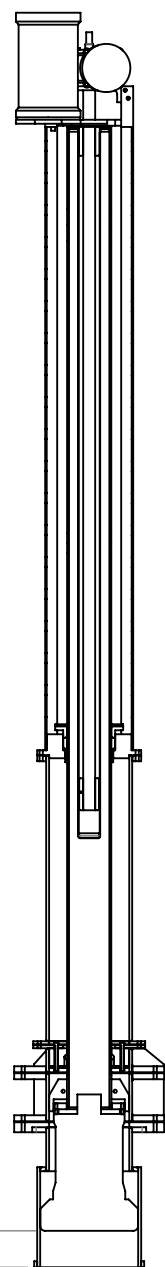


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REVISIONS

INITIAL RELEASE

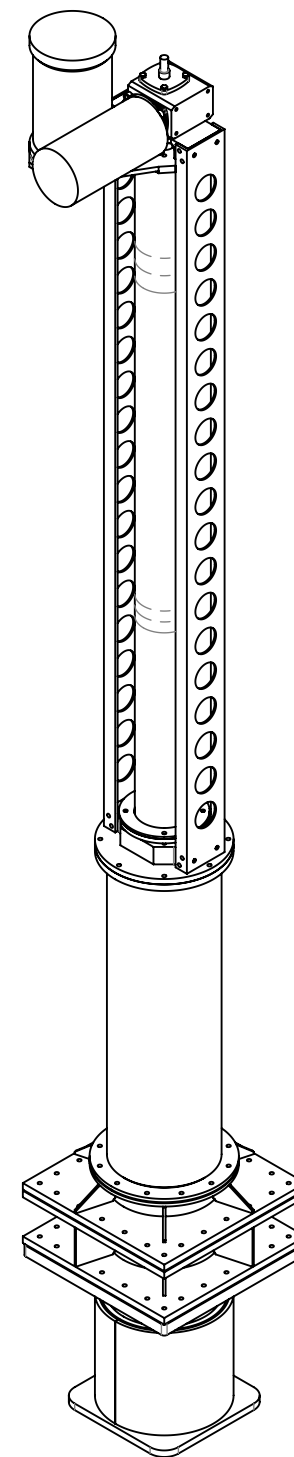
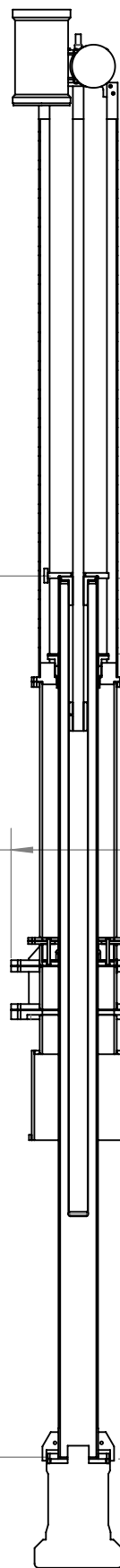
X/XX/01


$$-(4.553)$$

(123.000
One Piece Pole Length)

$$(10.563)$$
 (18.750)
$$(6.000)$$

(12.000)

