATE REQD -					
				SURFACE TREATMT							
				IDENT METHOD TAG		 SNS - FES MEBT MECHANICAL SUBSYSTEMS - RAFT SYSTEMS RAIL, X-SHIM					
				PROJECT NUMBER	N/A						
				PROJECT NAME	N/A	MICROFILMED:	DWG. TYPE	SHOWN ON	SCALE: 1/1	DO NOT SCALE PRINTS	
				DWG BY	Unknown	DATE	09-Apr-01			<b>SHEET 1 OF 1</b>	
				CHK BY	-	DATE		PATENT CLEAR:	DESIGN ACCT. NO.	CATEGORY CODE	DWG. NO. <b>25B4582</b> SIZE <b>1</b>
				APR BY	D. OSHATZ	DATE			-	FE3313	

REV	DWG	CHK	ZONE	DATE	CHANGES

UNLESS OTHERWISE SPECIFIED  
 PROJECTION:   
 TOLERANCES  
 X.X ± 0.1    FRAC. ± 1/64  
 X.XX ± 0.03    Angles ± 1.0°  
 X.XXX ± 0.010    FINISH   
 DO NOT SCALE PRINT  
 THREADS ARE CLASS 2  
 CHAMFER ENDS OF ALL SCREW TREADS 30°  
 CUT ROUND, 1.5 THREAD RELIEF ON MACHINED THREADS  
 BREAK EDGES .016 MAX. ON MACHINED WORK  
 REMOVE BURRS, WELD SPLATTER & LOOSE SCALE  
 IN ACCORDANCE WITH ASME Y14.5M & B46.1



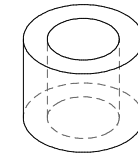
REV	DWG	CHK	ZONE	DATE	CHANGES

UNLESS OTHERWISE SPECIFIED  
 PROJECTION:

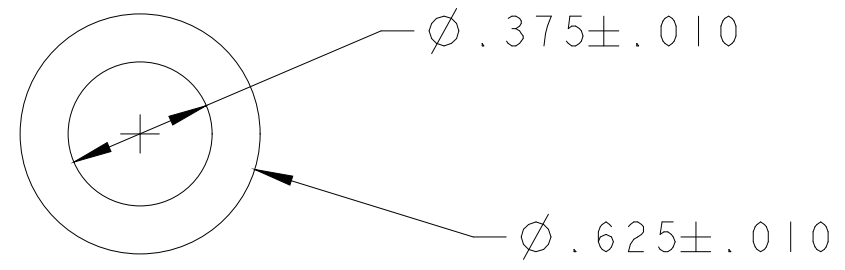
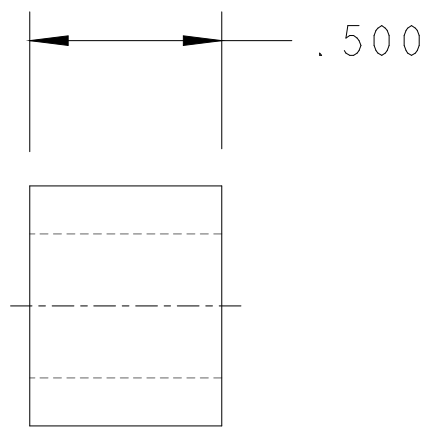
TOLERANCES  
 X.X ± 0.1      FRAC. ± 1/64  
 X.XX ± 0.03      Angles ± 1.0°  
 X.XXX ± 0.010      FINISH

DO NOT SCALE PRINT  
 THREADS ARE CLASS 2  
 CHAMFER ENDS OF ALL SCREW TREADS 30°  
 CUT ROUND, 1.5 THREAD RELIEF ON MACHINED THREADS  
 BREAK EDGES .016 MAX. ON MACHINED WORK  
 REMOVE BURRS, WELD SPLATTER & LOOSE SCALE  
 IN ACCORDANCE WITH ASME Y14.5M & B46.1

-		304 SS PRODEC		-	
DESCRIPTION		MATERIAL		MAT. LOCATION	
<b>SHOP ORDERS</b>		SER. NO. -		<b>ERNEST ORLANDO LAWRENCE</b> <b>BERKELEY NATIONAL LABORATORY</b> UNIVERSITY OF CALIFORNIA - BERKELEY	
ACCT NO.	NO. REQD	DATE ISSD	DATE REQD		
DEL TO		DATE	REQD		
SURFACE TREATMT		-			
IDENT METHOD		TAG		SNS - FES MEBT MECHANICAL SUBSYSTEMS - RAFT SYSTEMS RAIL, JACKING	
PROJECT NUMBER		N/A			
PROJECT NAME		N/A		MICROFILMED:	
DWG BY Unknown		DATE 09-Apr-01		DWG. TYPE PART	
CHK BY -		DATE		SHOWN ON -	
APR BY D. OSHATZ		DATE		SCALE: 1/1	
PATENT CLEAR:		DESIGN ACCT. NO. -		DO NOT SCALE PRINTS	
		CATEGORY CODE FE3313		SHEET 1 OF 1	
		DWG. NO. 25B4592		SIZE 1	



SCALE 1 / 1

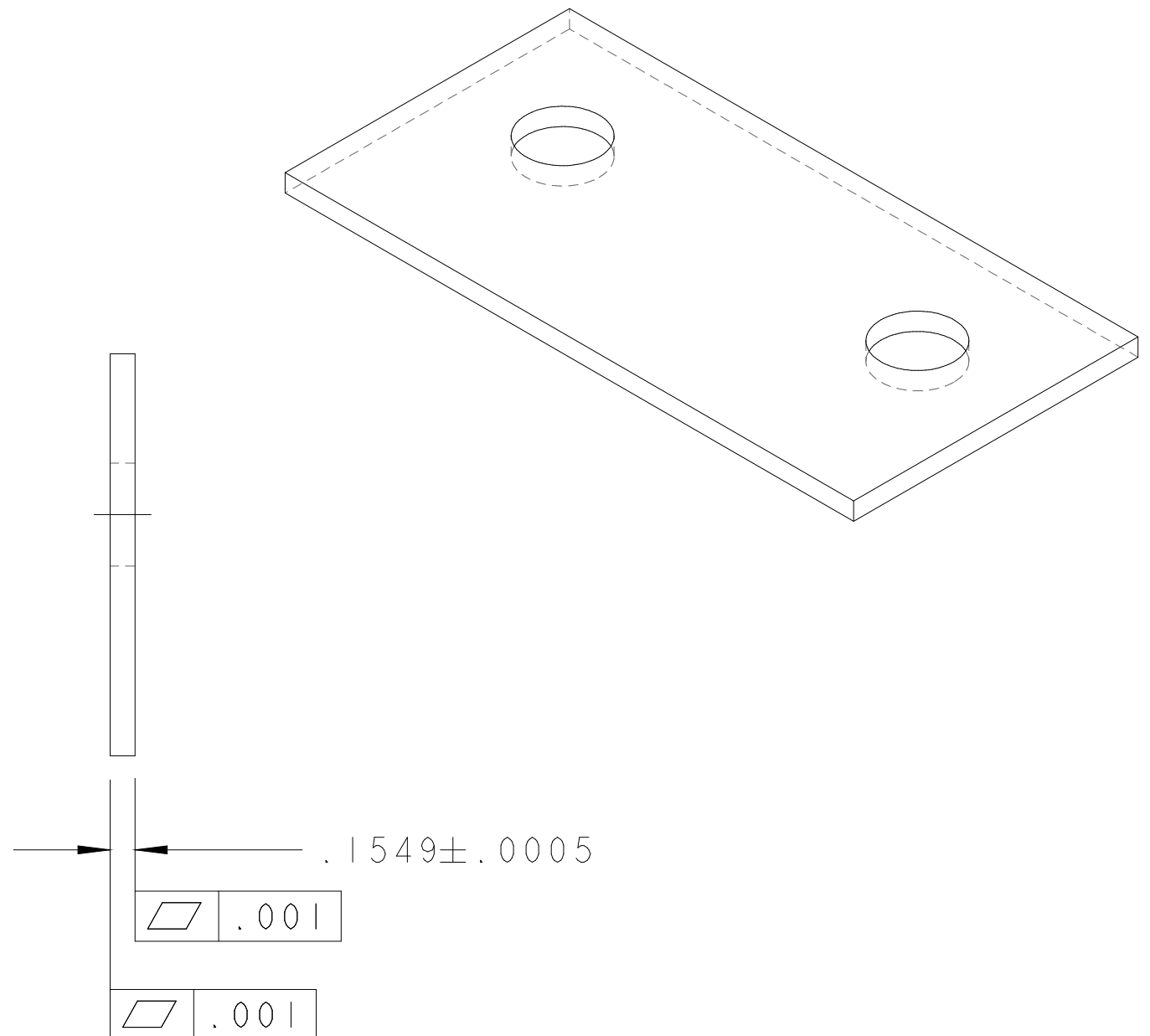
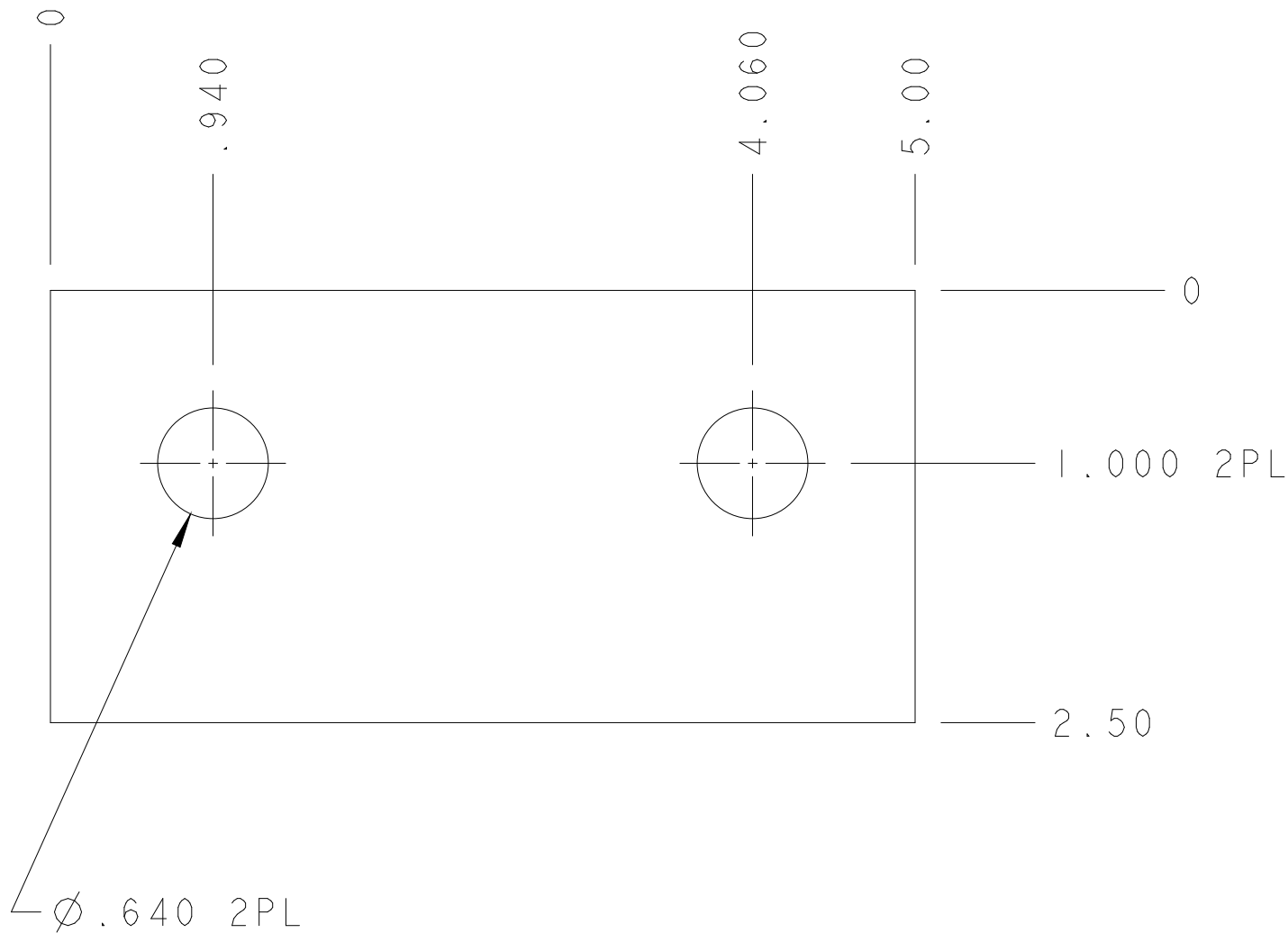


**PRELIMINARY**

REV	DWG	CHK	DATE	CHANGES		DESCRIPTION		304 SS PRODEC		
UNLESS OTHERWISE SPECIFIED				SHOP ORDERS		ERNEST ORLANDO LAWRENCE		MATERIAL		
PROJECTION:				ACCT NO.	NO. REQD	DATE ISSD	BERKELEY NATIONAL LABORATORY			
TOLERANCES	X.X ± 0.1	FRAC. ± 1/64		DEL	DATE REQD	UNIVERSITY OF CALIFORNIA - BERKELEY				
	X.XX ± 0.03	Angles ± 1.0°		SURFACE TREATMT		SNS - FES MEBT				
	X.XXX ± 0.010	FINISH 125/		TIDENT METHOD TAG		MECHANICAL SUBSYSTEMS - RAFT SYSTEMS				
DO NOT SCALE PRINT				PROJECT NUMBER N/A		MICROFILMED:		Z-SHIM		
THREADS ARE CLASS 2				PROJECT NAME N/A		DWG BY	DWG. TYPE	SHOWN ON	SCALE: 2/1	DO NOT SCALE PRINTS
CHAMFER ENDS OF ALL SCREW THREADS 30°				CHK BY	DATE	PAL	PART	-	SHEET 1 OF 1	
CUT ROUND, 1.5 THREAD RELIEF ON MACHINED THREADS				APR BY	DATE	D. Oshatz	XXXX-XX	XXnnnn	24B4601	REV.
BREAK EDGES .016 MAX. ON MACHINED WORK				PATENT CLEAR:		DESIGN ACCT. NO.	CATEGORY CODE	DWG. NO.	SIZE	
REMOVE BURRS, WELD SPLATTER & LOOSE SCALE										
IN ACCORDANCE WITH ASME Y14.5M & B46.1										

