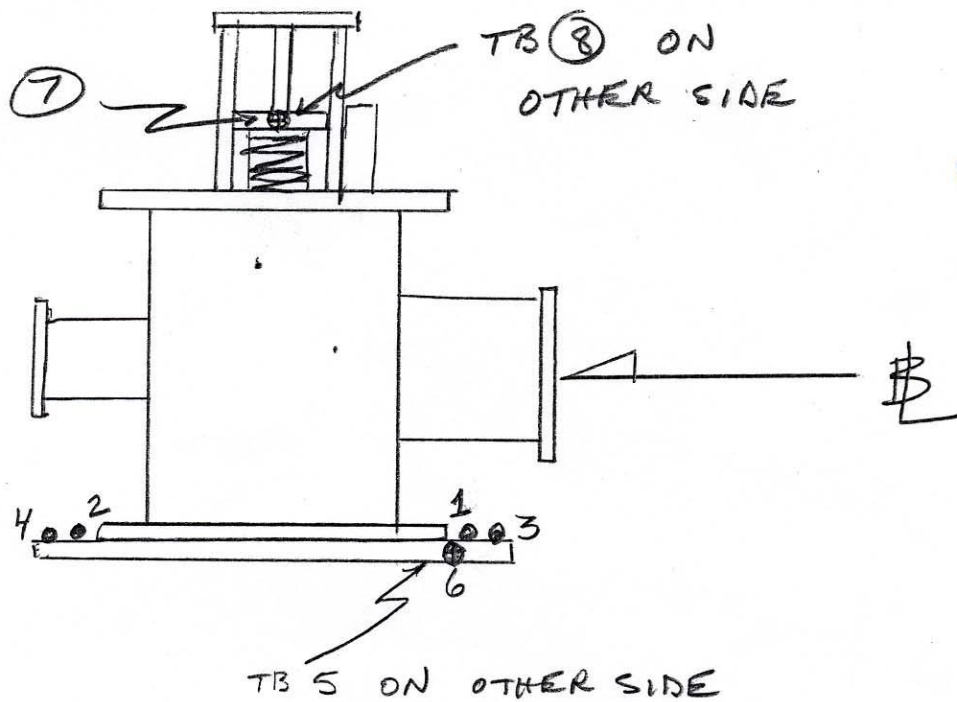


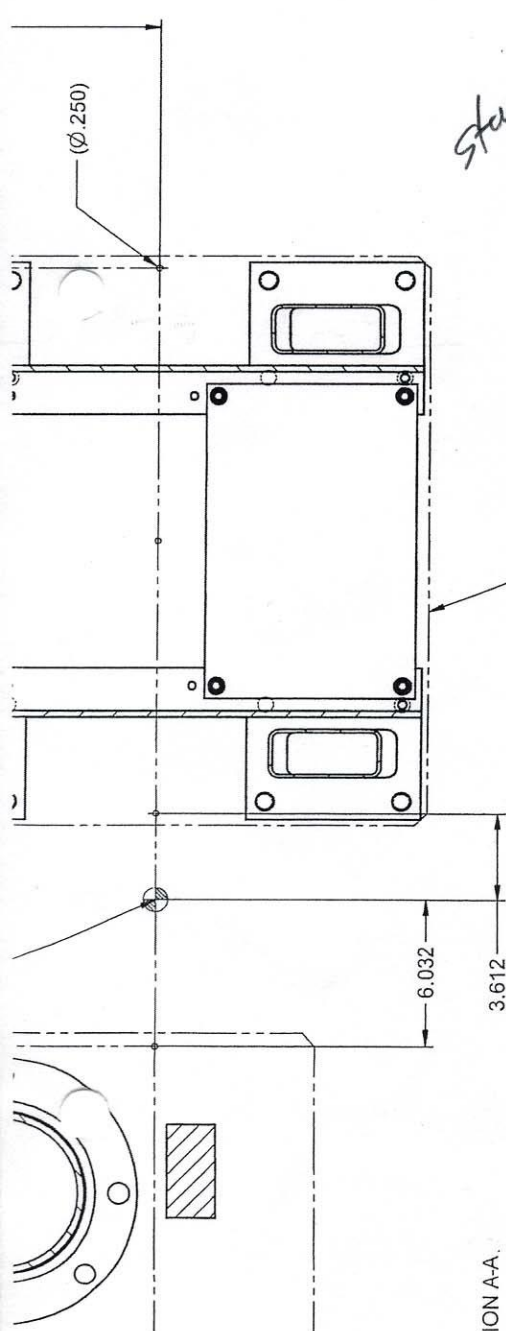
SSRL MOVEABLE MASK Φ 2



TB	X	Y	Z
1	-4.956	-5.738	-5.998
2	-4.968	-5.743	+3.988
3	+5.027	-5.730	-5.978
4	+5.012	-5.744	+4.003
5	-6.452	-7.233	-5.006
6	—	-7.220	—
7	+3.617	+17.462	-0.078
8	-3.589	+17.426	-0.099

MASK FIDUCIALIZED IN UP POSITION.
 CENTER OF D/S FLANGE USED AS Φ
 REFERENCE.

