

ISOMETRIC VIEW

- NOTES:
1. INTERPRET DIMENSIONS AND TOLERANCES PER ANSI Y14.5M.
 2. DIMENSION ARE IN INCHES.
 3. REQUIREMENTS FOR FABRICATING THE VACUUM VESSEL ARE DEFINED IN THE DRAWINGS, MODELS, AND SPECIFICATION.
 4. GEOMETRY OF VACUUM VESSEL IS DEFINED IN CAD MODELS/FILES SE120-001.ASM, SE120-002.ASM AND SE121-019.PRT
 5. HELIUM LEAK TEST SHALL SHOW NO DETECTABLE LEAK WITH LEAK DETECTOR SENSITIVITY SET AT 1.0×10^{-9} STD-CC/S.
 6. ALL MATERIAL EXCEPT FOR CONFLAT FLANGES TO BE UNS N06625. CONFLAT FLANGES TO BE 304 SST.
 7. BLANK MATING FLANGES AND ASSOCIATED SEALS AND HARDWARE TO BE FURNISHED FOR ALL PORTS.
 8. ADDITIONAL TOLERANCE LIMITS ARE DEFINED IN DOCUMENT NCSX-12-122002-PH.

REV	DESCRIPTION	DATE	BY	CHK	APP
19					
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9					
8	PORT 04A COVER TEST FLANGE WELDMENT				
7	PORT 12 COVER TEST FLANGE WELDMENT				
6	PORT NB COVER TEST FLANGE WELDMENT				
5	PORT 04A COVER TEST FLANGE WELDMENT				
4	VACUUM VESSEL FLANGE				
3	VACUUM VESSEL SPACER BLANKOFF COVER				
2	VACUUM VESSEL BODY				
1	VACUUM VESSEL PERIOD ASSEMBLY				

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1	VACUUM VESSEL PERIOD ASSEMBLY				

SCALE: .06

REV	DESCRIPTION	DATE	BY	CHK	APP
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1	VACUUM VESSEL PERIOD ASSEMBLY				

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P THIS DRAWING PRODUCED ON PRO-ENGINEER

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1	VACUUM VESSEL PERIOD ASSEMBLY				

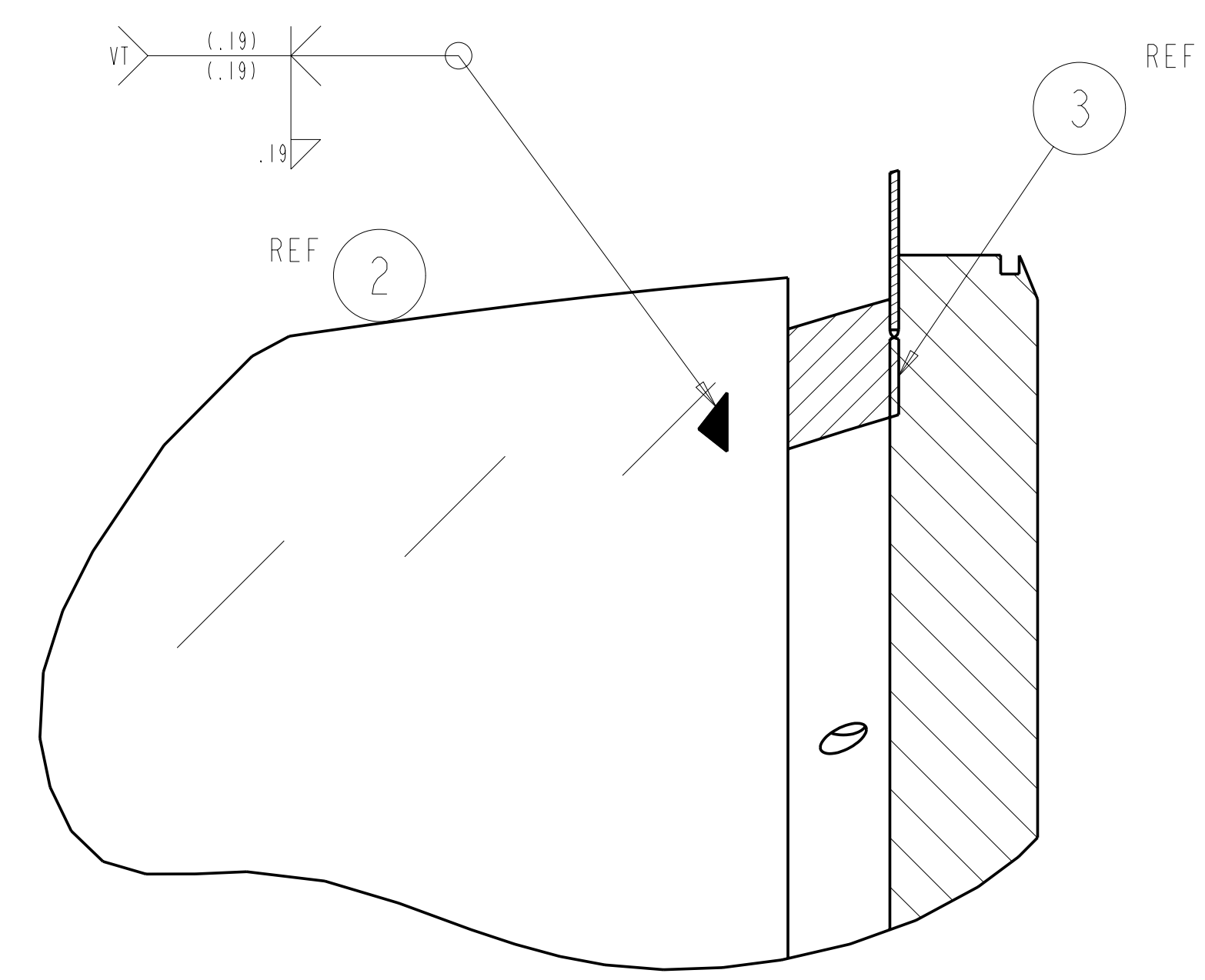
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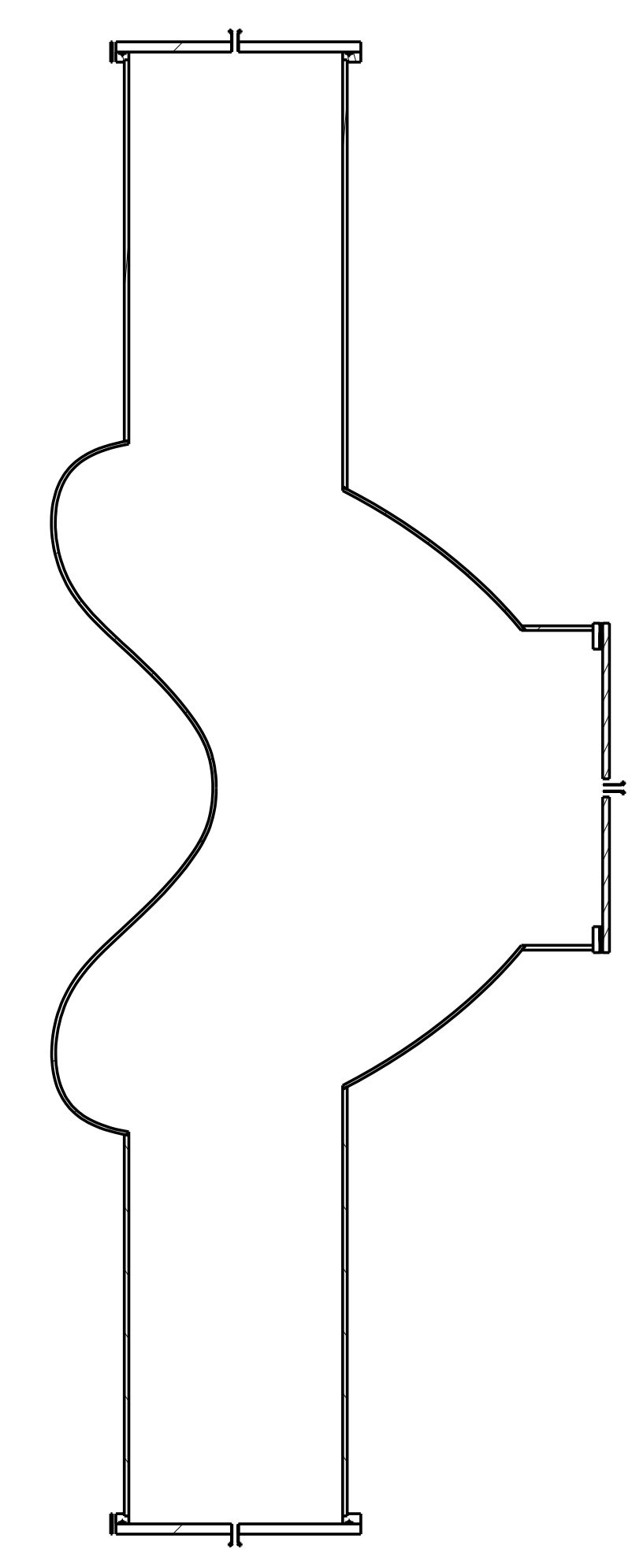
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FOR NOTES AND PARTS LIST SEE SHEET 1



TYPICAL VACUUM VESSEL FLANGE CONFIGURATION
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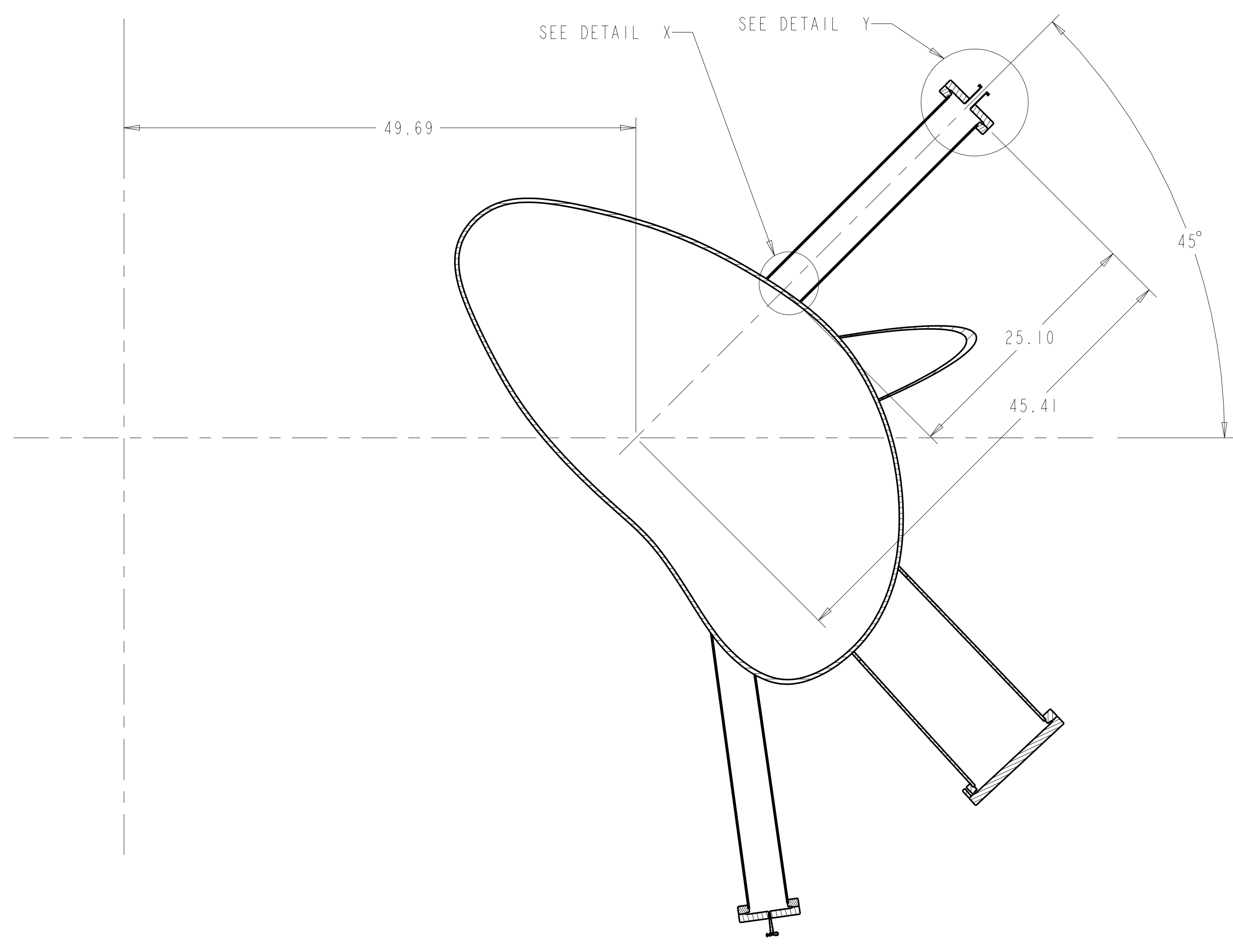
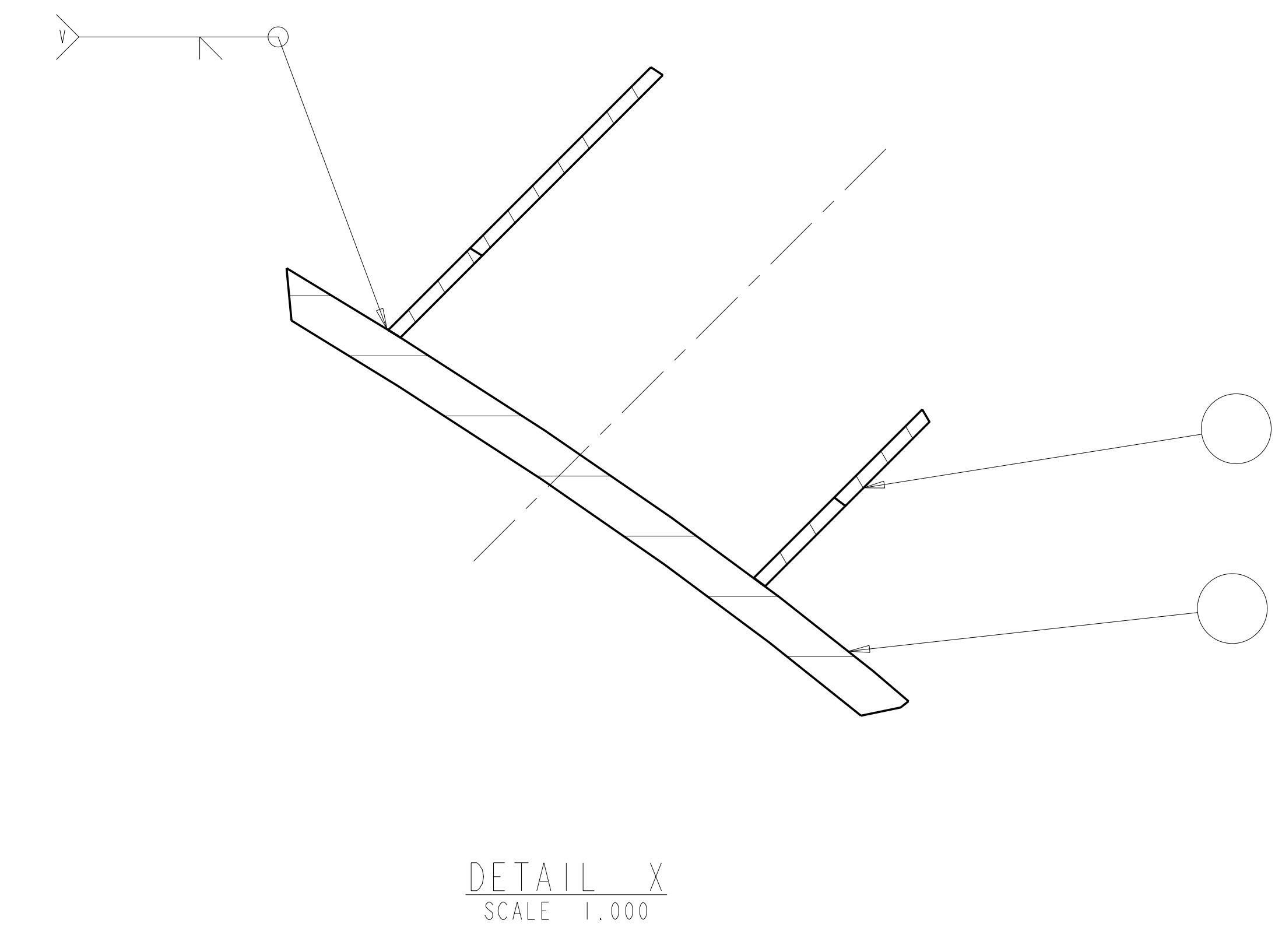
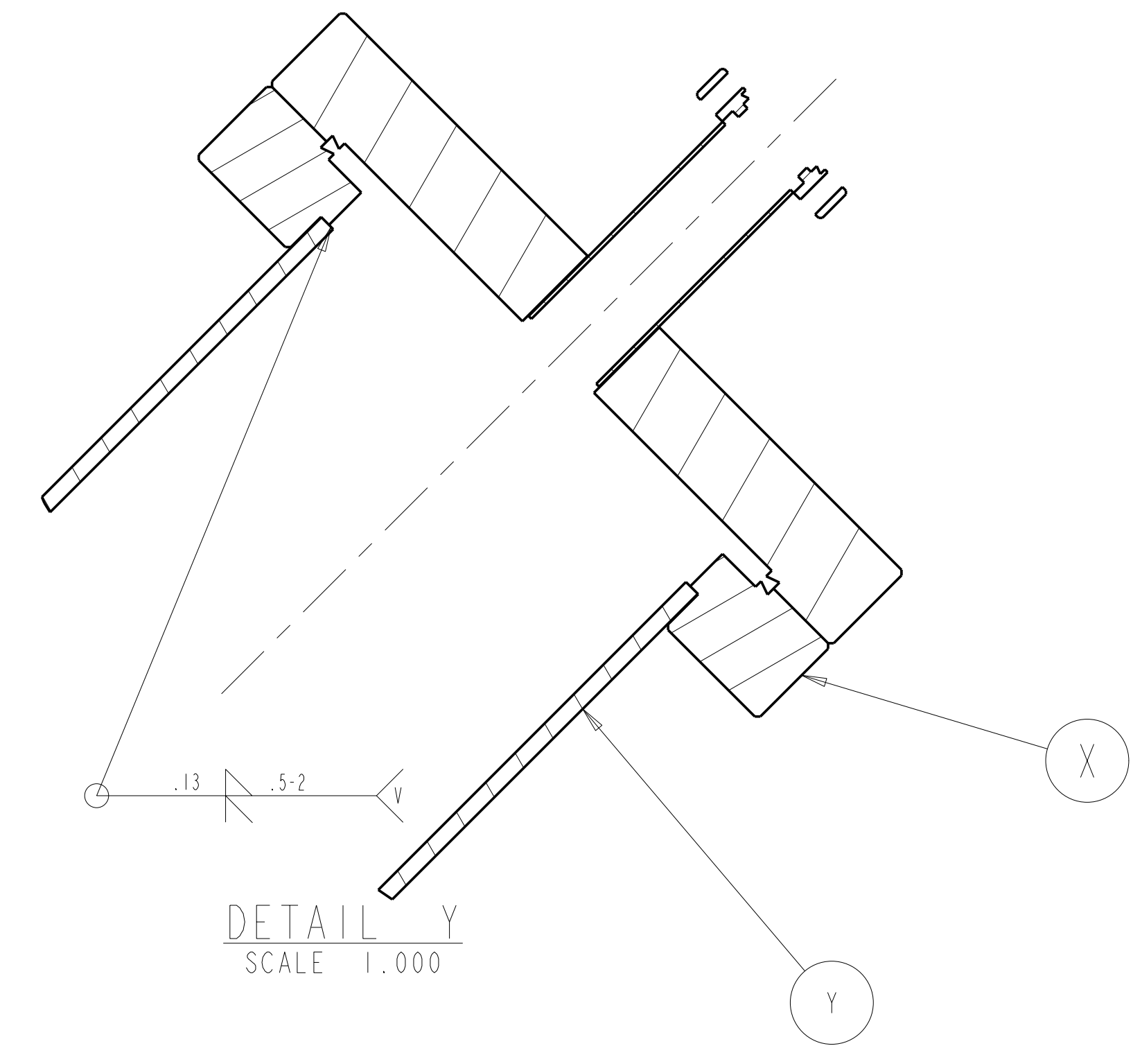
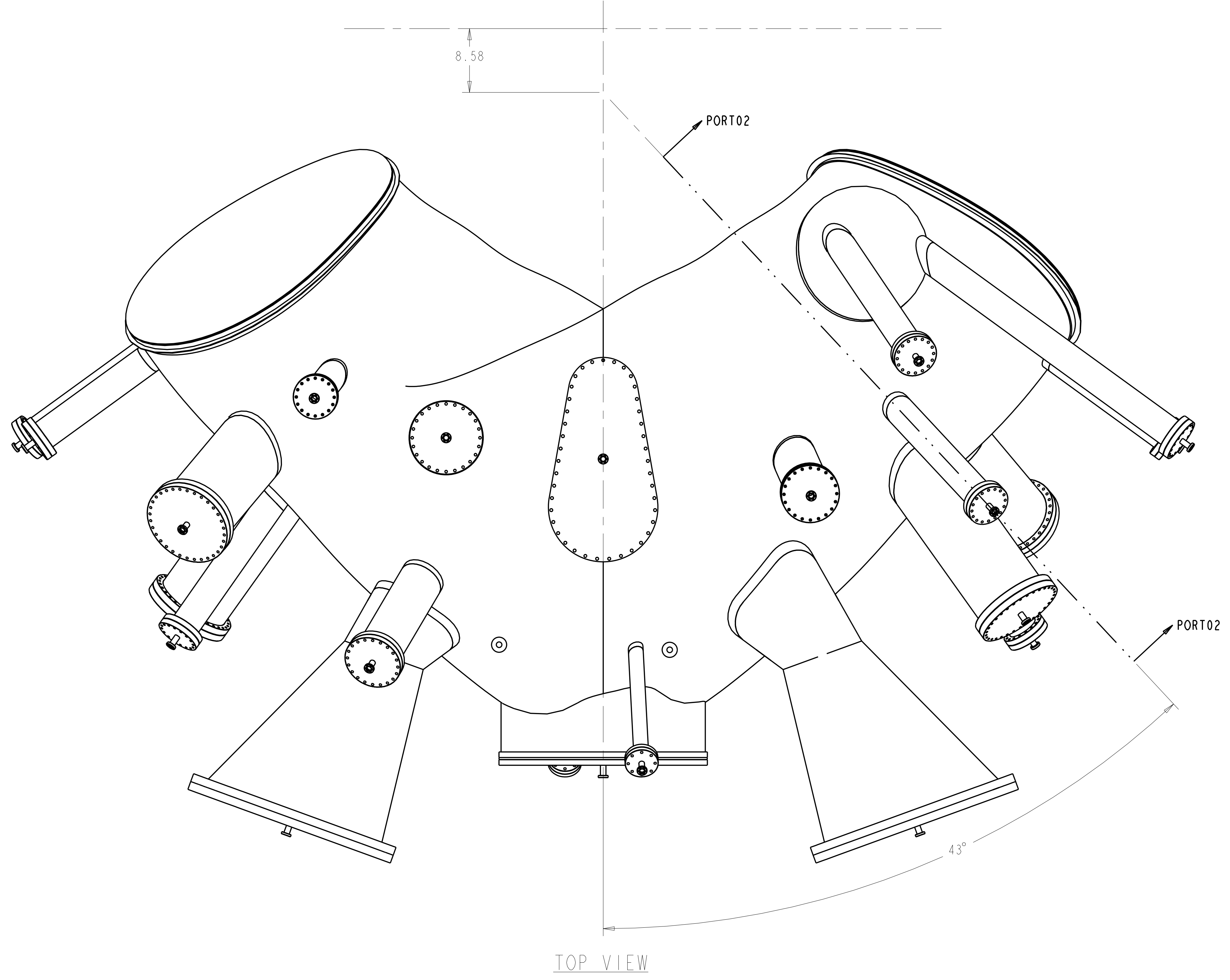
VESSEL PROFILE TOLERANCES

PRELIMINARY
FOR INFORMATION ONLY

Oak Ridge National Laboratory managed for the DEPARTMENT OF ENERGY under U.S. GOVERNMENT contract DE-AC05-00OR22725 UT-BATTELLE, LLC, Oak Ridge, Tennessee						
UT-BATTELLE						
NATIONAL COMPACT STELLERATOR EXPERIMENT						
VACUUM VESSEL PERIOD ASSEMBLY						
VERSION NO.	PLANT	BLDG	FL	SHT OF	TYPE	CLASS
54	XX	XX	XX	2 16	XX	U
RELEASE LEVEL		SEI20-004			REV	
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SEI20-004

FOR PARTS LIST AND NOTES SEE SHEET 1.



DIM. ARE TO THE COORDANT SYSTEM AND NOT THE MAGNETIC AXIS.

