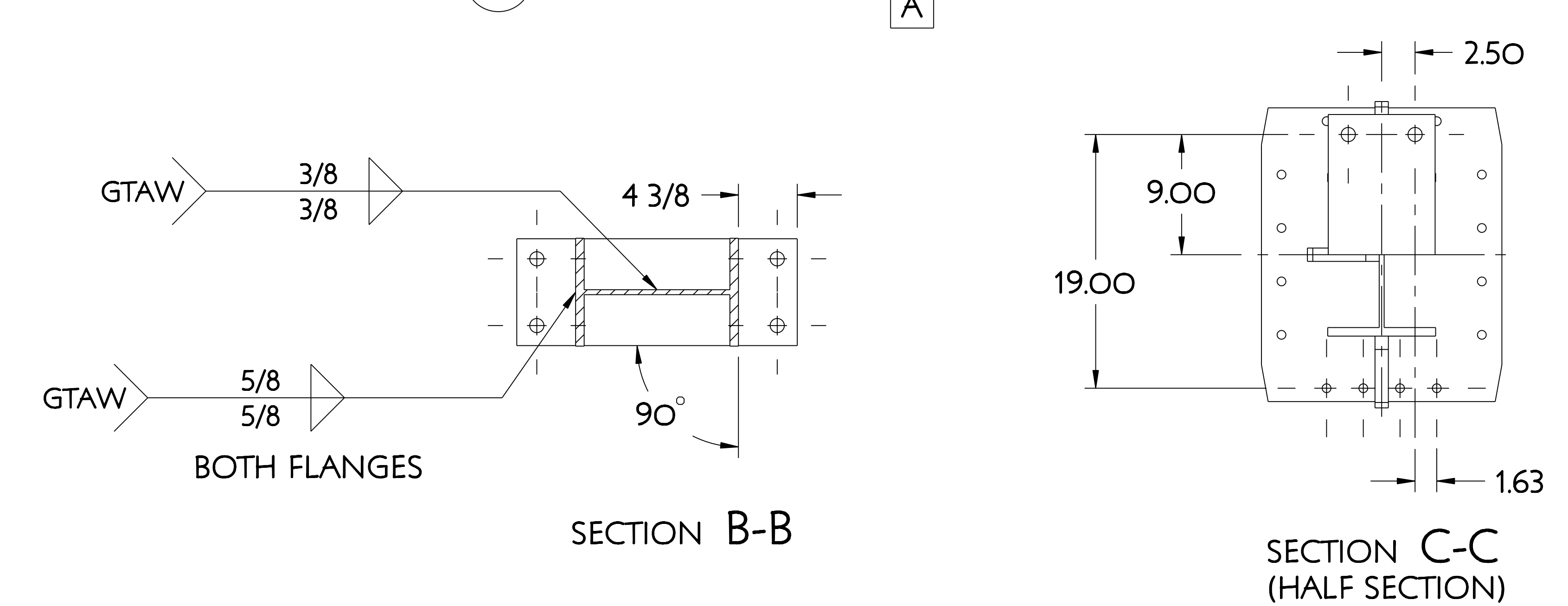


WELDING SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF AWS D1.6 (STRUCTURAL WELDING OF AUSTENITIC STAINLESS STEEL) AND PPPL PROCEDURE NO. ENG-037. VISUAL WELD INSPECTION SHALL BE PERFORMED IN ACCORDANCE WITH THE ACCEPTANCE CRITERIA OF AWS D1.6.

REFERENCE PERMEABILITY

BASE MATERIAL	1.05
FABRICATED PART	1.05
WELD	1.05

NOTE ORIENTATION OF ALL PARTS BEFORE WELDING.  
DRAWING DEPICTS FINAL REQUIRED ASSEMBLED STATE. MANUFACTURING TO DETERMINE MATERIAL ALLOWANCES AND WELD DISTORTION ALLOWANCES REQUIRED TO ACHIEVE DIMENSIONS/TOLERANCES INDICATED.



