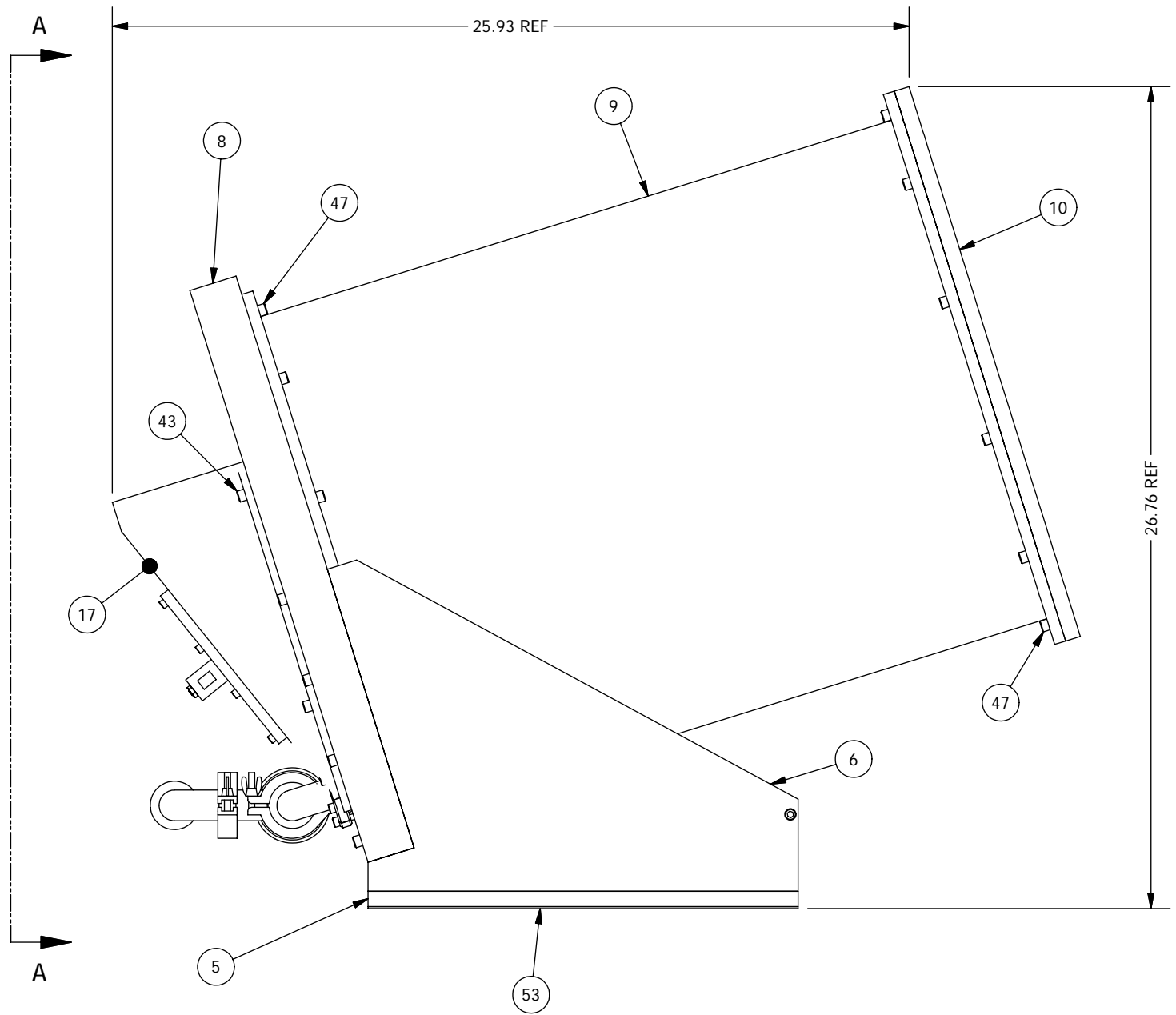


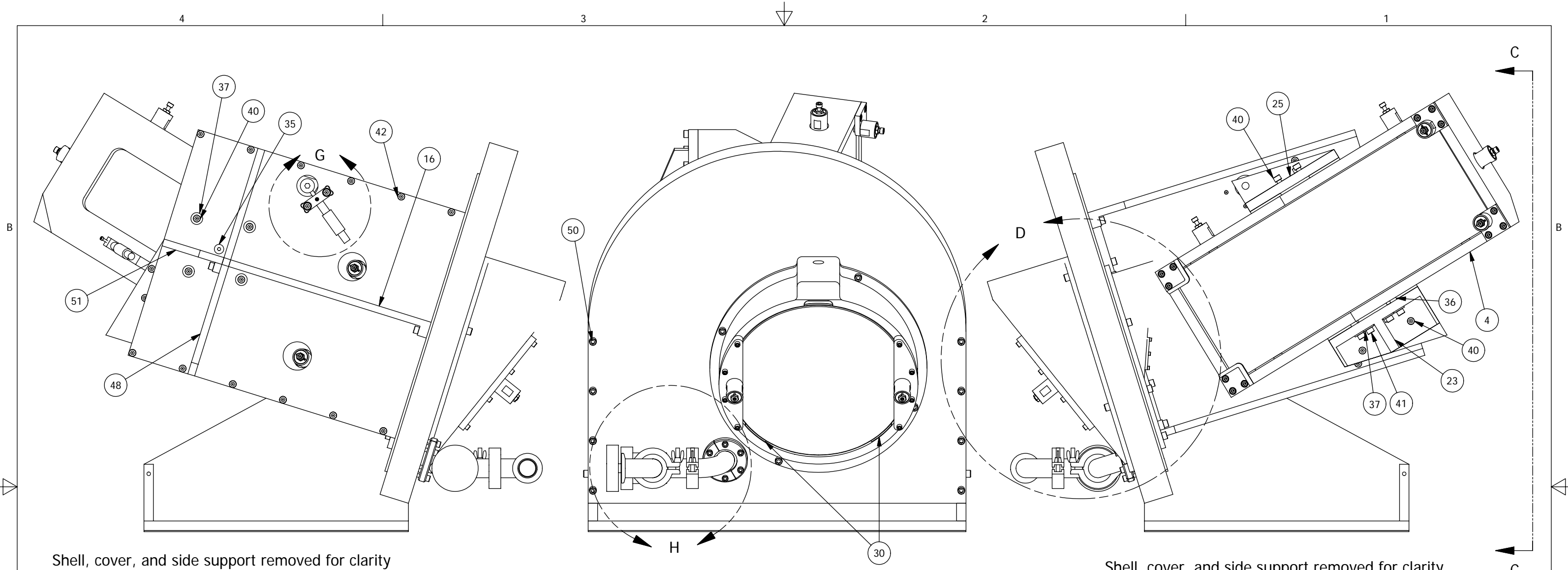
NOTES

1. Test fit assembly before anodizing.
2. Test-pump to 0.0001 mbar with a dummy prism plate (PFS14010) before mounting real grating and prism.
3. Test-pump to 0.0001 mbar with real prism before mounting real grating.
4. Working vacuum pressure should be set to 0.005 mbar target, and always maintained between 0.0002 and 0.012 mbar