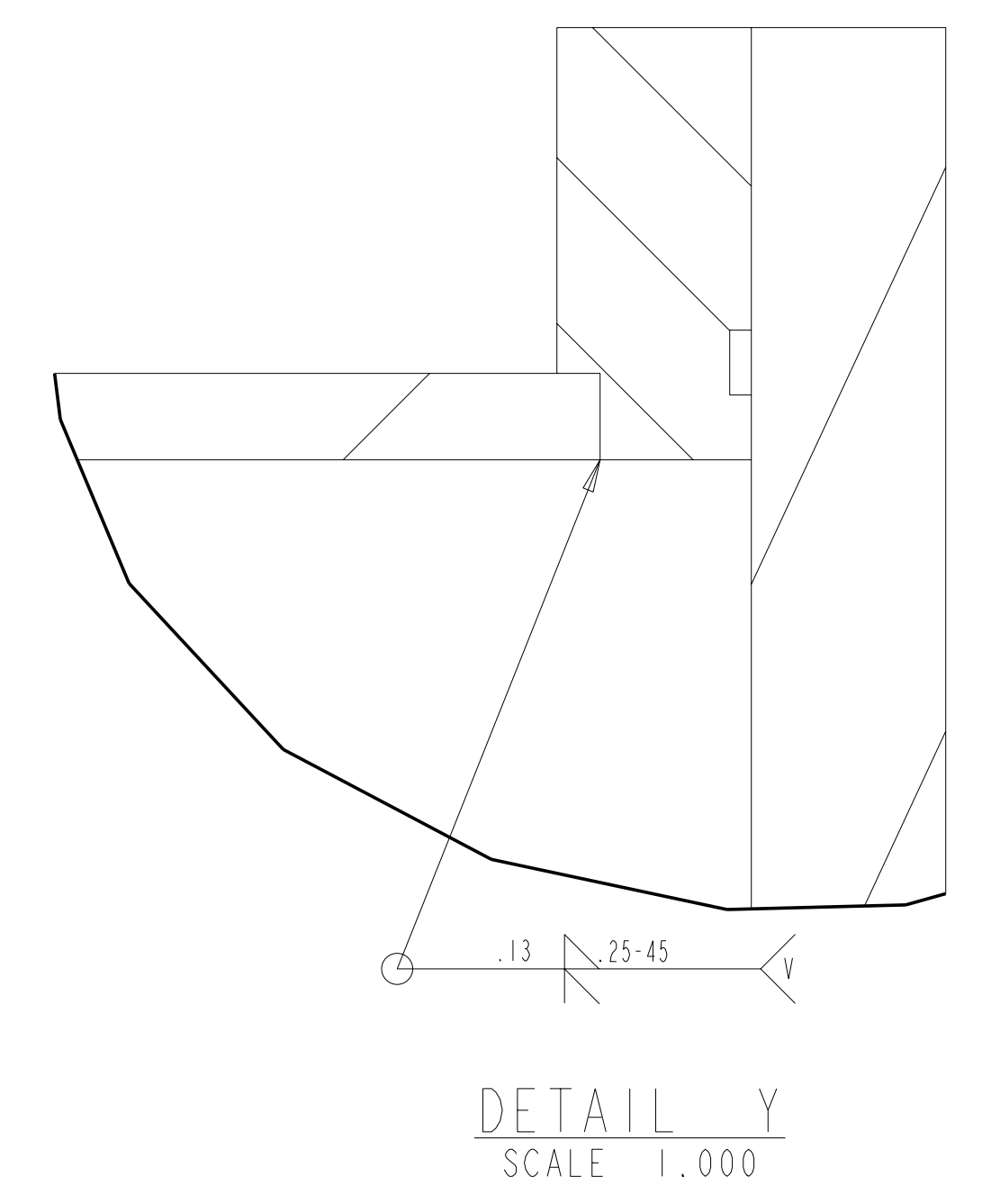
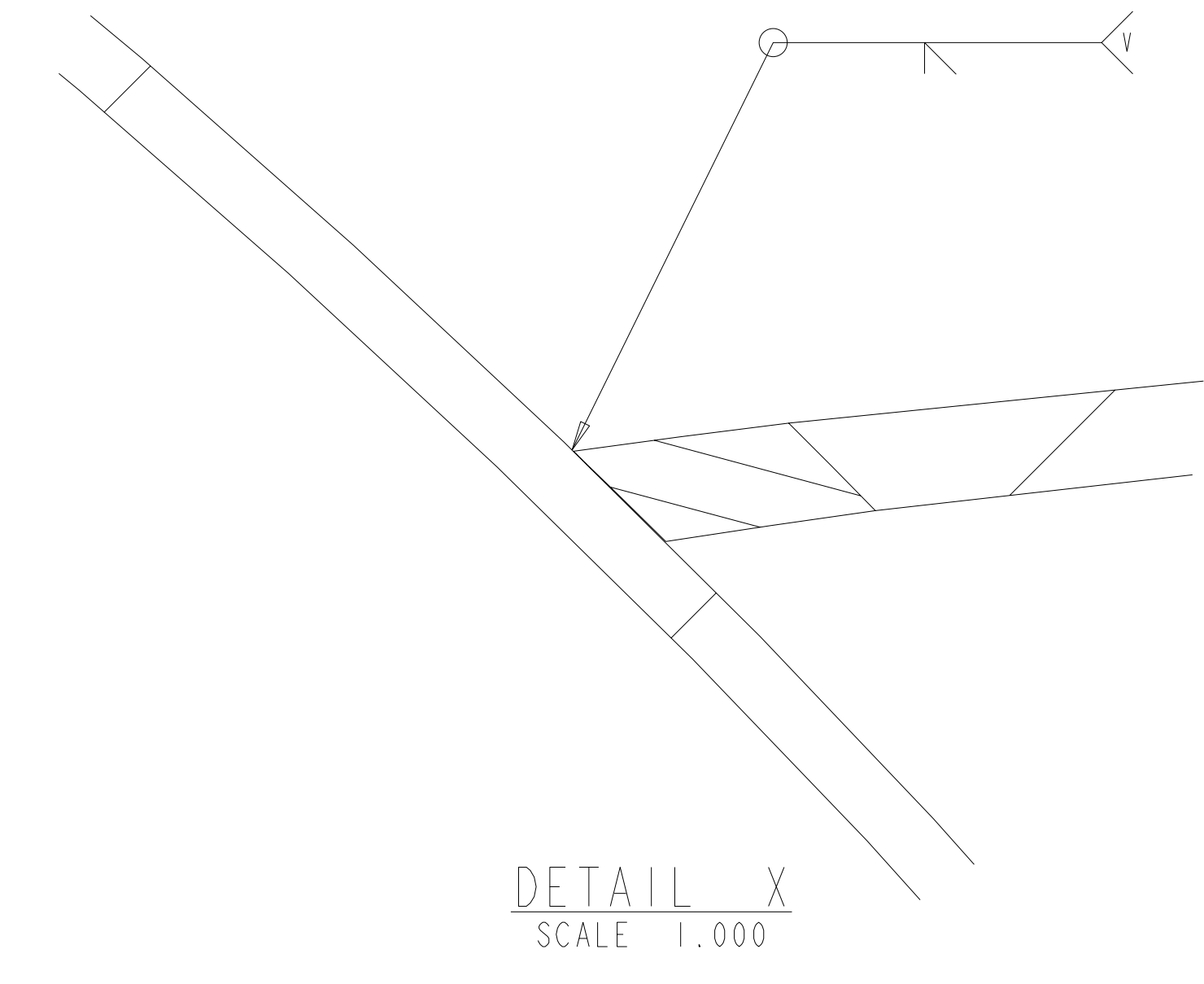
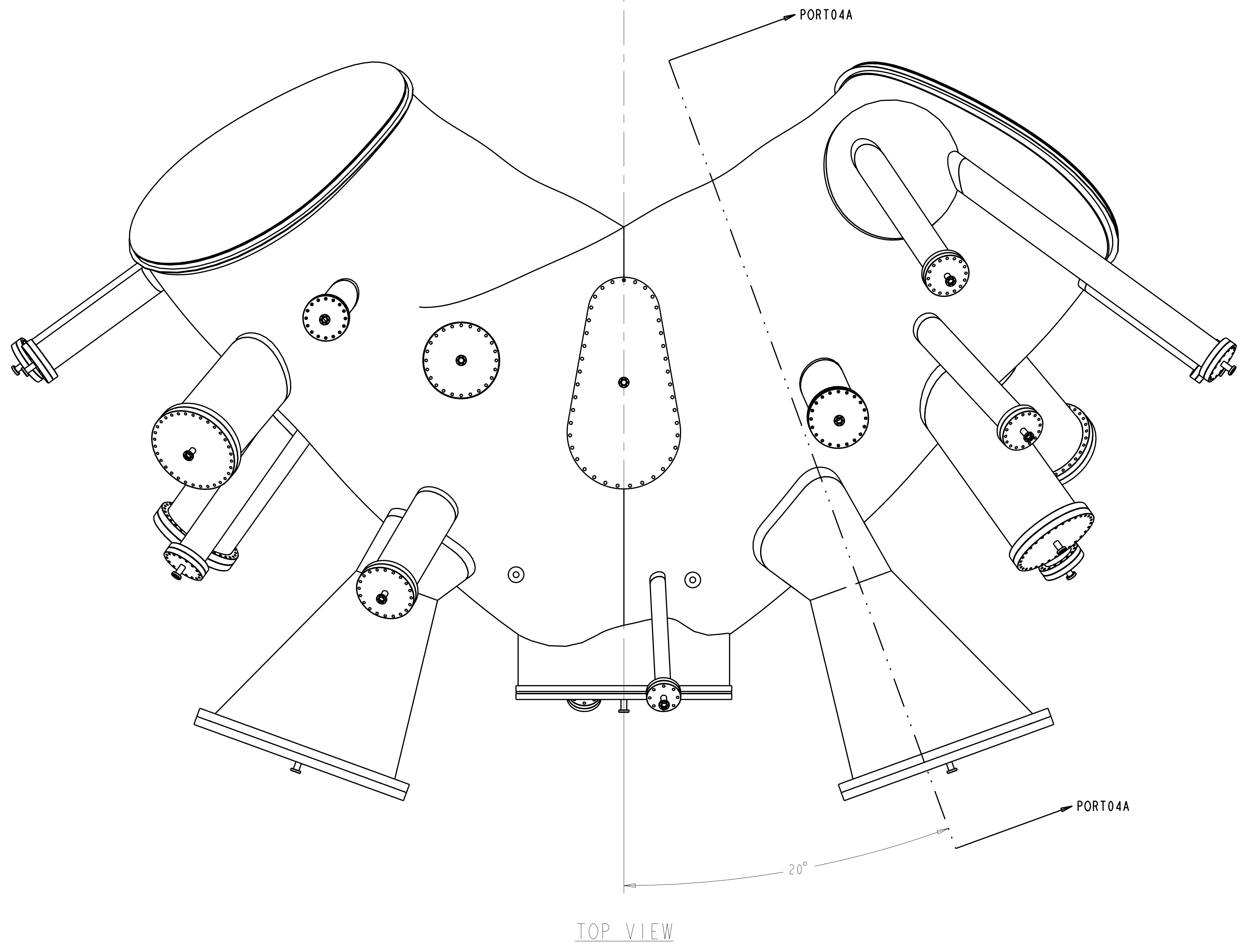
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UT-BATTELLE						
NATIONAL COMPACT STELLARATOR EXPERIMENT						
VACUUM VESSEL PERIOD ASSEMBLY						
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WIP	SE120-004					A

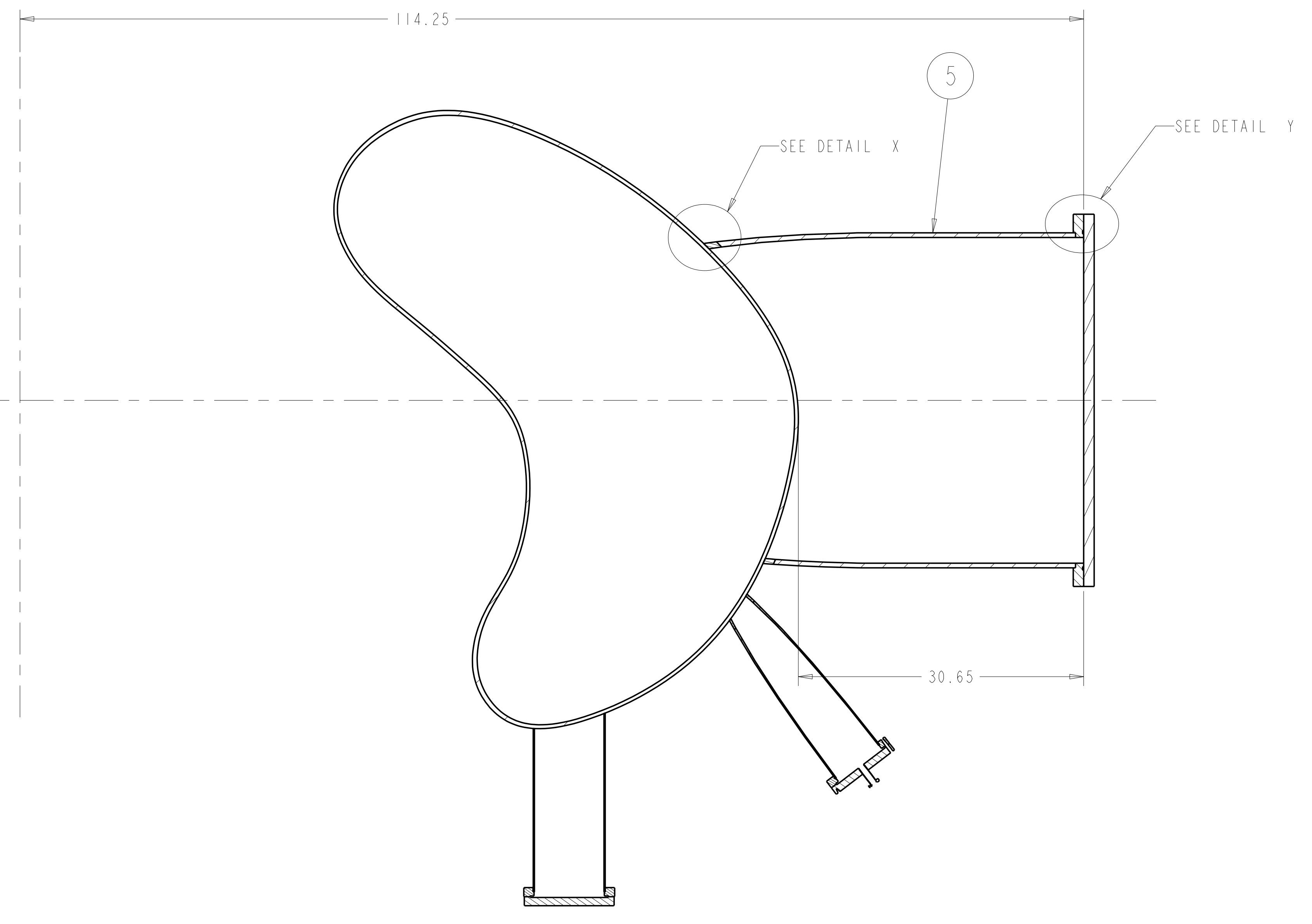
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SE120-004

FOR PARTS LIST AND NOTES SEE SHEET 1.



TOP VIEW



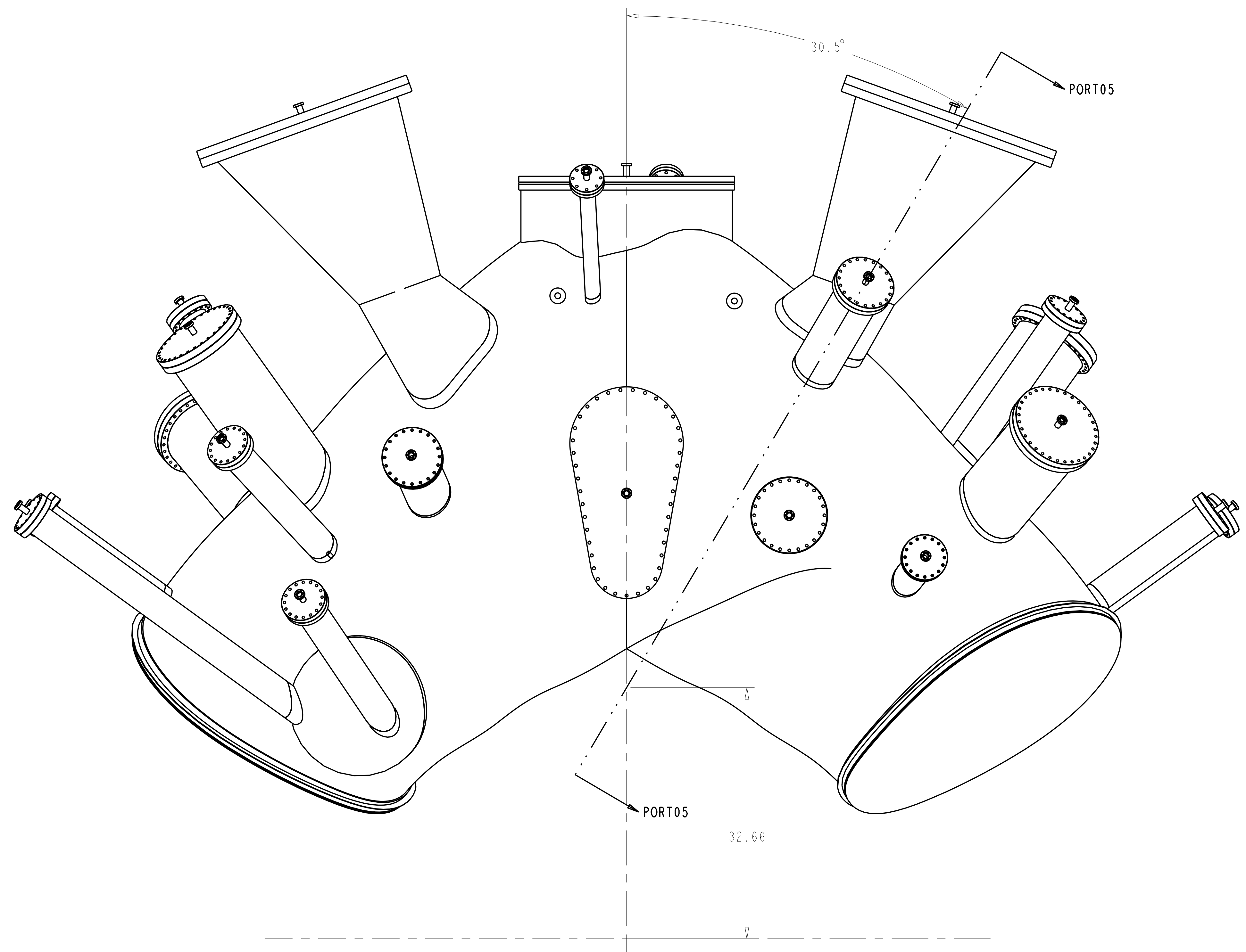
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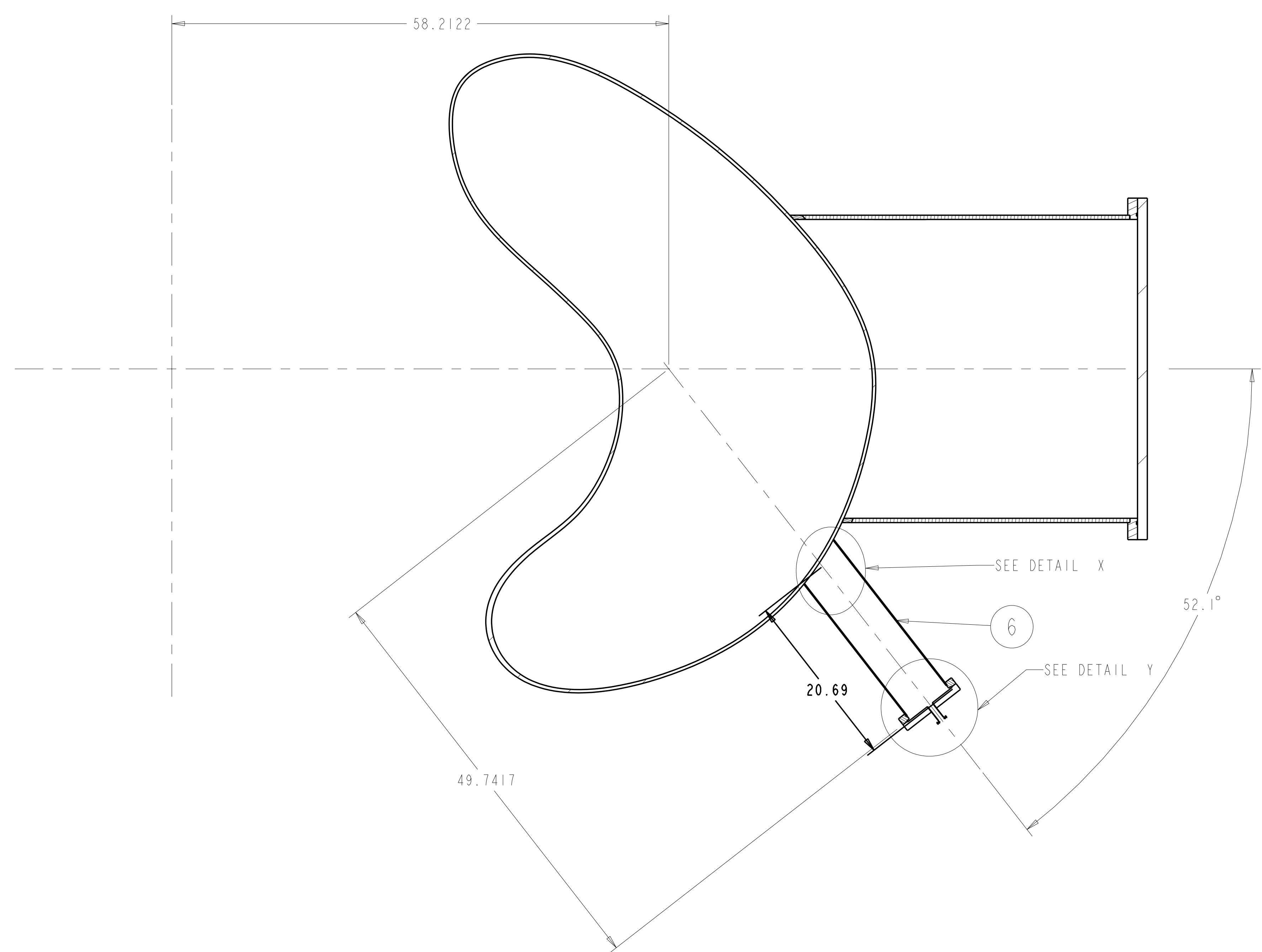
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UT-BATTELLE									
NATIONAL COMPACT STELLERATOR EXPERIMENT									
VACUUM VESSEL PERIOD ASSEMBLY									
VERSION NO.	PLANT	BLDG	FL	SHT OF	TYPE	CLASS			
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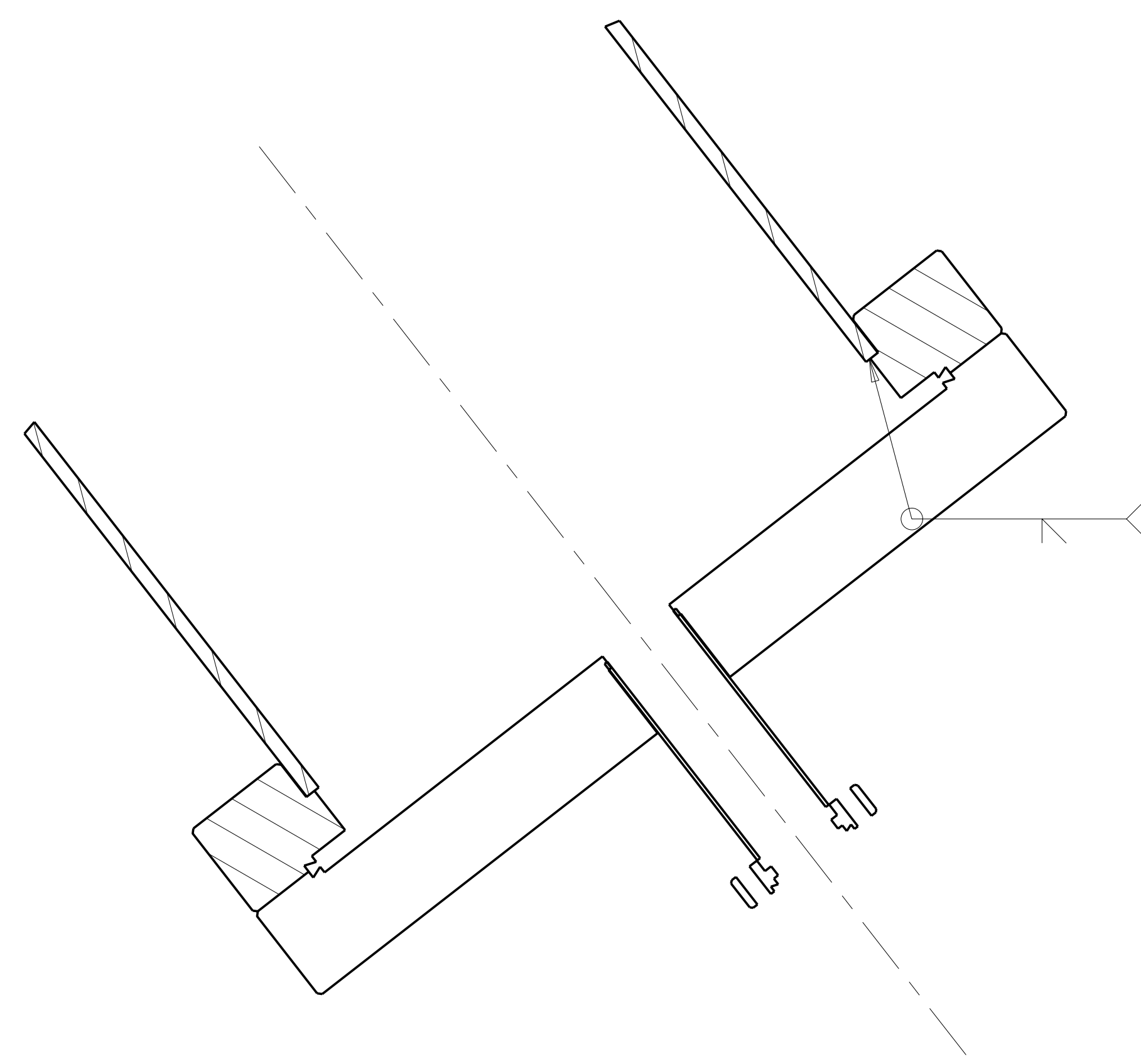
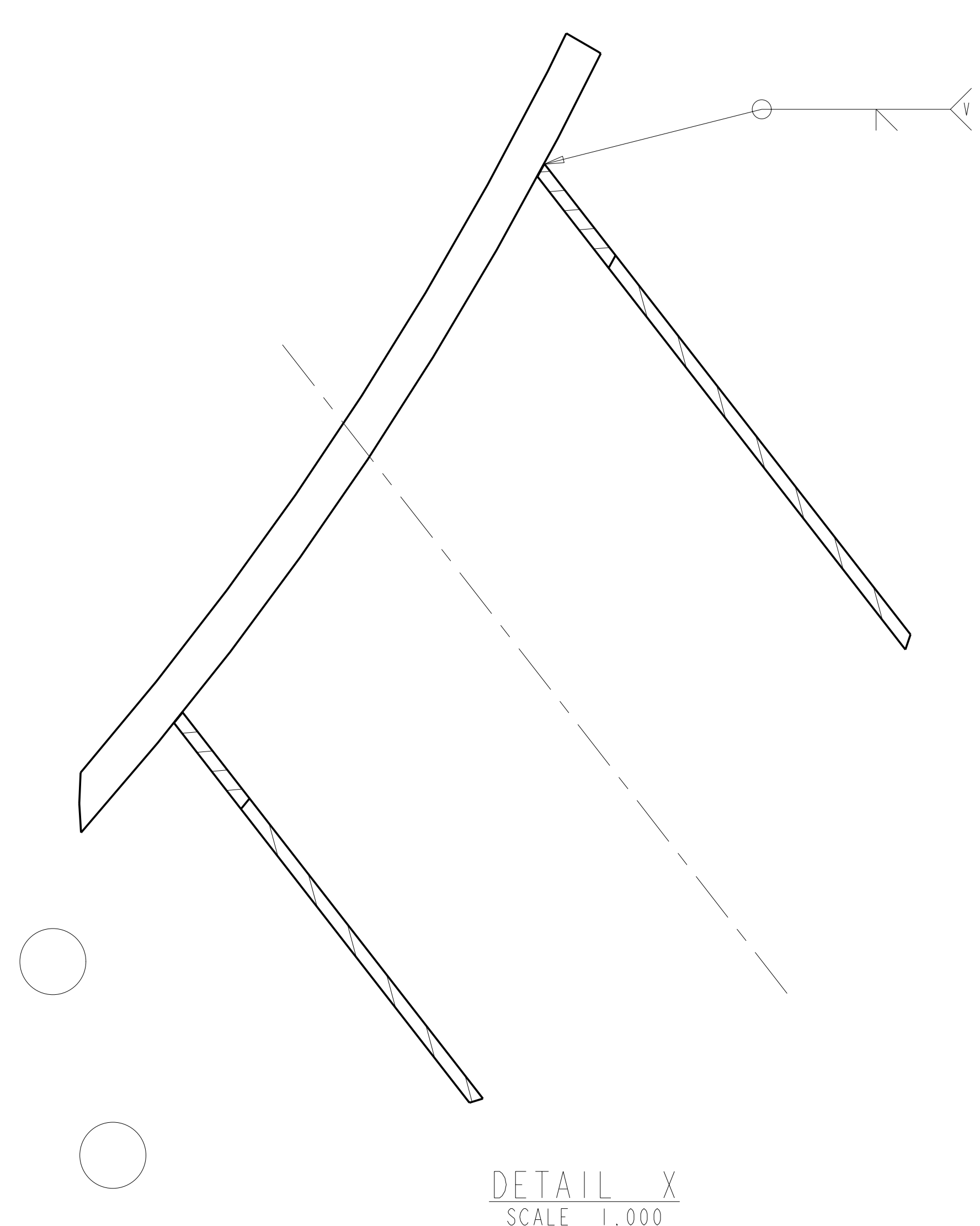


BOTTOM VIEW



SECTION PORT05-PORT05

FOR PARTS LIST AND NOTES SEE SHEET 1.