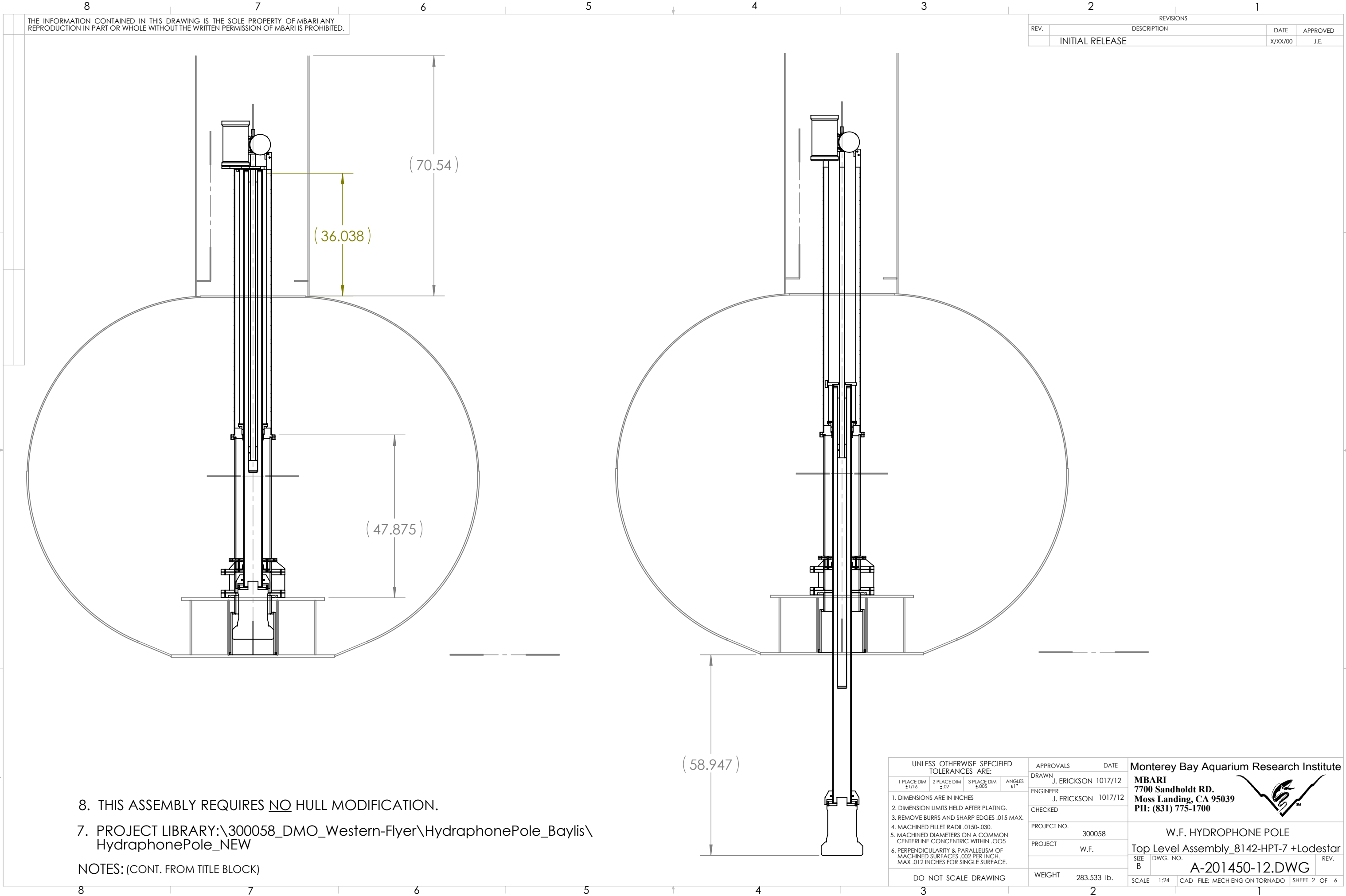
$$(59.697)$$
$$(15.197)$$


8. THIS ASSEMBLY REQUIRES NO HULL MODIFICATION.

7. PROJECT LIBRARY:\300058_DMO_Western-Flyer\HydraphonePole_Baylis\HydraphonePole_NEW

NOTES: (CONT. FROM TITLE BLOCK)

ITEM NO.	QTY.	PART NO.	DESCRIPTION	VENDOR	MATERIAL SPECIFICATION
BILL OF MATERIALS					
Shop / Q.C.		UNLESS OTHERWISE SPECIFIED TOLERANCES ARE:		APPROVALS DATE DRAWN J. ERICKSON 1017/12 ENGINEER J. ERICKSON 1017/12 CHECKED PROJECT NO. 300058 PROJECT W.F. SCALE B DWG. NO. A-201450-12.DWG SCALE 1:24 CAD FILE: MECH ENG ON TORNADO SHEET 1 OF 4 	
Inspector		1 PLACE DIM ±.1/16	2 PLACE DIM ±.02	3 PLACE DIM ±.005	ANGLES ±1°
Shop Foreman		1. DIMENSIONS ARE IN INCHES 2. DIMENSION LIMITS HELD AFTER PLATING. 3. REMOVE BURRS AND SHARP EDGES .015 MAX. 4. MACHINED FILLET RADII .0150-.030.			
Engineer		5. MACHINED DIAMETERS ON A COMMON CENTERLINE CONCENTRIC WITHIN .005 6. PERPENDICULARITY & PARALLELISM OF MACHINED SURFACES .002 PER INCH. MAX .012 INCHES FOR SINGLE SURFACE.			
NEXT ASSY Description	NEXT ASSY Number				
Application		DO NOT SCALE DRAWING		WEIGHT 283.533	