### 3 ASSEMBLIES REQUIRED

PART NO.	DRAWING NO	NOMENCLATURE OR DESCRIPTION	MATERIAL	QTY	REOD
4	SE172-203-2	BASE SUPPORT STRUCTURE BRACKET	304 STN STL	3	
3	SE172-240-3	SUPPORT COLUMN TOP PLATE	304 STN STL	1	
2	SE172-240-2	W12 X 50 OUTER SUPPORT COLUMN BEAM	304 STN STL	1	
1	SE172-240-1	OUTER SUPPORT COLUMN BOTTOM PLATE	304 STN STL	1	

PARTS LIST

COMPUTER GENERATED DRAWING	CENTRAL FILES:	PRINCETON PLASMA PHYSICS LABORATORY
MANUAL CHANGES NOT PERMITTED	UNLESS OTHERWISE SPECIFIED	NATIONAL COMPACT STELLARATOR EXPERIMENT
Pro E	DIMENSIONS ARE IN INCHES	STELLARATOR CORE
DO NOT VERIFY INFORMATION BY SCALING DRAWING	MACHINE SURFACES	BASE SUPPORT STRUCTURE
	BREAK SHARP EDGES .005/.020	MACHINE BASE SUPPORT COLUMN C-C JOINT
	TOLERANCES NON-CUMULATIVE	DSN: T. CRUICKSHANK
	DECIMAL-INCH FRACTIONS	CHK:
	.XX +/- .000	ENGR: F. DAHLGREN
	.XXX +/- .005	SUPV:
	ANGULAR +/- .05	
	OVER 120 +/- .125	

WEIGHT: 711.4 lbs  
MODEL NAME: SE172-240

RELEASE LEVEL: WIP  
DWG VERSION NO: 6

WELDING ENGINEER

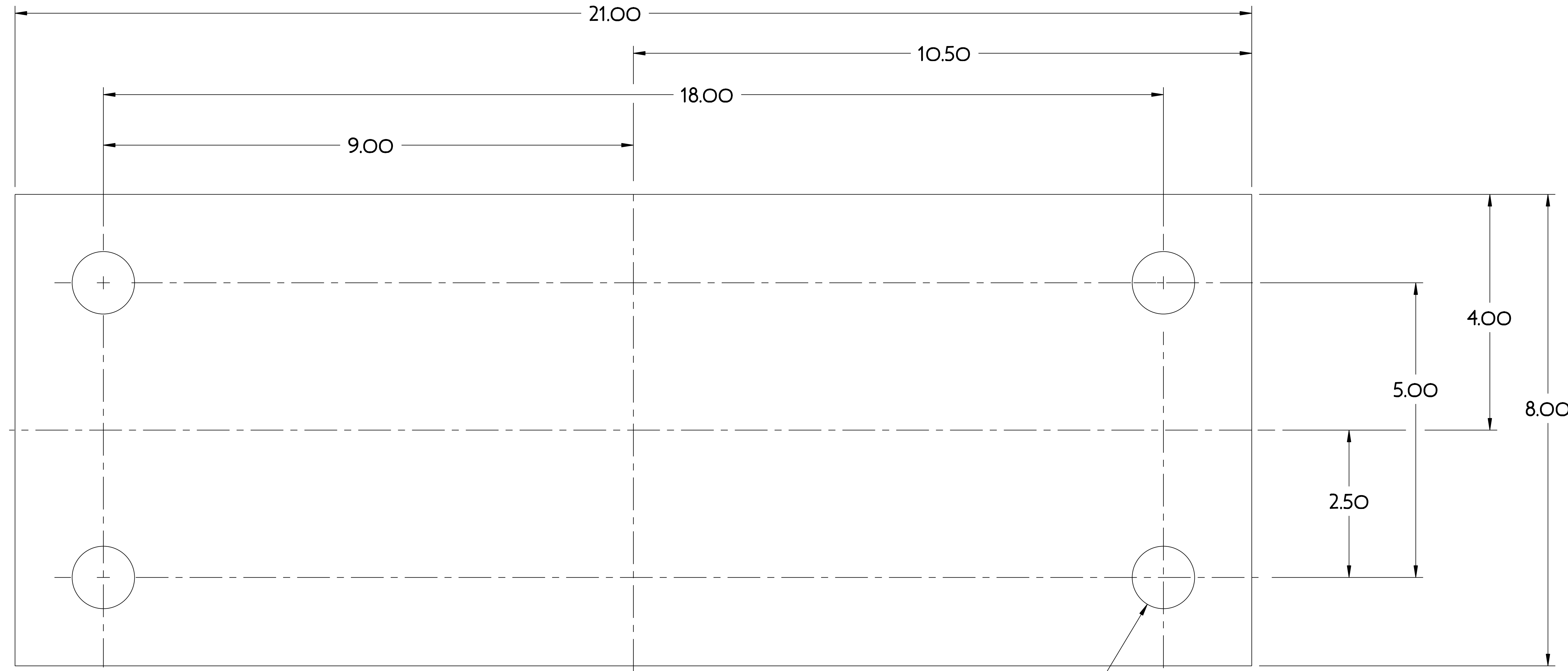
DRAWING NO: SE172-240  
SHEET 1 OF 4  
REV 0