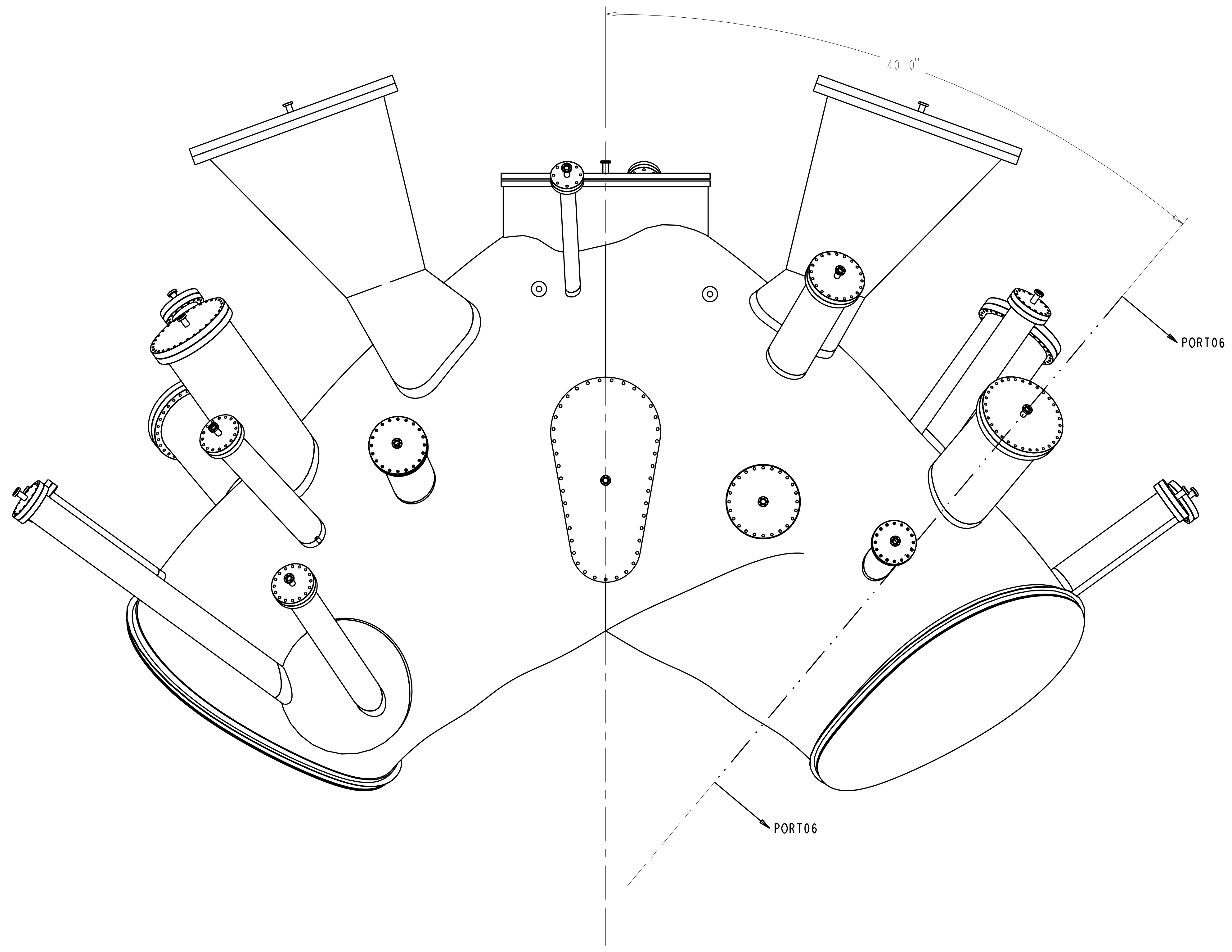
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FOR INFORMATION ONLY

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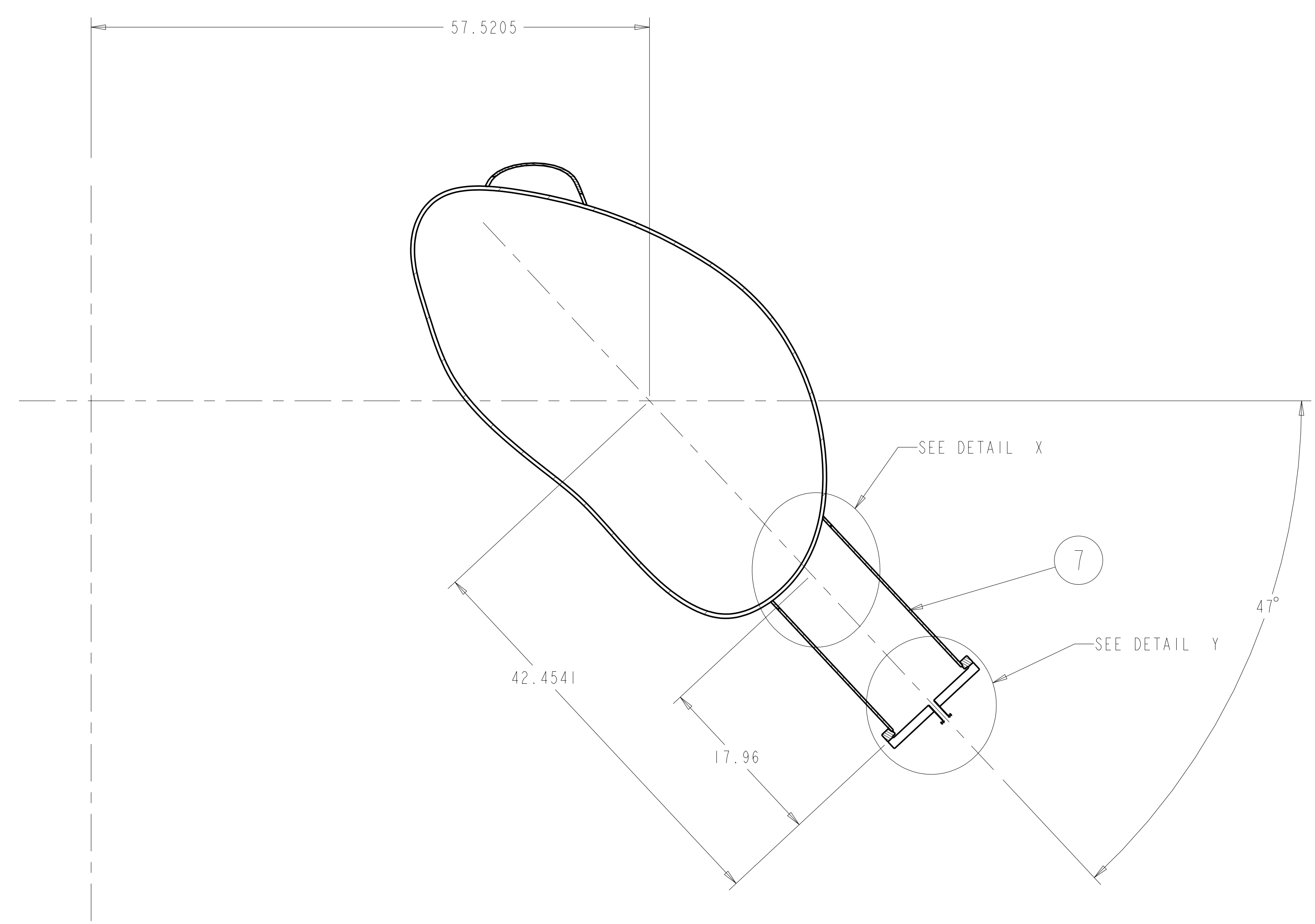
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UT-BATTELLE						
NATIONAL COMPACT STELLARATOR EXPERIMENT						
VACUUM VESSEL PERIOD ASSEMBLY						
VERSION NO.	PLANT	BLDG	FL	SHT OF	TYPE	CLASS
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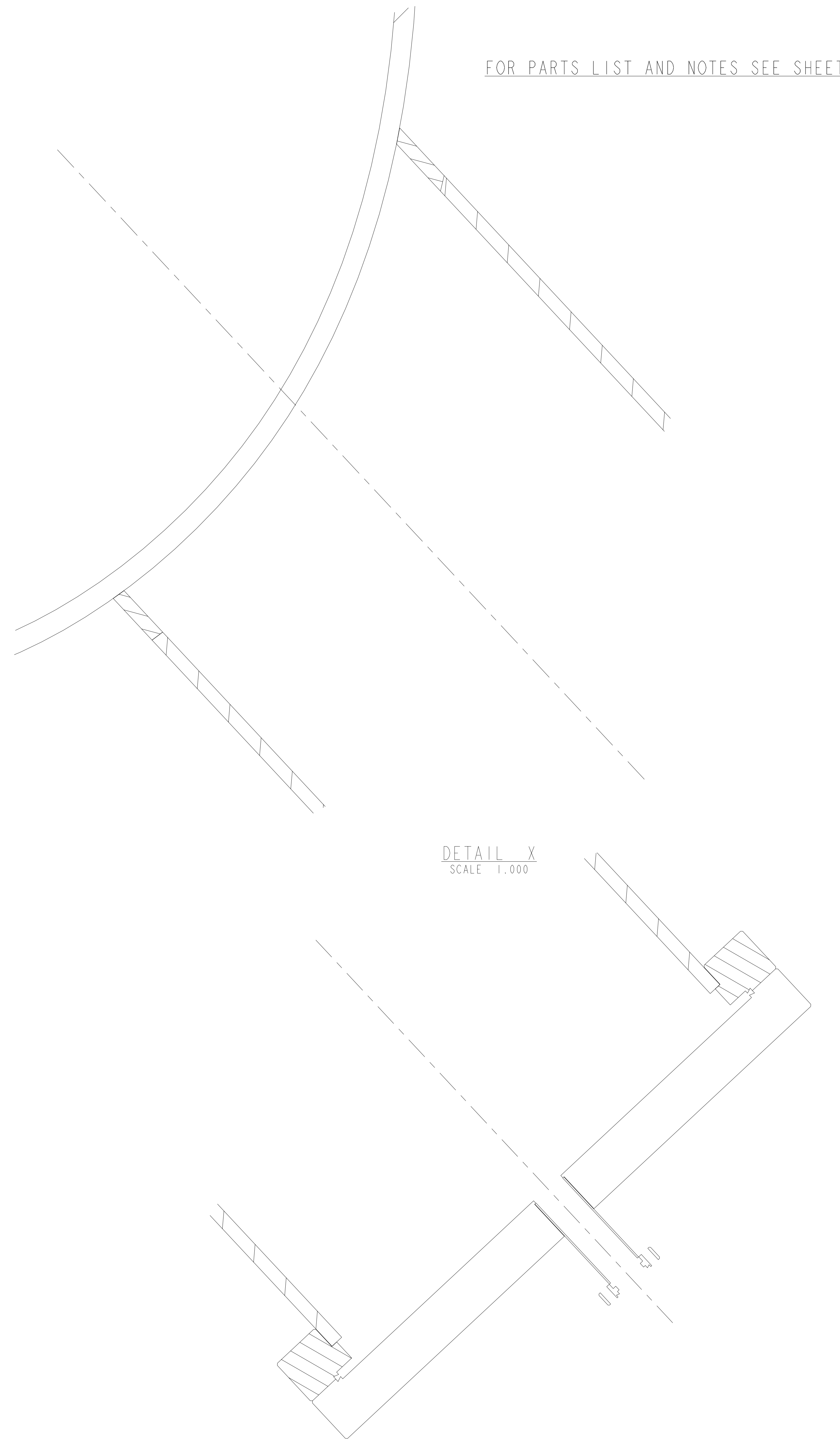
SEI20-004



BOTTOM VIEW



SECTION PORT06-PORT06



FOR PARTS LIST AND NOTES SEE SHEET 1.

DIM. ARE TO THE COORDANT SYSTEM AND NOT THE MAGNETIC AXIS.

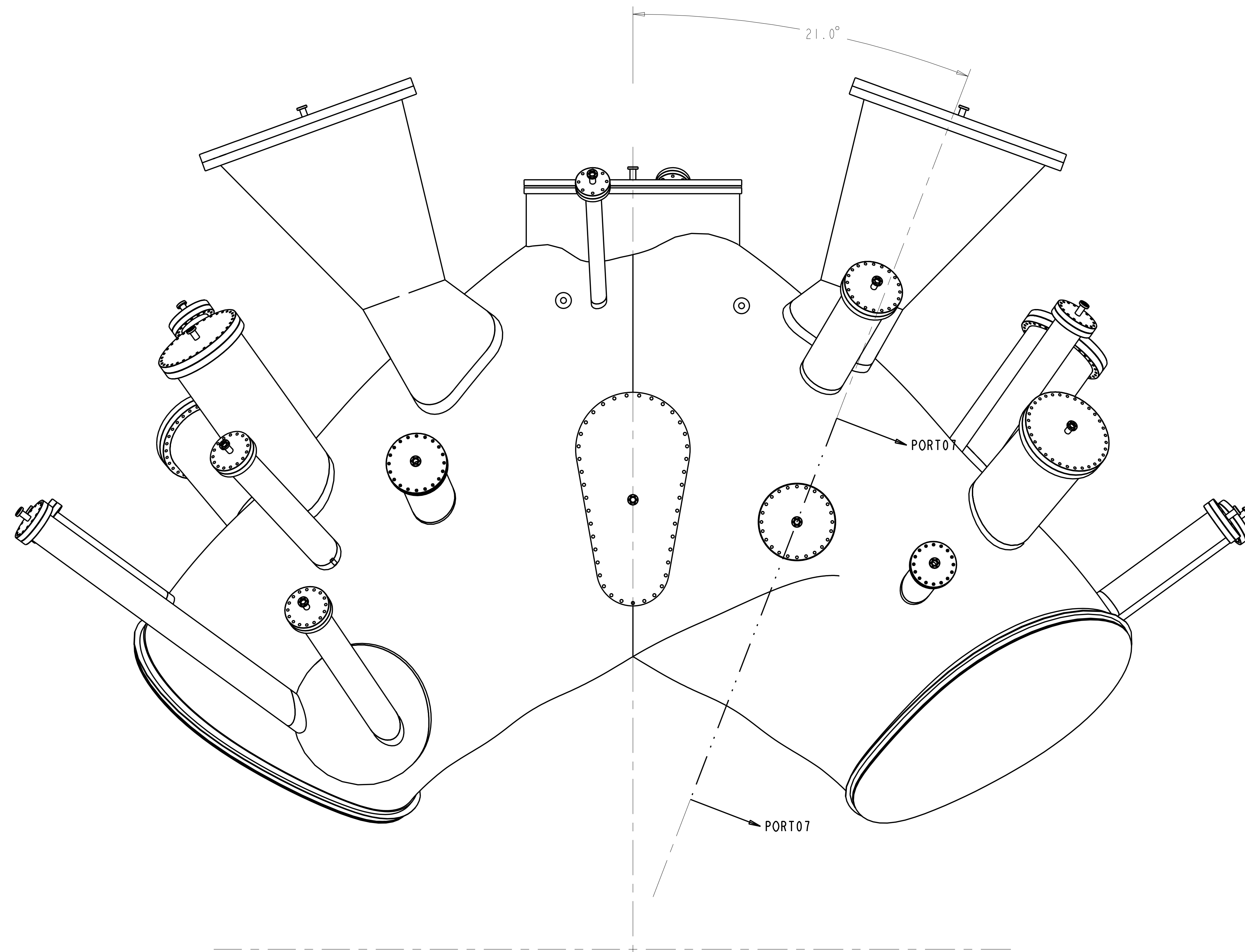
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UT-BATTELLE									
NATIONAL COMPACT STELLARATOR EXPERIMENT									
VACUUM VESSEL PERIOD ASSEMBLY									
VERSION NO.	PLANT	BLDG	FL	SHT OF	TYPE	CLASS			
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RELEASE LEVEL							REV		
WIP							SEI20-004		

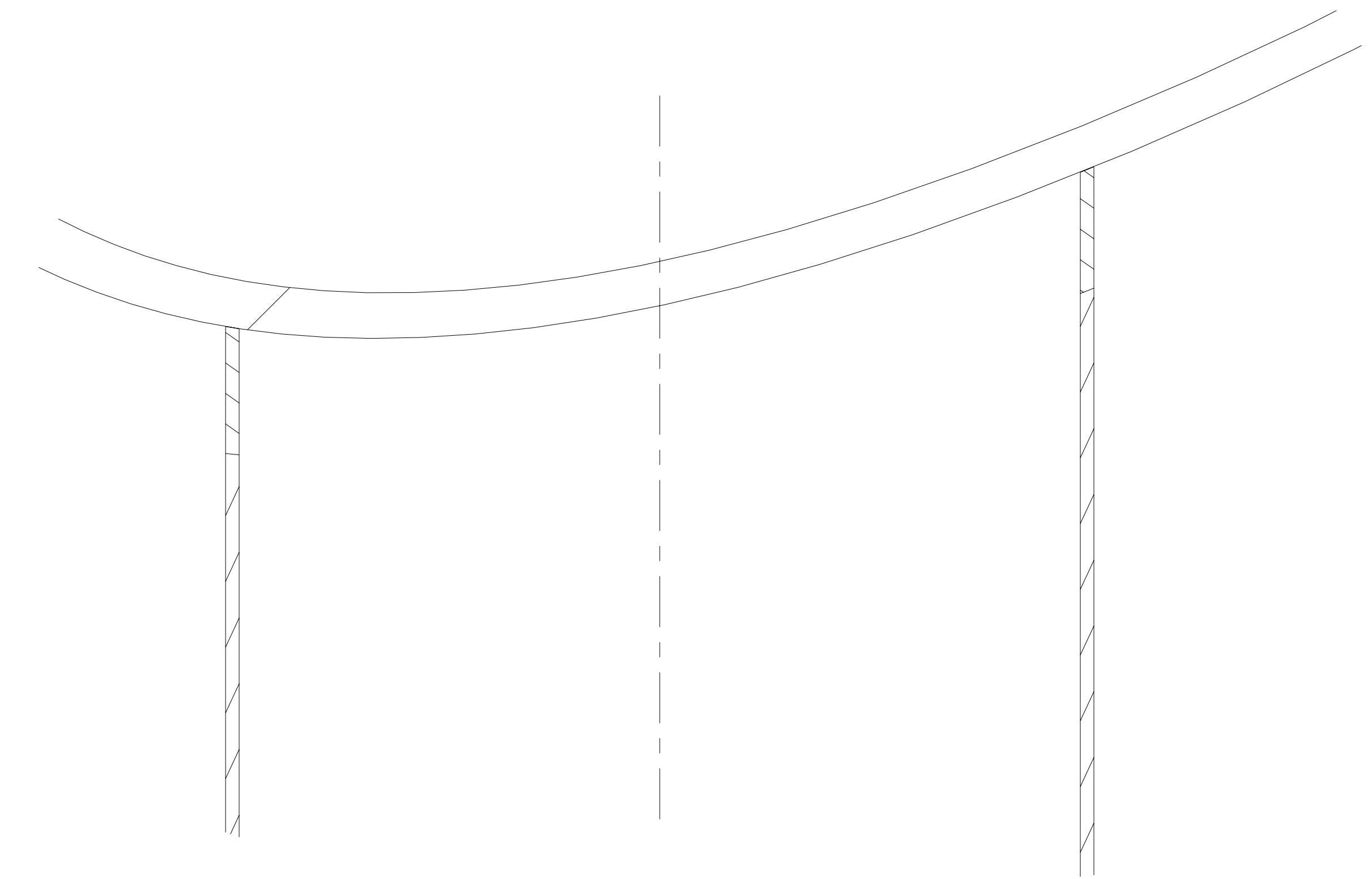
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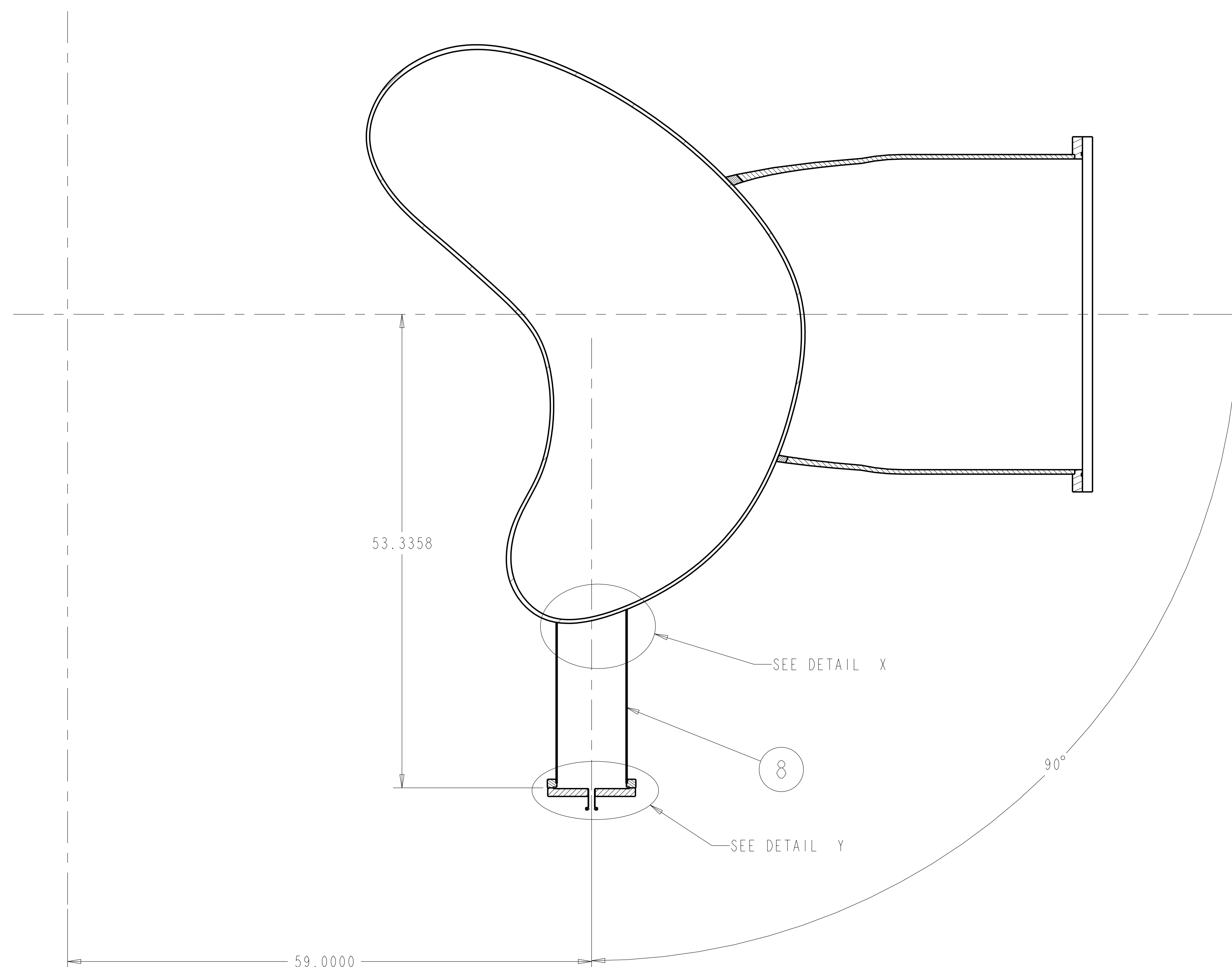
FOR PARTS LIST AND NOTES SEE SHEET 1.



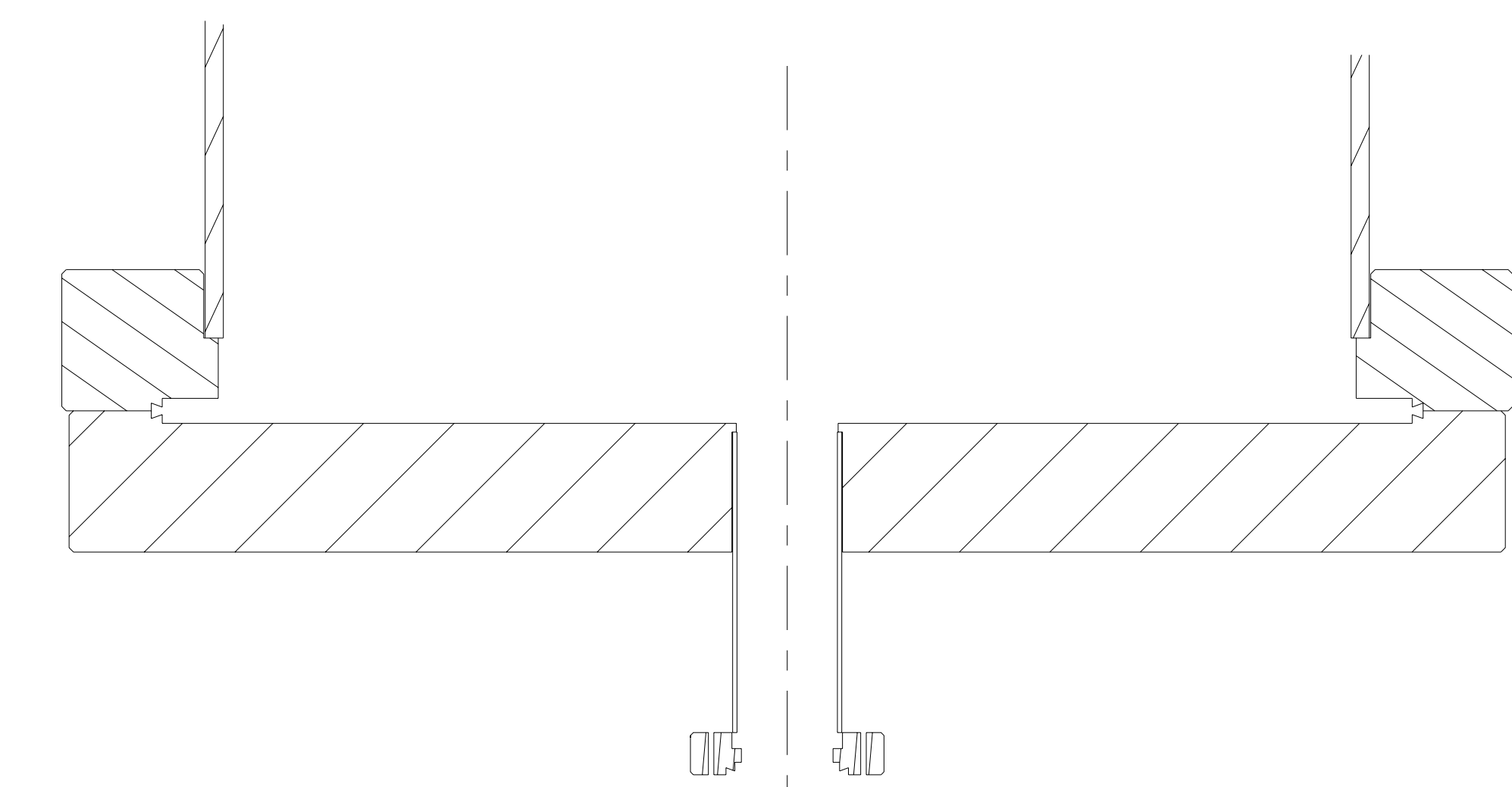
BOTTOM VIEW



DETAIL X
SCALE 1.000



SECTION PORT07-PORT07



DETAIL Y
SCALE 1.000

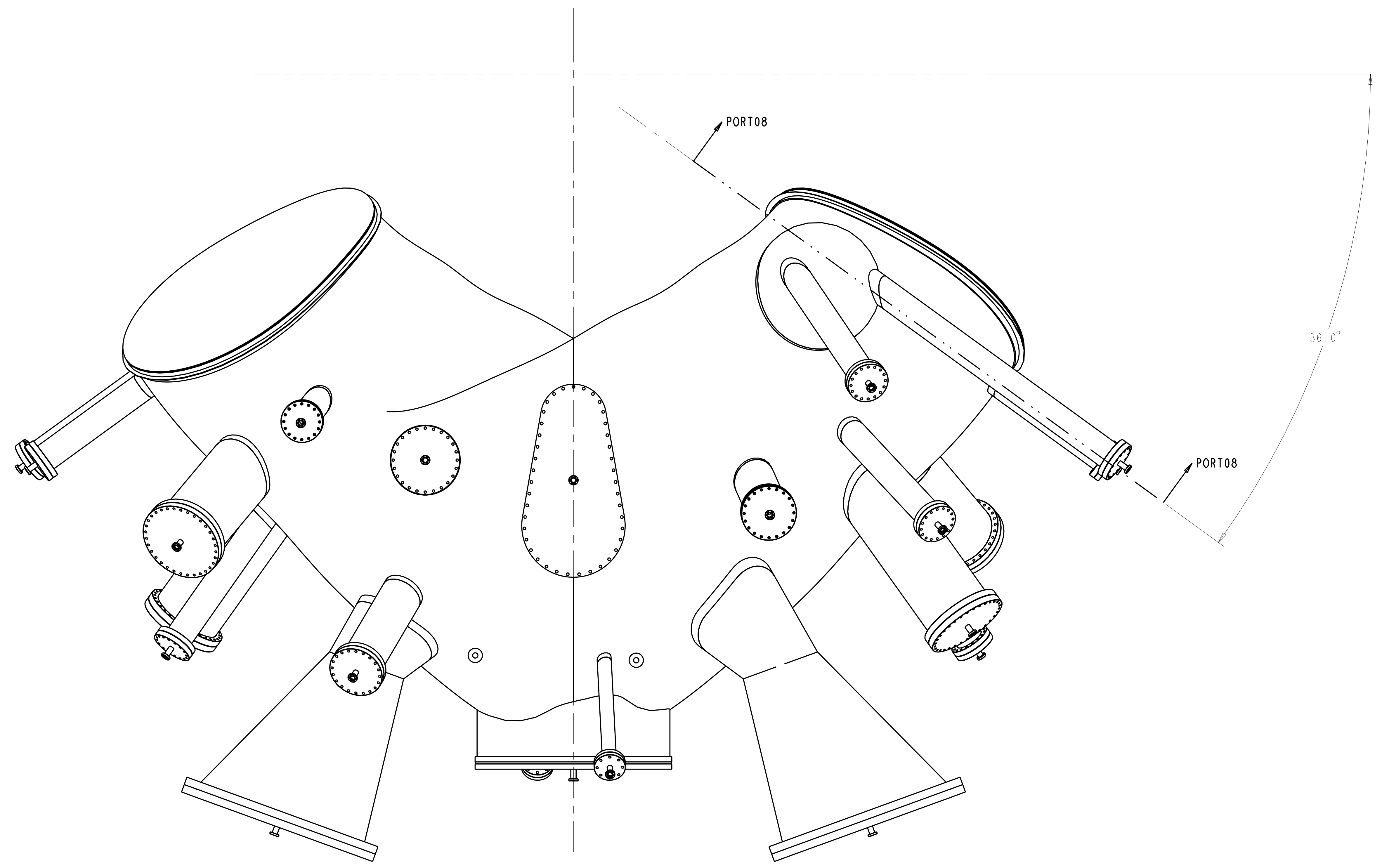
DIM. ARE TO THE COORDANT SYSTEM AND NOT THE MAGNETIC AXIS.