53	1	Prism/Grating Assembly Shear Pad	PFS11037				
52	2	SHCS 1/4-20x0.75 UNC vented	-	21	1	Grating Mount Stiffener	PFS11015
51	1	Grating Mount Brace 4	PFS11035	20	2	Prism PFSP1 Retention Clip	PFS11020
50	8	SHCS 1/4-20 UNCx2	-	19	2	Prism PFSP2 Safety Clip	PFS11021
49	6	SHCS 1/4-20x0.5 UNC vented	-	18	1	Prism PFSP2 Cell	PFS11019
48	1	Grating Mount Side Plate Stiffener	PFS11008	17	1	Prism PFSP1 Cell	PFS11018
47	24	SHCS 1/4-20 UNCx0.875	-	16	1	Grating Mount Brace 2	PFS11009
46	8	SHCS 8-32 UNCx0.625	-	15	1	Grating Mount Brace 3	PFS11034
45	2	SHCS 1/4-20 UNCx1	-	14	1	Grating Mount Brace 1	PFS11033
44	12	SHCS 1/4-20 UNCx0.75	-	13	1	Parker O-ring 2-270	-
43	4	SHCS 1/4-20 UNCx0.625	-	12	2	Parker O-ring 2-386	-
42	50	SHCS 1/4-20x1 UNC vented	-	11	1	Grating Mount Side Plate	PFS11007
41	6	SHCS 1/4-20x0.625 UNC vented	-	10	1	Prism/Grating Assembly Vacuum Cover	PFS11006
40	12	SHCS 1/4-20x0.875 UNC vented	-	9	1	Prism/Grating Assembly Vacuum Shell	PFS11005
39	2	SHCS 1/4-20x1.25 UNC vented	-	8	1	Prism/Grating Assembly Front Plate	PFS11002
38	8	SHCS 4-40x0.5 UNC vented	-	7	1	Prism/Grating Assembly Lateral Stiffener	PFS11004
37	8	Washer, ANSI A, Normal 0.25	-	6	2	Prism/Grating Assembly Side Support	PFS11003
36	2	Shim Washer MCM3088A509	-	5	1	Prism/Grating Assembly Base Plate	PFS11001
35	1	Shoulder Screw MCM94035A308	-	4	1	Grating Mount Assembly	PFS00010
34	1	Shoulder Screw MCM97345A716	-	3	2	Prism Axial Spring Plunger Assembly	PFS00006
33	1	Die Spring Screw Cap MCM96235K9	-	2.6	6	SHCS 10-32 UNFx0.75	-
32	1	Die Spring MCM9295K13	-	2.5	2	Nor-Cal NW 90 Radius Elbow 2E-NW-25B	-
31	3	UHMW Polyethylene Tape MCM76445A723	-	2.4	1	Nor-Cal Manual Angle Valve ESV-1002-NWB	-
30	3	Radial pad 4.00 x 1.50	-	2.3	3	Nor-Cal NW Centering Ring NW-25-CR-SV	-
29	2	Micrometer - Starrett 463L	-	2.2	2	Nor-Cal NW 25 Nut Clamp	-
28	1	Prism PFSP1 Radial Preload Block	PFS11022	2.1	1	Nor-Cal NW Bulkhead Clamp NW-25-BCP	-
27	1	Grating Azimuth Micrometer Mount	PFS11016	2	1	Nor-Cal Vacuum Valve Assembly	-
26	1	Grating Altitude Micrometer Mount	PFS11017	1.4	1	Echelle Grating	PFS01011
25	1	Grating Mount Azimuthal Base	PFS11011	1.3	1	Sylgard-184 RTV	-
24	1	Grating Mount Azimuthal Bushing	PFS11010	1.2	1	PFSP2 Prism	PFS01010
23	1	Grating Mount Altitude Arm 2	PFS11014	1.1	1	PFSP1 Prism	PFS01009
22	1	Grating Mount Altitudinal Arm 1	PFS11013	1	1	PFS Dispersive Optics	-
ITEM	QTY	DESCRIPTION	PART NUMBE	ITEM	QTY	DESCRIPTION	PART NUMBE
Bill of Material				Bill of Material			