NCSX-SE172-240

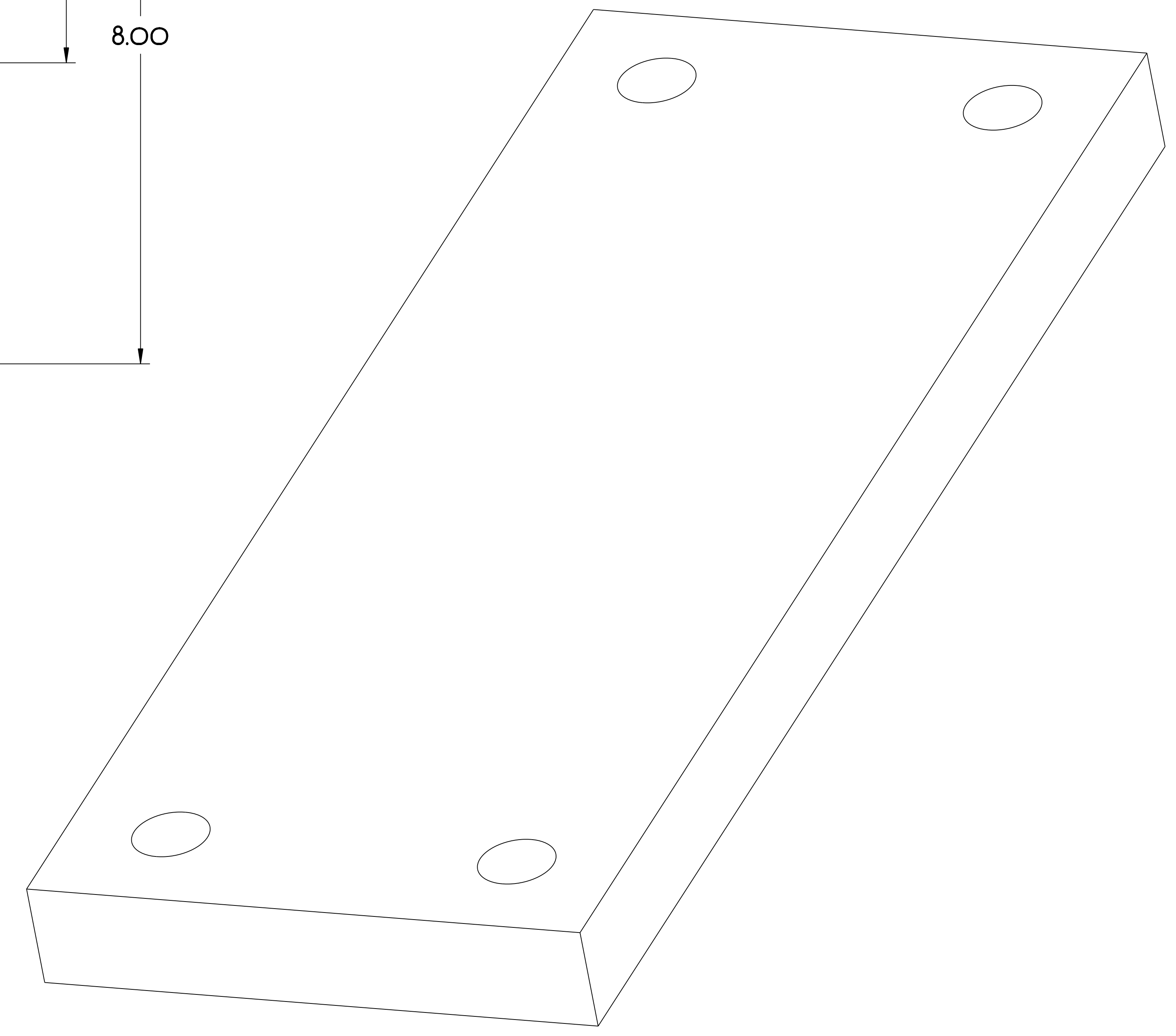
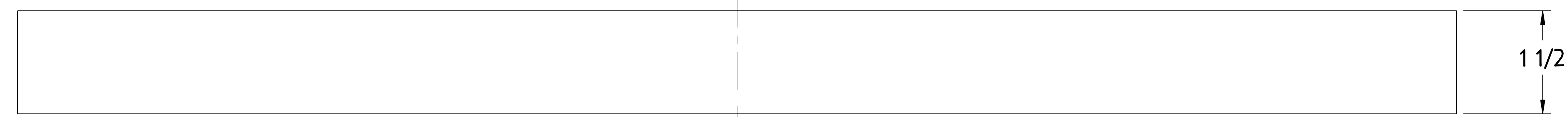
NCSX-ASSY-FORMAT.E