PRELIMINARY
FOR INFORMATION ONLY

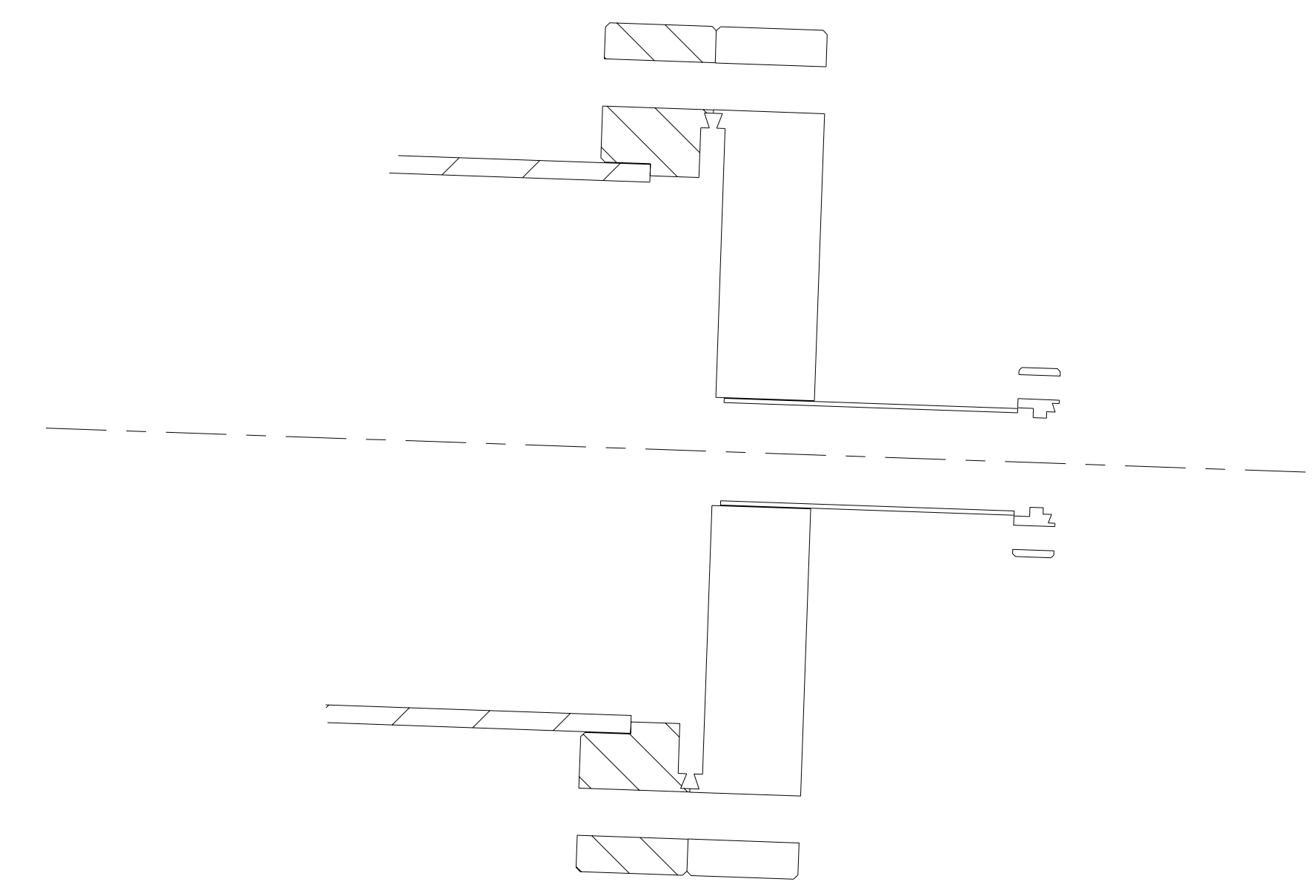
Oak Ridge National Laboratory managed for the DEPARTMENT OF ENERGY under U.S. GOVERNMENT contract DE-AC05-00OR22725 UT-BATTELLE, LLC, Oak Ridge, Tennessee						
PROJECT NAME NATIONAL COMPACT STELLARATOR EXPERIMENT						
VACUUM VESSEL PERIOD ASSEMBLY						
VERSION NO.	PLANT	BLDG	FL	SHT OF	TYPE	CLASS
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RELEASE LEVEL						REV
WIP	SE120-004					A

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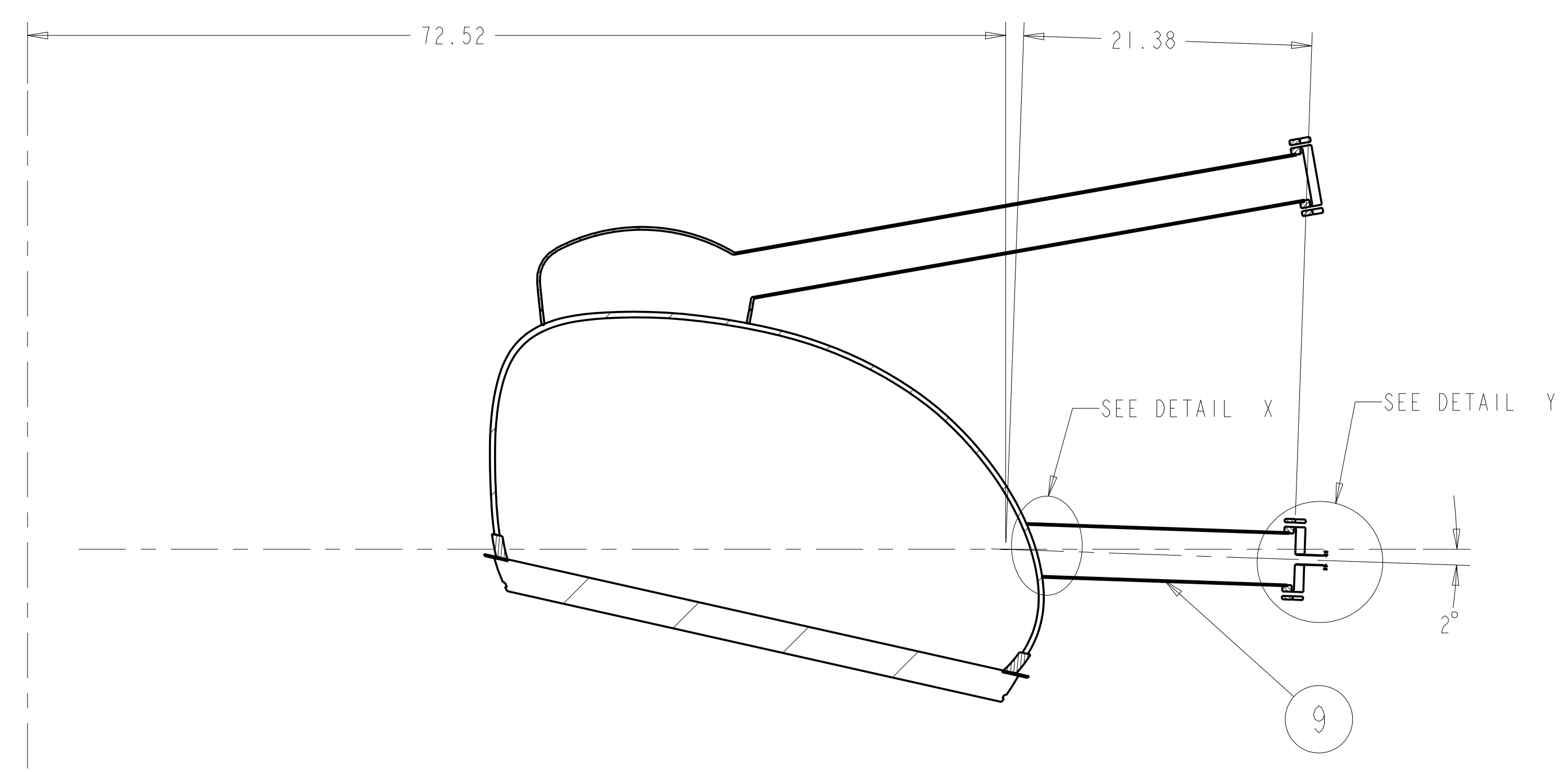
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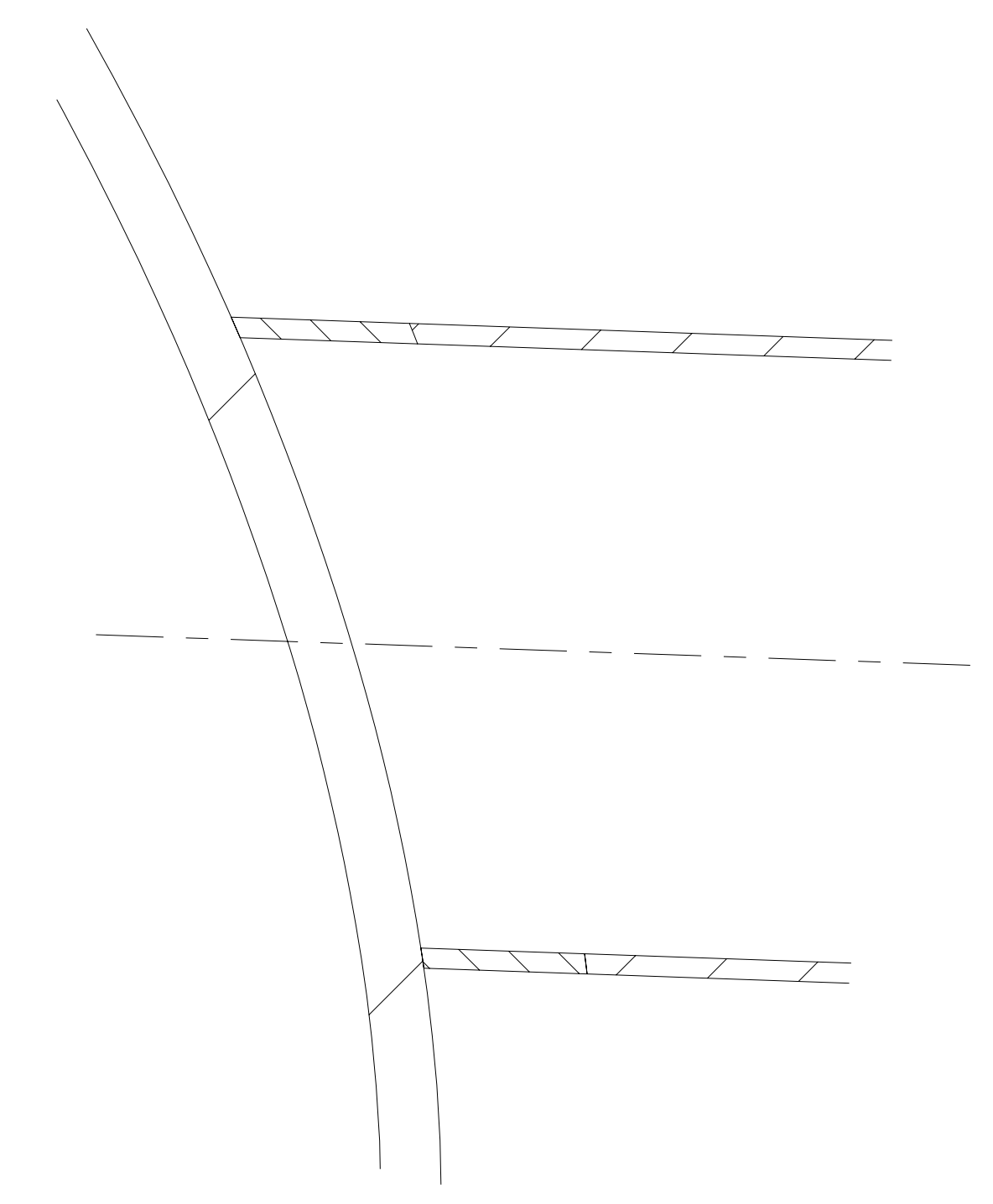
TOP VIEW



DETAIL Y
 SCALE 1.000



SECTION PORT08-PORT08



DETAIL X
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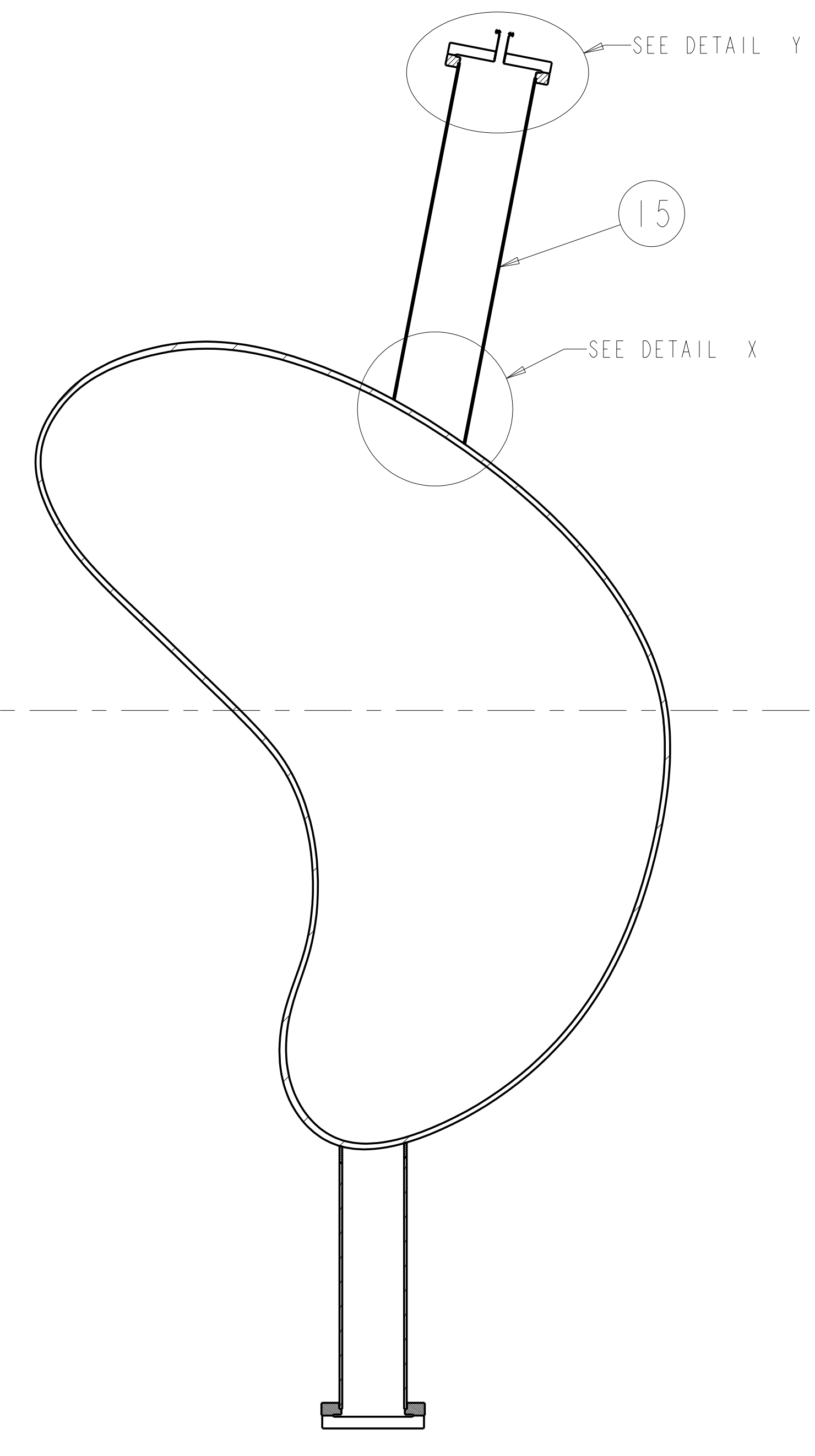
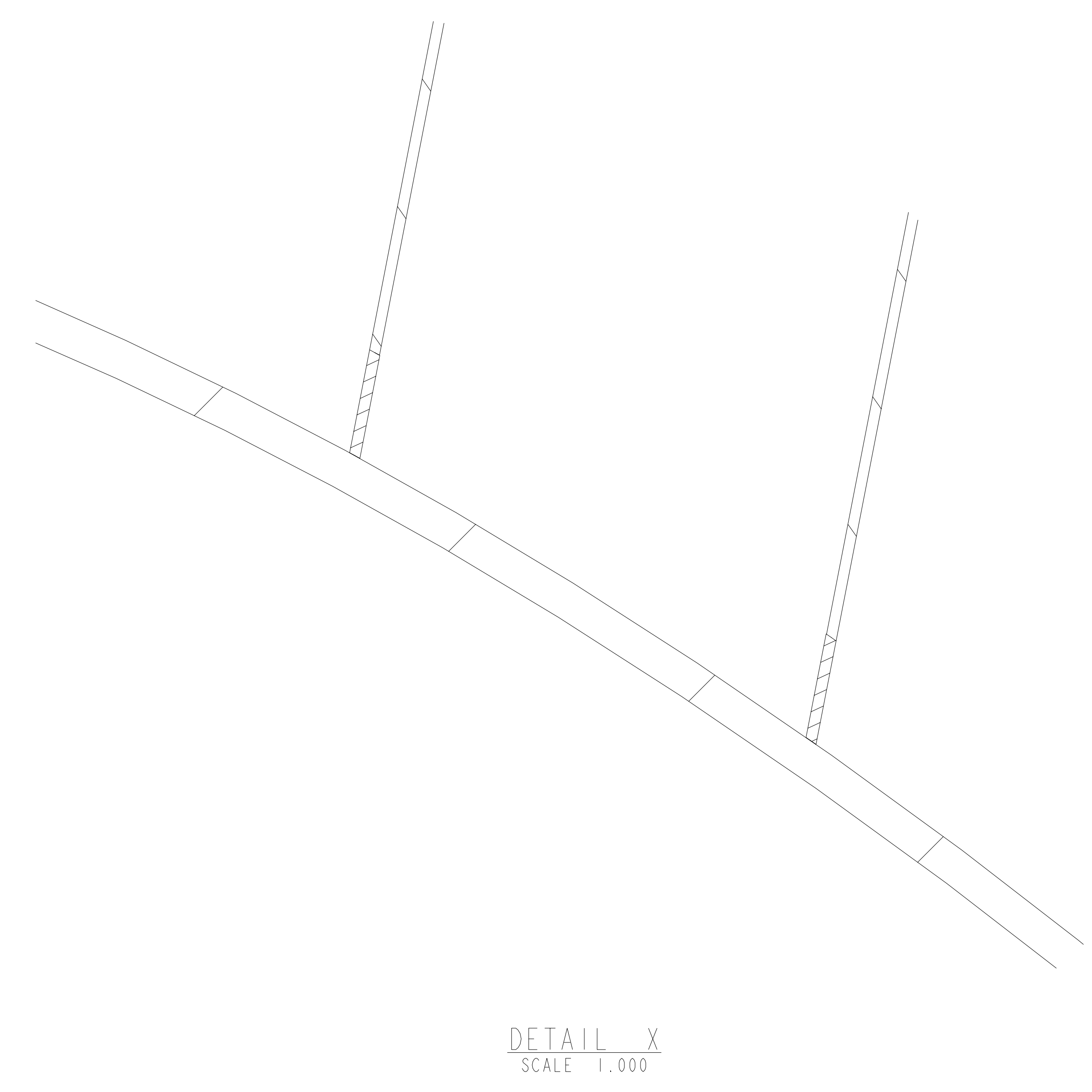
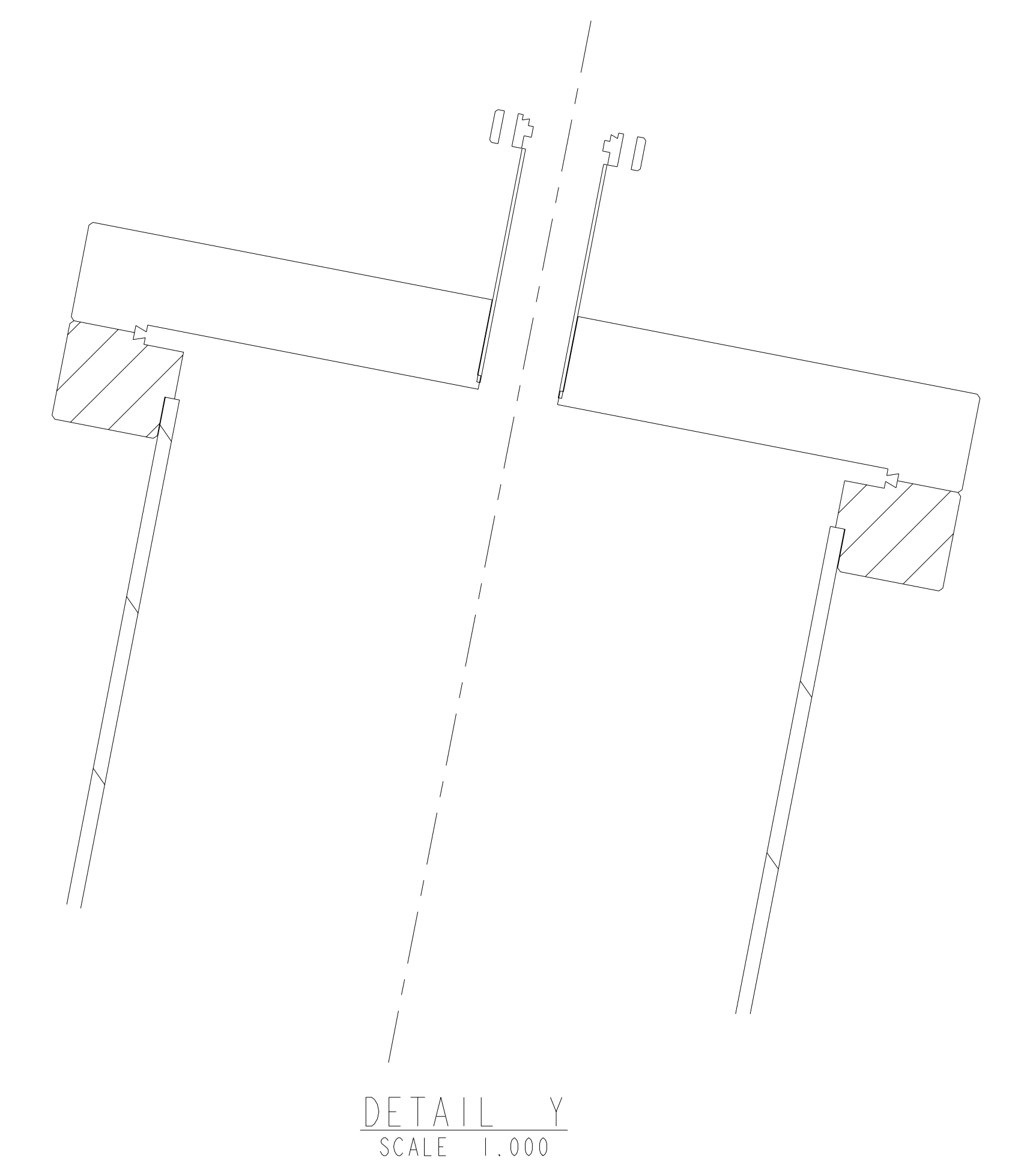
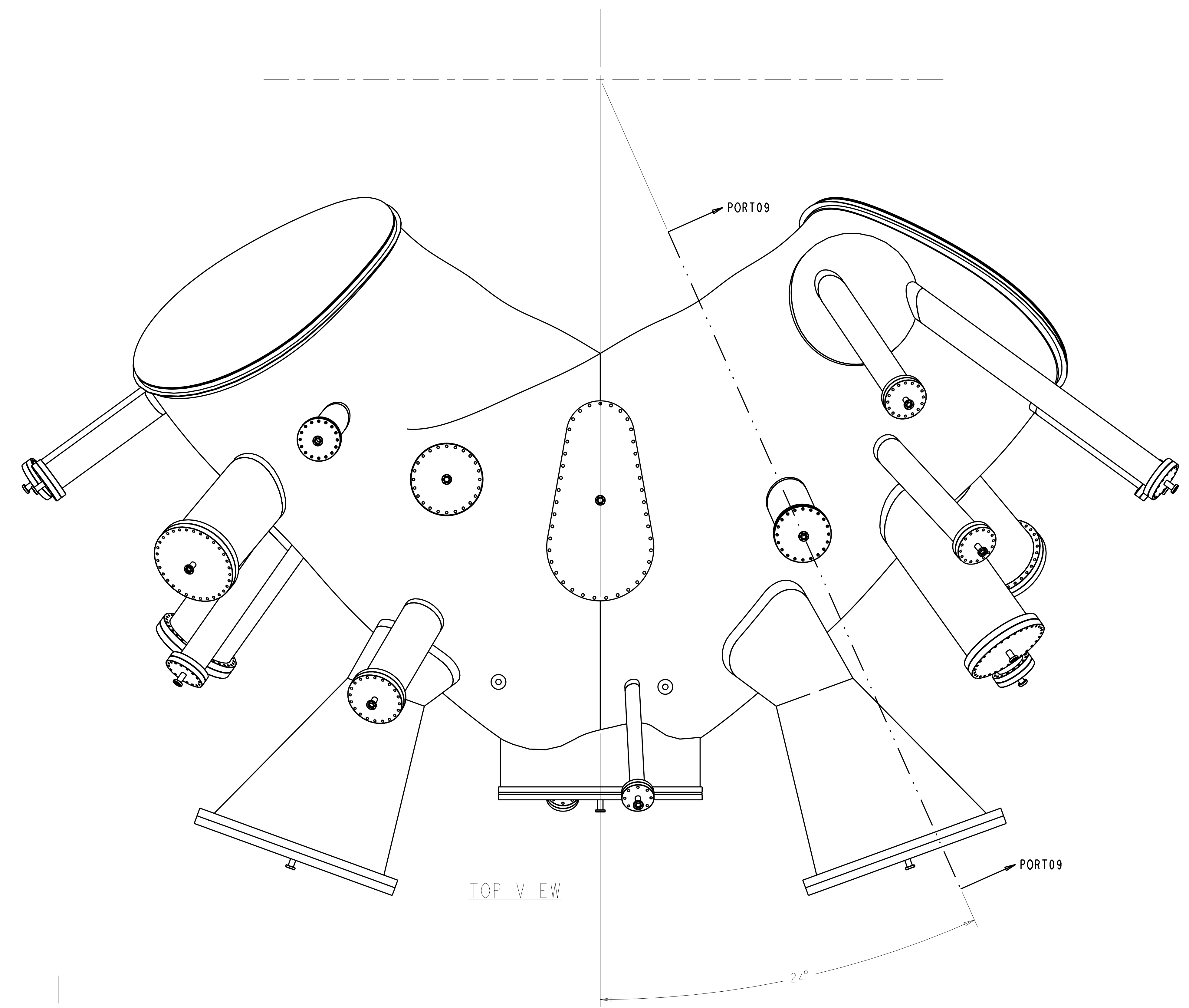
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Oak Ridge National Laboratory managed for the DEPARTMENT OF ENERGY under U.S. GOVERNMENT contract DE-AC05-00OR22725 UT-BATTELLE, LLC, Oak Ridge, Tennessee						
UT-BATTELLE NATIONAL COMPACT STELLERATOR EXPERIMENT						
VACUUM VESSEL PERIOD ASSEMBLY						
VERSION NO.	PLANT	BLDG	FL	SHT OF	TYPE	CLASS
54	XX	XX	XX	8 16	XX	U
RELEASE LEVEL						REV
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FOR PARTS LIST AND NOTES SEE SHEET 1.