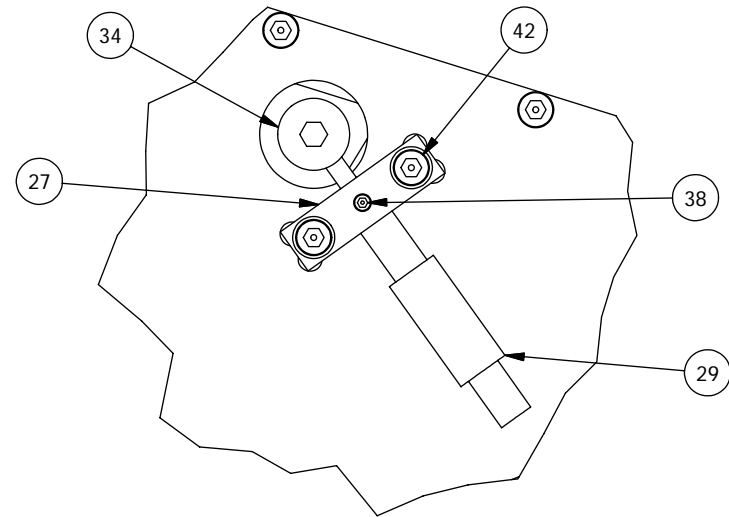
THE OBSERVATORIES OF THE CARNEGIE INSTITUTION OF WASHINGTON					
813 Santa Barbara Street Pasadena, CA 91101					
MATERIAL		UNLESS OTHERWISE SPECIFIED FRACTIONAL DECIMAL ANGULAR +/- 1/32 .XX +/- 0.01 +/- 0.1 DEG .XXX +/- 0.002 GOAL .XXX +/- 0.005 REQD BREAK SHARP EDGES MACHINED SURFACES 125			
EST WEIGHT		176 lb (+67 with optics)			
SCALE		1:5		Planet finder Spectrograph	
DWN	CRANE	6/6/2006		Prism/Grating Mount Assembly	
APVD	BY	DATE	SHEET	DRAWING NUMBER	REV
			B	PFS00011	SHT 1 OF 3
					3



Shell, cover, and side support removed for clarity

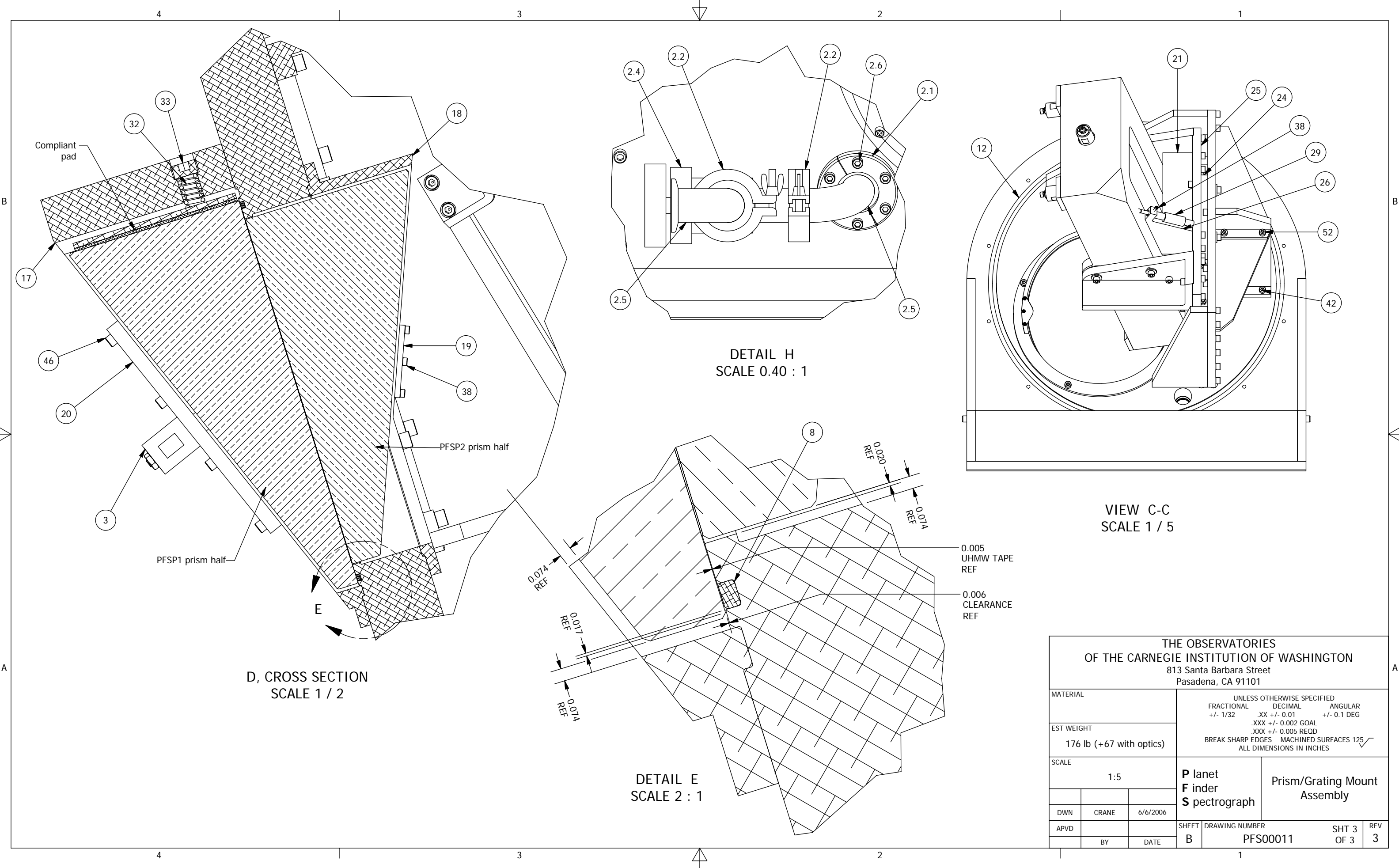
VIEW A-A
SCALE 1 / 5
Shell and cover removed for clarity