NO.	REVISION	BY	CH	SUP	APPROVED	DATE

1. DRAWINGS PREPARED IN ACCORDANCE WITH ASME Y14.100-2000
2. INTERPRET DIMENSIONS & TOLERANCES PER ASME Y14.5-1994.
3. DIMENSIONS ARE IN INCHES.
4. SEE SPECIFICATION NCSX-CSPEC-XXX-XX-XX FOR ADDITIONAL INFORMATION AND/OR MATERIAL REQUIREMENTS.



Ø1.06 THRU  
TYP 4 HOLES



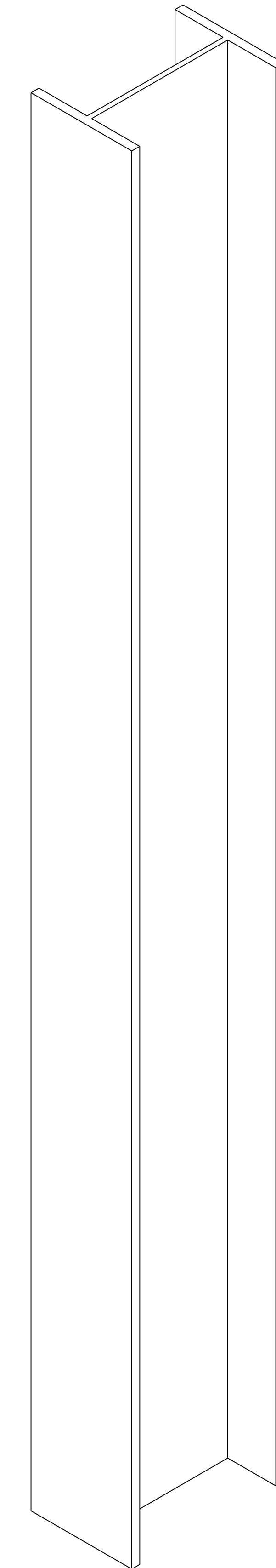
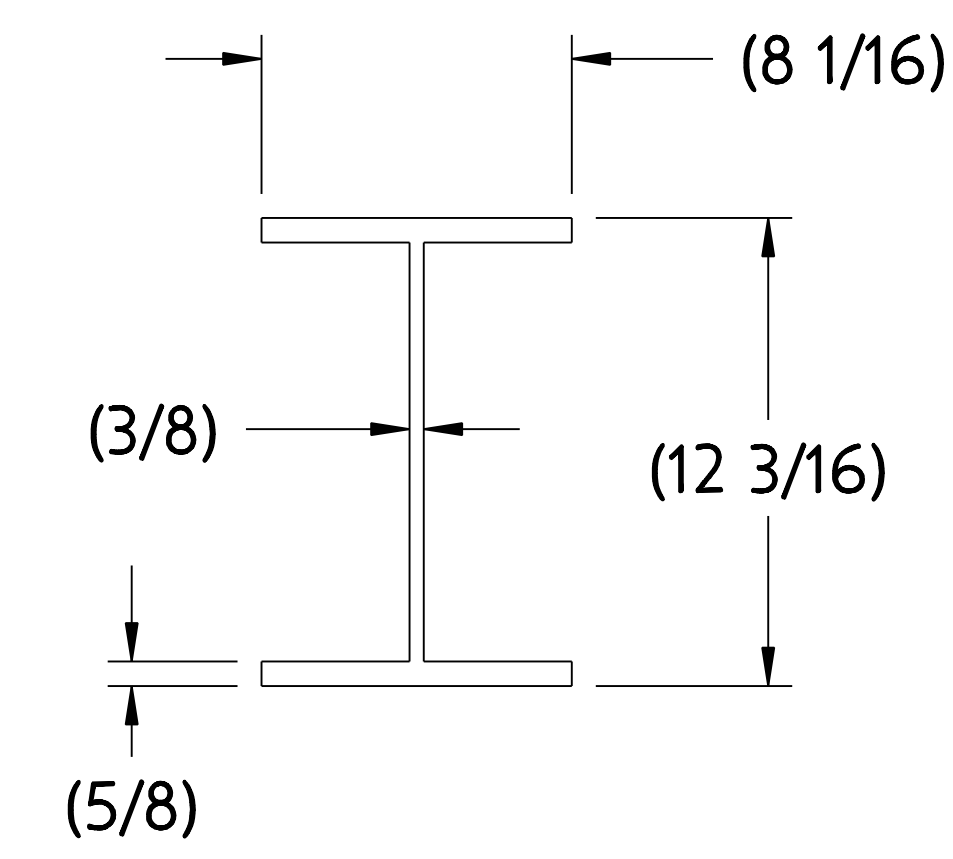
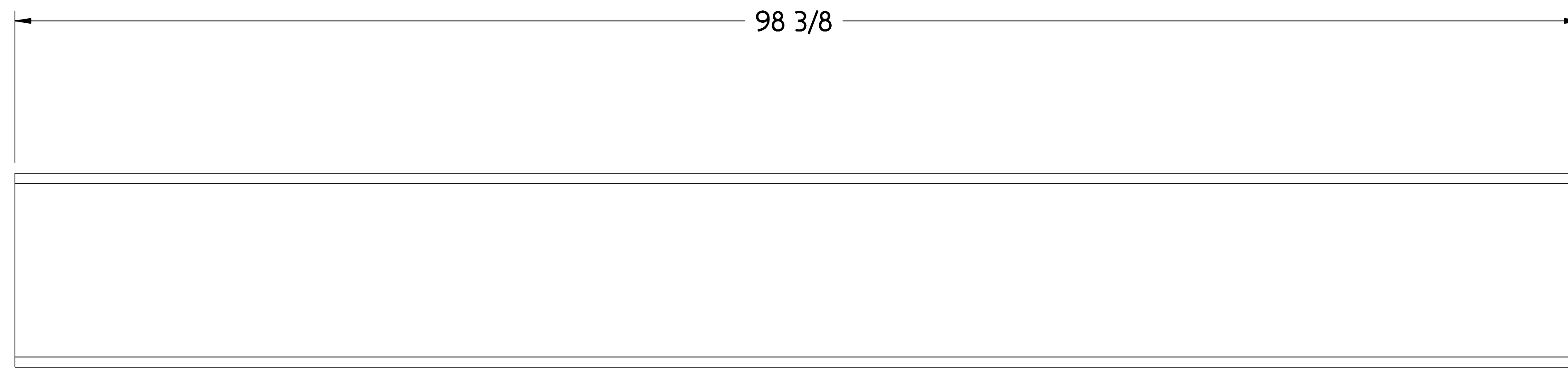
**6 REQUIRED**