SECTION PORT09-PORT09

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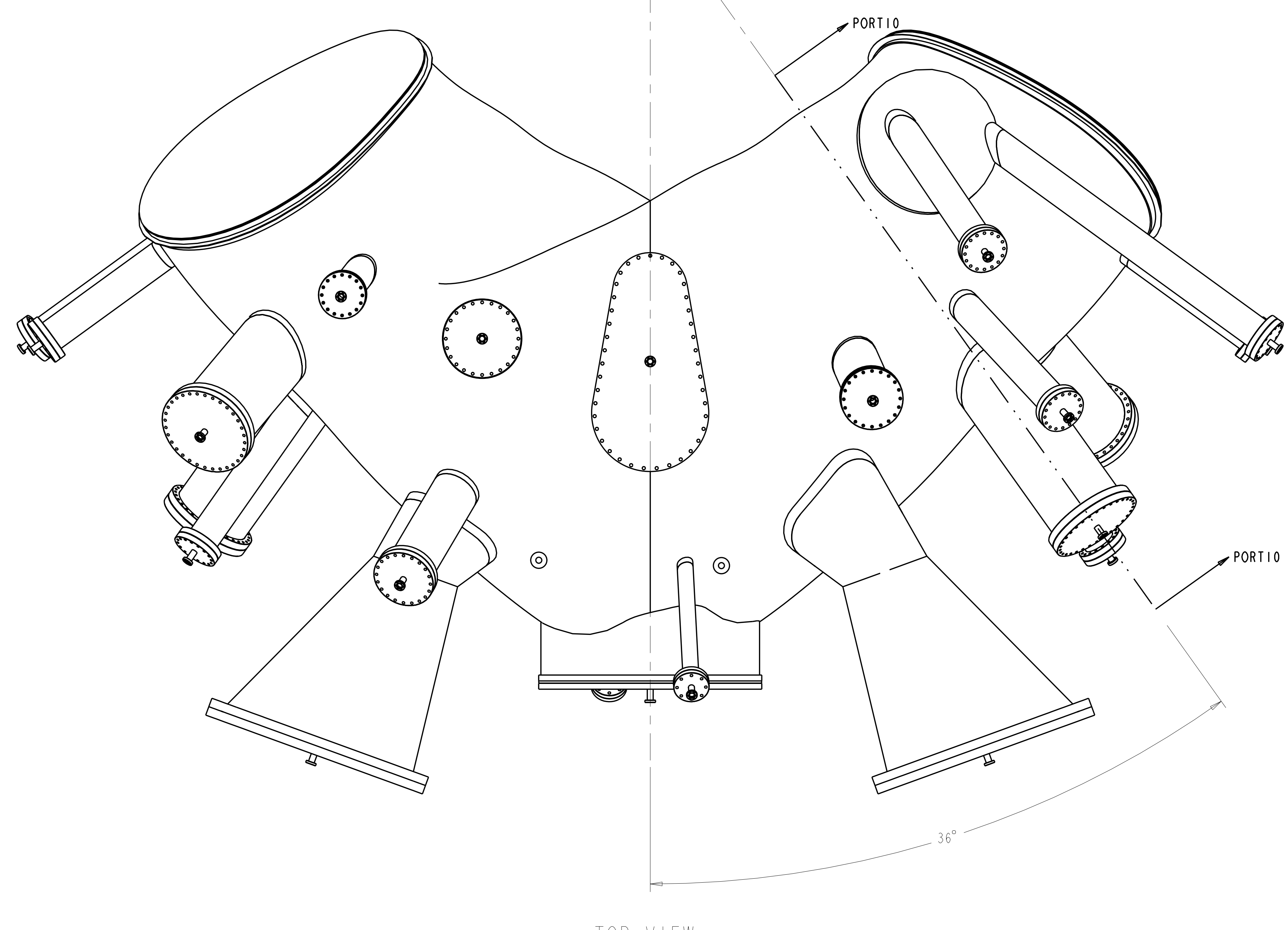
PRELIMINARY FOR INFORMATION ONLY

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RELEASE LEVEL	SEI20-004						REV		
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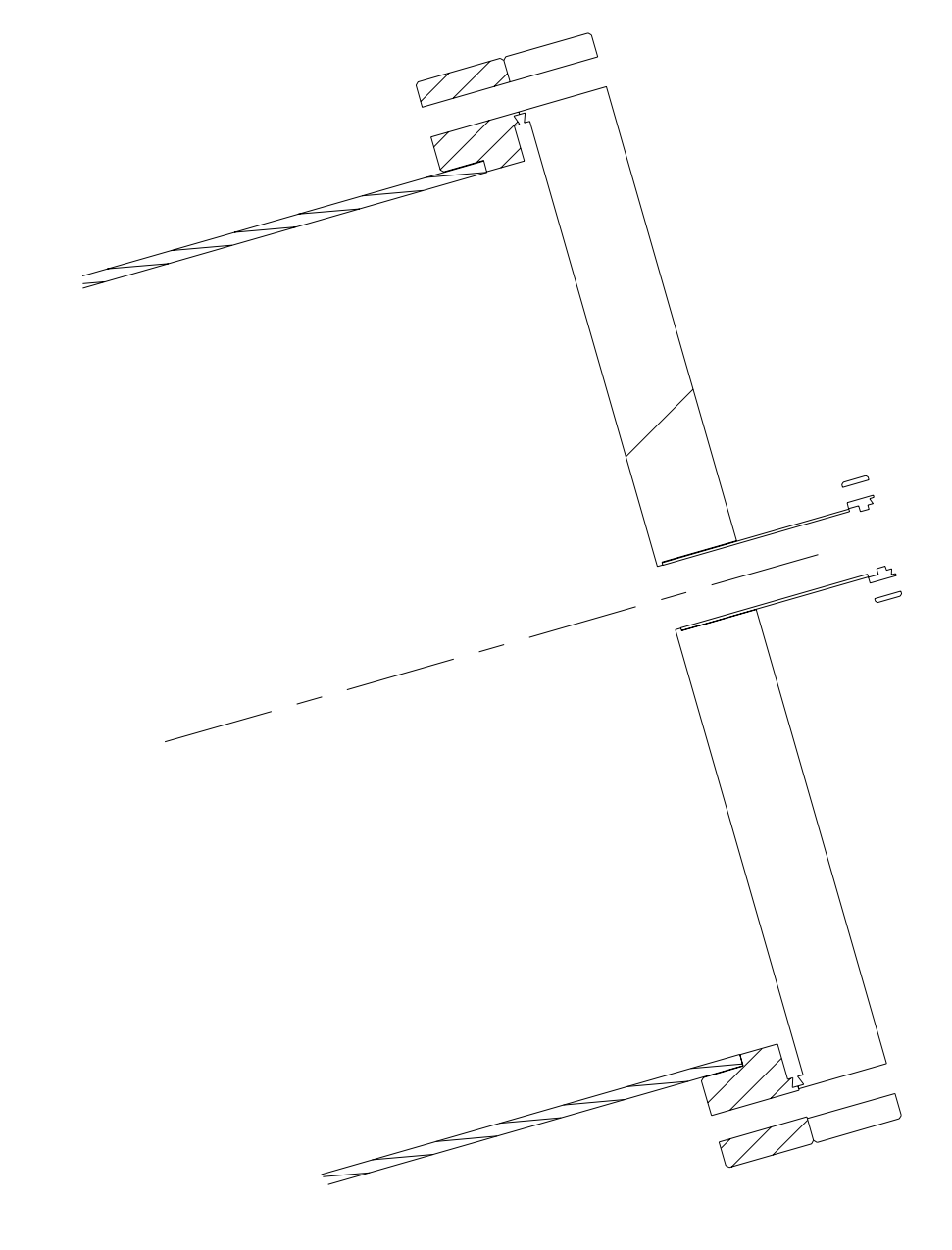
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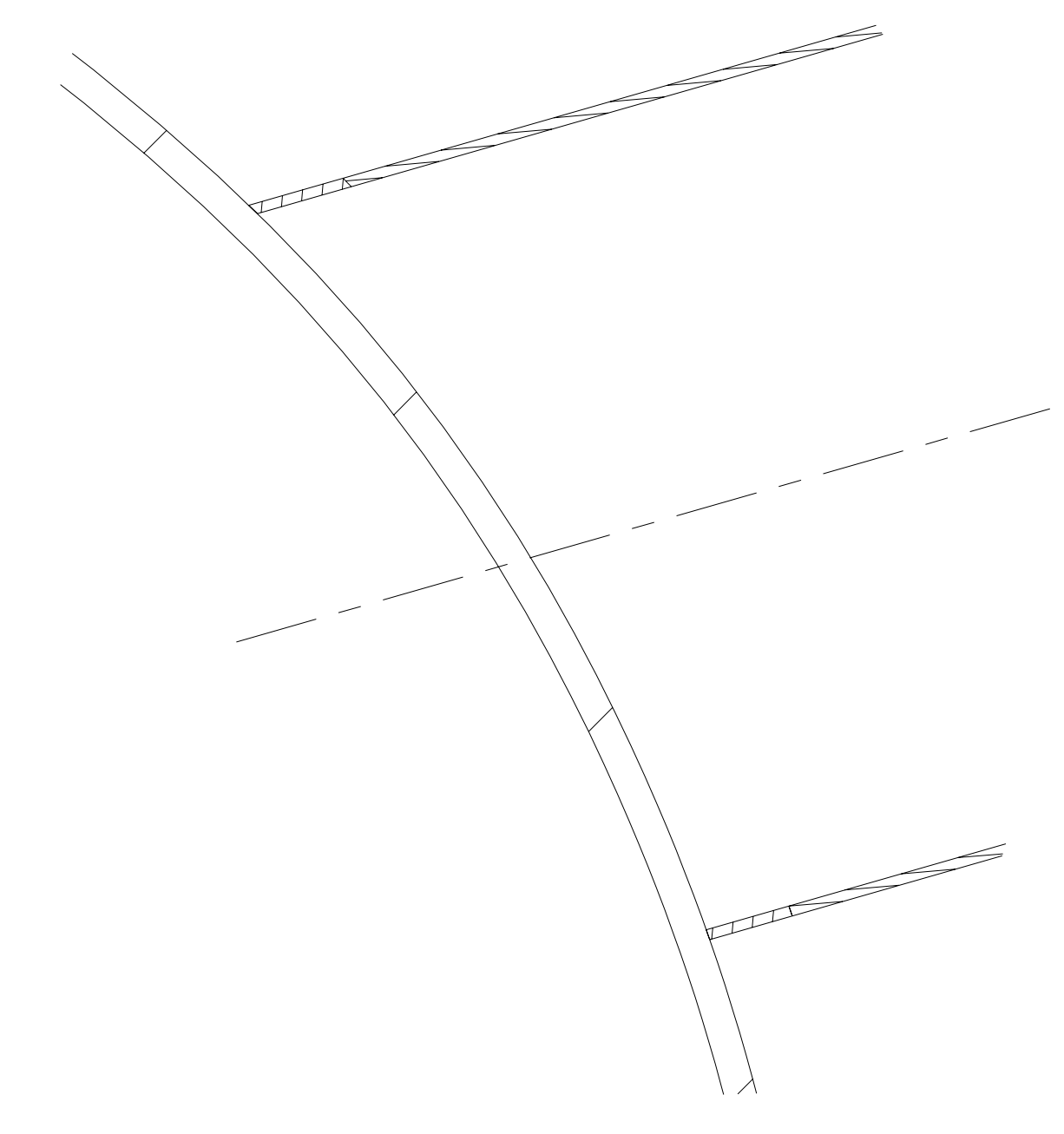
FOR PARTS LIST AND NOTES SEE SHEET 1.



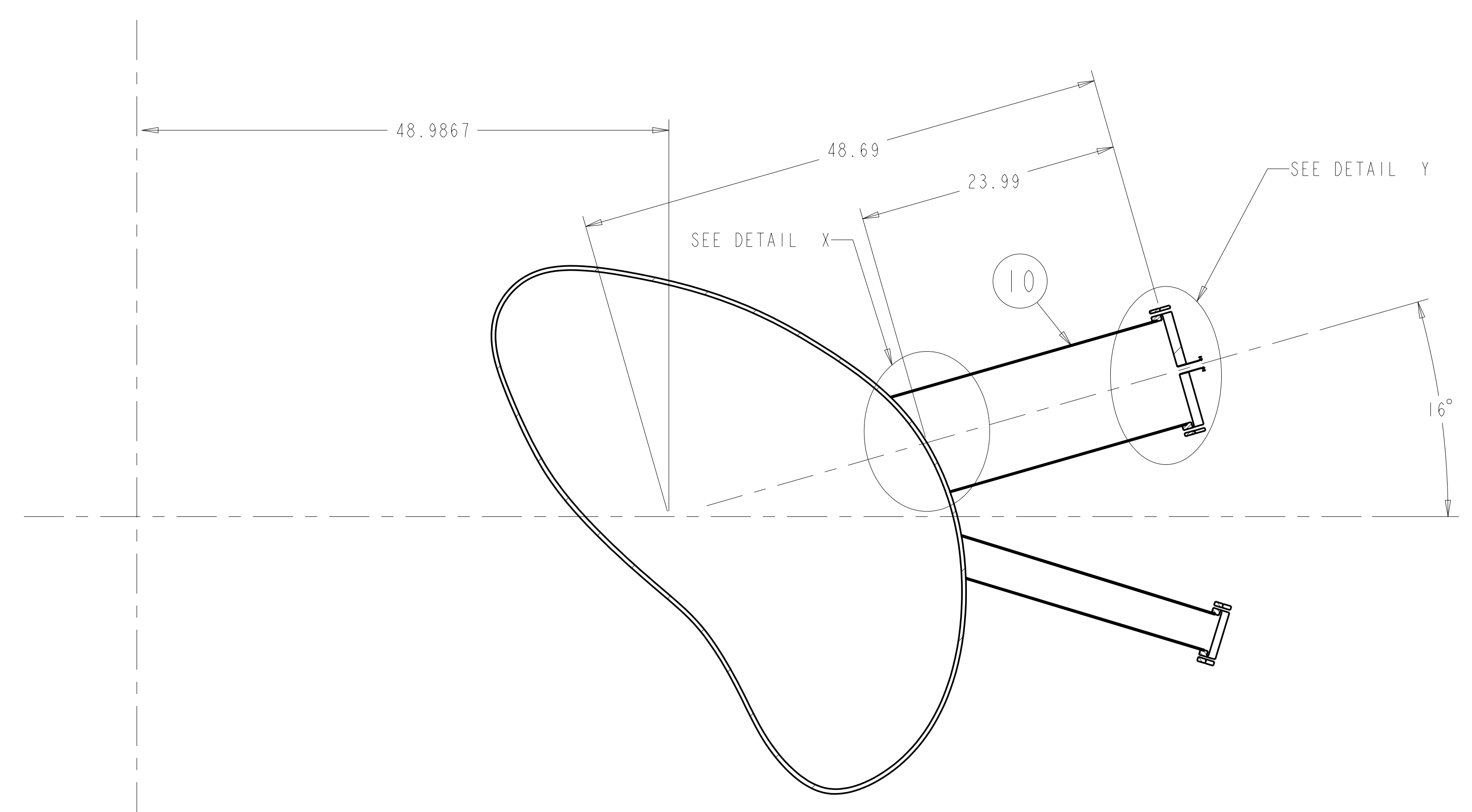
TOP VIEW



DETAIL Y
SCALE 0.500



DETAIL X
SCALE 0.500



SECTION PORT10-PORT10

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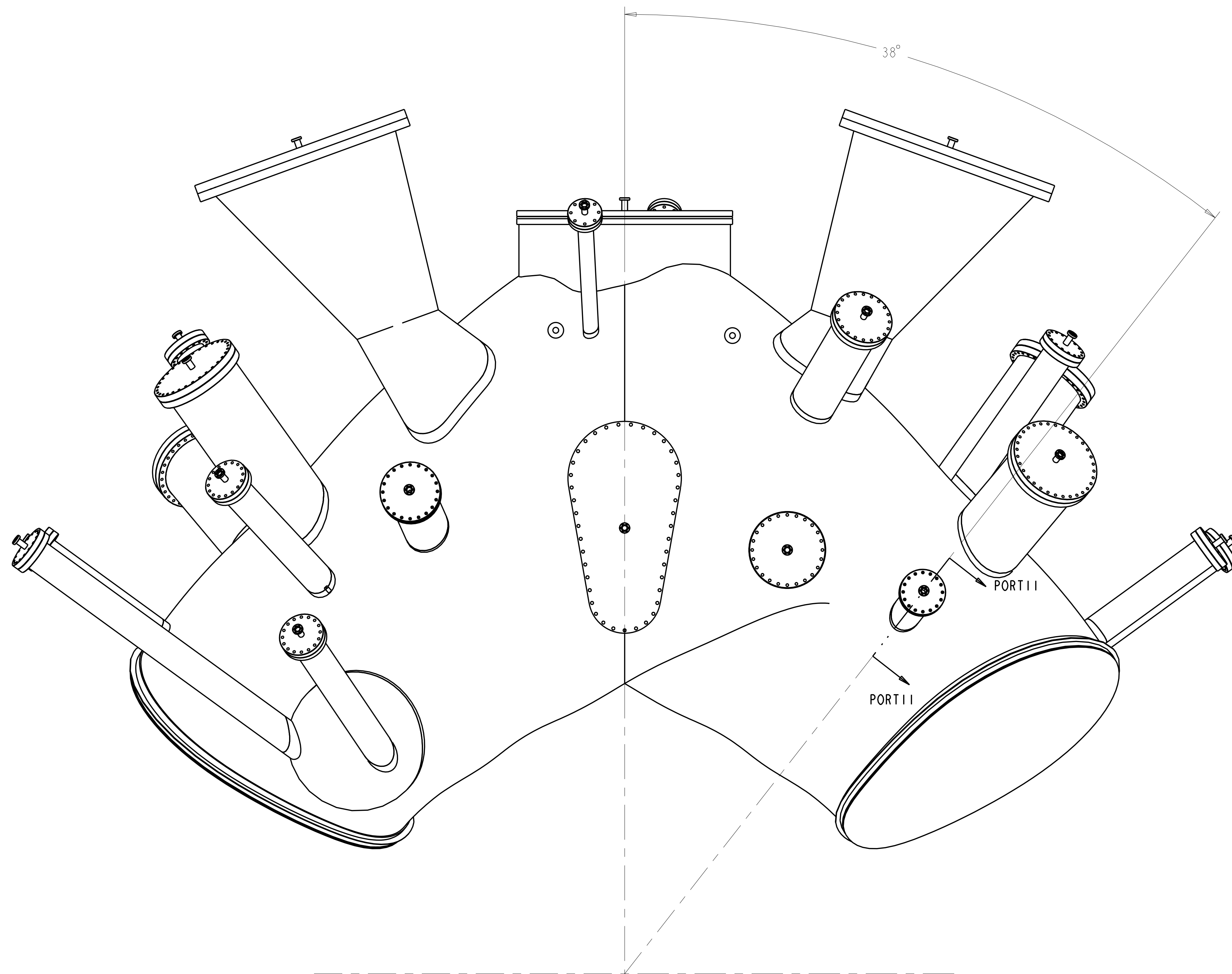
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VACUUM VESSEL PERIOD ASSEMBLY									
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WIP							A		