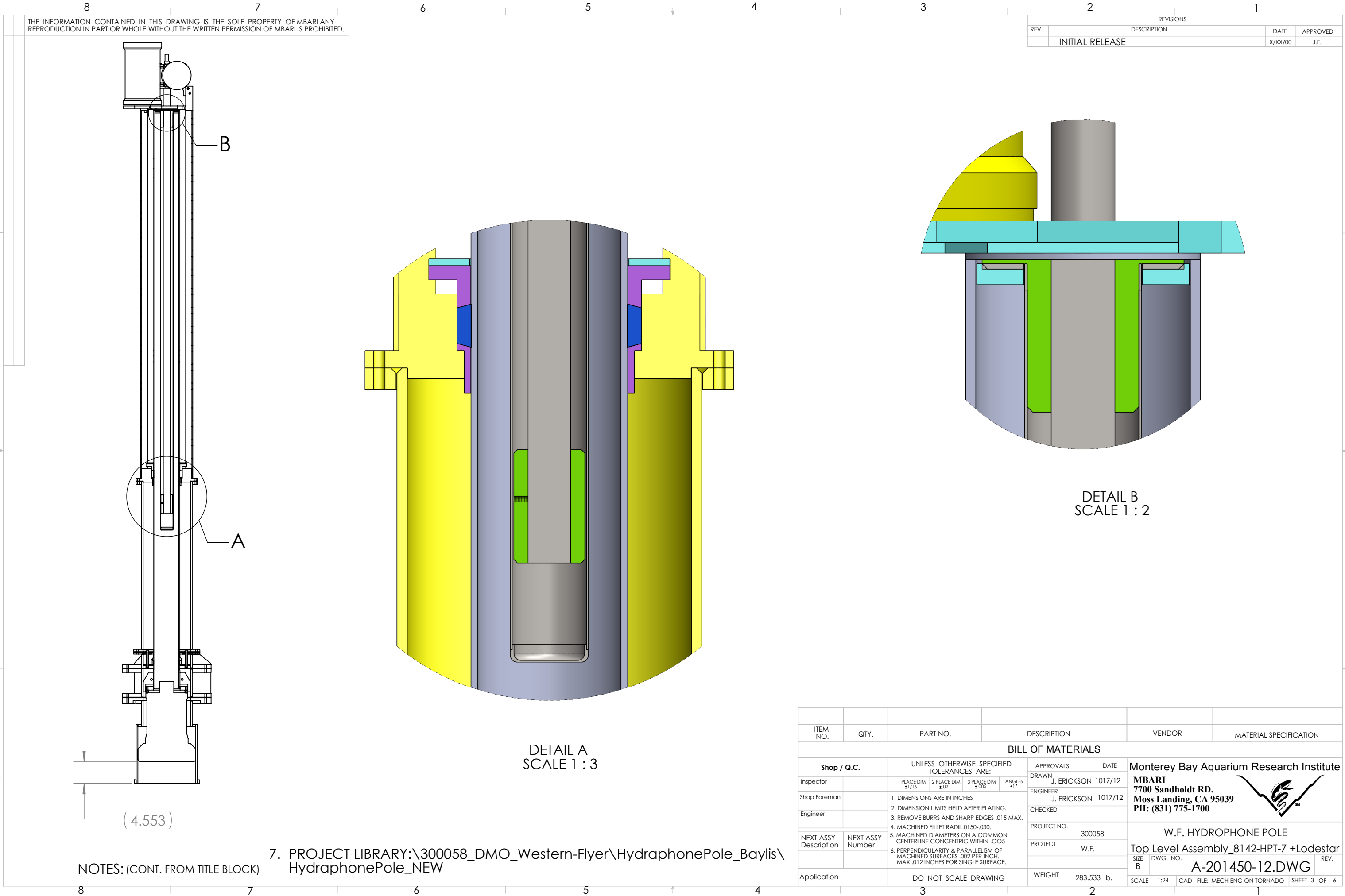


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REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
	INITIAL RELEASE	X/XX/00	J.E.