PART NO.	DRAWING/MODEL NO	NOMENCLATURE OR DESCRIPTION	MATERIAL	QTY RECD
	SE172-240-1	OUTER SUPPORT COLUMN BOTTOM PLATE	304 STN STL	
PARTS LIST				
COMPUTER GENERATED DRAWING DRAWING CHANGES NOT PERMITTED		CENTRAL FILES: UNLESS OTHERWISE SPECIFIED	PRINCETON PLASMA PHYSICS LABORATORY PRINCETON UNIVERSITY	
DO NOT VERIFY INFORMATION BY SCALING DRAWING		DIMENSIONS ARE IN INCHES MACHINE SURFACES BREAK SHARP EDGES .005/.020	NATIONAL COMPACT STELLARATOR EXPERIMENT	
NEXT ASSEMBLY		TOLERANCES NON-CUMULATIVE DECIMAL-INCH FRACTIONS .XX +/- .000 0°-12° +/- .010 .XXX +/- .005 12°-120° +/- .010 ANGULAR +/- .0°-15° OVER 120° +/- .12	DSN: T. CRUICKSHANK CHK: ENGR: F. DAHLGREN SUPV:	DRAWING NO: <b>SE172-240</b>
RELEASE LEVEL: WIP DWG VERSION NO: 3		WEIGHT 71.5 lbs	SHEET 2 OF 4	
		MODEL NAME SE172-240-3	REV B, 2	
		WELDING ENGINEER	NCSX-PART-FORMAT.E	