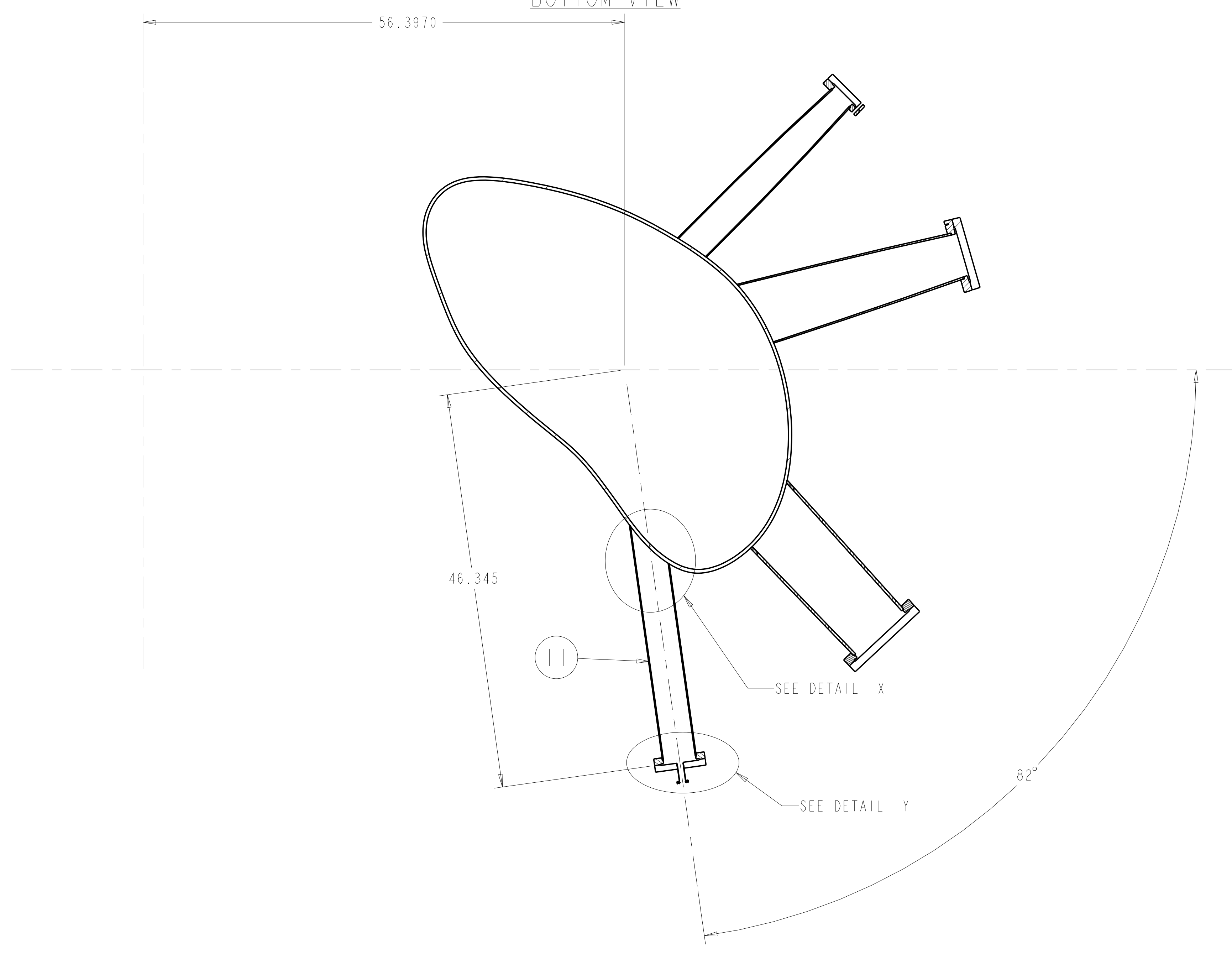
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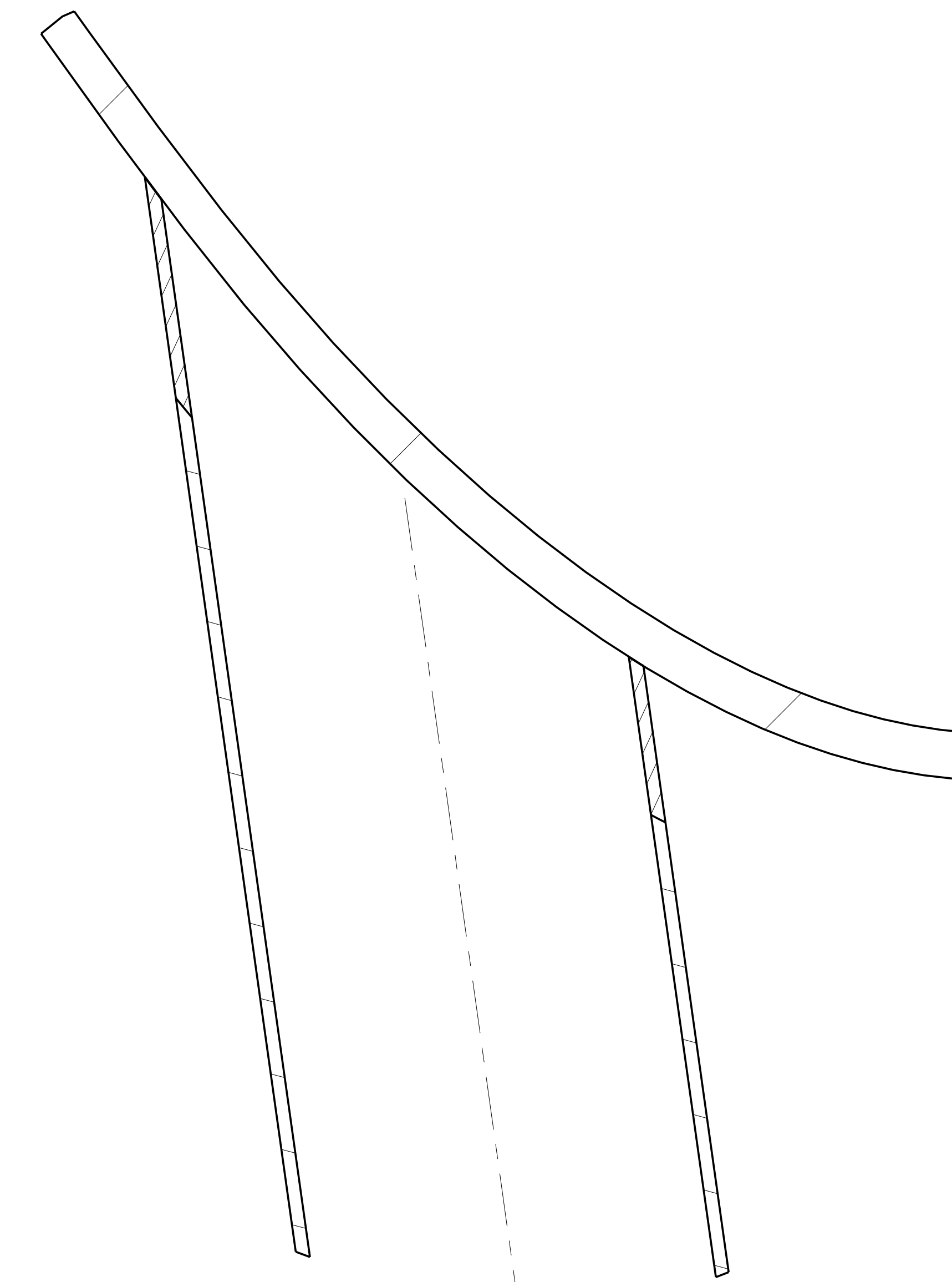
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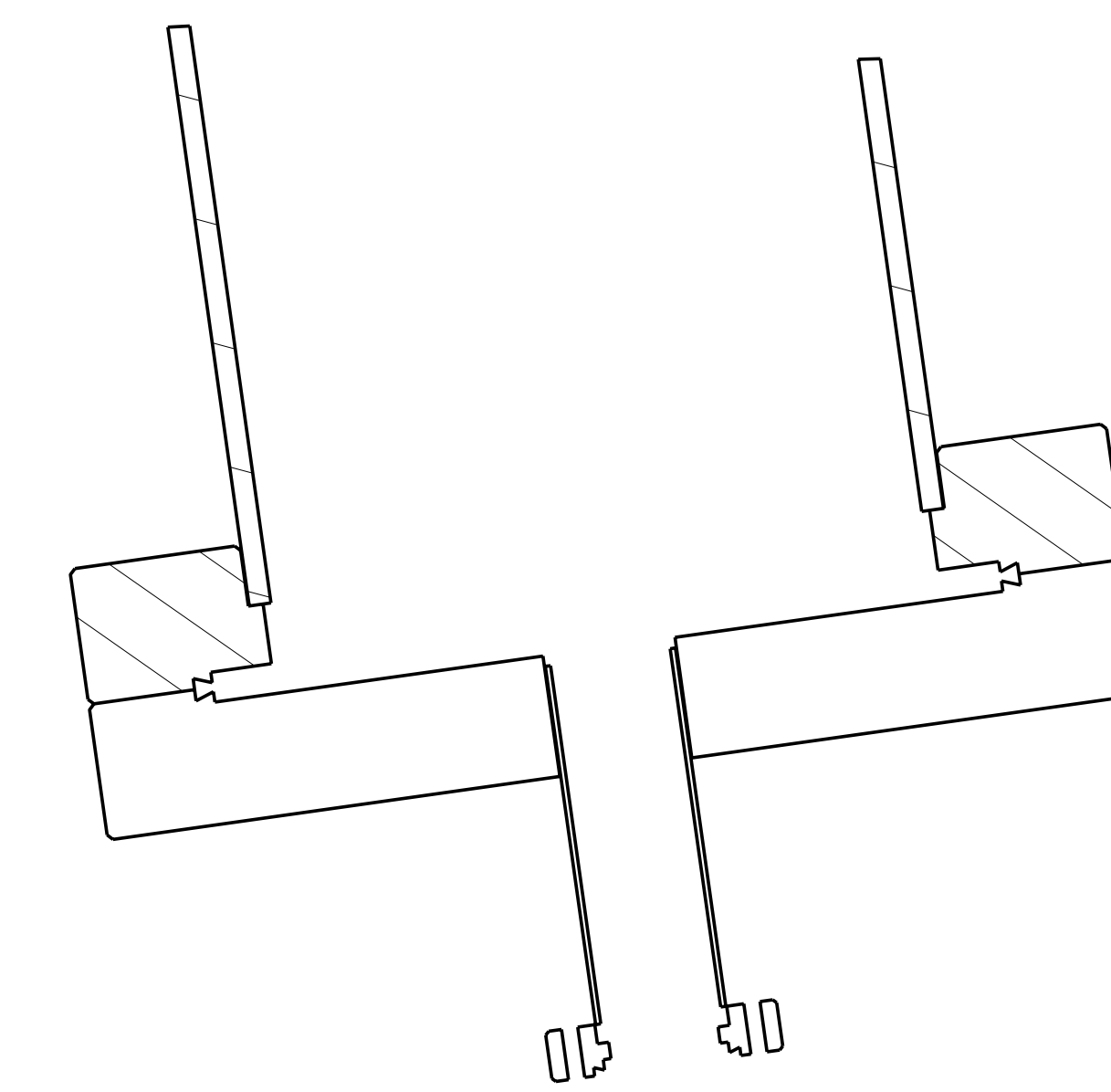
BOTTOM VIEW



SECTION PORT II-PORT III



DETAIL X
 SCALE 1.000



DETAIL Y
 SCALE 1.000

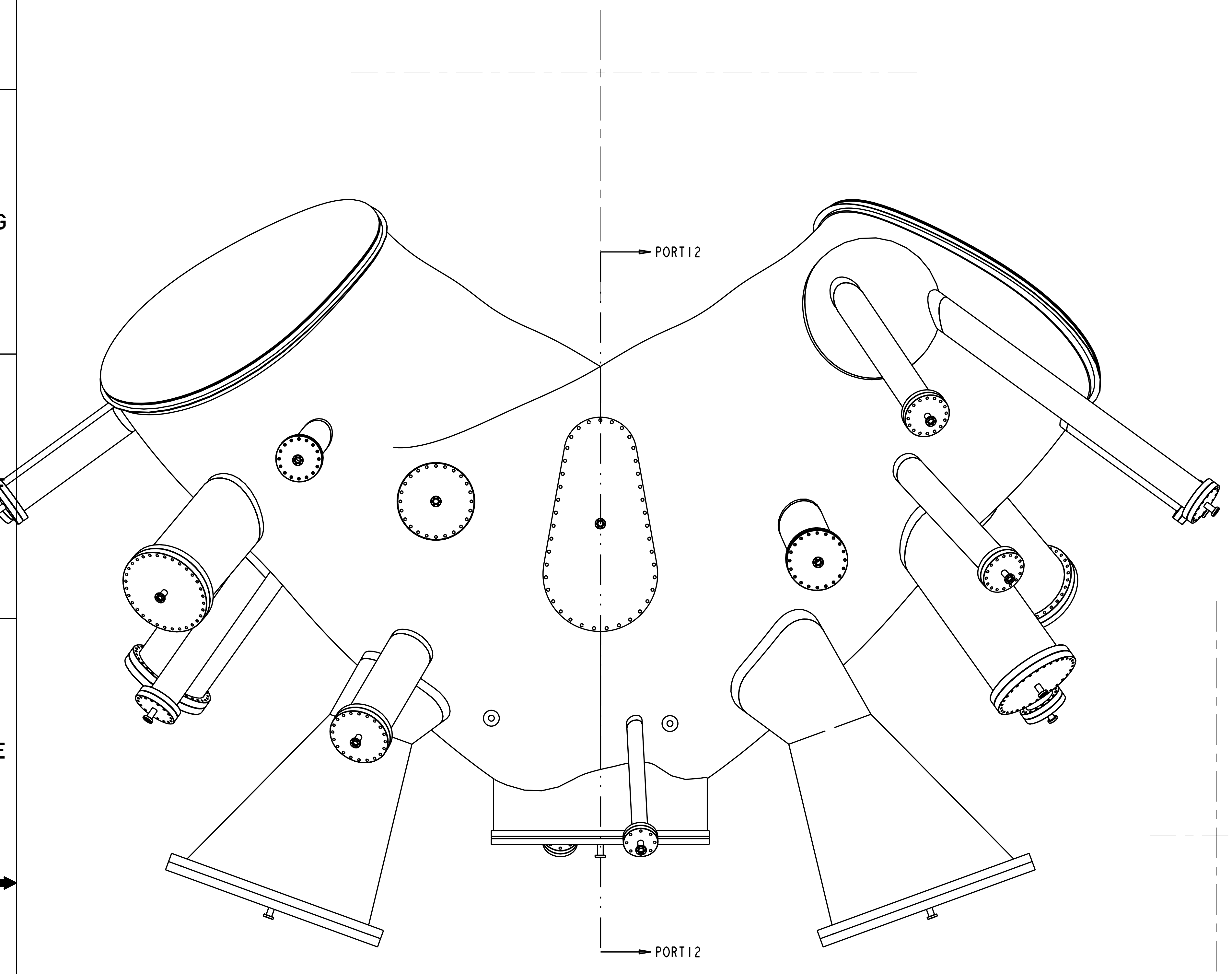
DIM. ARE TO THE COORDANT SYSTEM AND NOT THE MAGNETIC AXIS.

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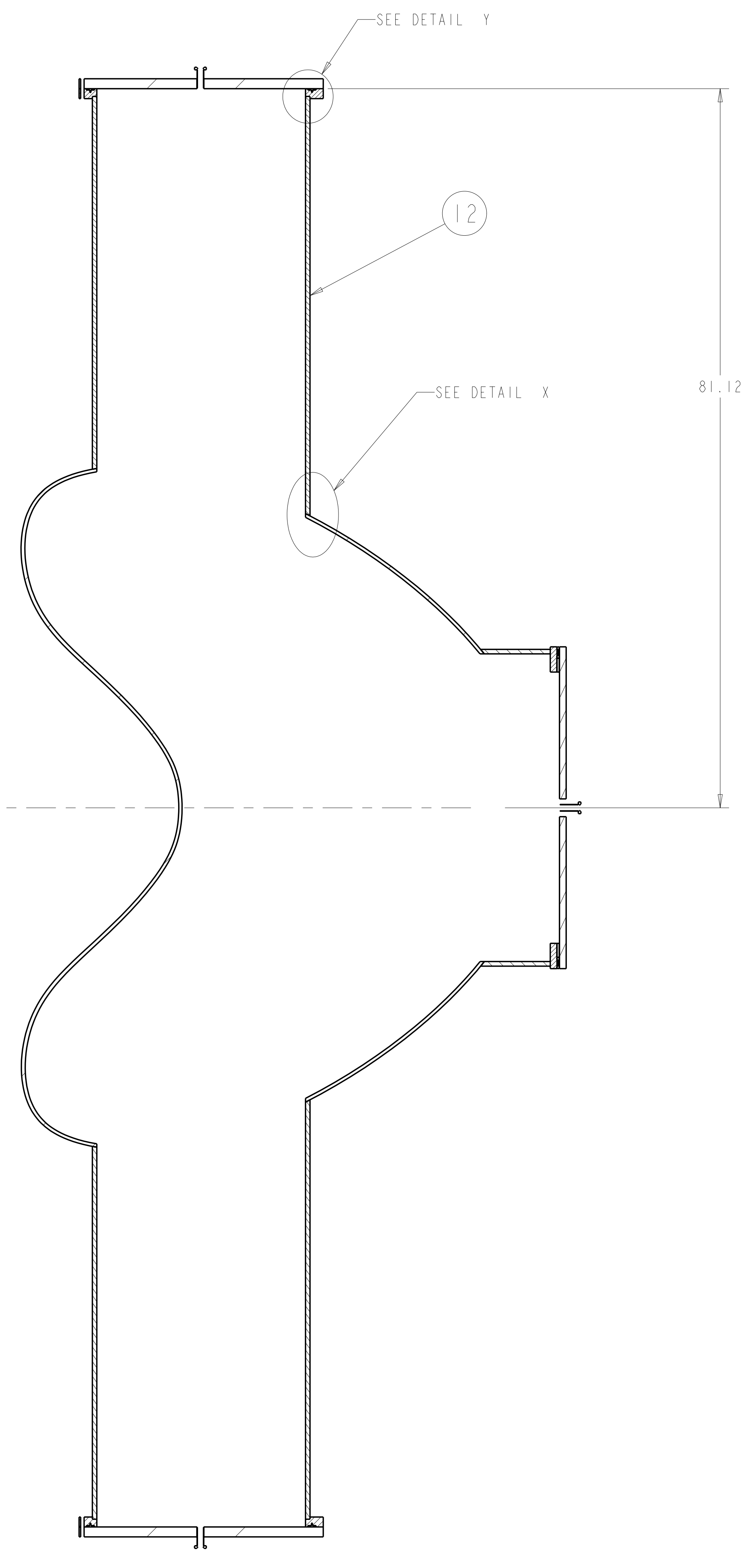
Oak Ridge National Laboratory managed for the DEPARTMENT OF ENERGY under U.S. GOVERNMENT contract DE-AC05-00OR22725 UT-BATTELLE, LLC, Oak Ridge, Tennessee									
PROJECT NAME NATIONAL COMPACT STELLARATOR EXPERIMENT									
VACUUM VESSEL PERIOD ASSEMBLY									
VERSION NO.	PLANT	BLDG	FL	SHT OF	TYPE	CLASS			
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RELEASE LEVEL		WIP		SE120-004		REV		A	

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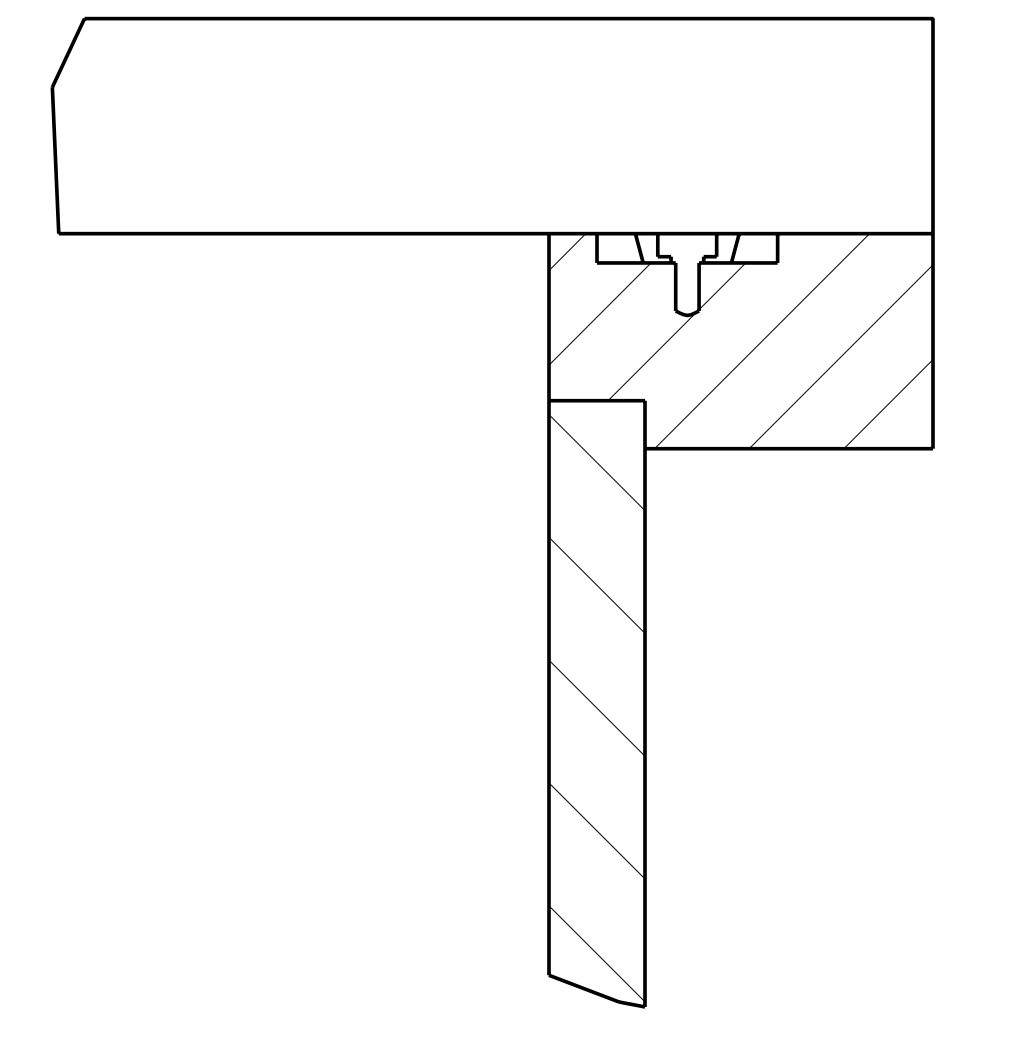
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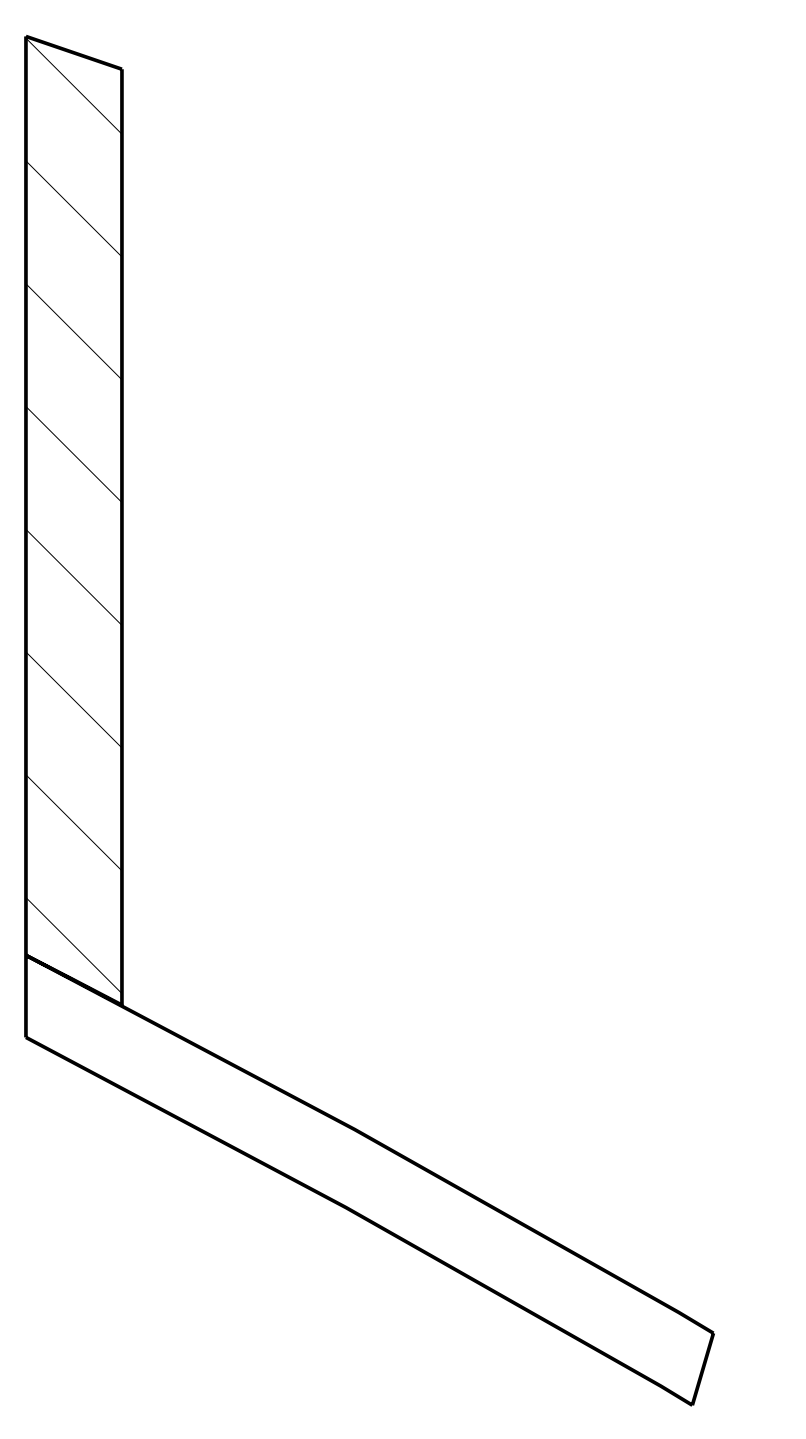
TOP VIEW



SECTION PORT12-PORT12



DETAIL Y
SCALE 1.000



DETAIL X
SCALE 1.000

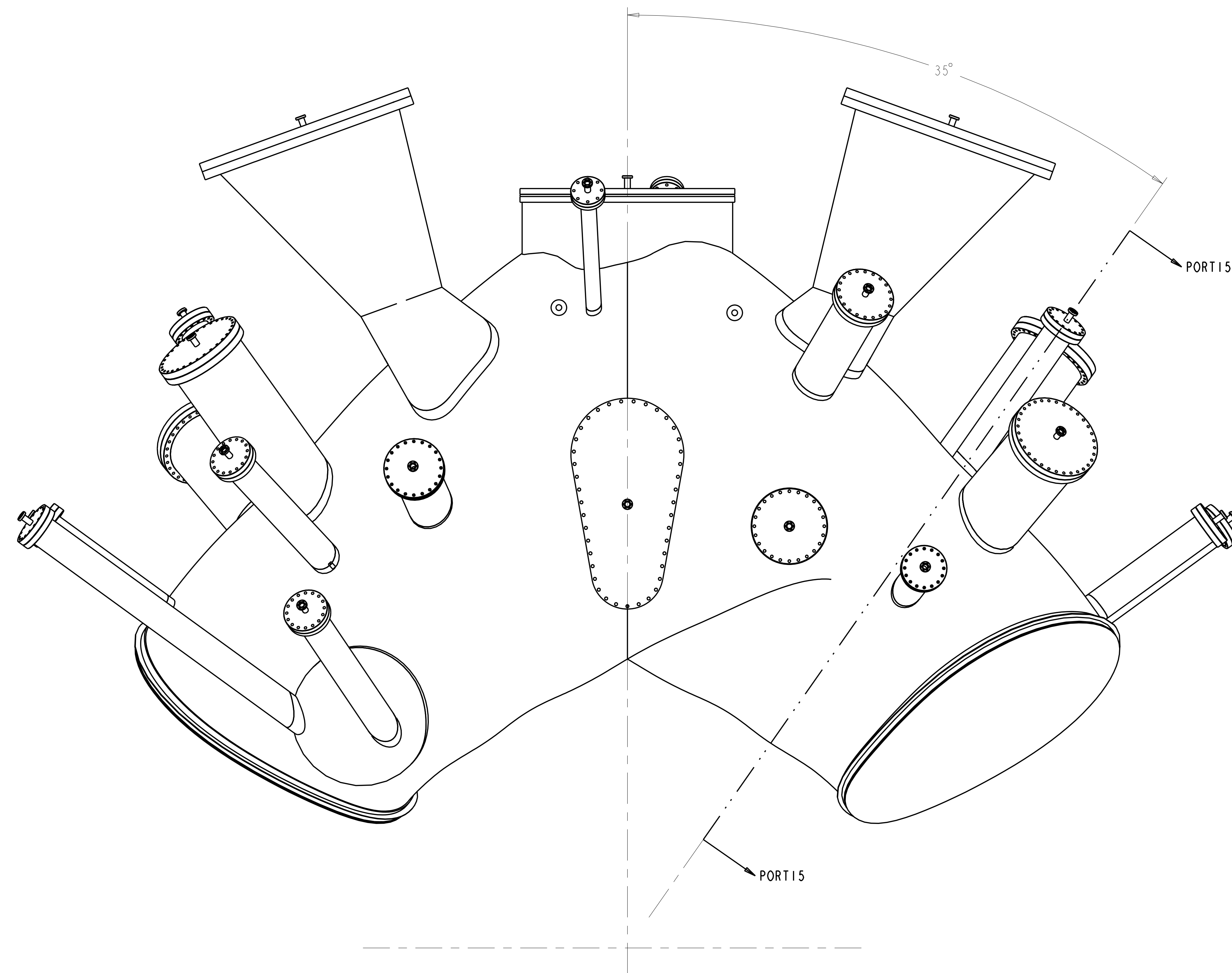
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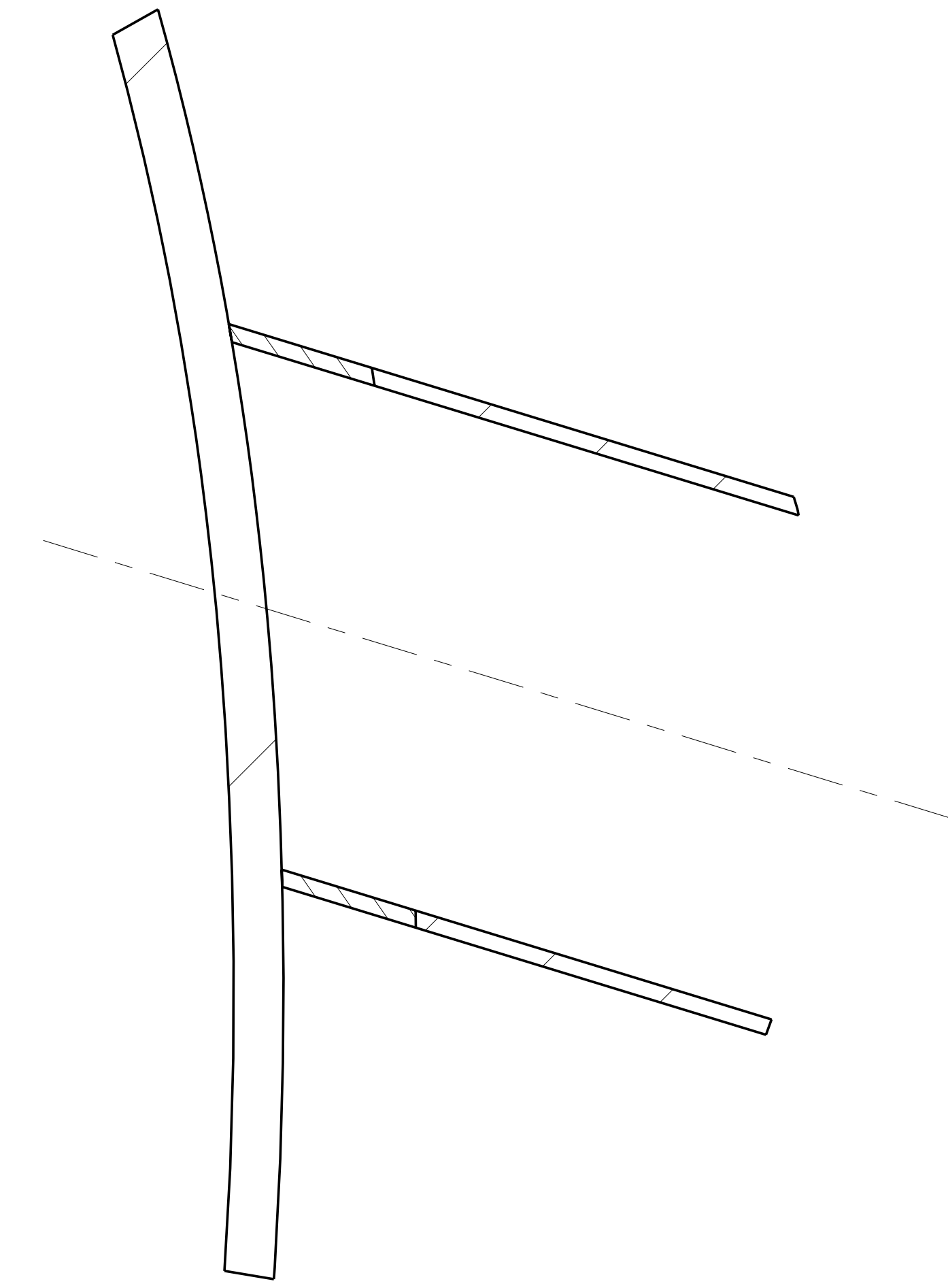
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NATIONAL COMPACT STELLARATOR EXPERIMENT							
VACUUM VESSEL PERIOD ASSEMBLY							
VERSION NO.	PLANT	BLDG	FL	SHT OF	TYPE	CLASS	
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RELEASE LEVEL	SE120-004						REV
WIP							A