8. THIS ASSEMBLY REQUIRES NO HULL MODIFICATION.
7. PROJECT LIBRARY:\300058_DMO_Western-Flyer\HydraphonePole_Baylis\HydraphonePole_NEW
- NOTES: (CONT. FROM TITLE BLOCK)

UNLESS OTHERWISE SPECIFIED TOLERANCES ARE:				APPROVALS	DATE	Monterey Bay Aquarium Research Institute MBARI 7700 Sandholdt RD. Moss Landing, CA 95039 PH: (831) 775-1700		
1 PLACE DIM ±1/16	2 PLACE DIM ±.02	3 PLACE DIM ±.005	ANGLES ±1°	DRAWN J. ERICKSON	1017/12			
1. DIMENSIONS ARE IN INCHES 2. DIMENSION LIMITS HELD AFTER PLATING. 3. REMOVE BURRS AND SHARP EDGES .015 MAX. 4. MACHINED FILLET RADII .0150-.030. 5. MACHINED DIAMETERS ON A COMMON CENTERLINE CONCENTRIC WITHIN .005 6. PERPENDICULARITY & PARALLELISM OF MACHINED SURFACES .002 PER INCH. MAX .012 INCHES FOR SINGLE SURFACE.				ENGINEER J. ERICKSON	1017/12	W.F. HYDROPHONE POLE Top Level Assembly_8142-HPT-7 +Lodestar		
DO NOT SCALE DRAWING				CHECKED				
				PROJECT NO.	300058	A-201450-12.DWG		
				PROJECT	W.F.			
				WEIGHT	283.533 lb.	SIZE B	DWG. NO.	REV.
				SCALE 1:24 CAD FILE: MECH ENG ON TORNADO SHEET 2 OF 6				



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REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
	INITIAL RELEASE	X/XX/00	J.E.