NCSX-SE172-240

NO.	REVISION	BY	CH	SUP	APPROVED	DATE

1. DRAWINGS PREPARED IN ACCORDANCE WITH ASME Y14.100-2000
2. INTERPRET DIMENSIONS & TOLERANCES PER ASME Y14.5-1994.
3. DIMENSIONS ARE IN INCHES.
4. SEE SPECIFICATION NCSX-CSPEC-XXX-XX-XX FOR ADDITIONAL INFORMATION AND/OR MATERIAL REQUIREMENTS.



**3 REQUIRED**

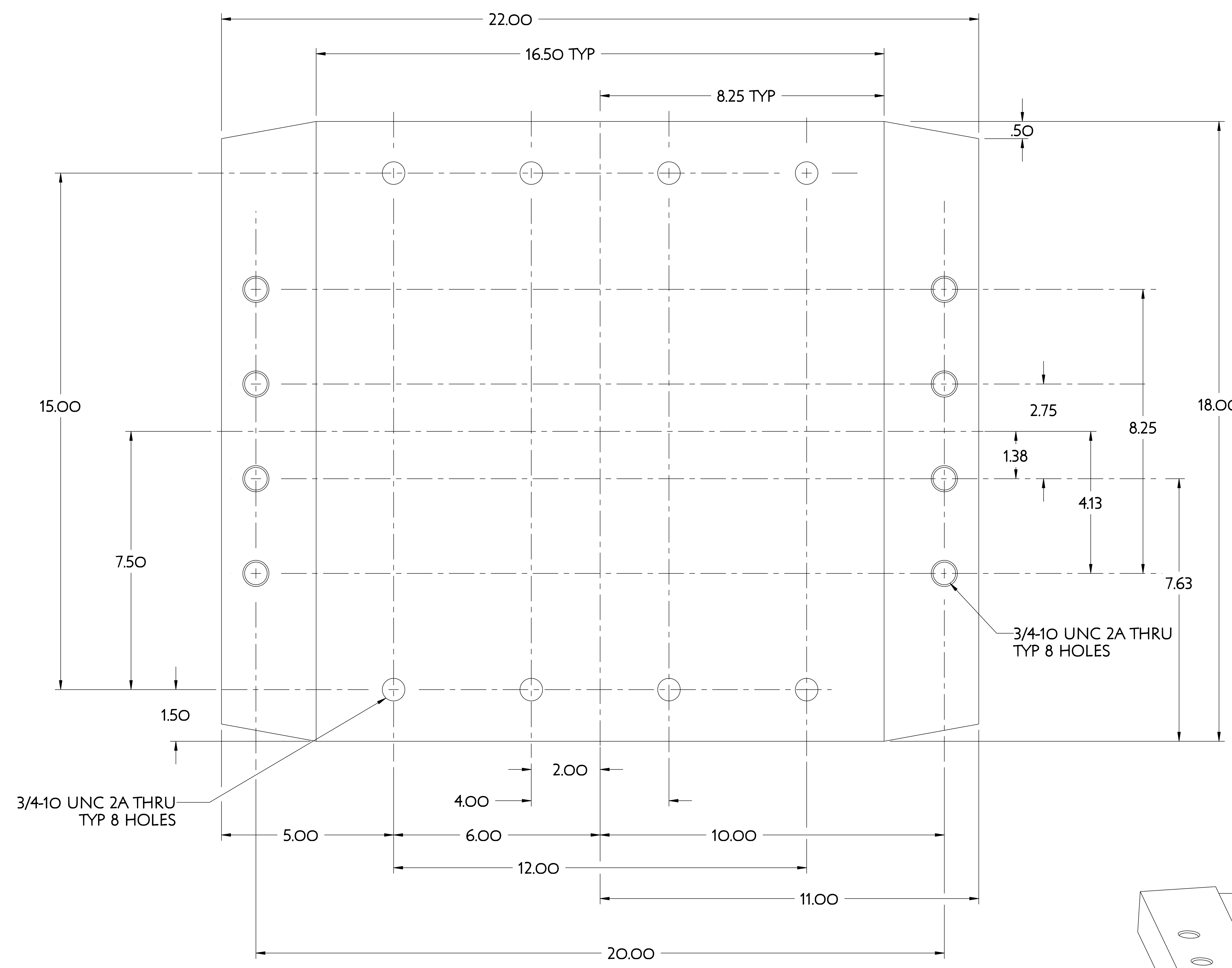
RELEASE LEVEL: WIP  
DWG VERSION NO: 3

WEIGHT  
410.2 lbs  
MODEL NAME  
SEI72-240-3  
WELDING ENGINEER

PART NO.	DRAWING/MODEL NO	NOMENCLATURE OR DESCRIPTION	MATERIAL	QTY RECD
2	SEI72-240-2	W12 X 50 OUTER SUPPORT COLUMN BEAM	304 STN STL	
PARTS LIST				
COMPUTER GENERATED DRAWING MANUAL CHANGES NOT PERMITTED Pr o E		CENTRAL FILES: UNLESS OTHERWISE SPECIFIED	PRINCETON PLASMA PHYSICS LABORATORY PRINCETON UNIVERSITY	