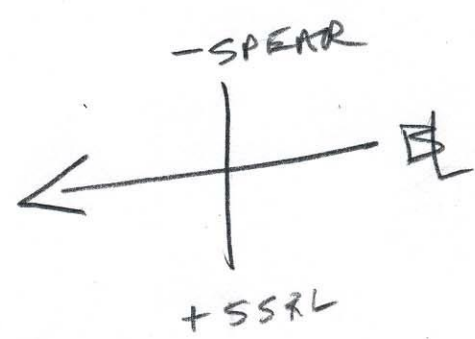
MONUMENT
Z= 6 METERS
X= .5 METERS



*Standard
A bend &*

BEND ANCHOR HOLE TEMPLATE
(PF 451-013-08)

BEAM LINE	SOURCE POINT (x,z)	ANGLE OF BEAM LINE CENTERLINE WITH RESPECT TO UPSTREAM ID STRAIGHT SECTION
1	-101.534, 3929.983	-.16000 rad
2	-104.471, 3948.060	-.162375 rad
3	-101.471, 3948.060	-.162375 rad
8	-100.197, 3921.666	-.15891 rad



MAY NEED TO CORRECT
TB'S FOR YAW ANGLE.

$$\begin{array}{r}
 -.162375 \\
 -.160000 \\
 \hline
 -.002375 \text{ rad CORRECTION} \\
 \text{TOWARDS SPEAR}
 \end{array}$$

SCALE: 1/4		DO NOT SCALE DRAWING		CAD FILE NAME: id45100800.dft	
STANFORD SYNCHROTRON RADIATION LABORATORY U.S. DEPARTMENT OF ENERGY		SLAC, STANFORD UNIVERSITY		STANFORD, CALIFORNIA	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. TOLERANCES: BREAK EDGES .005-.015 INTERNAL CORNERS R.015 MAX. FRACTIONS ± .01 DEC .xxx ± .005 ANGLE ± 1/2° ALL SURF				APPROVALS ENGR J PECK DWN RH PAUL CHR J PECK	
PROPRIETARY DATA OF STANFORD UNIVERSITY AND/OR U.S. DEPARTMENT OF ENERGY. RECIPIENT SHALL NOT PUBLISH THE INFORMATION WITHIN UNLESS GRANTED SPECIFIC PERMISSION OF STANFORD UNIVERSITY.		DATE		32	
NEXT ASSEMBLIES:		DATE		ALL SURF	
DRAWING NUMBER		ID 451-008-00		REVISION NUMBER	
0		E		E	

SSRL STD BEND FE
STPERS, MASKS & SHTTERS
VARIOUS
STD BL FE INSTALL DWG

2 SSRL MOVABLE MASK

3/12/03
M.R., F.G.

✓ 3/12/03
WR

Y) PITCH & ROLL FROM TOP FLANGE.

<u>U/S</u>	<u>D/S</u>	(+)	(-)	
8.366	8.354	8.355	8.355	Flange Loose
8.354	8.354			
8.373	8.383	8.386	8.387	Flange Tight
8.388	8.385	8.382	8.389	
8.388	8.090			

Z) Buck-IN ON (+) / (-) SIDES OF ~~PI~~ FLANGE

FAR VALUE = 0	(-)		(+) FLANGE
N	V = 0	(+)	
1ST F.	= 14.668 + 1	= 15.668	13.788
1ST N.	= 14.671 + 1	= 15.671	3.370
2ND F.	= 14.668 + 1	= 15.668	✓ - 17.158 = LOS
2ND N.	= 15.853 + 1	= 16.853	
5th F.	= 15.695 - 1 ✓	= 14.695	
5th N.	= 15.695 - 1 ✓	= 14.695	
LOS	= 15.695 ✓		

1st Auto collimated X direction lead blades @ 69"
2nd ~~Auto~~ Auto collimation Z direction read U/S side
of Mask set yaw.

<u>top</u>	<u>bot</u>	(+)	(-)		
21.554	21.549	21.789	22.713	different gun set-up.	
21.560	21.555	22.252	22.248		
21.565	21.566	22.249	22.250		
		22.251	22.252		
		21.553	21.557		Flange Tight
		21.546	21.560		
		21.562	21.568		

y)

\$ 2 MOVEABLE MASK

② of 4
3/12/03
M.R., F.G.