Rev. 1/29/2000 J.L.B. - Oshatz





**PRELIMINARY**

REV	DWG	CHK	ZONE	DATE	CHANGES

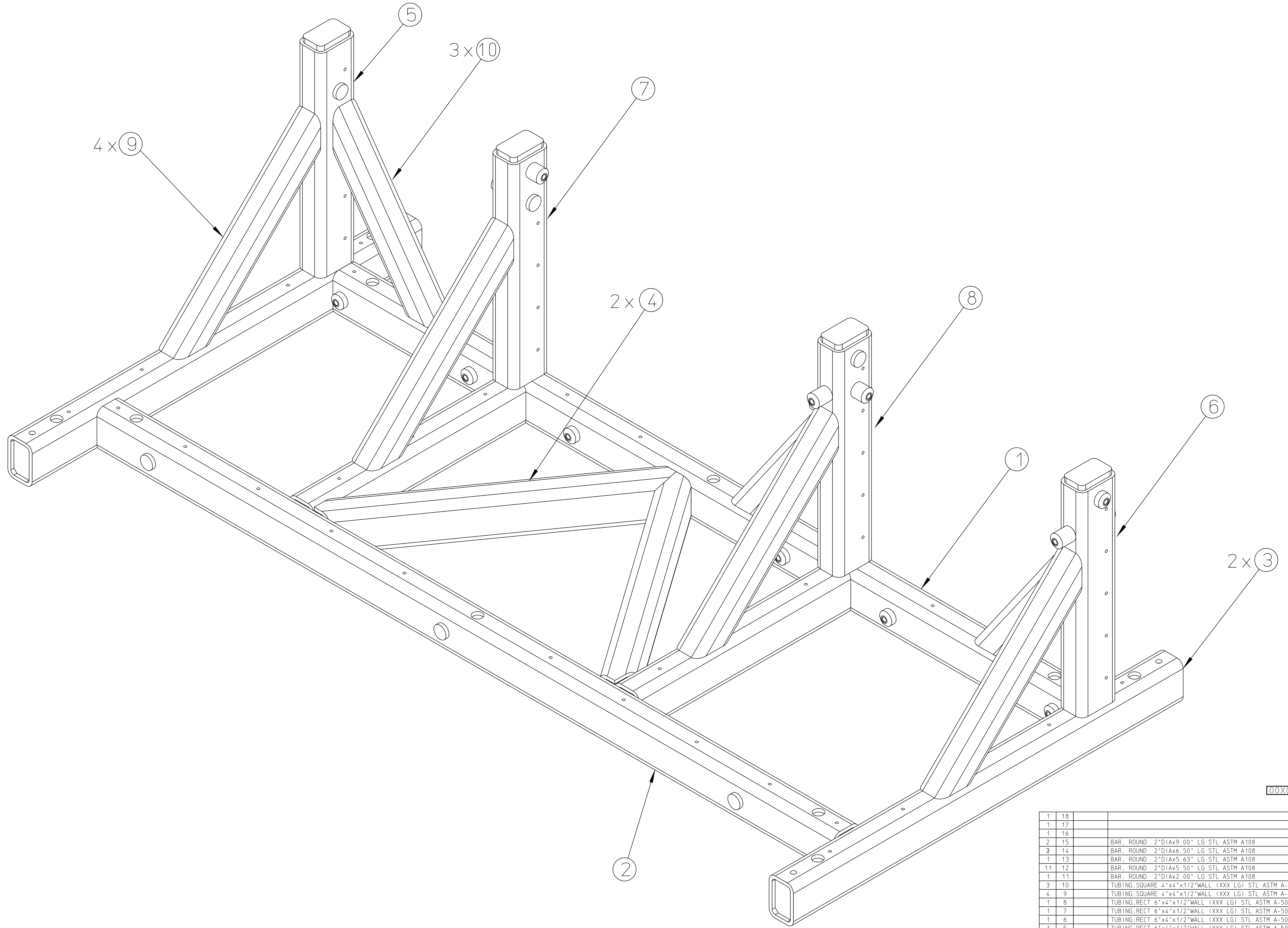
UNLESS OTHERWISE SPECIFIED  
 PROJECTION:

TOLERANCES

X.X ± 0.1	FRAC. ± 1/64
X.XX ± 0.03	Angles ± 1.0°
X.XXX ± 0.010	FINISH

DO NOT SCALE PRINT  
 THREADS ARE CLASS 2  
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 CUT ROUND, 1.5 THREAD RELIEF ON MACHINED THREADS  
 BREAK EDGES .016 MAX. ON MACHINED WORK  
 REMOVE BURRS, WELD SPLATTER & LOOSE SCALE  
 IN ACCORDANCE WITH ASME Y14.5M & B46.1

DESCRIPTION		MATERIAL		MAT. LOCATION	
-		304 SS - PRODEC		-	
<b>SHOP ORDERS</b>		SER. NO. -		<b>ERNEST ORLANDO LAWRENCE</b> <b>BERKELEY NATIONAL LABORATORY</b> UNIVERSITY OF CALIFORNIA - BERKELEY	
ACCT. NO.	NO. REQD.	DATE ISSD	DATE REQD.		
DEL TO		DATE	REQD.		
SURFACE TREATMT		-			
IDENT METHOD TAG		-		SNS - FES MEBT MECHANICAL SUBSYSTEMS - RAFT SYSTEMS Y-SHIM, REBUNCHEER	
PROJECT NUMBER N/A		-			
PROJECT NAME N/A		-		MICROFILMED: - DWG. TYPE: PART SHOWN ON: - SCALE: 1/1 DO NOT SCALE PRINTS	
DWG BY PAL		DATE 11-Apr-01		SHEET 1 OF 1 DWG. NO. 25B4612 SIZE REV.	
CHK BY		DATE		DESIGN ACCT. NO. XXXX-XX CATEGORY CODE FE3313	
APR BY D.Oshatz		DATE		Dwg. File: 25B461 Model File: 25B461	

