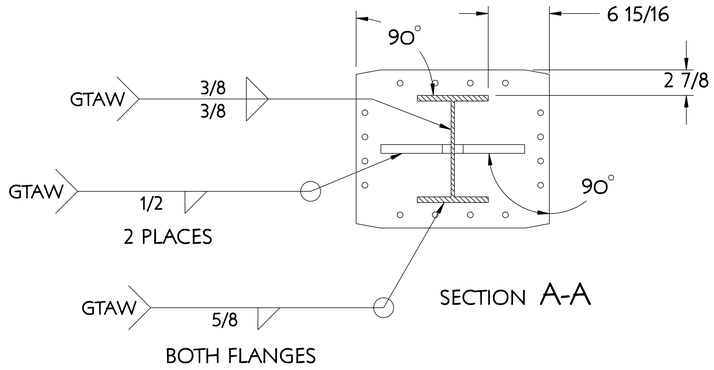
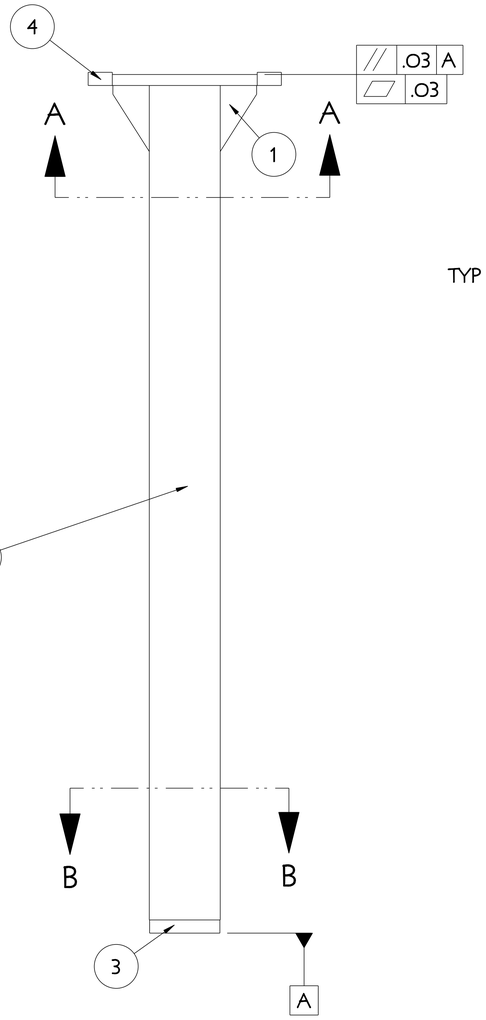
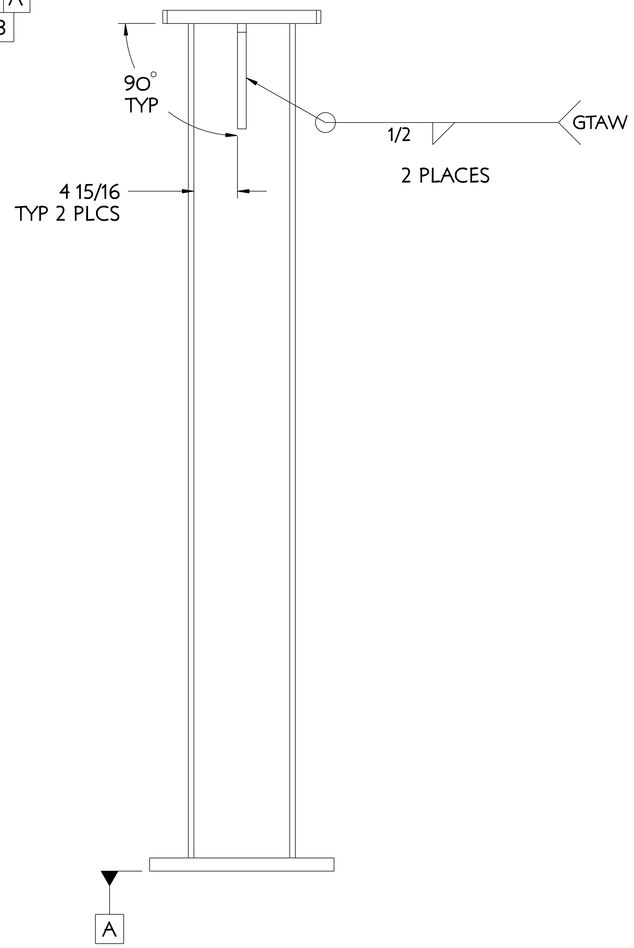
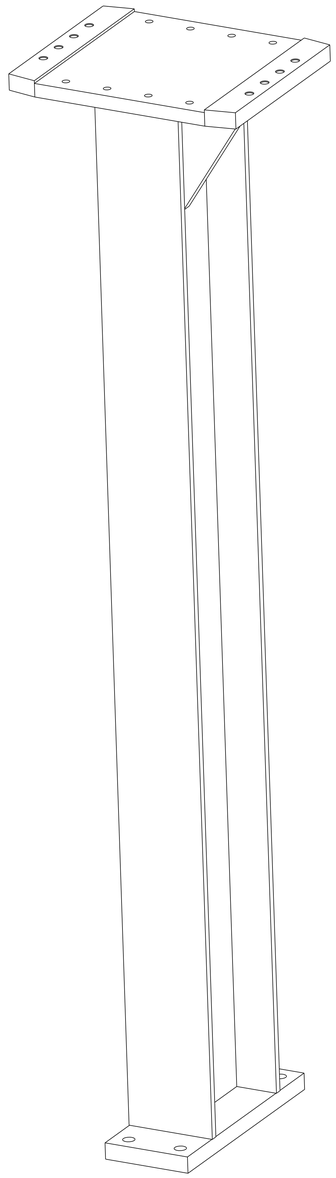
NO.	REVISION	BY	CH	SUP	APPROVED	DATE