Top of Mask
(low Gun)

✓ 3/12/03
MR

D/S Flange
(High Gun)

(+)	(-)
+001	+009

17.095
<u>3.370</u>
20.465 ✓ HI

Turtle
3.818
40
<u>43.318</u>
42.813

42.813
<u>.472</u> (1/2 slot)
43.285 ✓ S/R

TURTLE

6.278
<u>57</u>
63.278 ✓
<u>20.465</u>
-42.813 ✓

(+)	(-)
+034	+041
+037	+041
+004	+004

D/S Flange
17.098
<u>3.370</u>
20.468 ✓ HI

<u>1</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>Turtle</u>
6.835	6.827	25.212	26.701	8.317	6.350
<u>19.371</u>	<u>19.371</u>	<u>1</u>	<u>1</u>	<u>19.371</u>	<u>57.813</u>
26.206 ✓	26.198 ✓	26.212 ✓	27.701 ✓	27.688 ✓	63.350 ✓
20.468	20.468	20.468	20.468	20.468	42.813 ✓
<u>-5.738</u> ✓	<u>-5.730</u> ✓	<u>-5.744</u> ✓	<u>-7.233</u> ✓	<u>-7.220</u> ✓	20.537 HI

<u>2</u>	<u>7</u>	<u>8</u>	check <u>4</u>
25.280	1.825	1.861	25.283
<u>1</u>	<u>1.250</u>	<u>1.250</u>	<u>1</u>
26.280 ✓	3.075 ✓	3.111 ✓	26.283 ✓
20.537	20.537	20.537	20.537
<u>-5.743</u> ✓	<u>+17.462</u> ✓	<u>+17.426</u> ✓	<u>-5.746</u> ✓

SSRL ~~2~~ MOVABLE MASK

(3) of 4

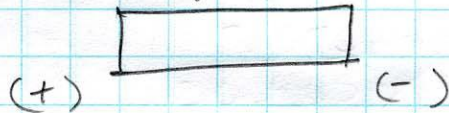
X) D/S Flange

$$\begin{array}{r}
 13.788 \\
 3.370 \\
 \hline
 \text{LOS} = -17.158 \checkmark \\
 69.000 \\
 \hline
 \Phi \quad 51.842 \checkmark \\
 2.520 \\
 \hline
 \text{S/R} \quad 54.362 \checkmark
 \end{array}$$

✓ 3/12/03
me

Ref blades @ 69"

$$5039 \div 2 = 2520 \checkmark$$



(+)

(-)

on blades for (-) side.

+1.008

<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>
11.202	11.190	2.814	2.799	9.706
<u>1</u>	<u>1</u>	<u>19.371</u>	<u>19.371</u>	<u>1</u>
12.202 ✓	12.190 ✓	22.185 ✓	22.170 ✓	10.706 ✓
17.158	17.158	17.158	17.158	17.158
<u>-4.956</u> ✓	<u>-4.968</u> ✓	<u>+5.027</u> ✓	<u>+5.012</u> ✓	<u>-6.452</u> ✓

8

$$\begin{array}{r}
 12.569 \\
 \hline
 13.569 \checkmark \\
 17.158 \\
 \hline
 \boxed{-3.589} \checkmark
 \end{array}$$

U/S FL.

$$\begin{array}{r}
 17.158 \\
 5.790 \\
 \hline
 \text{S/R} \quad 11.368 \checkmark \\
 \text{FND} \quad 11.388 \quad +20 \checkmark
 \end{array}$$

7

MIR'D 7-8

$$\begin{array}{r}
 7.706 \\
 3.589 \\
 \hline
 4.117 \checkmark \\
 .5 \\
 \hline
 \boxed{+3.617} \checkmark
 \end{array}$$

SSL MOVABLE MASK

4 of 4

2

3/12/03

2)

1/5 SIDE MASK

√ 3/12/03

m 21.609

$$\begin{array}{r}
 .505 \\
 + 22.114 \\
 \hline
 23.114 = +LOS \\
 \hline
 4 \qquad \qquad \qquad 5
 \end{array}$$

1

2

3

4

5

$$\begin{array}{r}
 28.112 \\
 1 \\
 \hline
 29.112 \checkmark \\
 23.114 \\
 \hline
 \boxed{-5.998} \checkmark
 \end{array}$$

$$\begin{array}{r}
 18.126 \\
 1 \\
 \hline
 19.126 \checkmark \\
 23.114 \\
 \hline
 \boxed{+3.988} \checkmark
 \end{array}$$

$$\begin{array}{r}
 28.092 \\
 1 \\
 \hline
 29.092 \checkmark \\
 23.114 \\
 \hline
 \boxed{-5.978} \checkmark
 \end{array}$$

$$\begin{array}{r}
 18.111 \\
 1 \\
 \hline
 19.111 \checkmark \\
 23.114 \\
 \hline
 \boxed{+4.003} \checkmark
 \end{array}$$

$$\begin{array}{r}
 27.120 \\
 1 \\
 \hline
 28.120 \checkmark \\
 23.114 \\
 \hline
 \boxed{-5.006} \checkmark
 \end{array}$$

7

8

$$\begin{array}{r}
 22.036 \\
 1 \\
 \hline
 23.036 \checkmark \\
 23.114 \\
 \hline
 \boxed{-0.078} \checkmark
 \end{array}$$

$$\begin{array}{r}
 22.213 \\
 1 \\
 \hline
 23.213 \checkmark \\
 23.114 \\
 \hline
 \boxed{-0.099} \checkmark
 \end{array}$$