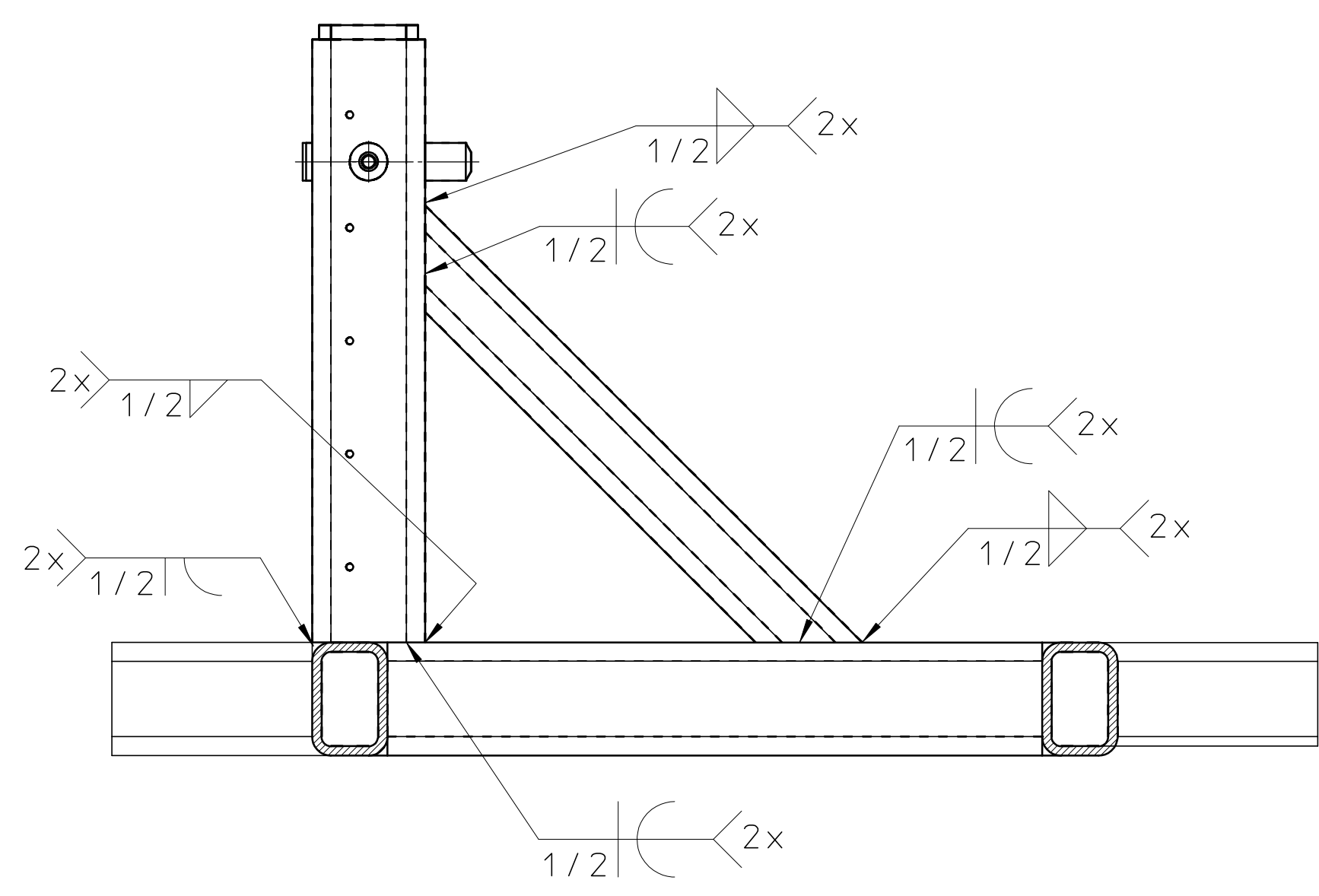
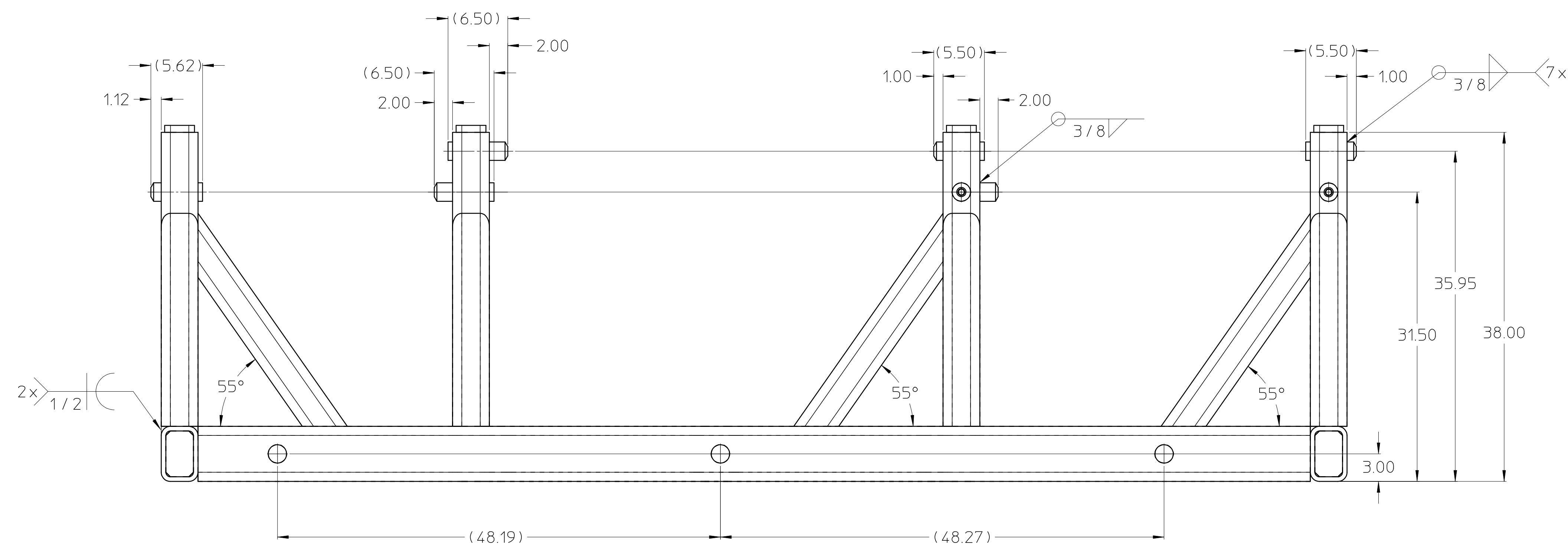
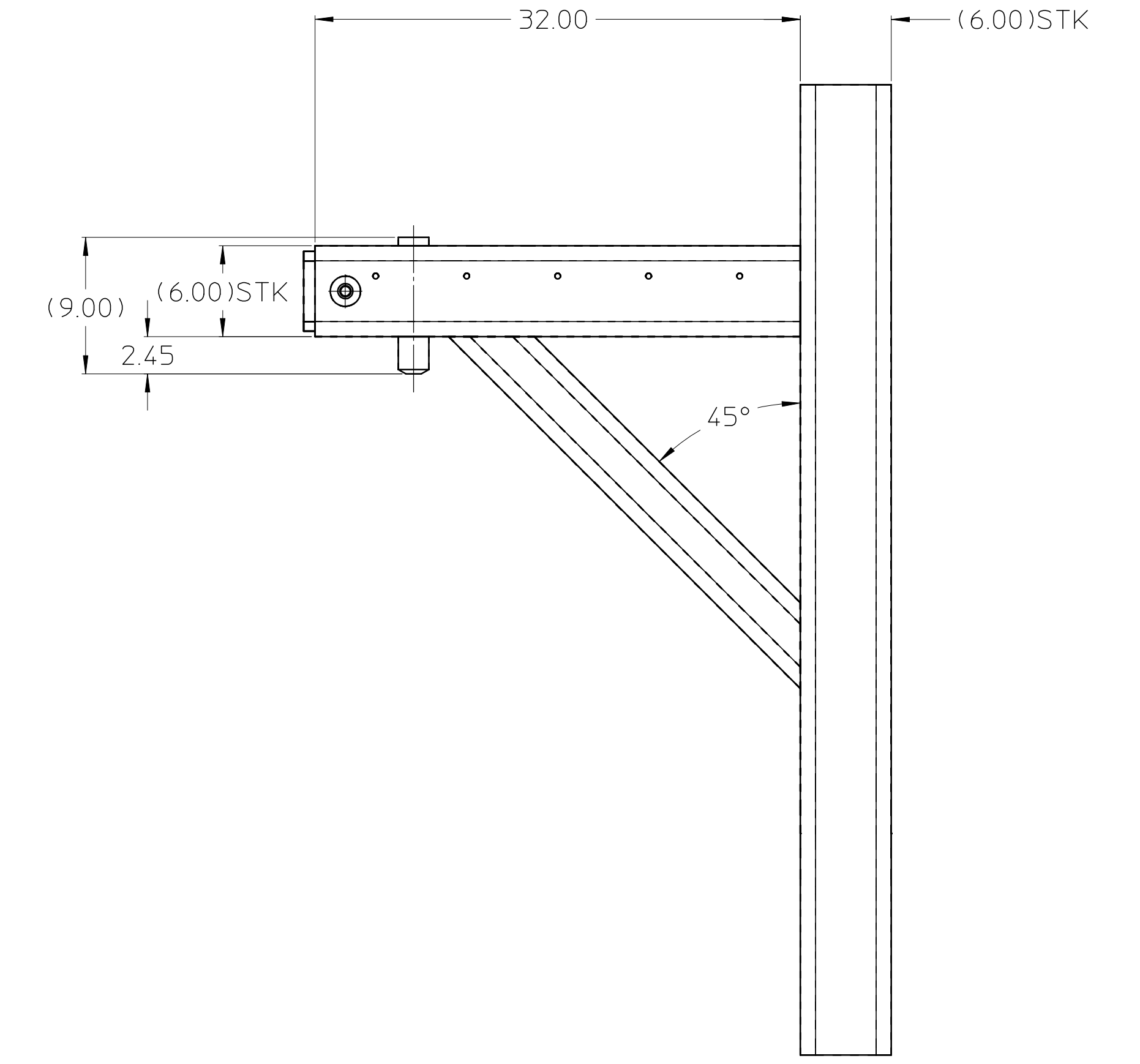
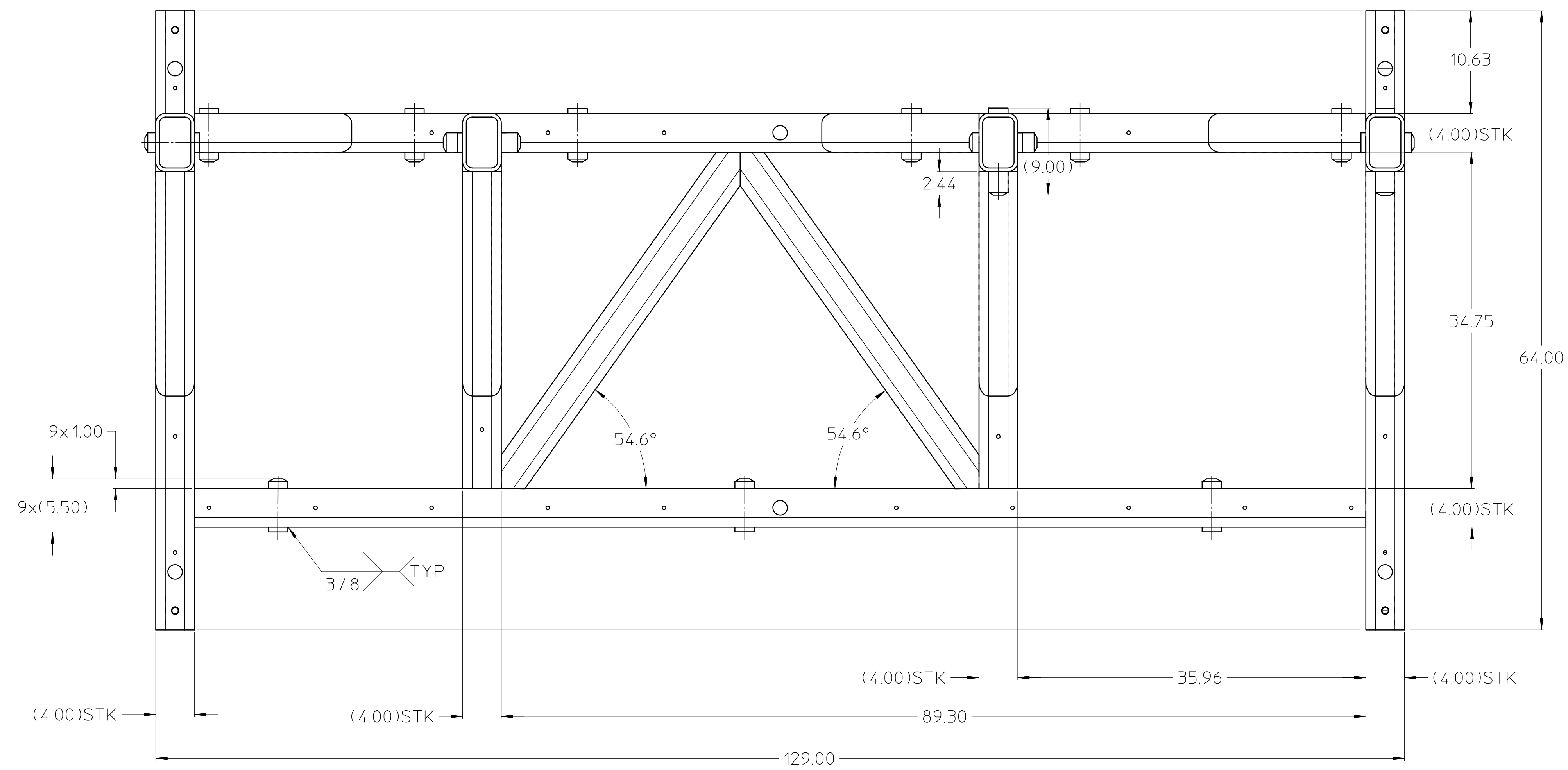
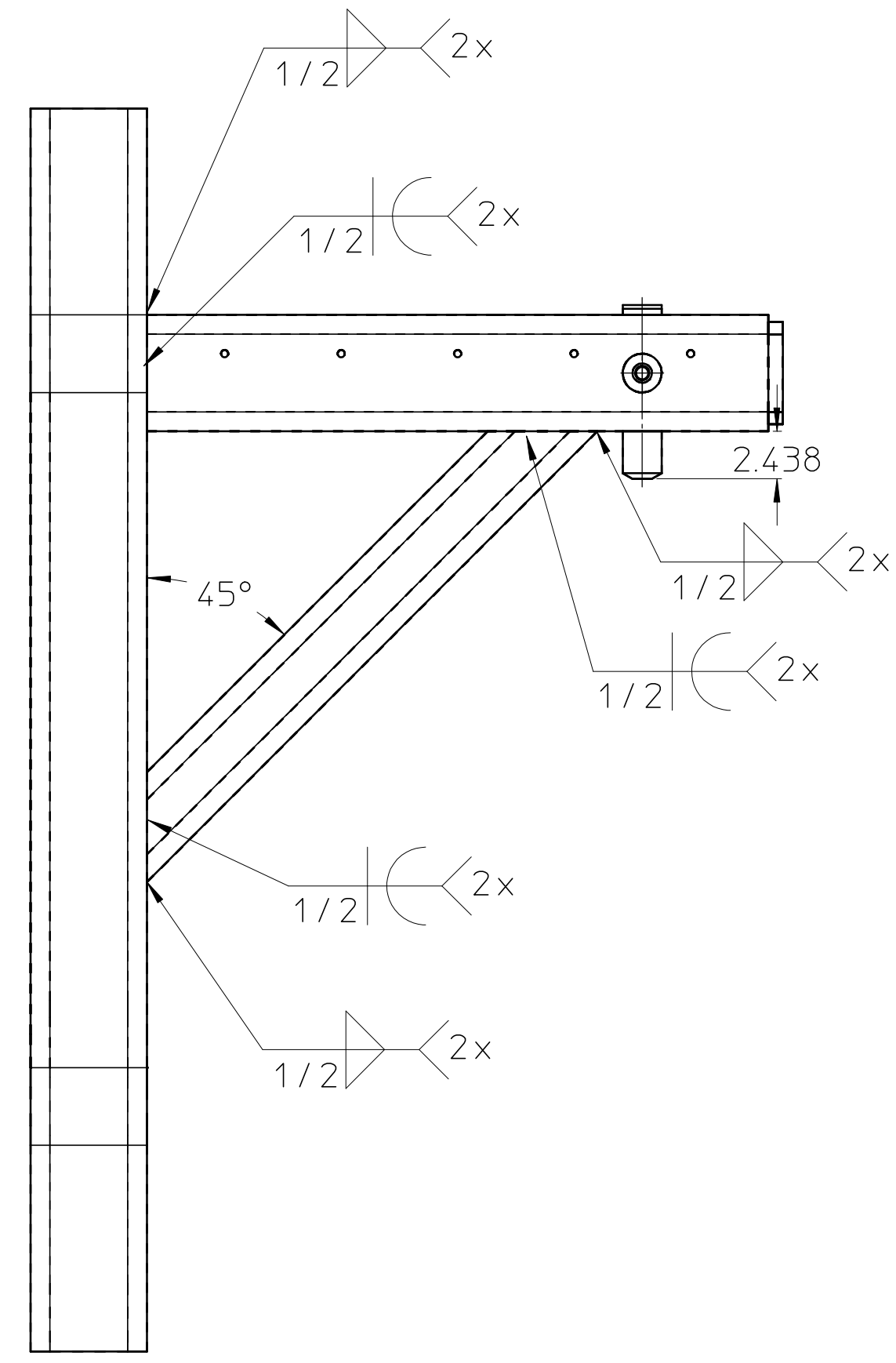
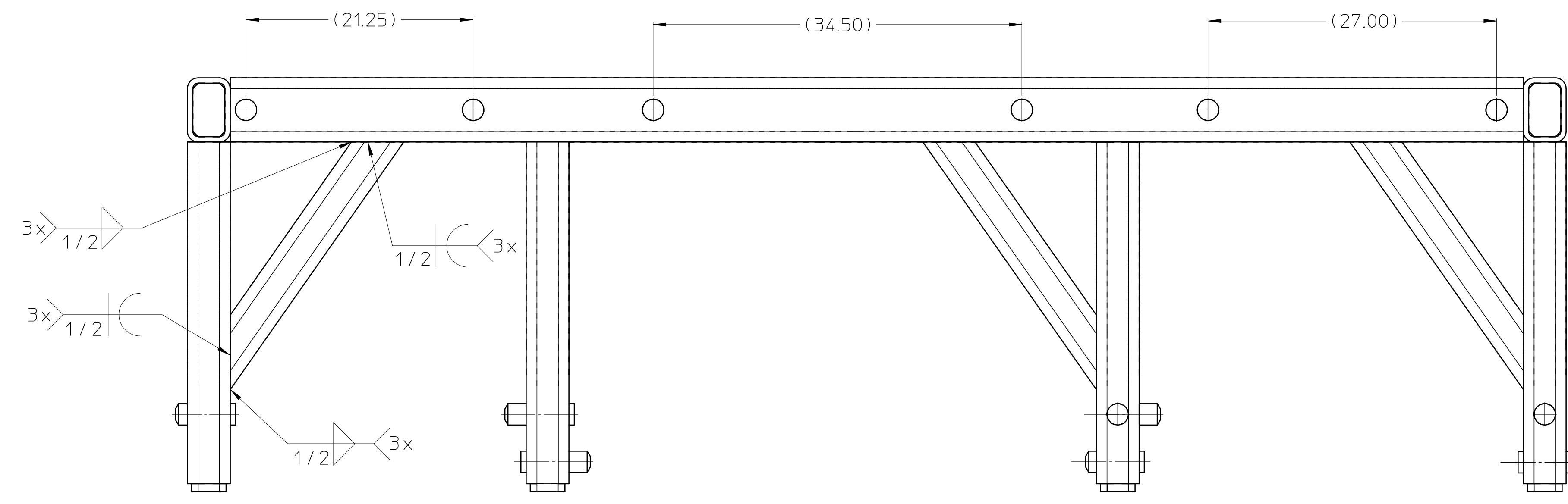