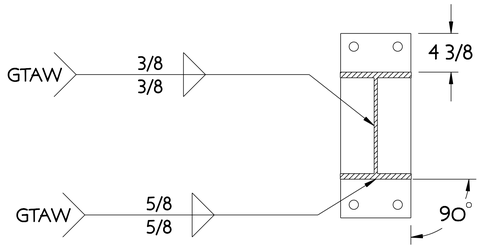


SECTION A-A

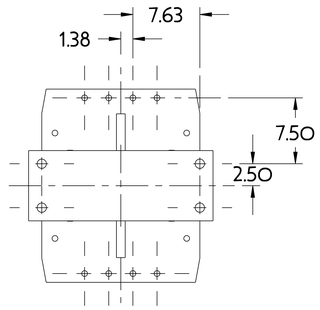








SECTION B-B



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 REQD
4	SE172-240-3	SUPPORT COLUMN TOP PLATE	304 STN STL	1
3	SE172-240-1	OUTER SUPPORT COLUMN BOTTOM PLATE	304 STN STL	1
2	SE172-253-2	W12 X 35 INNER SUPPORT COLUMN BEAM	304 STN STL	1
1	SE172-253-1	INNER SUPPORT COLUMN BEAM GUSSET	304 STN STL	2

PARTS LIST

COMPUTER GENERATED DRAWING MANUAL CHANGES NOT PERMITTED

Pro E

DO NOT VERIFY INFORMATION BY SCALING DRAWING

NEXT ASSEMBLY

CENTRAL FILES: UNLESS OTHERWISE SPECIFIED

DIMENSIONS ARE IN INCHES MACHINE SURFACES

BREAK SHARP EDGES .005/.020

TOLERANCES NON-CUMULATIVE

DECIMAL-INCH	FRACTIONS
.X +/-.100	0°-12° +/-1/16
.XX +/-.030	12°-72° +/-1/8
.XXX +/-.005	72°-120° +/-1/4
ANGULAR +/-0°-15'	OVER 120° +/-1/2