DO NOT VERIFY INFORMATION BY SCALING DRAWING		DIMENSIONS ARE IN INCHES MACHINE SURFACES BREAK SHARP EDGES .005/.020	NATIONAL COMPACT STELLARATOR EXPERIMENT STELLARATOR CORE BASE SUPPORT STRUCTURE W12 X 35 MACHINE SUPPORT COLUMN C-C JOINT	
NEXT ASSEMBLY		TOLERANCES NON-CUMULATIVE DECIMAL-INCH FRACTIONS .X +/- .100 0°-12° +/- .100 .XX +/- .030 12°-72° +/- .100 .XXX +/- .005 72°-120° +/- .100 ANGULAR +/- .0°-15° OVER 120° +/- .100	DSN: T. CRUCKSHANK CHK: ENGR: F. DAHLGREN SUPV:	DRAWING NO: <b>SEI72-240</b> SHEET 3 OF 4 REV B, 2

NCSX-SEI72-240

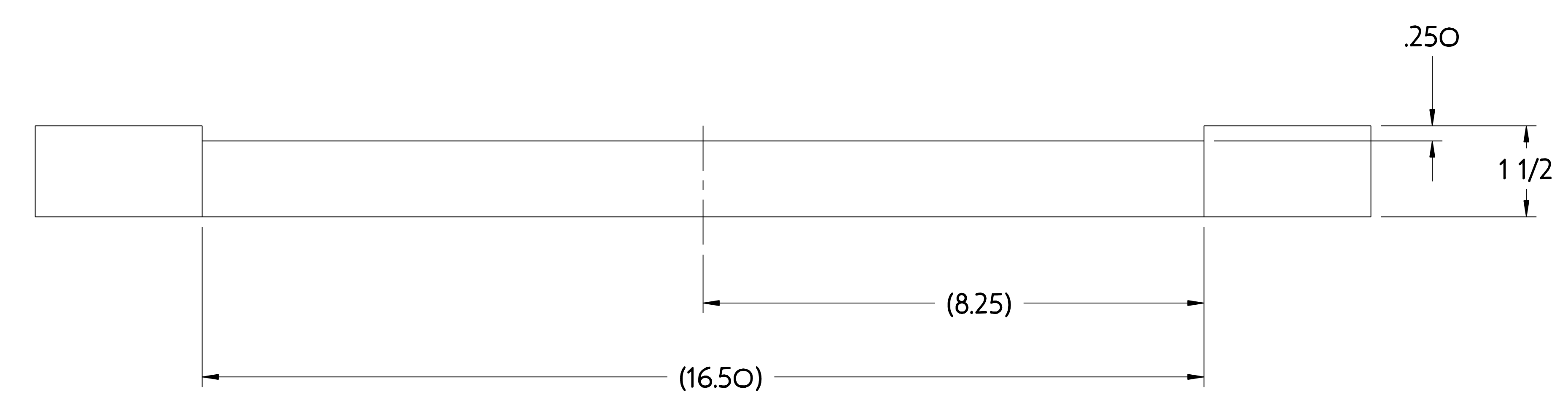
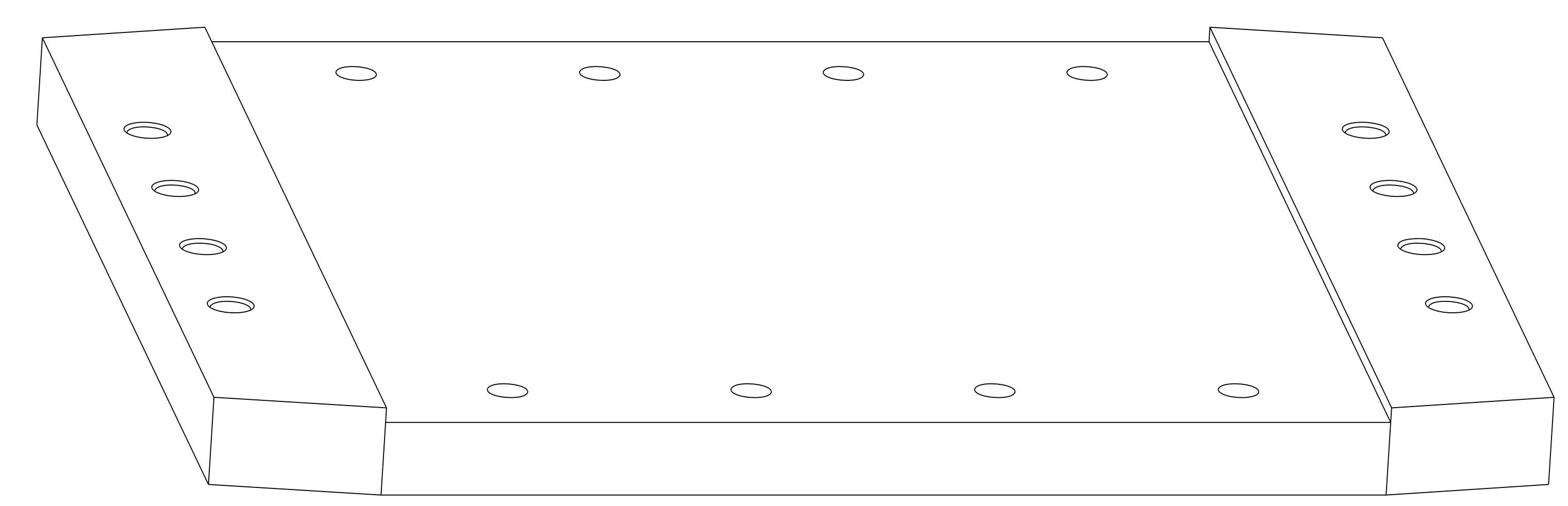
NO.	REVISION	BY	CH	SUP	APPROVED	DATE