REV	ITEM	PART NO.	DESCRIPTION
1	18		
1	17		
1	16		
2	15		BAR, ROUND 2" DIA x 9' 00" LG STL ASTM A108
3	14		BAR, ROUND 2" DIA x 6' 50" LG STL ASTM A108
1	13		BAR, ROUND 2" DIA x 5' 63" LG STL ASTM A108
11	12		BAR, ROUND 2" DIA x 5' 50" LG STL ASTM A108
1	11		BAR, ROUND 2" DIA x 2' 00" LG STL ASTM A108
3	10		TUBING, SQUARE 4"x4"x1/2" WALL (XXX LG) STL ASTM A-500
4	9		TUBING, SQUARE 4"x4"x1/2" WALL (XXX LG) STL ASTM A-500
1	8		TUBING, RECT 6"x4"x1/2" WALL (XXX LG) STL ASTM A-500
1	7		TUBING, RECT 6"x4"x1/2" WALL (XXX LG) STL ASTM A-500
1	6		TUBING, RECT 6"x4"x1/2" WALL (XXX LG) STL ASTM A-500
1	5		TUBING, RECT 6"x4"x1/2" WALL (XXX LG) STL ASTM A-500
2	4		TUBING, RECT 6"x4"x1/2" WALL (XXX LG) STL ASTM A-500
2	3		TUBING, RECT 6"x4"x1/2" WALL (XXX LG) STL ASTM A-500
1	2		TUBING, RECT 6"x4"x1/2" WALL (XXX LG) STL ASTM A-500
1	1		TUBING, RECT 6"x4"x1/2" WALL (XXX LG) STL ASTM A-500

UNLESS OTHERWISE SPECIFIED:		SHOP ORDERS		LAWRENCE BERKELEY LABORATORY	
CD	X ± .1	FRAC. ± 1/64	ACCT. NO.	UNIVERSITY OF CALIFORNIA-BERKELEY	
CD	XX ± .03	ANGLES ± 1°	DATE ISSD	SNS-FES MBT	
CD	XXX ± .005	FINISH 125/7	DATE BEGD	MECHANICAL SUBSYSTEMS	
			DATE BEGD	MEBT SUPPORT BASE	
			DELIVER		
THREADS ARE CLASS 2			SURFACE TREATMENT: DEGREASE		
CHAMFER ENDS OF ALL SCREW THREADS 30°			PATENT CLEAR		
Ø1.5 PITCH RHD RELIEF WITH ROUND NSE 100%			DWG. TYPE		
ON MACHINE CUT THREADS			ASSEMBLY		
BREAK EDGES: Ø16 MAX. ON MACHINED WORK			DESIGN ACCT. NO.		
REMOVE BURRS, WELD SPATTER & LOOSE SCALE			CATEGORY CODE		
REFERENCES: ANSI Y14.5 & B46.1			DWG. NO.		
			81212A		
			SIZE		
			REV.		

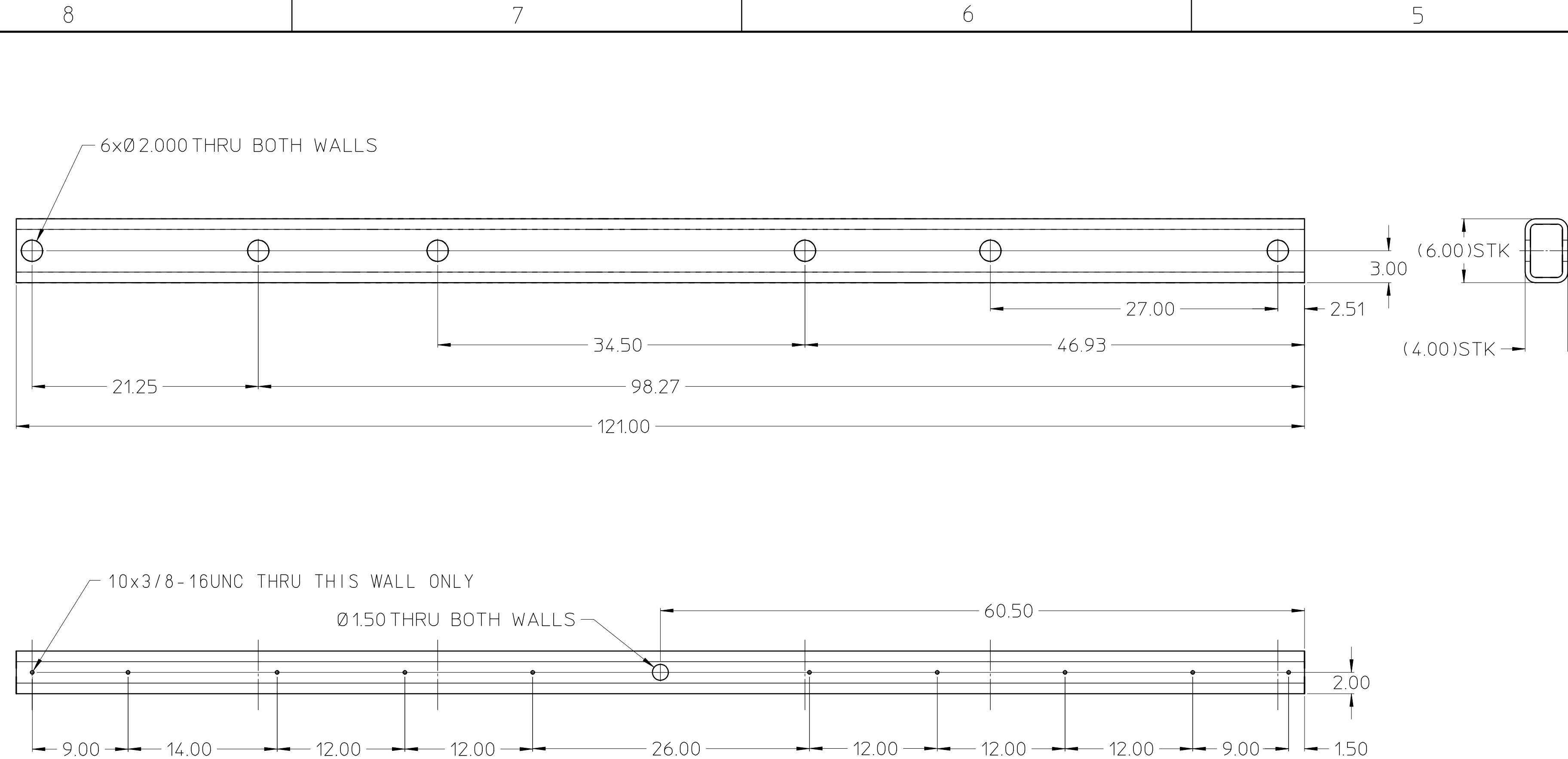
REV	DWG	CHK	ZONE	DATE	CHANGES

00X0006A

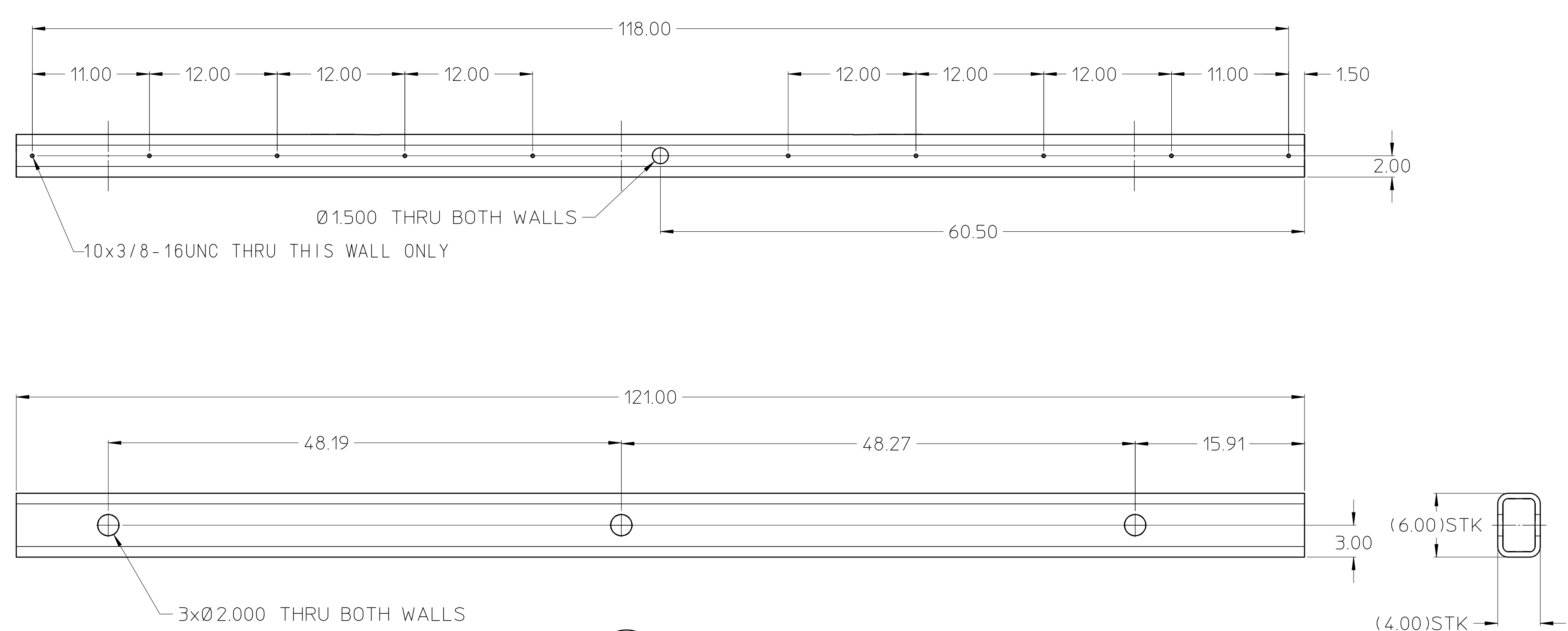


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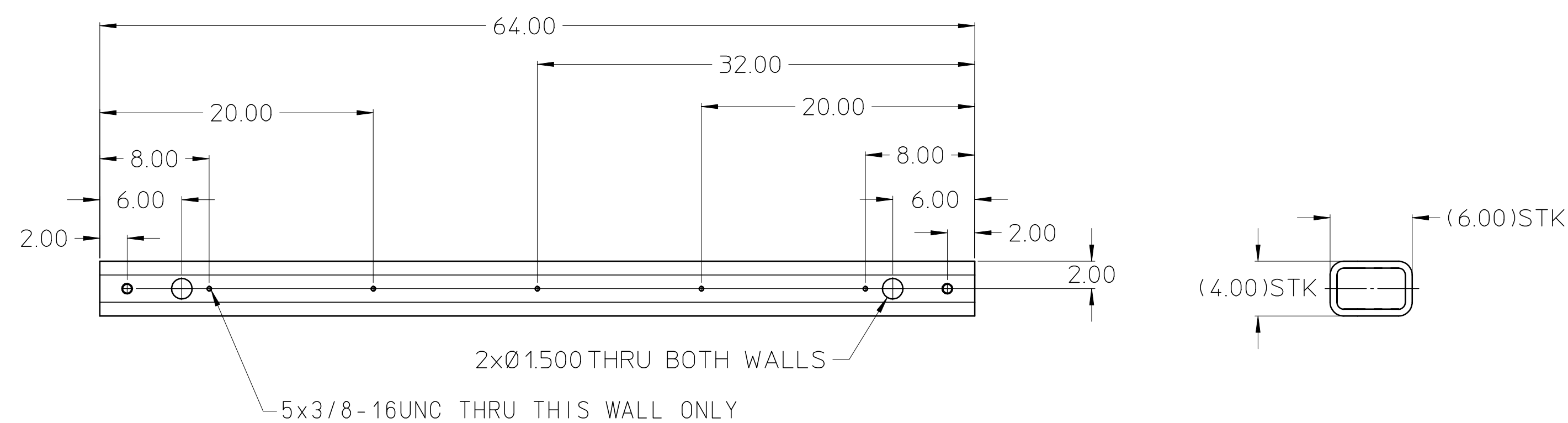
REV	DWG	CHK	ZONE	DATE	CHANGES	UNLESS OTHERWISE SPECIFIED	RECD	ITEM	PART NO.	DESCRIPTION
						TOLERANCES: DIMENSIONS: X ± .1 FRACTION ± 1/64 ANGLES ± 1° FINISH 125 THREADS ARE CLASS 2 CHAMFER ENDS OF ALL SCREW THREADS 30° CUT 1.5 PITCH TRHD RELIEF WITH ROUND NOSE TOOL ON MACHINE CUT THREADS. BREAK EDGES .016 MAX. ON MACHINED WORK. REMOVE BURRS WELD SPLATTER & LOOSE SCALE REFERENCES: ANSI Y14.5 & B46.1				<b>LAWRENCE BERKELEY LABORATORY</b> UNIVERSITY OF CALIFORNIA-BERKELEY FRIST LINE OF TITLE SECOND LINE OF TITLE THRID LINE OF TITLE DNG. TYPE SHOWN ON SCALE FULL ASSEMBLY 00X0000 DNG. NO. SIZE REV. 9999-99 999999 00X0006 A TAG DRAFTSMAN DATE 00-00-00 USUALLY NO ONE DATE 00-00-00