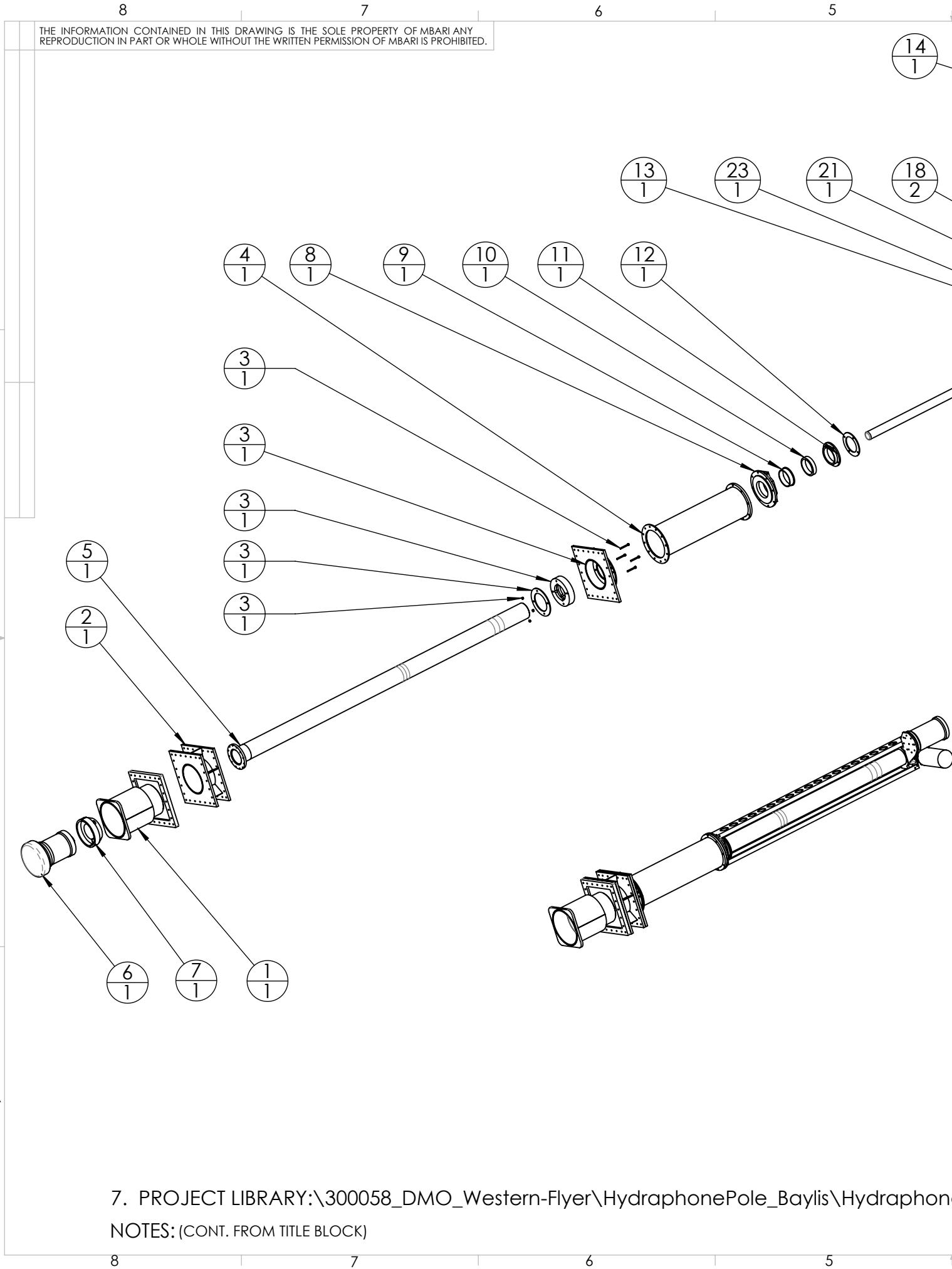
DETAIL A
SCALE 1 : 3

DETAIL B
SCALE 1 : 2

NOTES: (CONT. FROM TITLE BLOCK)

7. PROJECT LIBRARY:\300058_DMO_Western-Flyer\HydraphonePole_Baylis\HydraphonePole_NEW

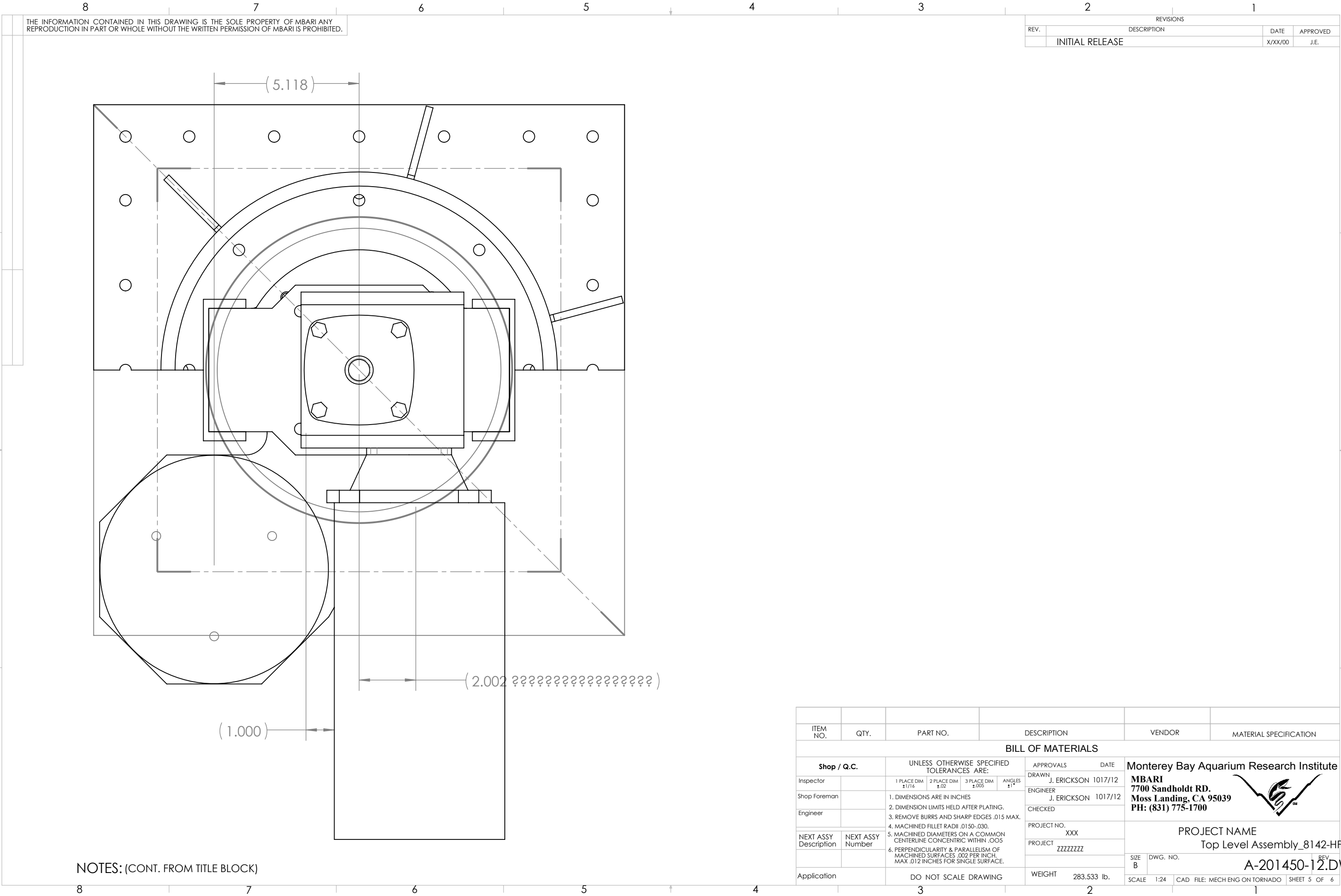
ITEM NO.	QTY.	PART NO.	DESCRIPTION	VENDOR	MATERIAL SPECIFICATION
BILL OF MATERIALS					
Shop / Q.C.		UNLESS OTHERWISE SPECIFIED TOLERANCES ARE:		APPROVALS	DATE
Inspector		1 PLACE DIM ±1/16	2 PLACE DIM ±.02	DRAWN J. ERICKSON	1017/12
Shop Foreman		3 PLACE DIM ±.005	ANGLES ±1°	ENGINEER J. ERICKSON	1017/12
Engineer		1. DIMENSIONS ARE IN INCHES 2. DIMENSION LIMITS HELD AFTER PLATING. 3. REMOVE BURRS AND SHARP EDGES .015 MAX. 4. MACHINED FILLET RADII .0150-.030. 5. MACHINED DIAMETERS ON A COMMON CENTERLINE CONCENTRIC WITHIN .005 6. PERPENDICULARITY & PARALLELISM OF MACHINED SURFACES .002 PER INCH, MAX .012 INCHES FOR SINGLE SURFACE.		CHECKED	
NEXT ASSY Description	NEXT ASSY Number	PROJECT NO. 300058		PROJECT W.F.	
Application	DO NOT SCALE DRAWING	WEIGHT 283.533 lb.			
Monterey Bay Aquarium Research Institute				W.F. HYDROPHONE POLE	
MBARI 7700 Sandholdt RD. Moss Landing, CA 95039 PH: (831) 775-1700				Top Level Assembly_8142-HPT-7 +Lodestar	
				SIZE B	REV.
				A-201450-12.DWG	
				SCALE 1:24	CAD FILE: MECH ENG ON TORNADO SHEET 3 OF 6