PRINCETON PLASMA PHYSICS LABORATORY
PRINCETON UNIVERSITY
NATIONAL COMPACT STELLARATOR EXPERIMENT

STELLARATOR CORE
BASE SUPPORT STRUCTURE
MACHINE BASE SUPPORT COLUMN A-A JOINT

DSN: T. CRUICKSHANK
CHK:
ENGR: F. DAHLGREN
SUPV:

DRAWING NO: SE172-253

SHEET 1 OF 3 REV 0

WEIGHT
648.1 lbs

MODEL NAME
SE172-253

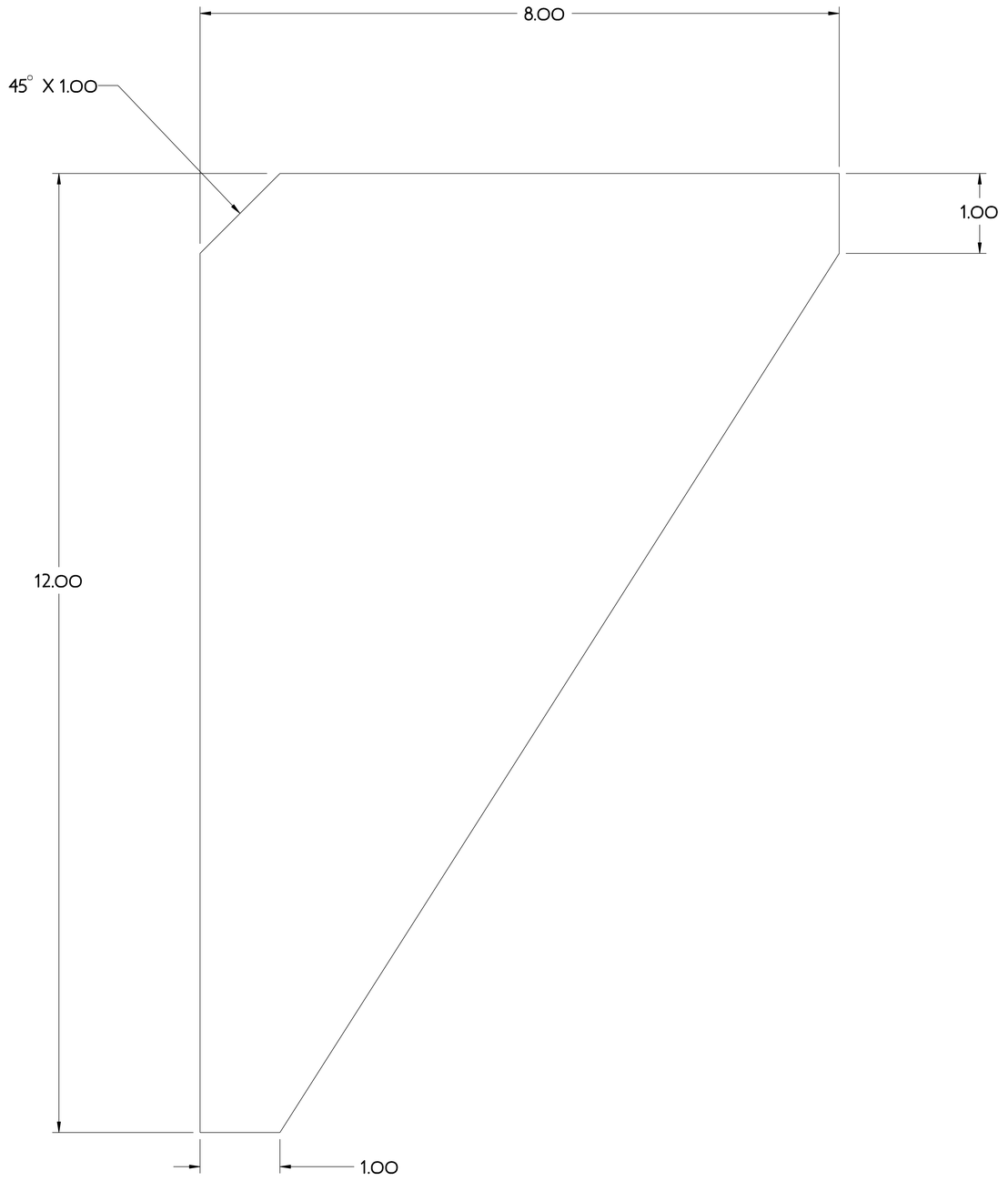
WELDING ENGINEER

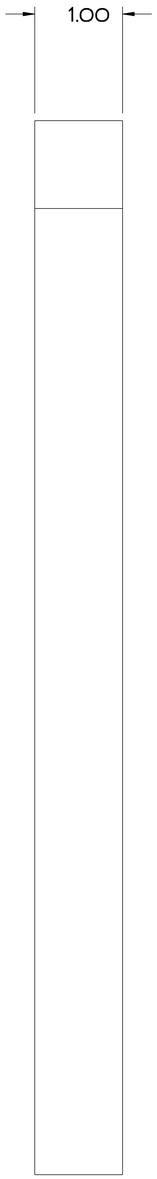
RELEASE LEVEL: WIP
DWG VERSION NO: 3

NCSX-SE172-253

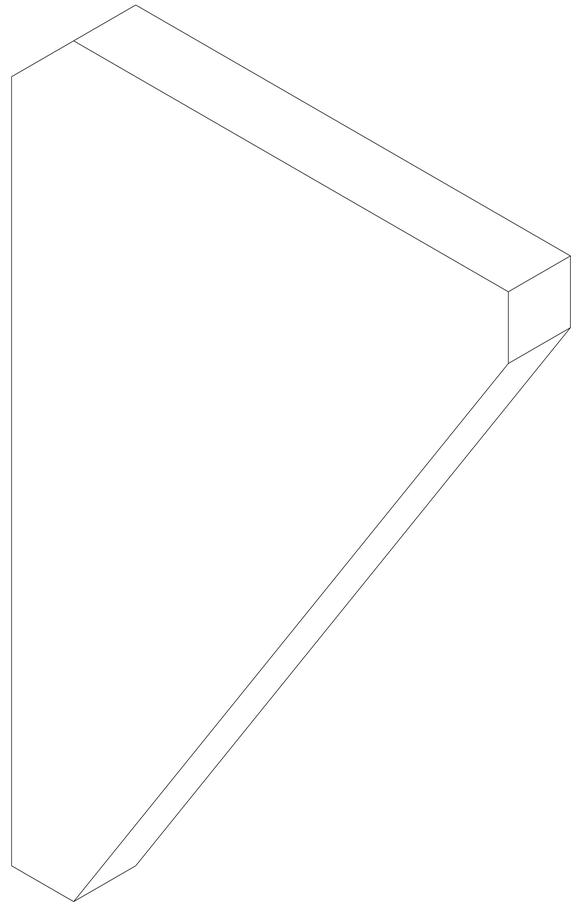
NCSX_ASSY_FORMAT_E

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.



6 REQUIRED

PART NO.	DRAWING/MODEL NO	NOMENCLATURE OR DESCRIPTION	MATERIAL	QTY REQD
1	SE172-253-1	INNER SUPPORT COLUMN BEAM GUSSET	304 STN STL	

PARTS LIST

COMPUTER GENERATED DRAWING MANUAL CHANGES NOT PERMITTED	CENTRAL FILES: UNLESS OTHERWISE SPECIFIED	PRINCETON PLASMA PHYSICS LABORATORY PRINCETON UNIVERSITY NATIONAL COMPACT STELLARATOR EXPERIMENT
Pro E	DIMENSIONS ARE IN INCHES MACHINE SURFACES ▽	STELLARATOR CORE BASE SUPPORT STRUCTURE INNER SUPPORT COLUMN BEAM GUSSET
DO NOT VERIFY INFORMATION BY SCALING DRAWING	BREAK SHARP EDGES .005/.020	
	TOLERANCES NON-CUMULATIVE	DSN: T. CRUICKSHANK
NEXT ASSEMBLY	DECIMAL-INCH: .X +/-.100, .XX +/-.030, .XXX +/-.005, ANGULAR +/-0°-15'; FRACTIONS: 0°-12° +/-1/16, 12°-72° +/-1/8, 72°-120° +/-1/4, OVER 120° +/-1/2	CHK:
		ENGR: F. DAHLGREN
		SUPV:

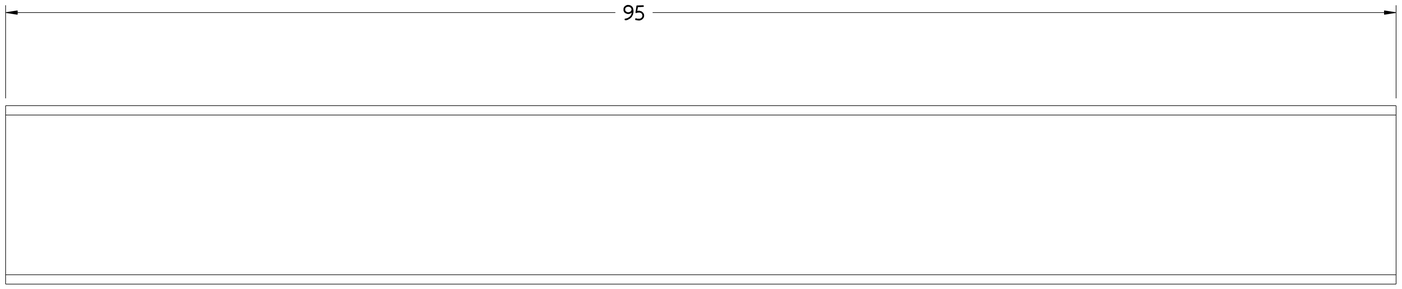
WEIGHT	DRAWING NO:	
16.5 lbs	SE172-253	
MODEL NAME SE172-253-2	SHEET 2 OF 3	REV 0.1
WELDING ENGINEER		

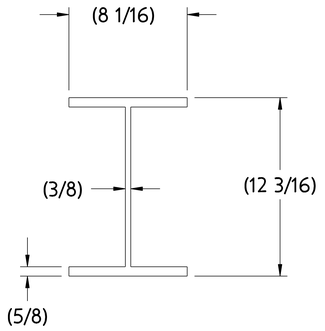
RELEASE LEVEL: WIP
DWG VERSION NO: 2

NCSX-SE172-253

NCSX_PART_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.

3 REQUIRED

PART NO.	DRAWING/MODEL NO	NOMENCLATURE OR DESCRIPTION	MATERIAL	QTY REQD
2	SE172-253-2	WI2 X 35 INNER SUPPORT COLUMN BEAM	304 STN STL	

PARTS LIST

COMPUTER GENERATED DRAWING MANUAL CHANGES NOT PERMITTED	CENTRAL FILES: UNLESS OTHERWISE SPECIFIED	PRINCETON PLASMA PHYSICS LABORATORY PRINCETON UNIVERSITY **NATIONAL COMPACT STELLARATOR EXPERIMENT**
Pro E	DIMENSIONS ARE IN INCHES MACHINE SURFACES 125	STELLARATOR CORE BASE SUPPORT STRUCTURE W6 X 20 INNER SUPPORT COLUMN BEAM
DO NOT VERIFY INFORMATION BY SCALING DRAWING	BREAK SHARP EDGES .005/.020	
NEXT ASSEMBLY	TOLERANCES NON-CUMULATIVE DECIMAL-INCH: .X +/-.100, .XX +/-.030, .XXX +/-.005, ANGULAR +/-0°-15' FRACTIONS: 0°-12° +/-1/16, 12°-72° +/-1/8, 72°-120° +/-1/4, OVER 120° +/-1/2	DSN: T. CRUICKSHANK CHK: ENGR: F. DAHLGREN SUPV:
		DRAWING NO: **SE172-253**
		SHEET 3 OF 3 REV D.1

WEIGHT	MODEL NAME	WELDING ENGINEER
396.1 lbs	SE172-253-2	

RELEASE LEVEL: WIP
DWG VERSION NO: 3

NCSX-SE172-253

NCSX_PART_FORMAT_E