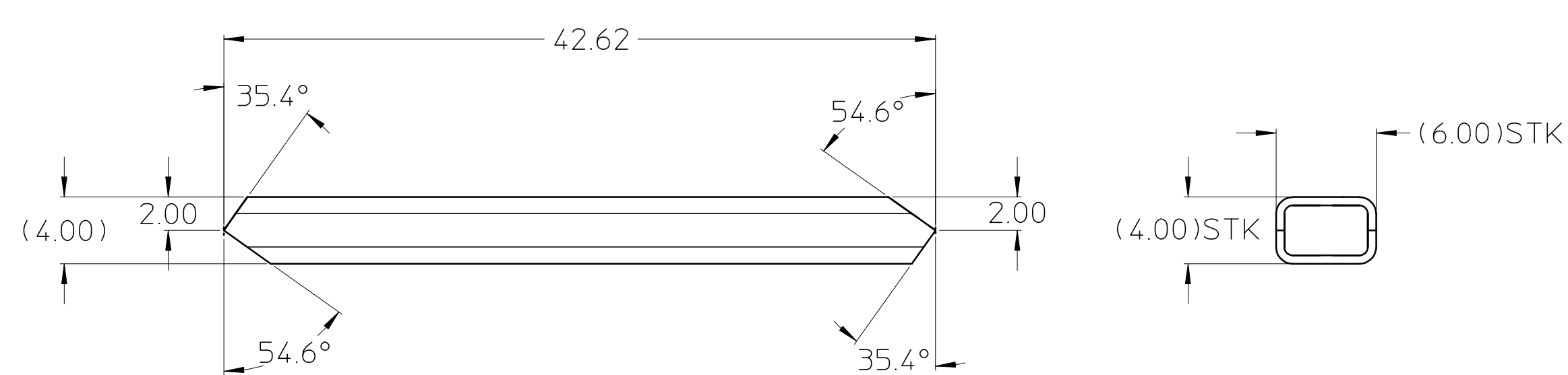
ITEM 1 DETAIL



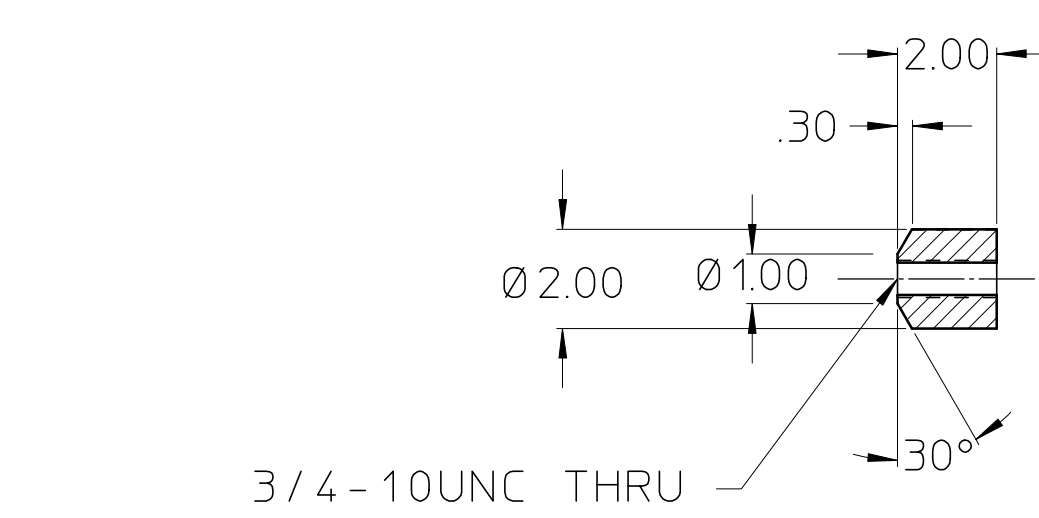
ITEM 2 DETAIL



ITEM 3 DETAIL

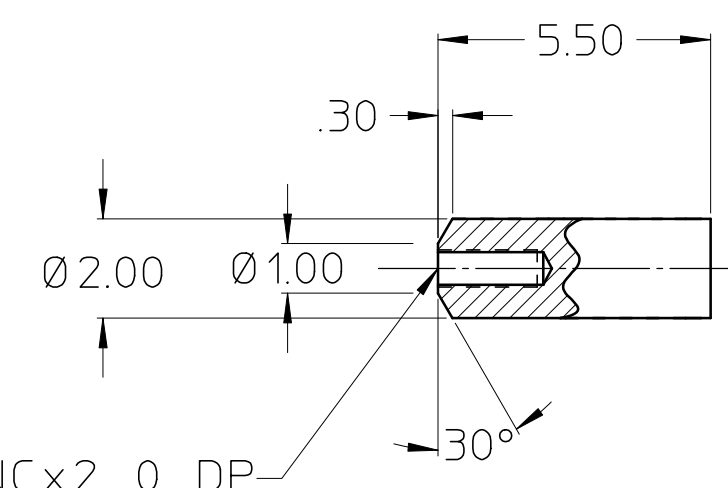


ITEM 4 DETAIL



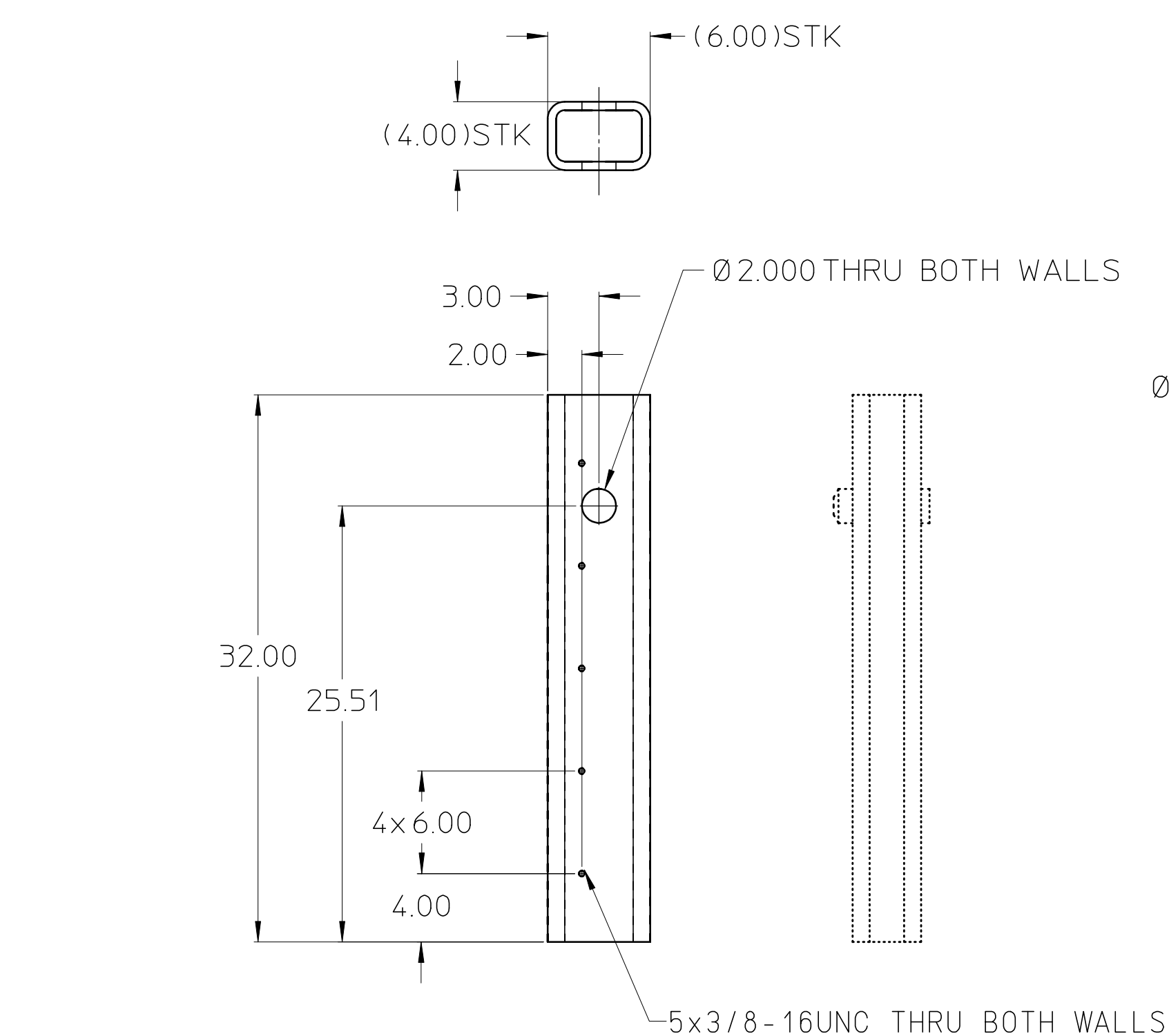
ITEM 11 DETAIL

SCALE: 1/4  
1 REQD

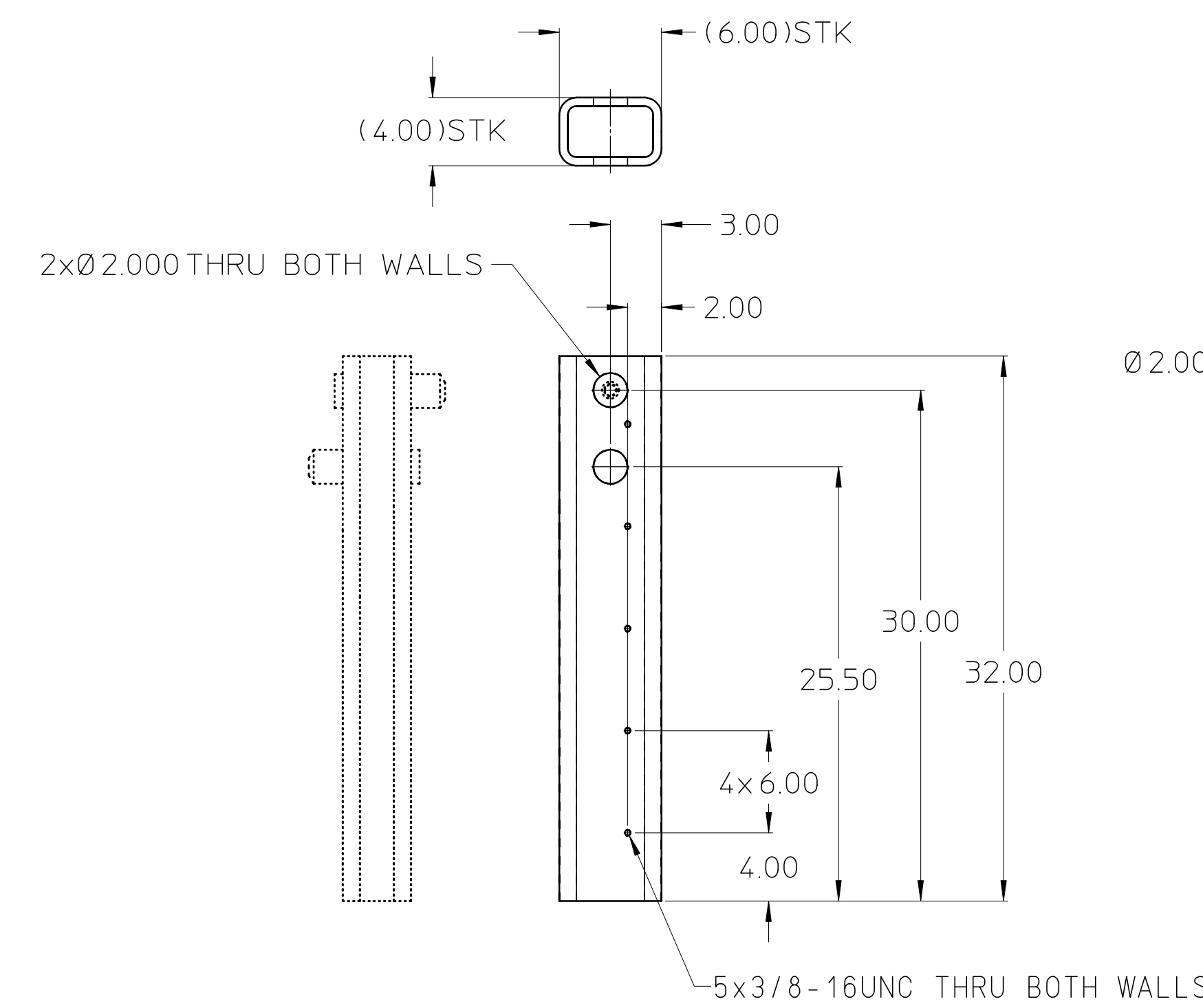


ITEM 12 DETAIL

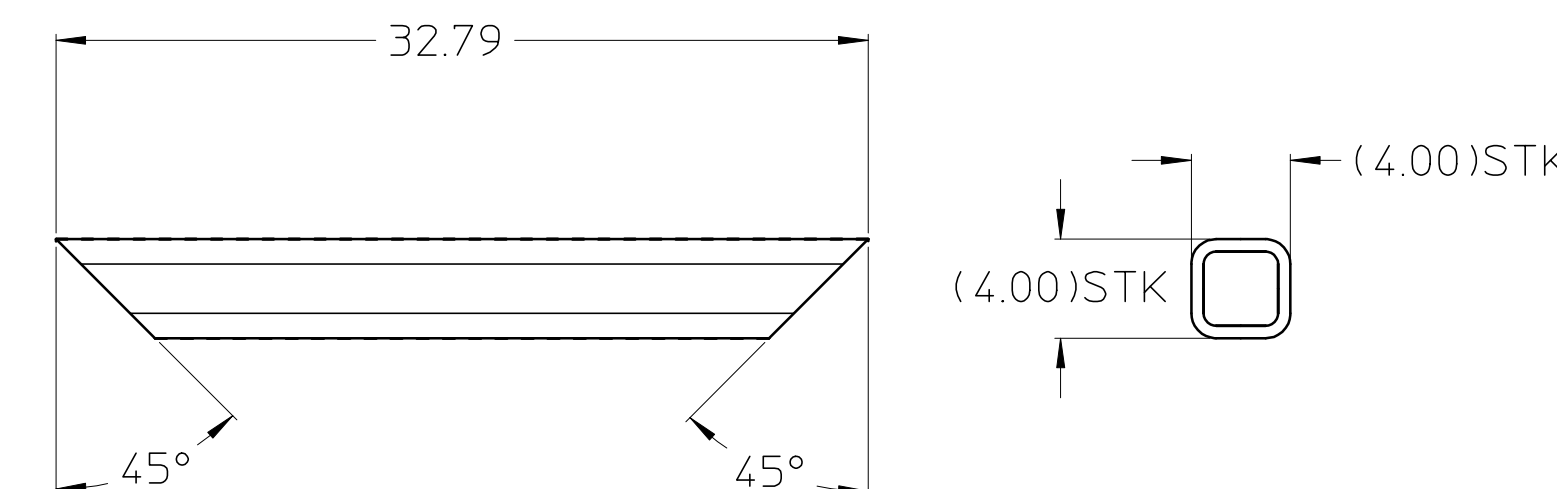
SCALE: 1/4  
11 REQD



ITEM 5 DETAIL

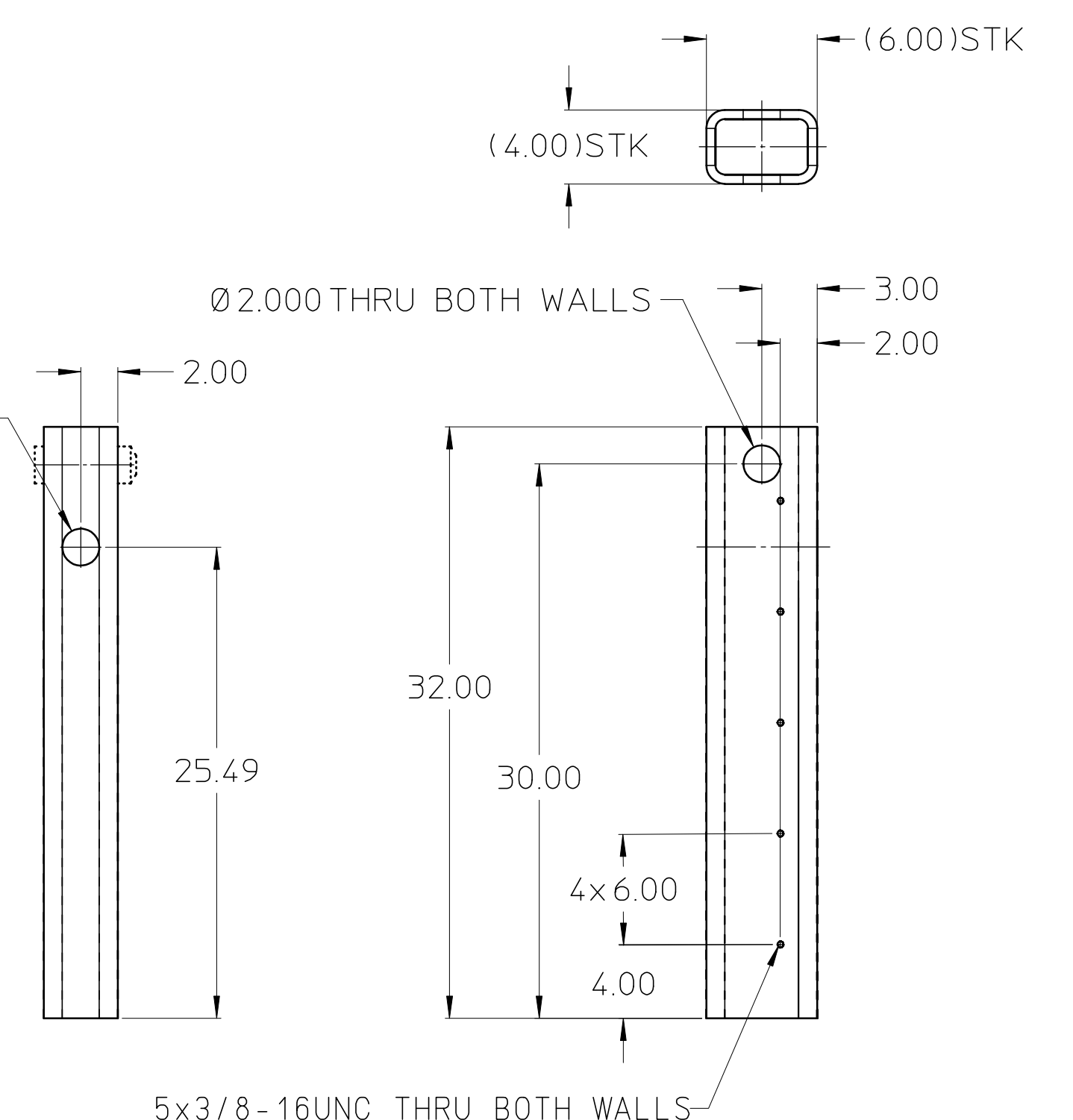


ITEM 7 DETAIL

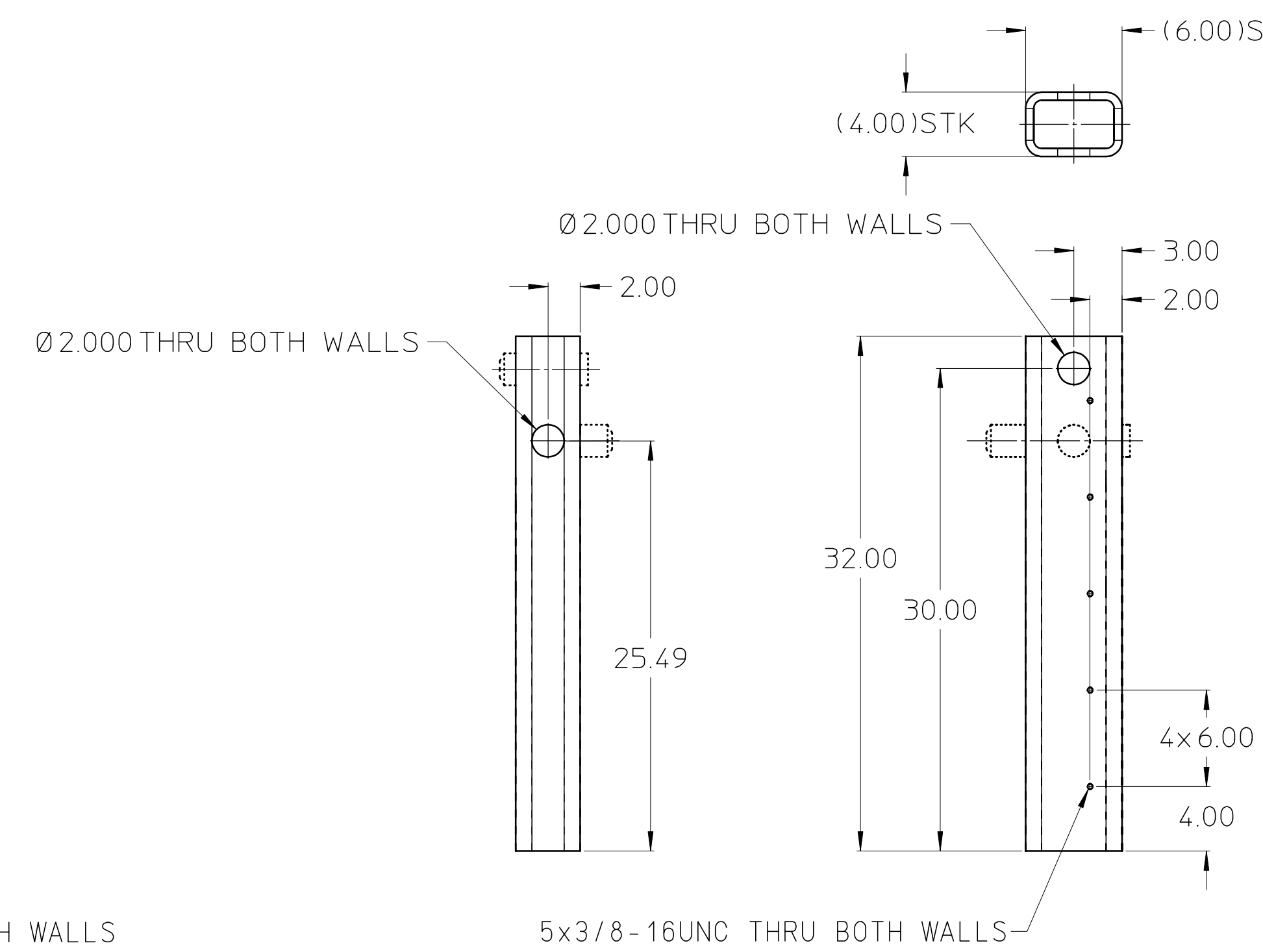


ITEM 9 DETAIL

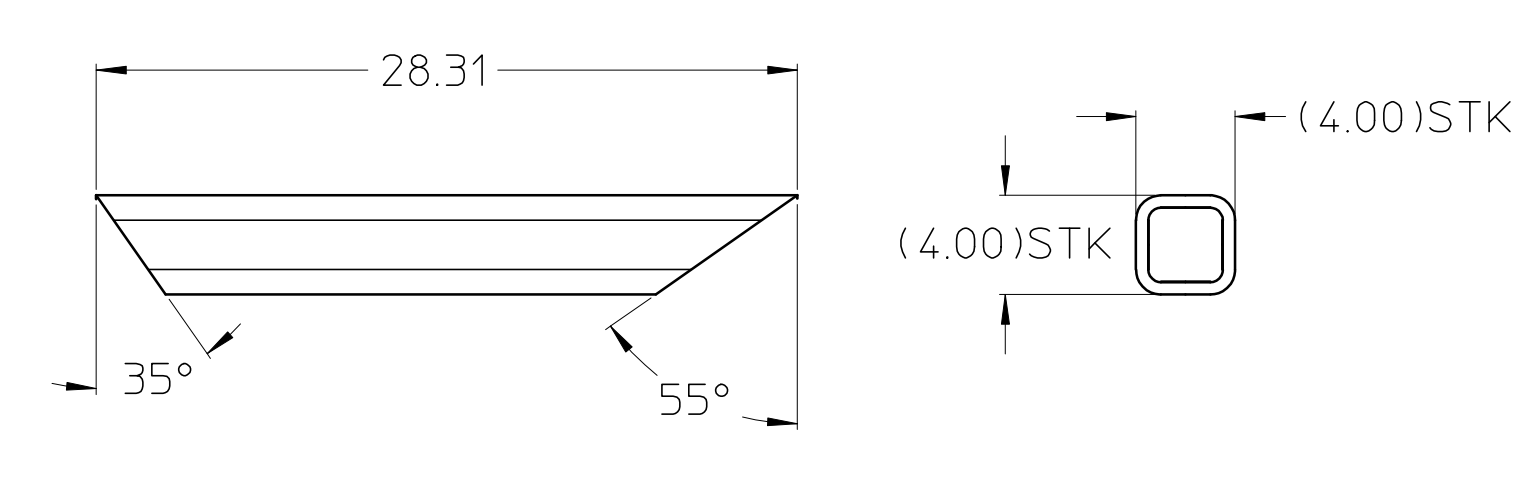
4 REQD



ITEM 6 DETAIL