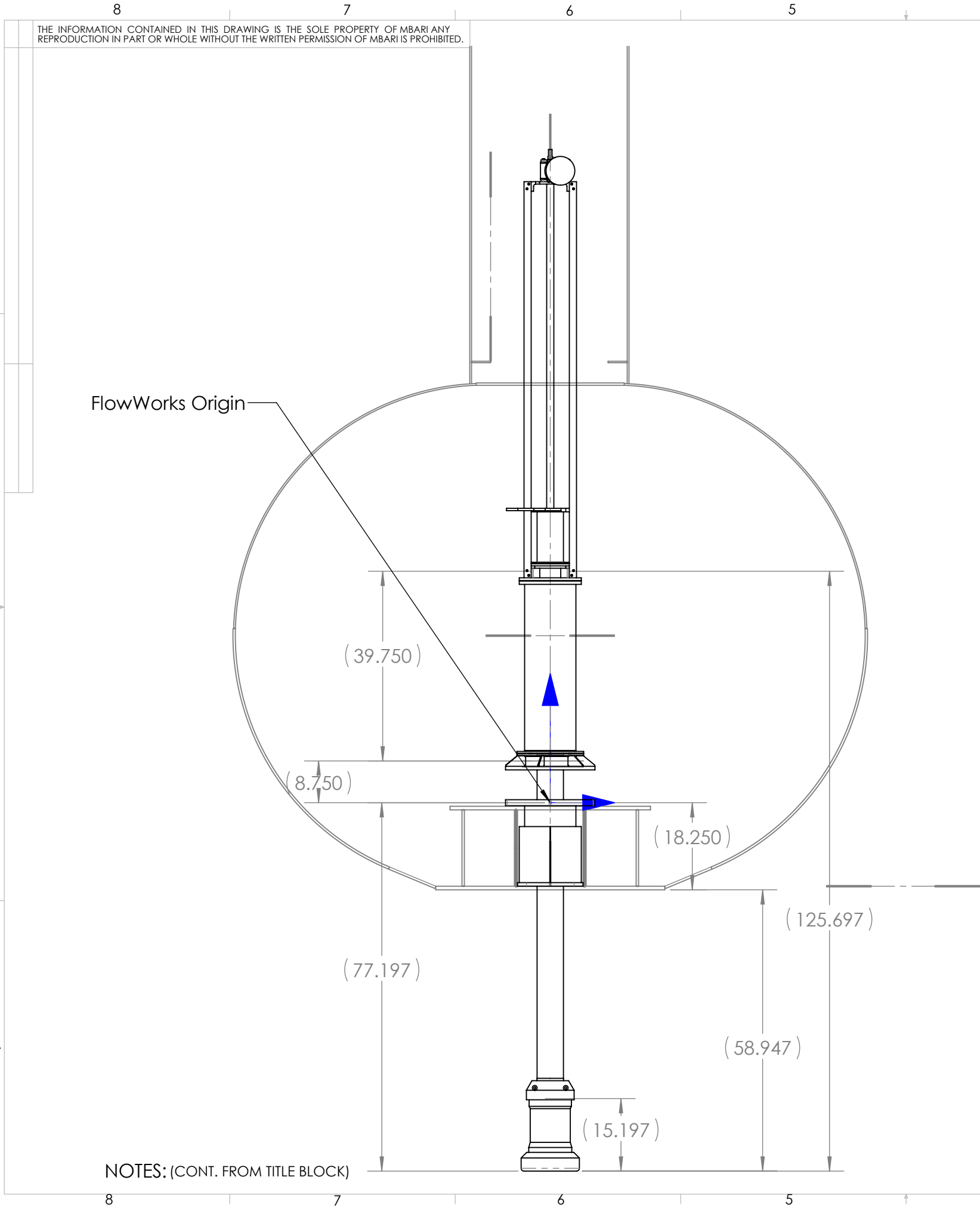


ITEM NO.	QTY.	Part_Number	DESCRIPTION	Revision	Vendor	MATERIAL
24	1		1000m LodeStar		Sonardyne	
23	1	P-201472-13	ACME SCREW END CAP	A	MBARI	DELRIIN (BLACK ACETAL)
21	1	P-201467-12	New ACME Screw (Baylis #10)	A	MBARI	304 S.S.
20	1	SRF718-30-B5-J	BOSTON Worm Gear Flanged Reducer		MBARI	
19	1	P-210457-12	Support Plate- Gear Box (BAYLIS #9)		MBARI	Aluminum 6061-T6
18	2	P-201470-12	Guide Channel (#6)		MBARI	5 x 2.75, 6061-T6 Aluminum Channel
17	1	P-201455-12	Roller Guide Delrin (BAYLIS #21)		MBARI	DELRIIN
16	1	P-201456-12	Bushing - Guide (BAYLIS #22)		MBARI	304 SS
15	1	P-201458-12	CAP-Extension Column (Baylis #8)	A	MBARI	304 SS
14	1	P-201469-12	ACME Nut (#11)		MBARI	DELRIIN (BLACK ACETAL)
13	1	P-201460-12	Acme Screw Sleeve cover Tube (Baylis #12)		MBARI	304 S.S.
12	1	P-201454-12	Ring Backing (BAYLIS #18)		MBARI	304 SS
11	1	P-201452-12	Gland Packing - (BAYLIS #17)	A	MBARI	DELRIIN
10	1	P-201xxx-12	Packing 1/2 Square Teflon yarn (BAYLIS #19)		MBARI	1/2 Sq. Teflon Yarn
9	1	P-201453-12	Sleeve Packing - (BAYLIS #16)	A	MBARI	DELRIIN
8	1	P-201459-12	Cap - Main Cylinder (Baylis #7)		MBARI	Aluminum 6061-T6
7	1	P-210451-12	Bushing Split (Baylis #15)		MBARI	DELRIIN
6	1	8023	Sonardyne_8142-HPT-7		Sonardyne Inc.	
5	1	A-201431-12	Hydrophone Pole "NEW"		MBARI	
4	1	A-201443-12	Main Guide Tube Weldment Assembly		MBARI	
3	1	A-201449-12	Mid Bushing Assembly / Weldment		MBARI	
2	1	A-201587-13	Spacer Assembly / Weldment		MBARI	
1	1	A-201440-12	Lower Guide Tube Weldment Assembly		MBARI	