1. DRAWINGS PREPARED IN ACCORDANCE WITH ASME Y14.100-2000
2. INTERPRET DIMENSIONS & TOLERANCES PER ASME Y14.5-1994.
3. DIMENSIONS ARE IN INCHES.
4. SEE SPECIFICATION NCSX-CSPEC-XXX-XX-XX FOR ADDITIONAL INFORMATION AND/OR MATERIAL REQUIREMENTS.

3/4-10 UNC 2A THRU TYP 8 HOLES

3/4-10 UNC 2A THRU TYP 8 HOLES



**6 REQUIRED**

3	SE172-240-3	SUPPORT COLUMN TOP PLATE	304 STN STL	
PART NO.	DRAWING/MODEL NO	NOMENCLATURE OR DESCRIPTION	MATERIAL	QTY RECD
PARTS LIST				
COMPUTER GENERATED DRAWING DRAWING MANUAL CHANGES NOT PERMITTED Pro E		CENTRAL FILES: UNLESS OTHERWISE SPECIFIED	PRINCETON PLASMA PHYSICS LABORATORY PRINCETON UNIVERSITY <b>NATIONAL COMPACT STELLARATOR EXPERIMENT</b>	
DO NOT VERIFY INFORMATION BY SCALING DRAWING		DIMENSIONS ARE IN INCHES MACHINE SURFACES BREAK SHARP EDGES .005/.020	STELLARATOR CORE BASE SUPPORT STRUCTURE SUPPORT COLUMN C-C JOINT TOP PLATE	
NEXT ASSEMBLY		TOLERANCES NON-CUMULATIVE DECIMAL-INCH FRACTIONS .XX +/- .000 .XXX +/- .005 ANGULAR +/- .05	DSN: T. CRUICKSHANK CHK: ENGR: F. DAHLGREN SUPV:	DRAWING NO: <b>SE172-240</b>
RELEASE LEVEL: WIP DWG VERSION NO: 4		WELDING ENGINEER	SHEET 4 OF 4 REV B, 2	

NCSX-SE172-240