Shell, cover, and side support removed for clarity



DETAIL G
SCALE 1 / 2

THE OBSERVATORIES OF THE CARNEGIE INSTITUTION OF WASHINGTON 813 Santa Barbara Street Pasadena, CA 91101					
MATERIAL		UNLESS OTHERWISE SPECIFIED FRACTIONAL DECIMAL ANGULAR $\pm 1/32$.XX ± 0.01 ± 0.1 DEG			
EST WEIGHT		.XXX ± 0.002 GOAL .XXX ± 0.005 REQD BREAK SHARP EDGES MACHINED SURFACES 125 \sqrt ALL DIMENSIONS IN INCHES			
SCALE		1:5		P lanet F nder S pectrograph Prism/Grating Mount Assembly	
DWN	CRANE	6/6/2006			
APVD	BY	DATE	SHEET	DRAWING NUMBER	REV
			B	PFS00011	SHT 2 OF 3 3



D, CROSS SECTION
SCALE 1 / 2

DETAIL H
SCALE 0.40 : 1

VIEW C-C
SCALE 1 / 5

DETAIL E
SCALE 2 : 1

0.005
UHMW TAPE
REF

0.006
CLEARANCE
REF

THE OBSERVATORIES OF THE CARNEGIE INSTITUTION OF WASHINGTON 813 Santa Barbara Street Pasadena, CA 91101				
MATERIAL		UNLESS OTHERWISE SPECIFIED FRACTIONAL DECIMAL ANGULAR +/- 1/32 .XX +/- 0.01 +/- 0.1 DEG		
EST WEIGHT		.XXX +/- 0.002 GOAL .XXX +/- 0.005 REQD BREAK SHARP EDGES MACHINED SURFACES 125 $\sqrt{\text{V}}$ ALL DIMENSIONS IN INCHES		
SCALE		P lanet F inder S pectrograph Prism/Grating Mount Assembly		
1:5				
DWN	CRANE	6/6/2006		
APVD	BY	DATE	SHEET B	DRAWING NUMBER PFS00011
			SHT 3 OF 3	REV 3