SE120-004

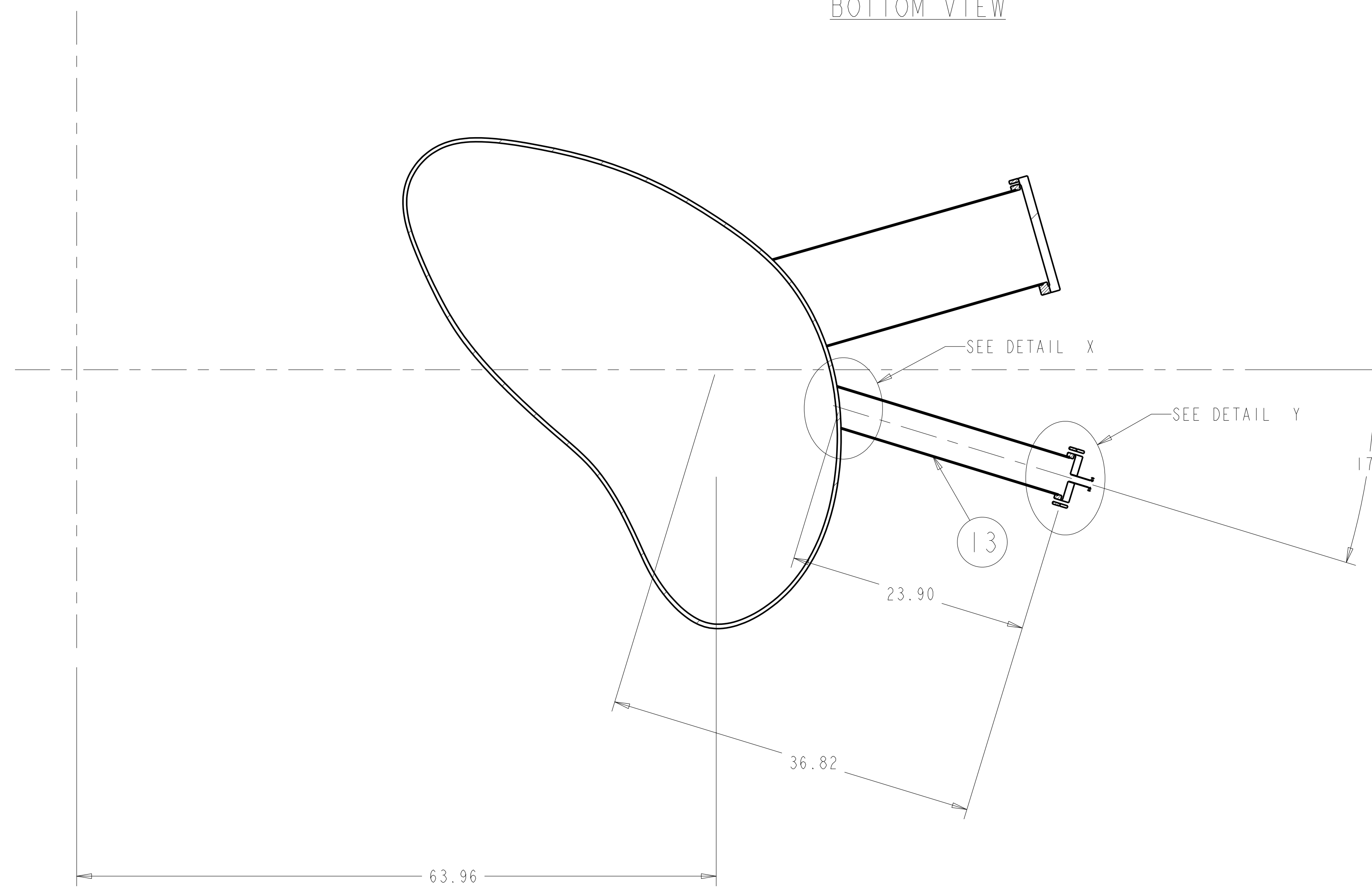
FOR PARTS LIST AND NOTES SEE SHEET 1.



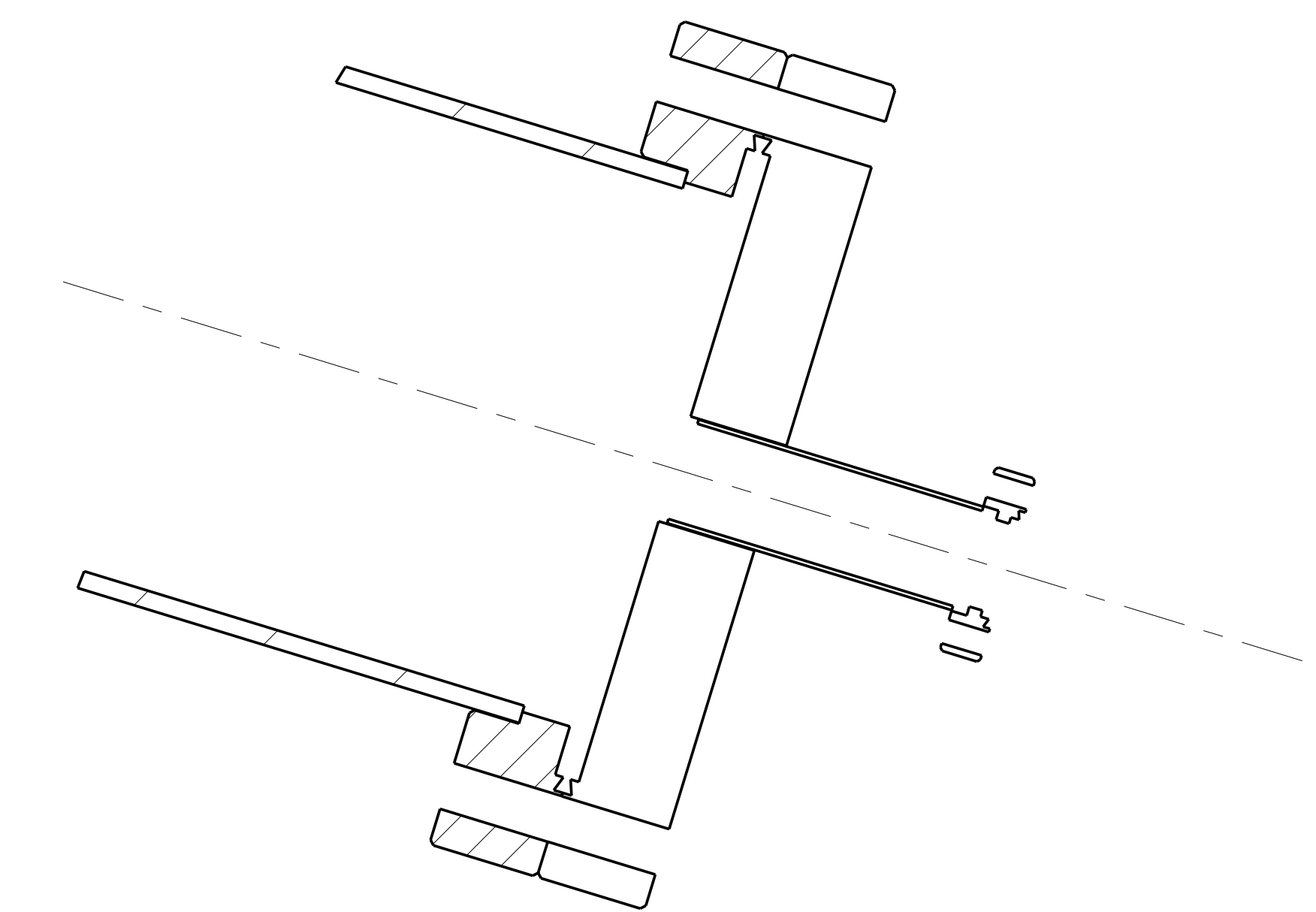
BOTTOM VIEW



DETAIL X
 SCALE 1.000



SECTION PORT15-PORT15



DETAIL Y
 SCALE 1.000

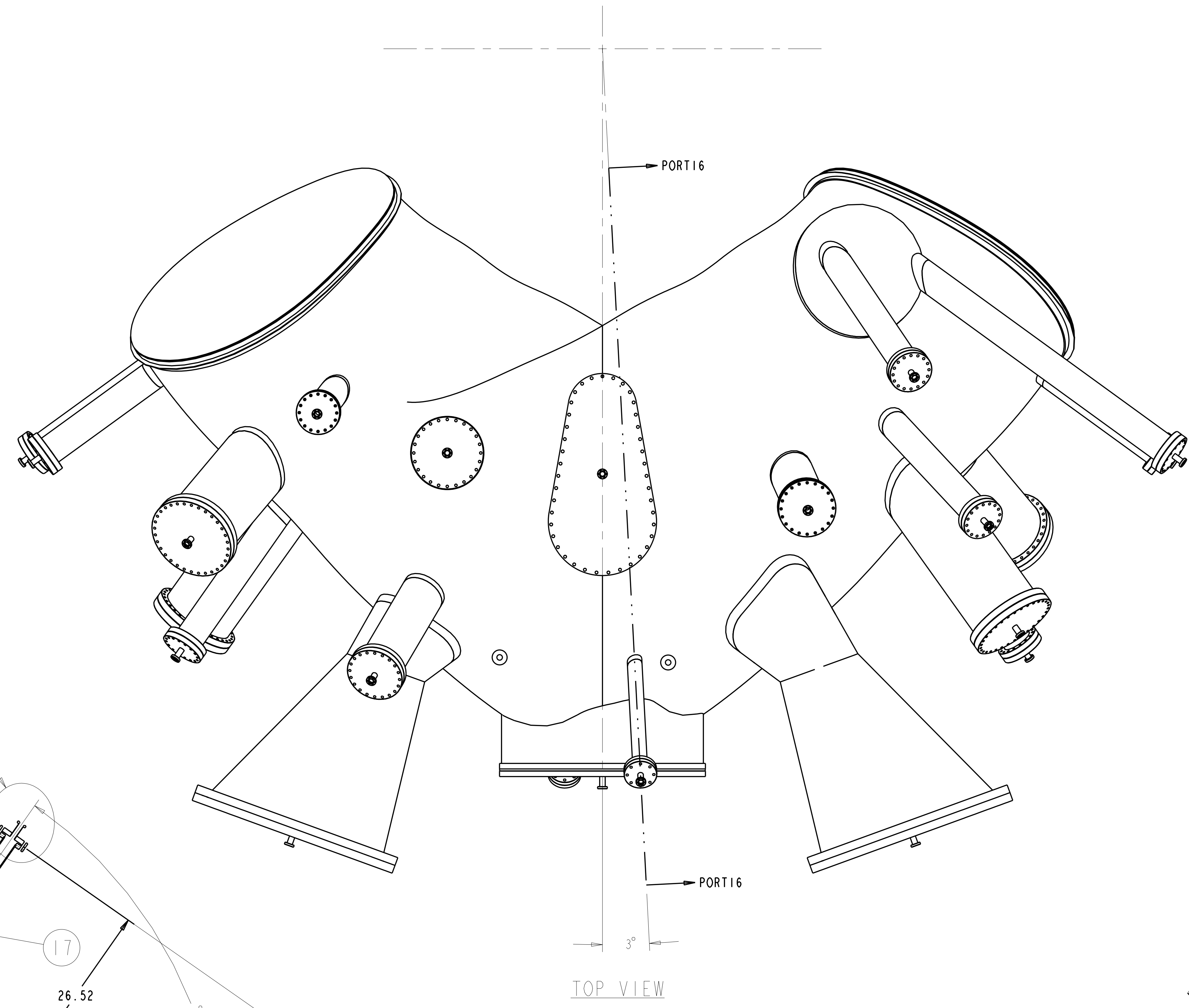
DIM. ARE TO THE COORDANT SYSTEM
 AND NOT THE MAGNETIC AXIS

PRELIMINARY
 FOR INFORMATION ONLY

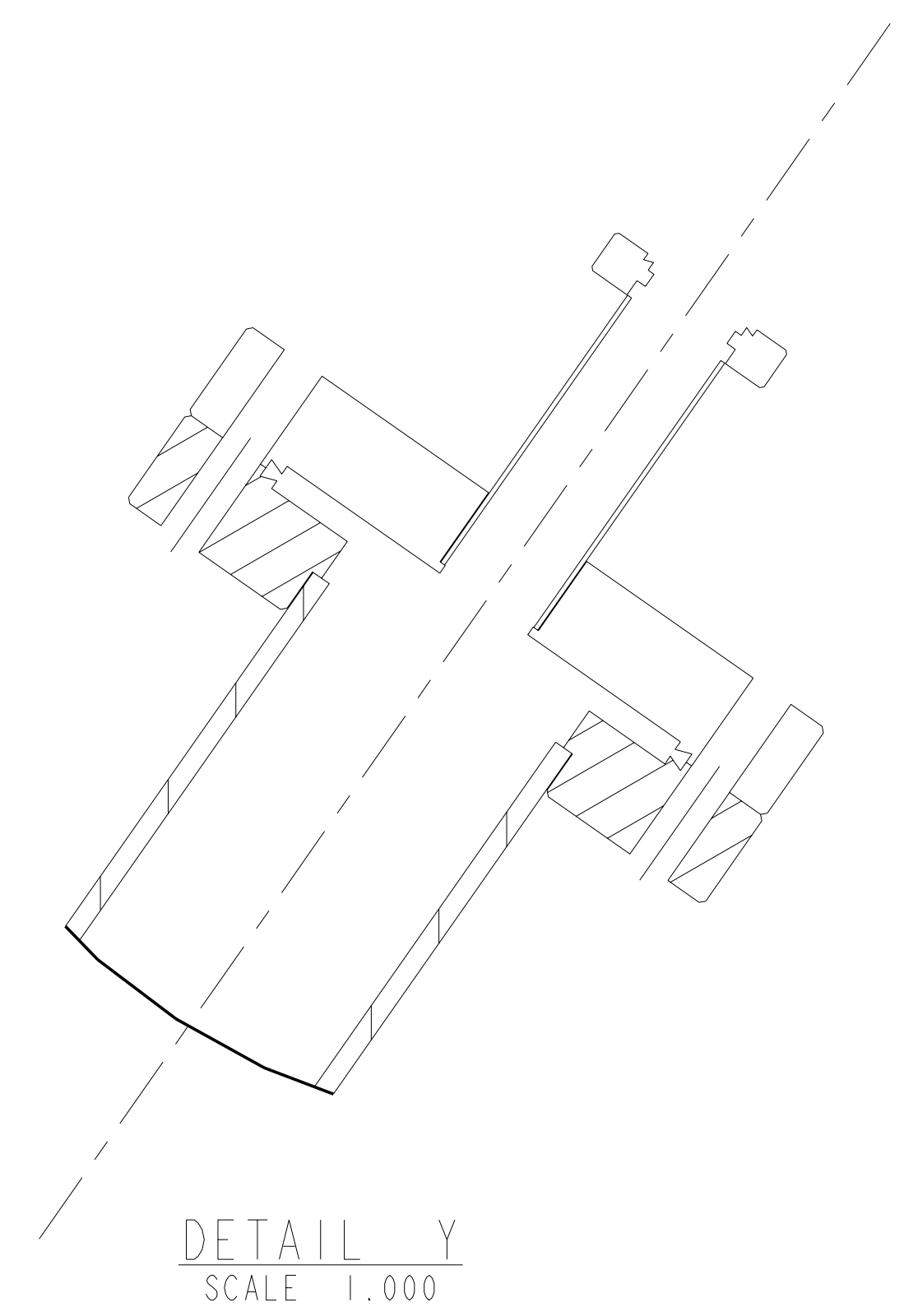
Oak Ridge National Laboratory managed for the DEPARTMENT OF ENERGY under U.S. GOVERNMENT contract DE-AC05-00OR22725 UT-BATTELLE, LLC, Oak Ridge, Tennessee						
UT-BATTELLE						
NATIONAL COMPACT STELLARATOR EXPERIMENT						
VACUUM VESSEL PERIOD ASSEMBLY						
VERSION NO.	PLANT	BLDG	FL	SHT OF	TYPE	CLASS
54	XX	XX	XX	3	16	XX U
RELEASE LEVEL		WIP			REV	
		SE120-004			A	

SE120-004

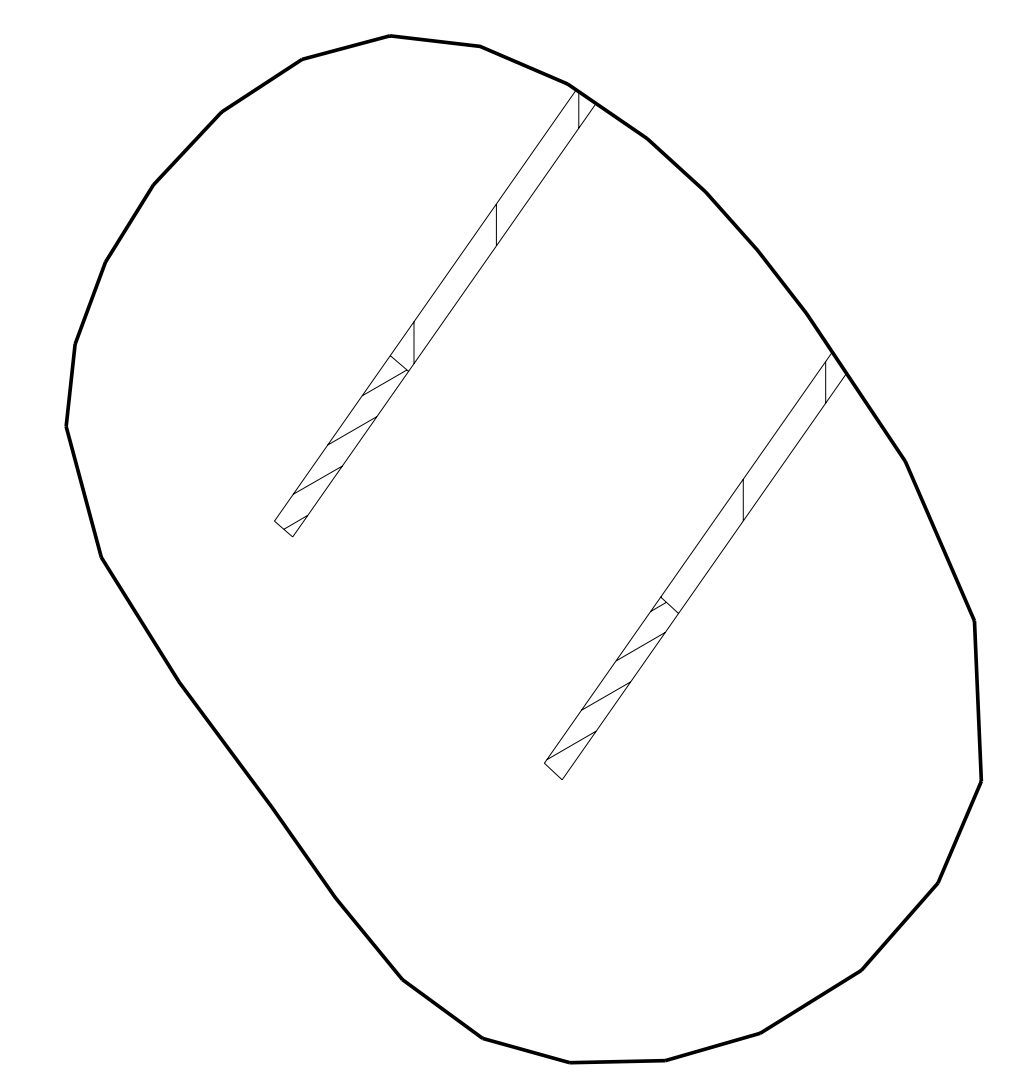
FOR PARTS LIST AND NOTES SEE SHEET 1.



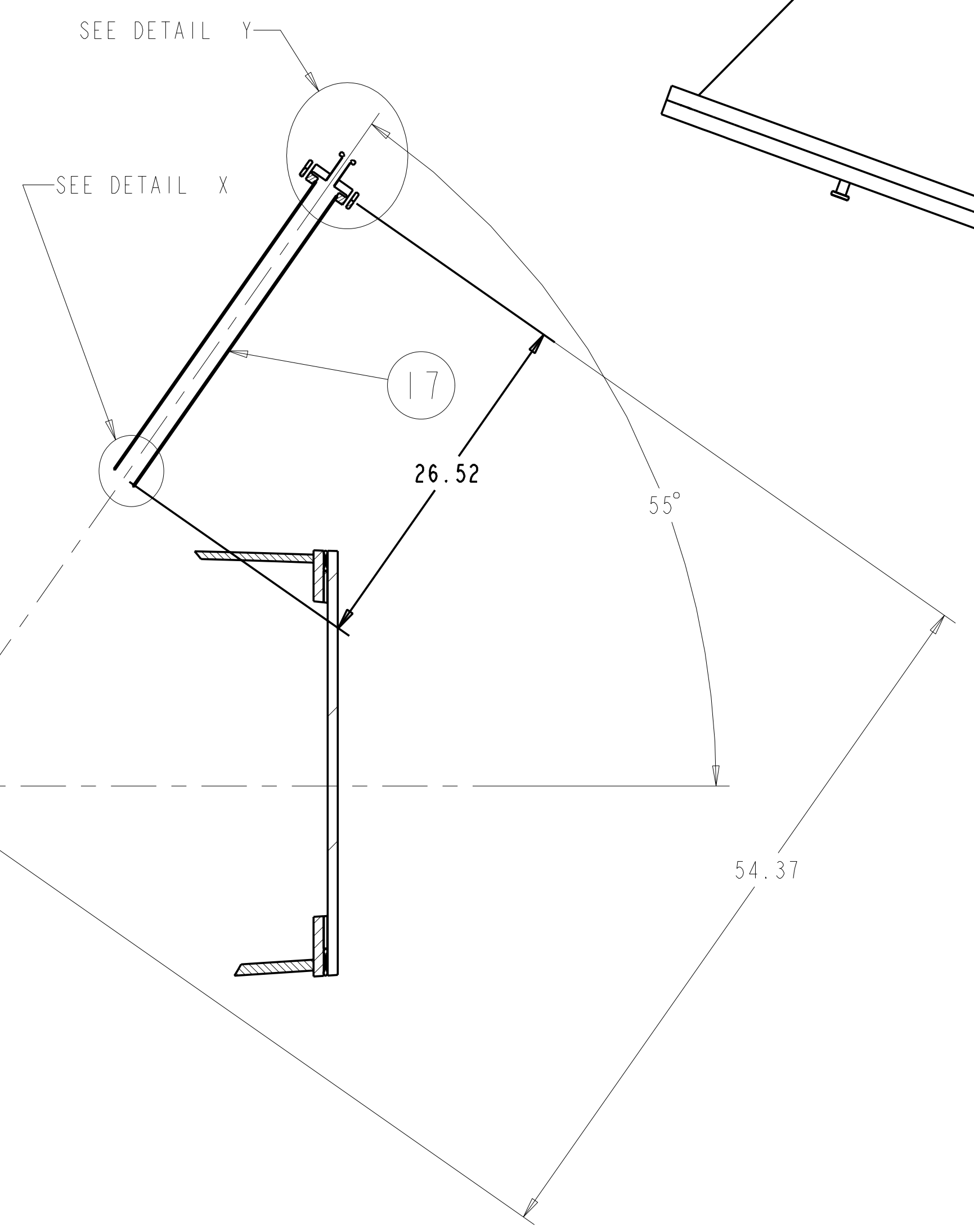
TOP VIEW



DETAIL Y
SCALE 1.000



DETAIL X
SCALE 1.000



SECTION PORT16-PORT16

PRELIMINARY
FOR INFORMATION ONLY

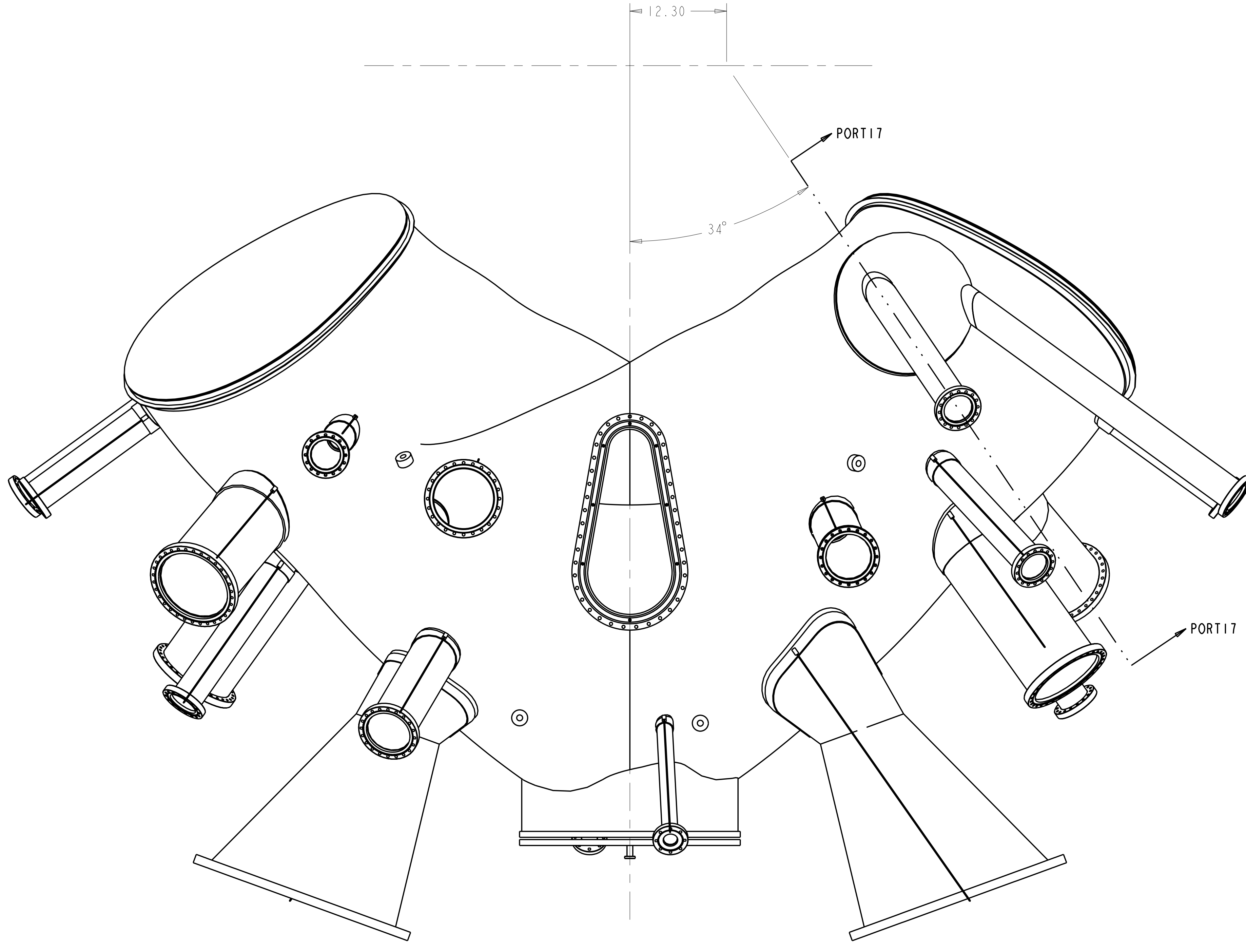
DIM. ARE TO THE COORDANT SYSTEM
AND NOT THE MAGNETIC AXIS

Oak Ridge National Laboratory managed for the DEPARTMENT OF ENERGY under U.S. GOVERNMENT contract DE-AC05-00OR22725 UT-BATTELLE, LLC, Oak Ridge, Tennessee						
UT-BATTELLE NATIONAL COMPACT STELLARATOR EXPERIMENT						
VACUUM VESSEL PERIOD ASSEMBLY						
VERSION NO.	PLANT	BLDG	FL	SHT OF	TYPE	CLASS
54	XX	XX	XX	4	16	XX U
RELEASE LEVEL		WIP			REV	
		SE120-004			A	