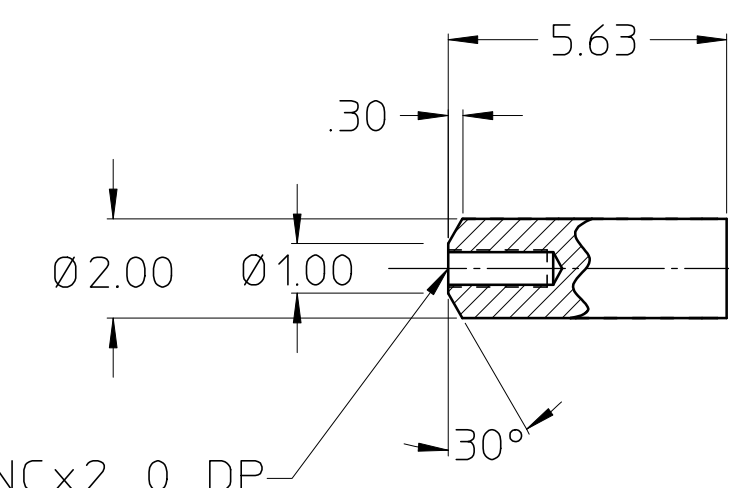


ITEM 8 DETAIL



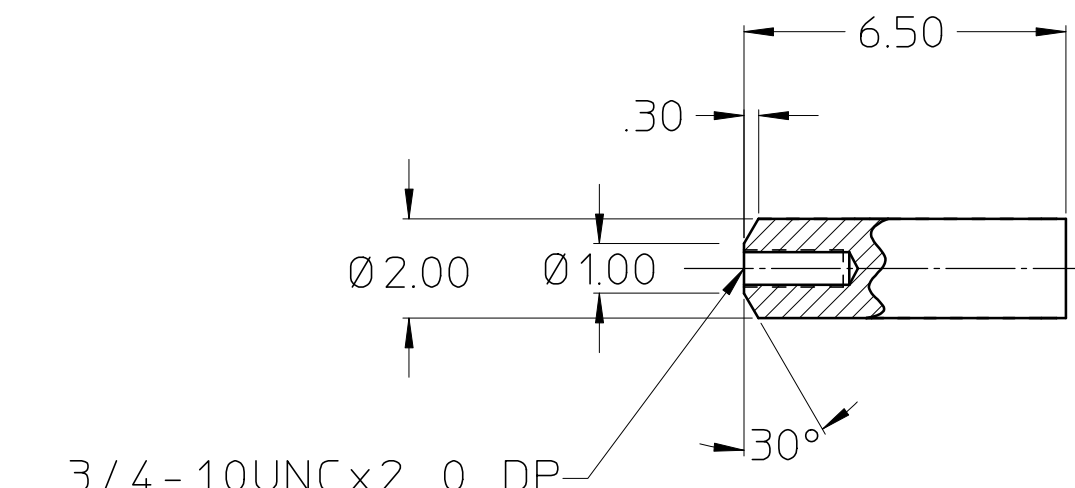
ITEM 10 DETAIL

3 REQD



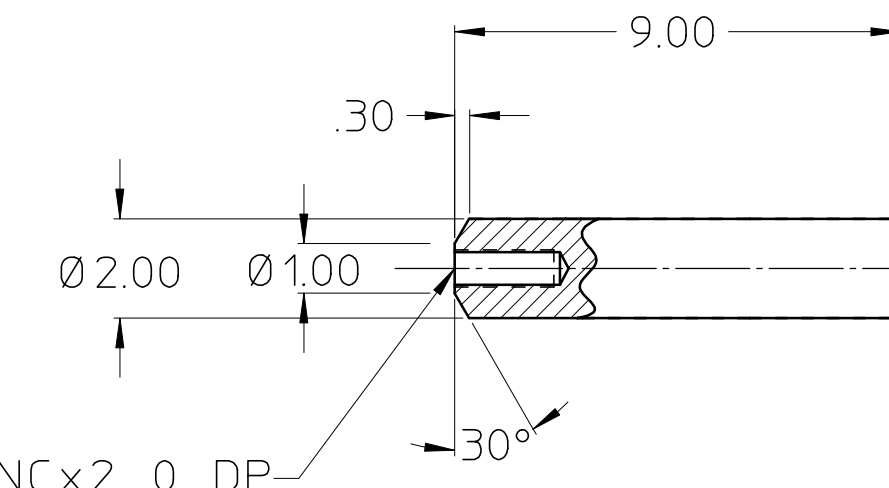
ITEM 13 DETAIL

SCALE: 1/4  
1 REQD



ITEM 14 DETAIL

SCALE: 1/4  
2 REQD



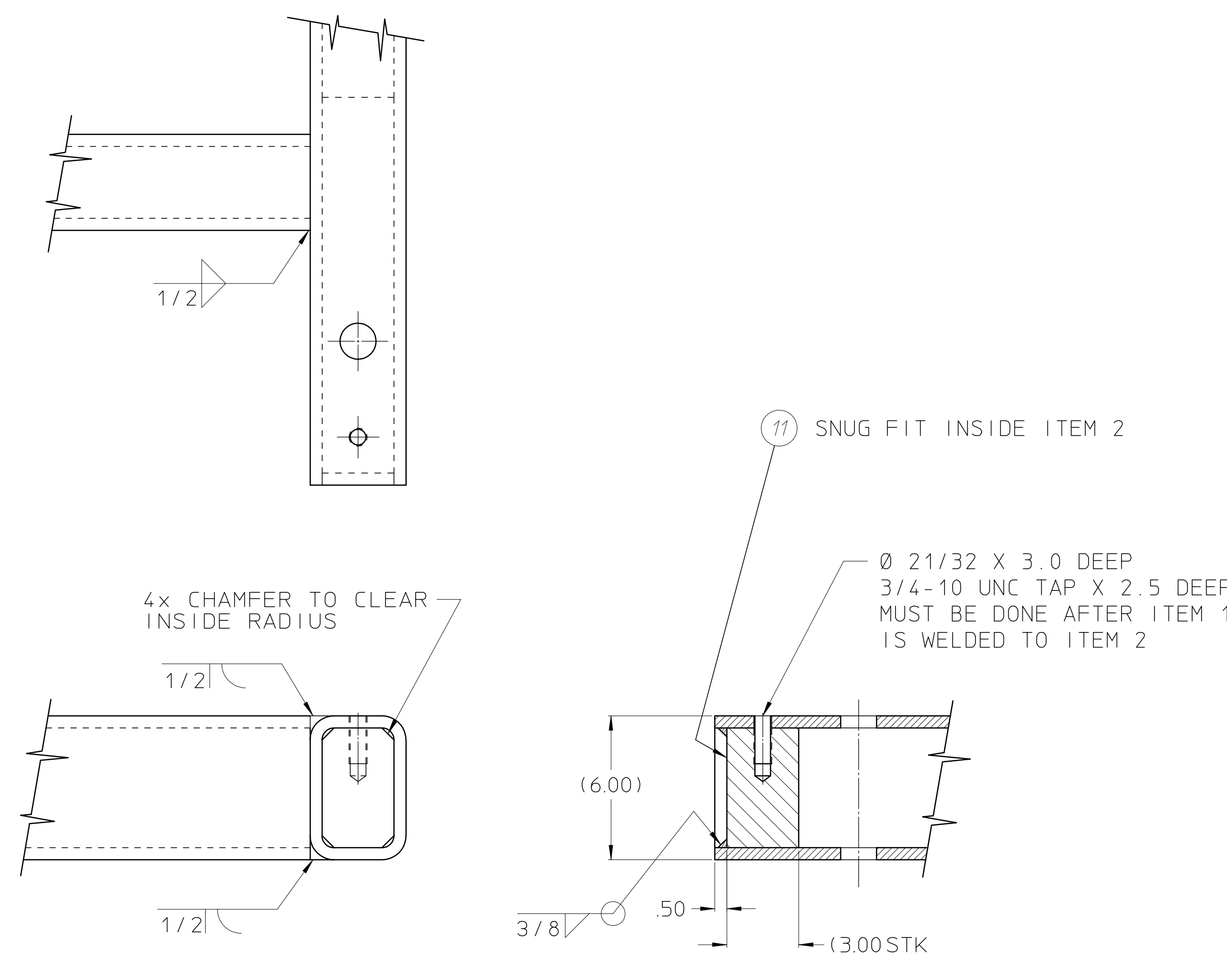
ITEM 15 DETAIL

SCALE: 1/4  
2 REQD

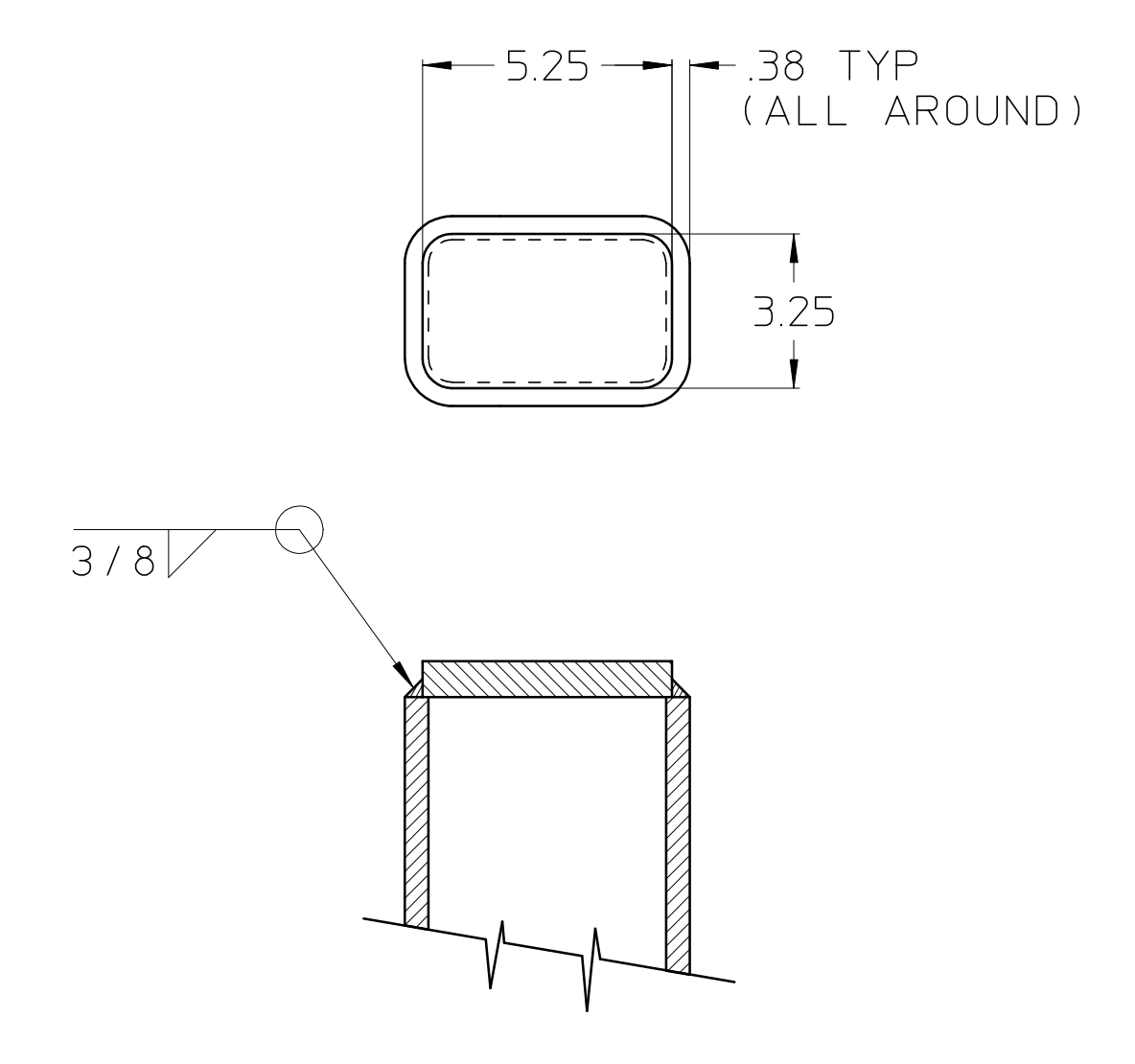
REV   DWG   CHK   ZONE   DATE		CHANGES		UNLESS OTHERWISE SPECIFIED				SHOP ORDERS				LAWRENCE BERKELEY LABORATORY			
THREADS ARE CLASS 2 CHAMFER ENDS OF ALL SCREW THREADS 30° CUT 1.5 PITCH THRO RELIEF WITH ROUND NOSE TOOL ON MACHINE CUT THREADS BREAK EDGES .016 MAX. ON MACHINED WORK REMOVE BURRS WELD SPLATTER & LOOSE SCALE REFERENCES: ANSI 114.5 & B46.1				SERIAL NO.				UNIVERSITY OF CALIFORNIA-BERKELEY							
SURFACE TREATMENT: DEGREASE				DATE RECD				SNS-FES MEBT							
PATENT CLEAR				DATE				MECHANICAL SUBSYSTEMS							
BY: RAY LOW				DATE: 04-04-01				MEBT SUPPORT BASE							
BY: DARYL OSHATZ				DATE: 02-04-01				SCALE: 1/8 & NOTED							
MITROFILTRED				CATEGORY CODE: 8212A1				SIZE: 00X0006							
DRAWN BY: RAY LOW				DATE: 04-04-01				REV. 1							
DRAWN BY: DARYL OSHATZ				DATE: 02-04-01				REV. 2							