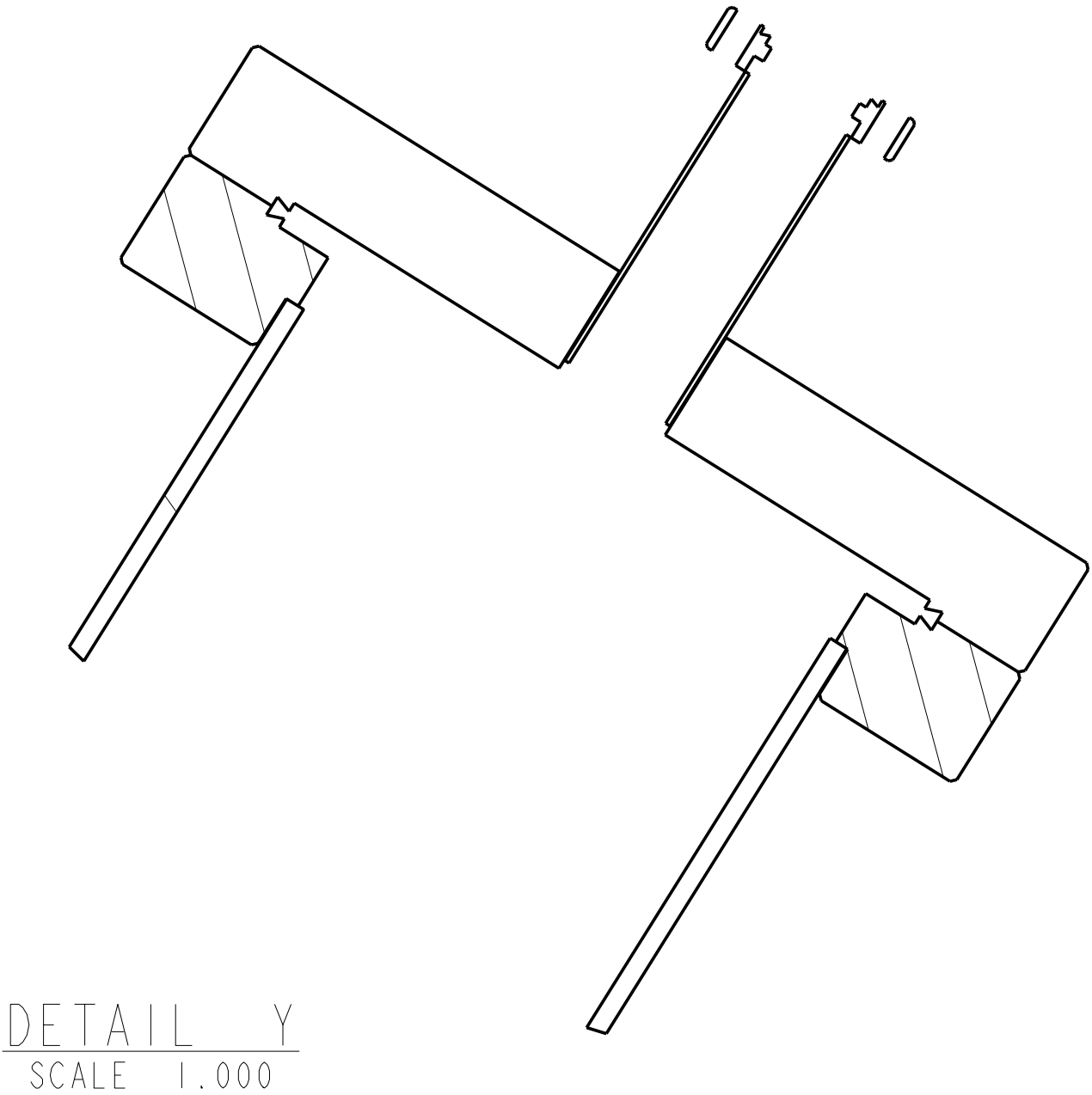
SE120-004

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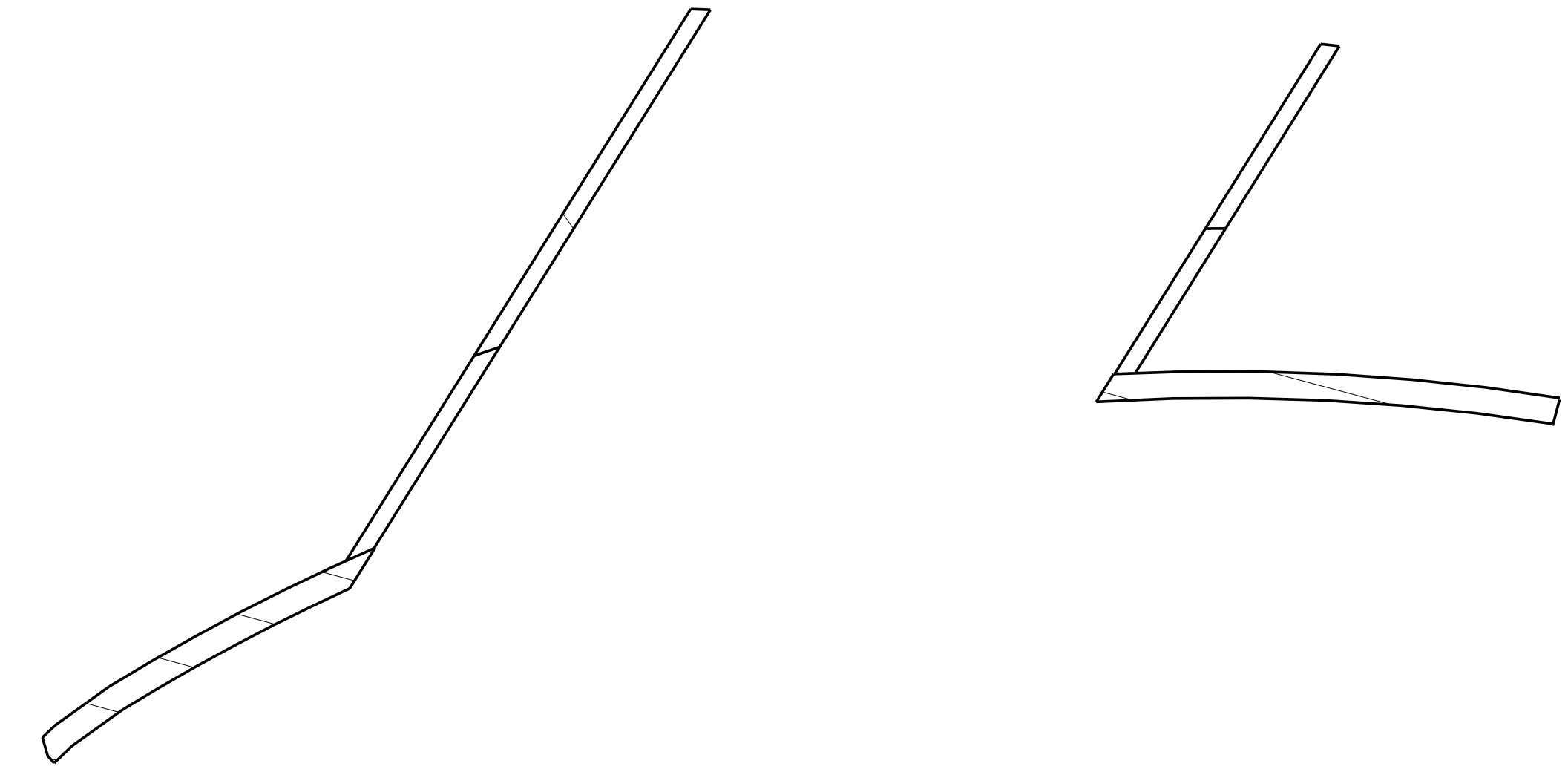
FOR PARTS LIST AND NOTES SEE SHEET 1.



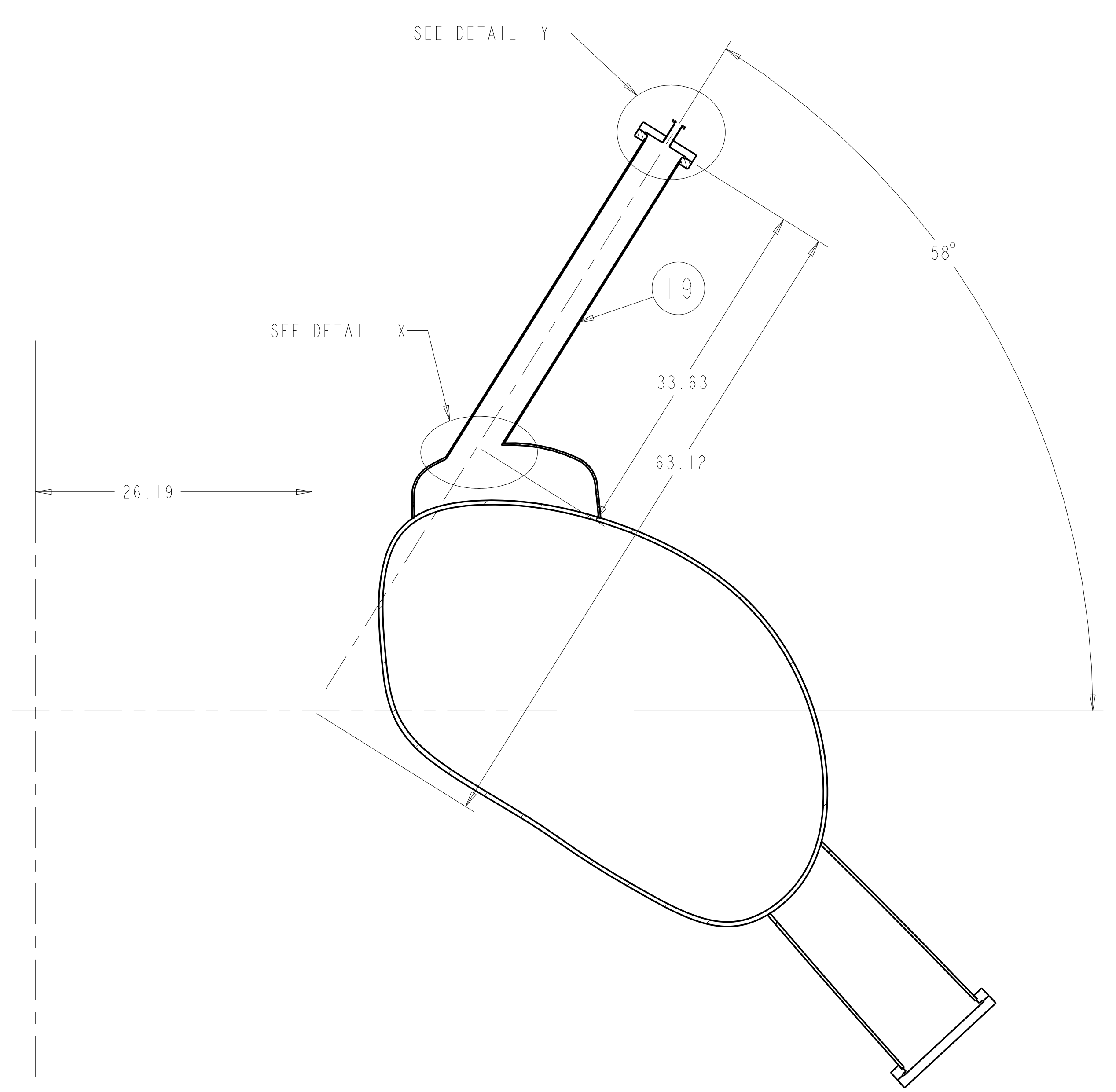
TOP VIEW



DETAIL Y
SCALE 1.000



DETAIL X
SCALE 1.000



SECTION PORT17-PORT17

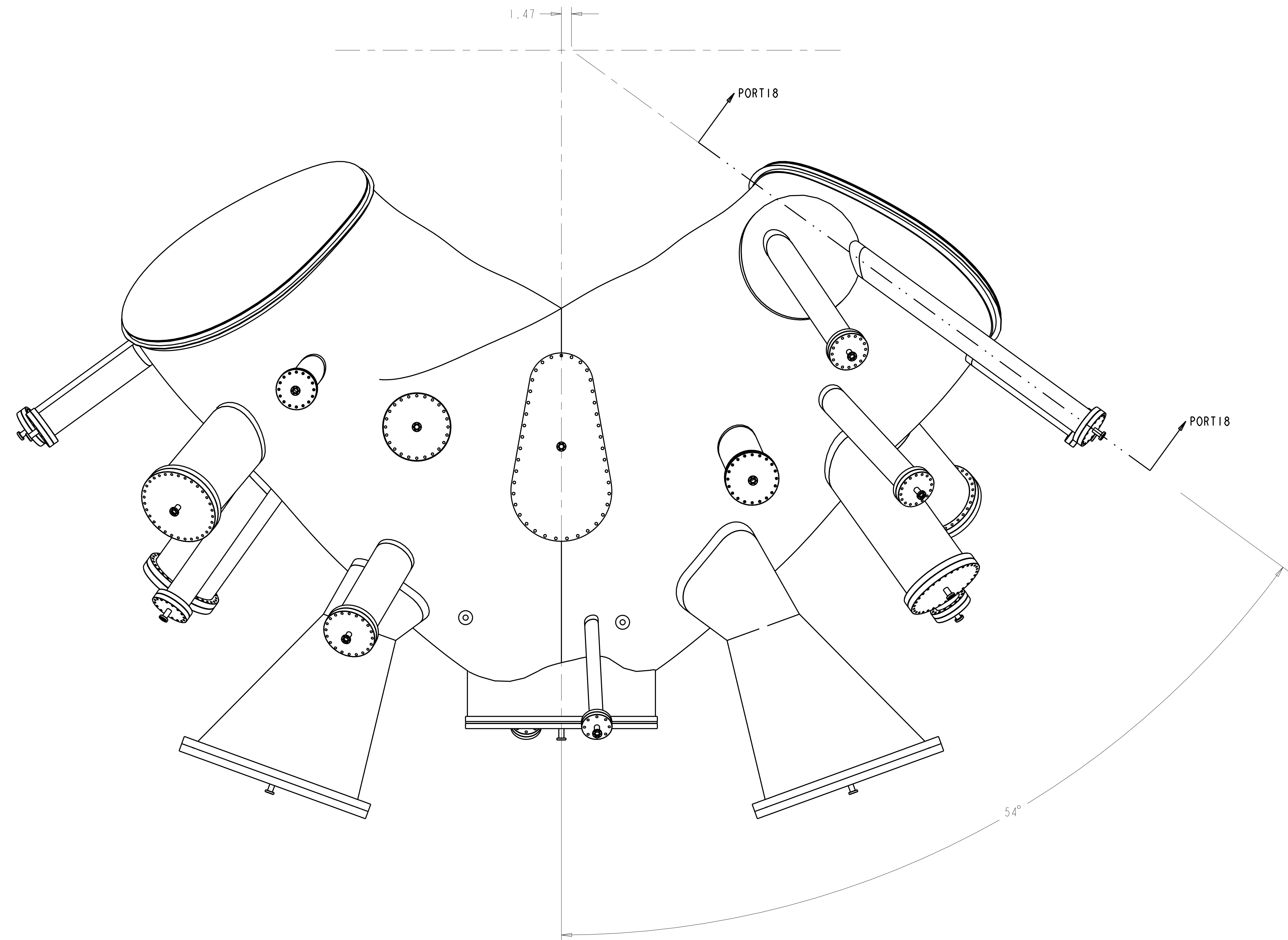
DIM. ARE TO THE COORDANT SYSTEM AND NOT THE MAGNETIC AXIS

PRELIMINARY
FOR INFORMATION ONLY

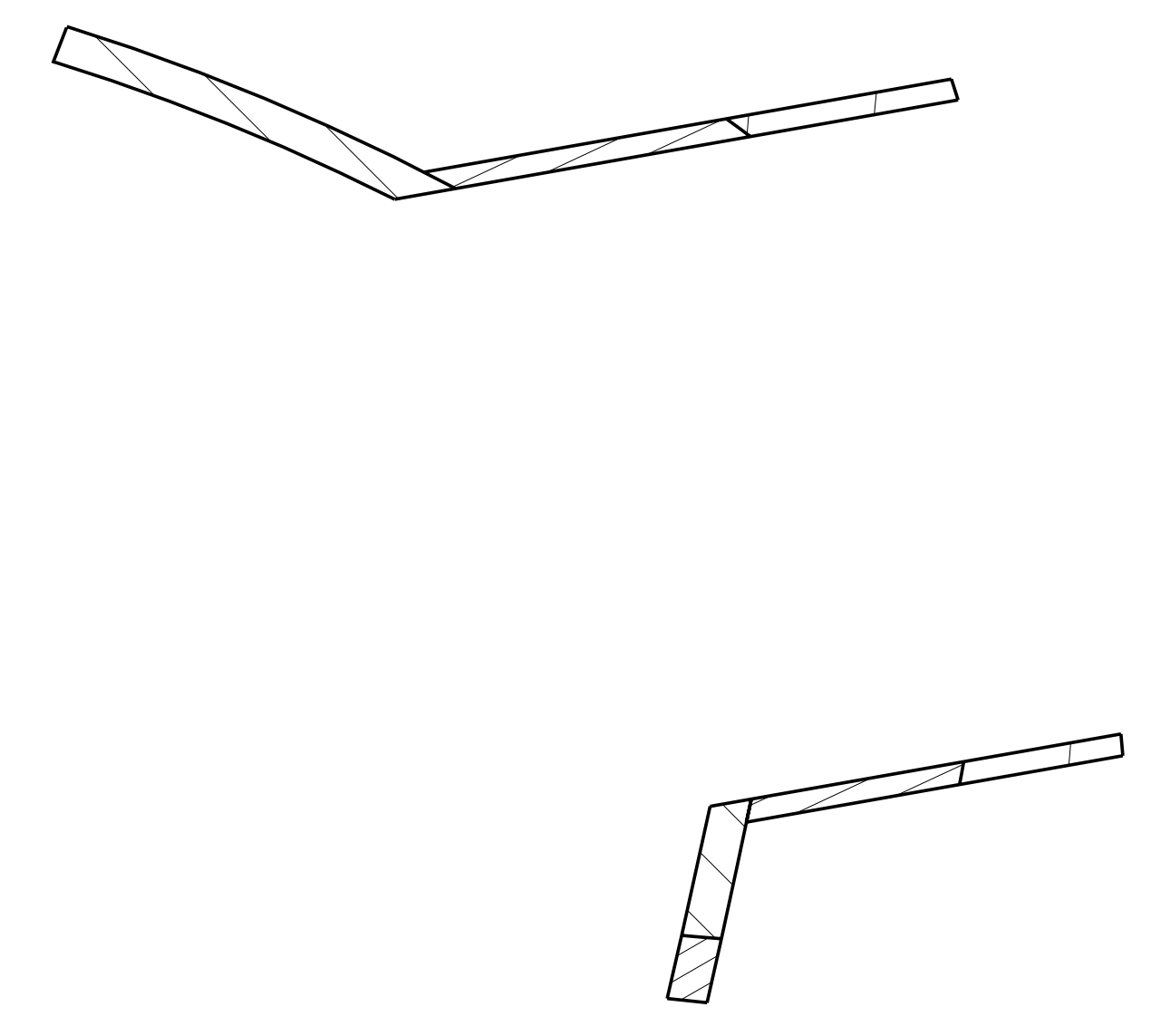
Oak Ridge National Laboratory managed for the DEPARTMENT OF ENERGY under U.S. GOVERNMENT contract DE-AC05-00OR22725 UT-BATTELLE, LLC, Oak Ridge, Tennessee						
UT-BATTELLE						
NATIONAL COMPACT STELLARATOR EXPERIMENT						
VACUUM VESSEL PERIOD ASSEMBLY						
VERSION NO.	PLANT	BLDG	FL	SHT OF	TYPE	CLASS
54	XX	XX	XX	5	16 XX	U
RELEASE LEVEL						REV
WIP	SE120-004					A

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 SE120-004

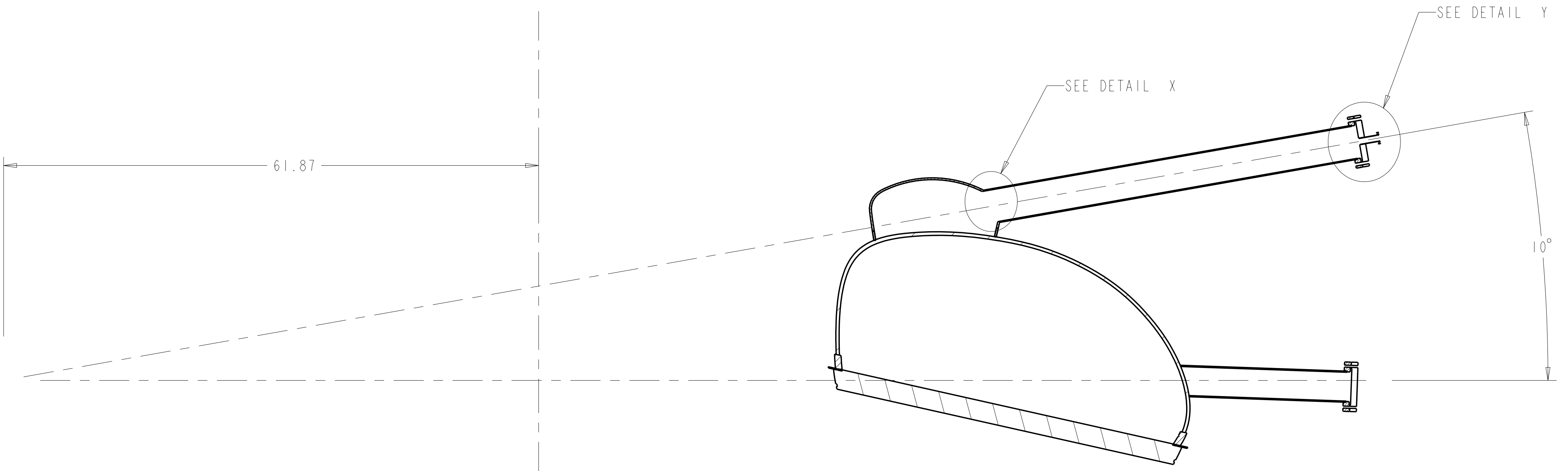
FOR PARTS LIST AND NOTES SEE SHEET 1.



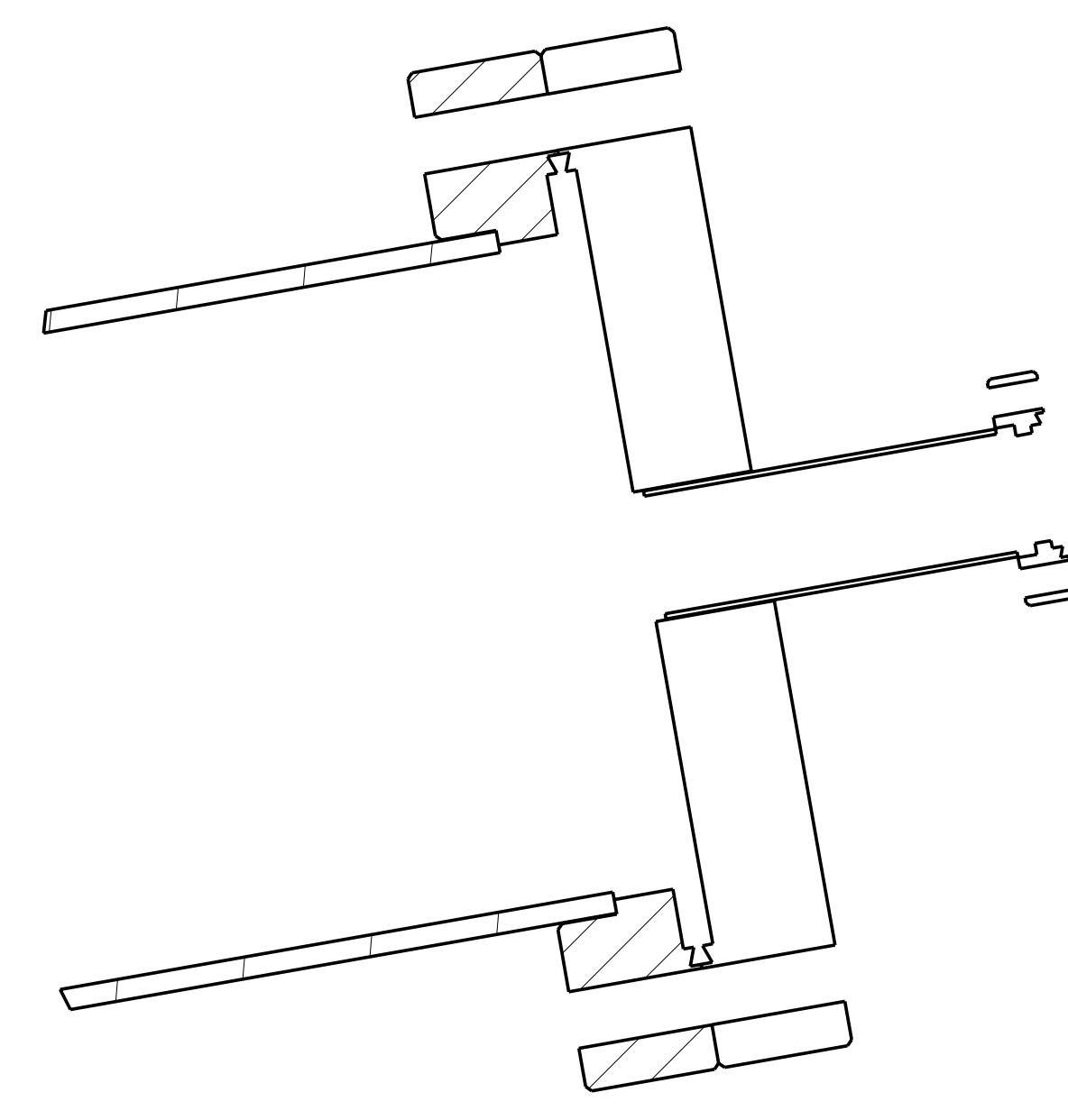
TOP VIEW



DETAIL X
 SCALE 1.000



SECTION PORT18-PORT18



DETAIL Y
 SCALE 1.000

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UT-BATTELLE							
NATIONAL COMPACT STELLARATOR EXPERIMENT							
VACUUM VESSEL PERIOD ASSEMBLY							
VERSION NO.	PLANT	BLDG	FL	SHT OF	TYPE	CLASS	
54	XX	XX	XX	6	16	XX	U
RELEASE LEVEL		WIP		SE120-004		REV A	

SE120-004

A