00X0006A

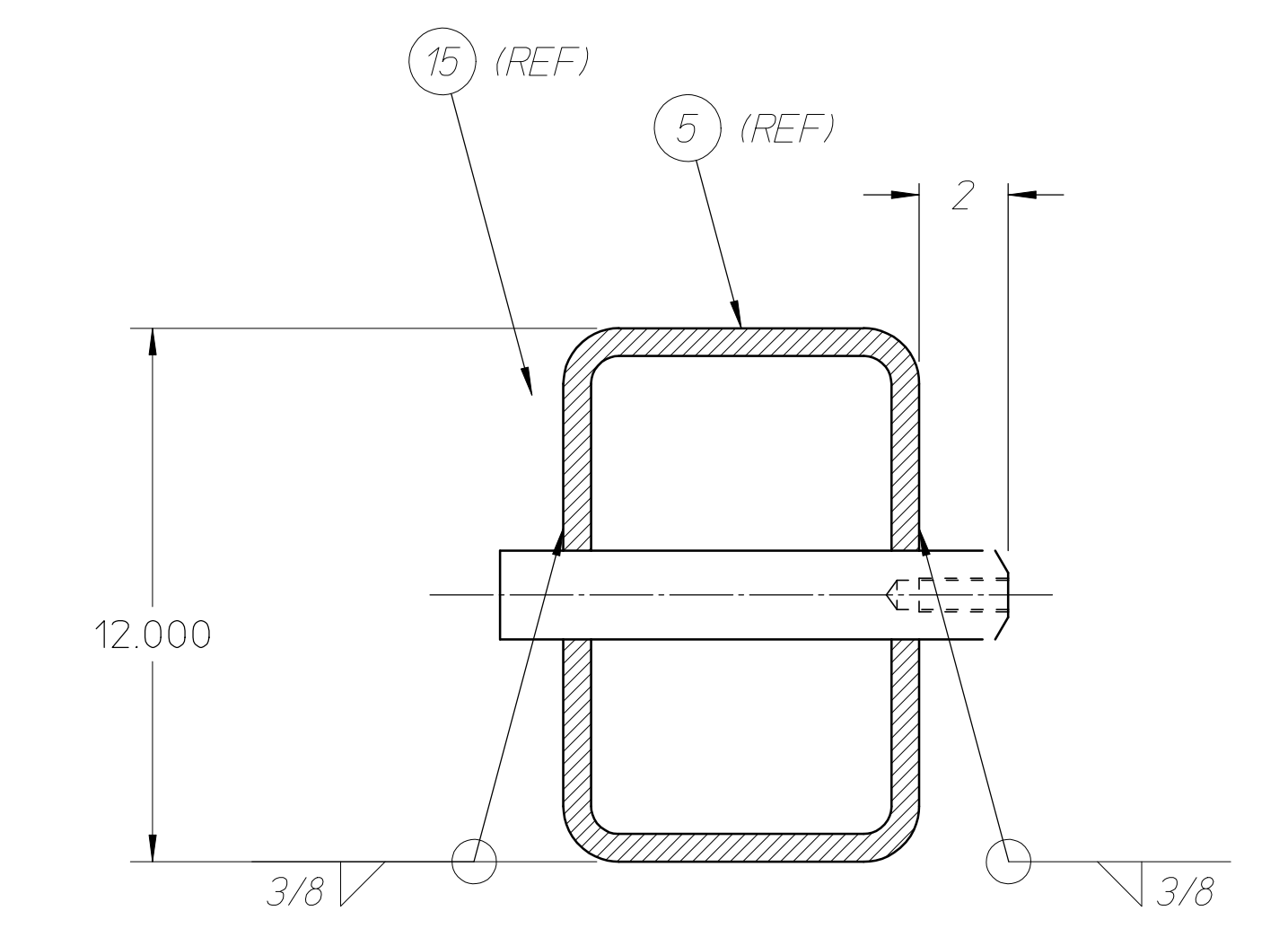
8 7 6 5 4 3 2 1



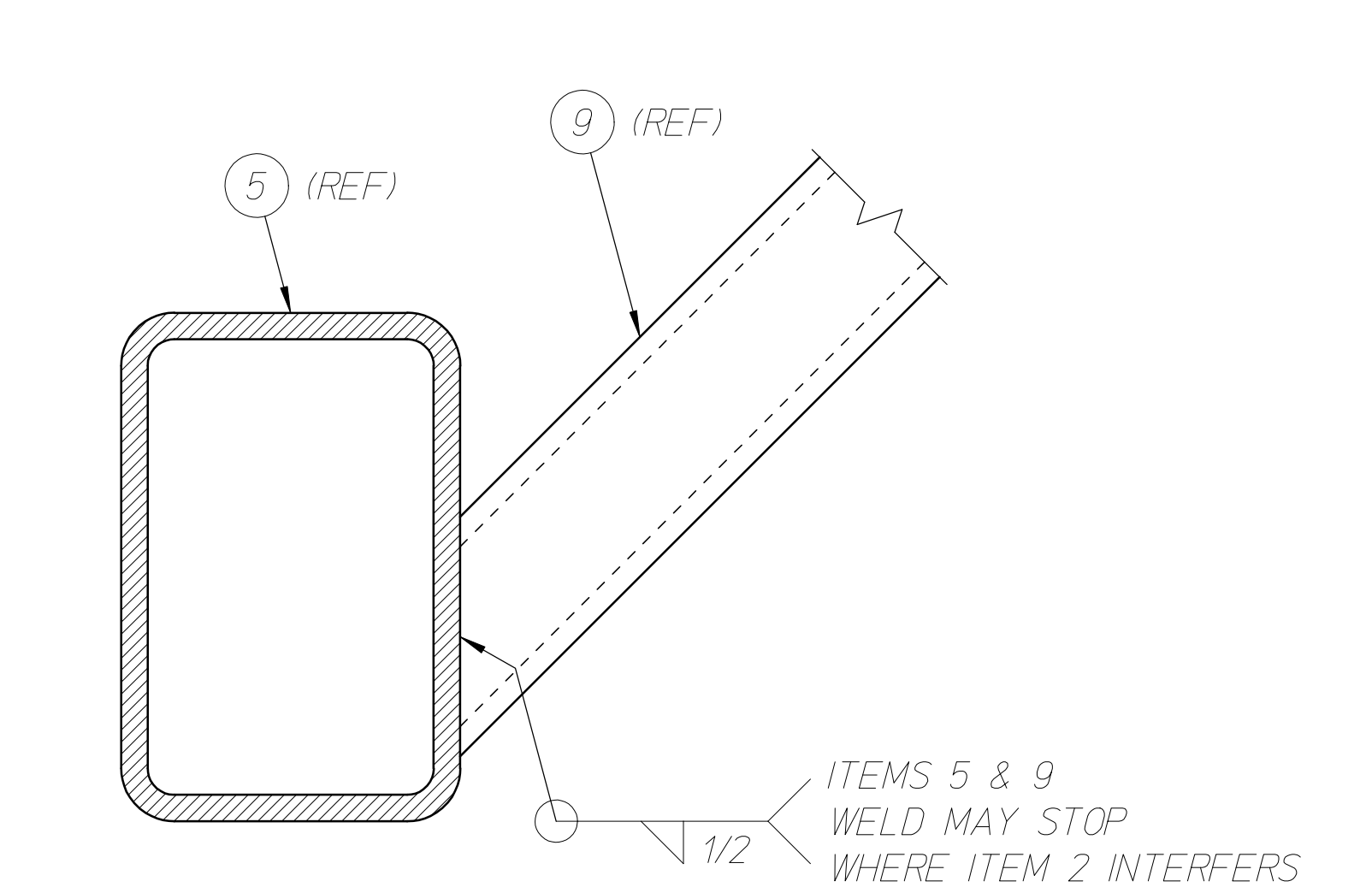
**DETAIL A**  
SCALE: 1/4  
TYPICAL 4 PLCS



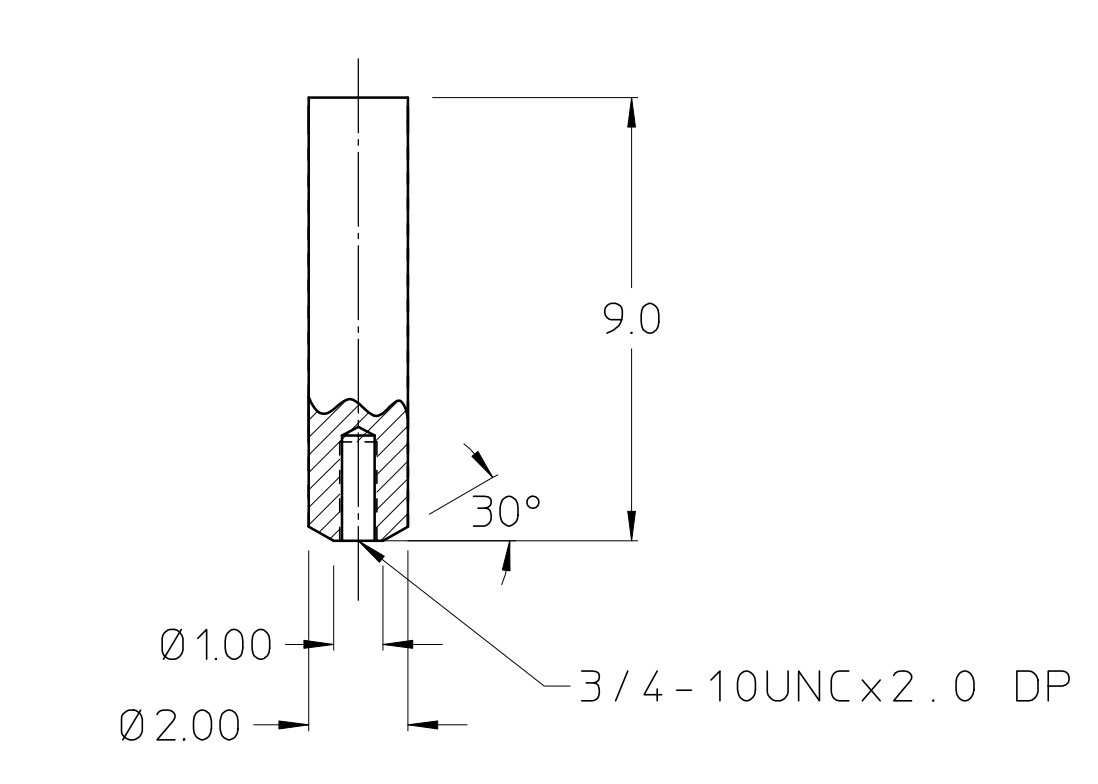
**DETAIL B**  
SCALE: 1/4  
TYPICAL 4 PLCS



**DETAIL E**  
SCALE: 1/4  
SIMPLIFIED FOR CLARITY  
TYPICAL 3 PLACES



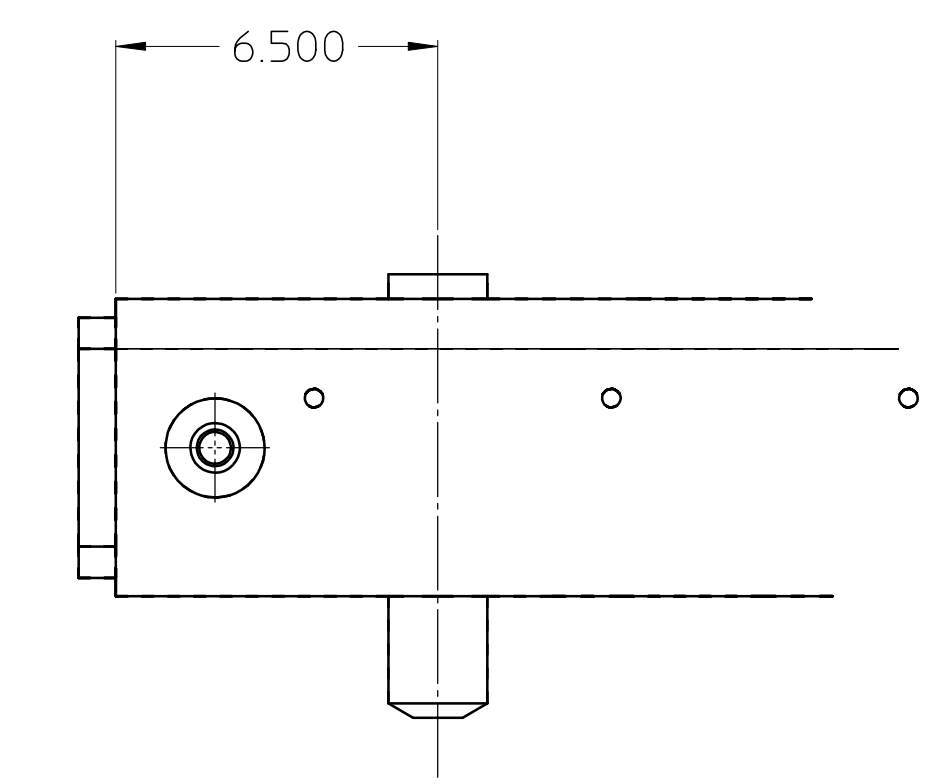
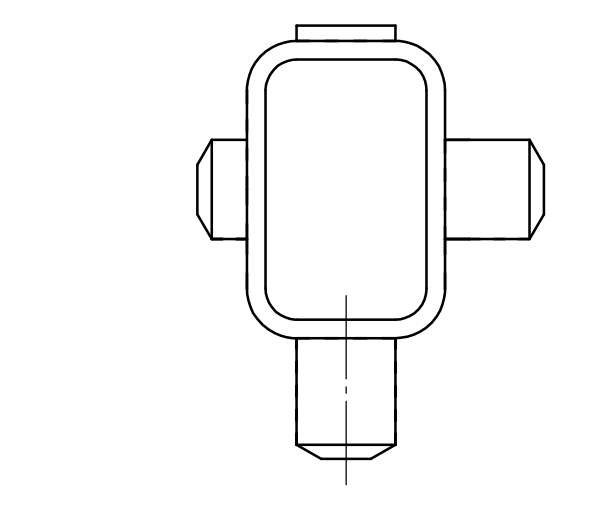
**DETAIL F**  
SCALE: 1/4  
SIMPLIFIED FOR CLARITY  
TYPICAL 3 PLACES



**ITEM 9 DETAIL**  
4 REQD

10x3/8-16UNC THRU THIS WALL ONLY

**ITEM 1 DETAIL**



00X0006A

REV		DWG	CHK	ZONE	DATE	CHANGES	UNLESS OTHERWISE SPECIFIED		SHOP ORDERS		LAWRENCE BERKELEY LABORATORY		
							SC: .X ± .1	FRAC: ± 1/64	ACCT NO.	SERIAL NO.	UNIVERSITY OF CALIFORNIA-BERKELEY		
							XX ± .01	ANGLES ± 1°	DATE ISSD	DATE RECD	NO. RECD	FIRST LINE OF TITLE	
							XXX ± .001	FINISH 125	DELIVER TO:	TAG	DEGREASE	SECOND LINE OF TITLE	
							THREADS ARE CLASS 2	SURFACE TREATMENT				THIRD LINE OF TITLE	
							CHAMFER ENDS OF ALL SCREW THREADS 30°		PATENT CLEAR	DWG. TYPE	SHOWN ON	SCALE	FULL
							CUT 1.5 PITCH THRD RELIEF WITH ROUND NOSE TOOL			ASSEMBLY	00X0000	DWG. NO.	00X0006
							ON MACHINE CUT THREADS				9999-99	999999	SIZE
							BREAK EDGES: 0.16 MAX. ON MACHINED WORK						REV.
							REMOVE BURRS WELD SPATTER & LOOSE SCALE						A
							REFERENCES: ANS1 Y14.5 & B46.1						
							BY: USUALLY NO ONE						