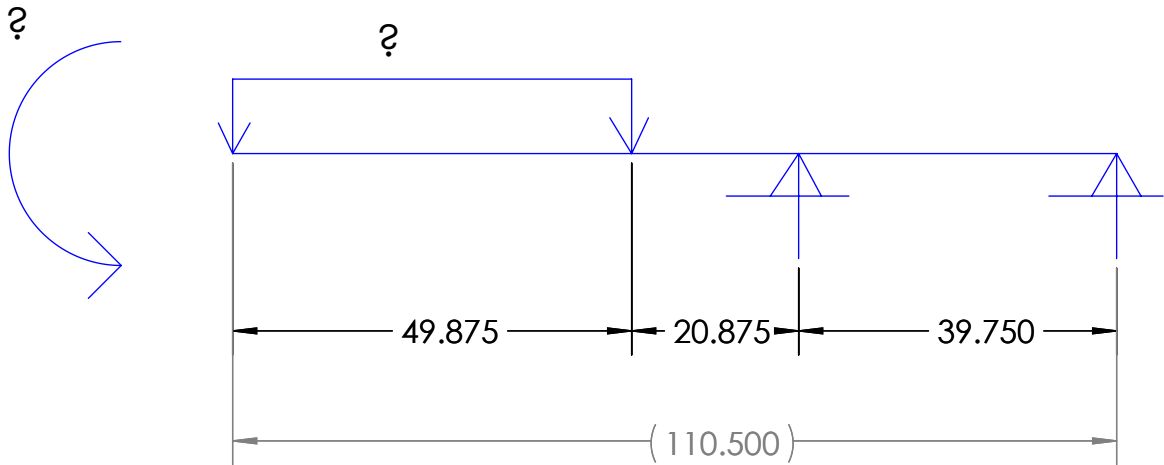
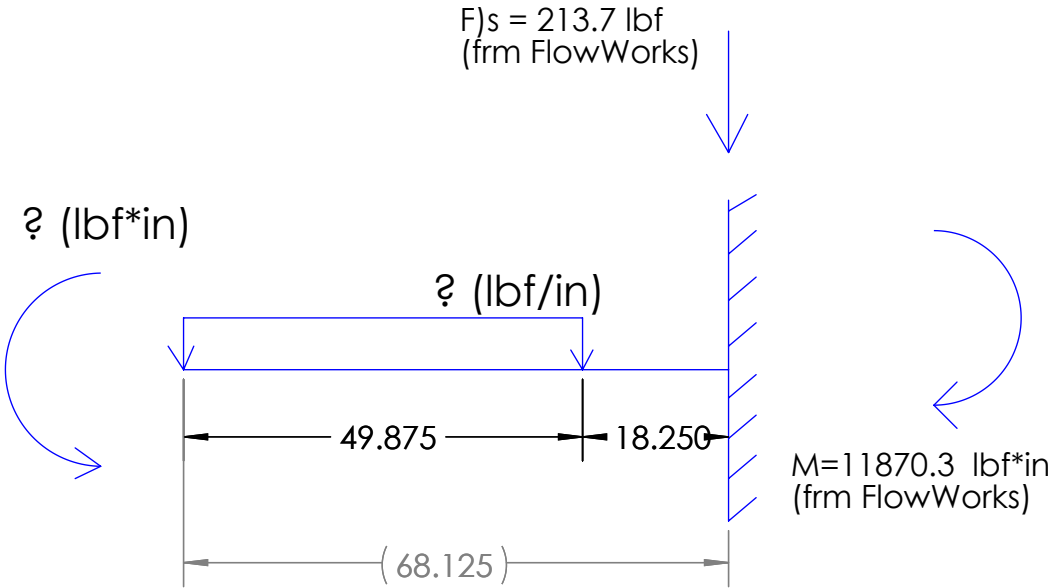
BILL OF MATERIALS

Shop / Q.C.		UNLESS OTHERWISE SPECIFIED TOLERANCES ARE:				APPROVALS	DATE	Monterey Bay Aquarium Research Institute			
Inspector		1 PLACE DIM ±1/16	2 PLACE DIM ±.02	3 PLACE DIM ±.005	ANGLES ±1°	DRAWN	J. ERICKSON 1017/12	MBARI 7700 Sandholdt RD. Moss Landing, CA 95039 PH: (831) 775-1700 			
Shop Foreman		1. DIMENSIONS ARE IN INCHES 2. DIMENSION LIMITS HELD AFTER PLATING. 3. REMOVE BURRS AND SHARP EDGES .015 MAX. 4. MACHINED FILLET RADII .0150-.030. 5. MACHINED DIAMETERS ON A COMMON CENTERLINE CONCENTRIC WITHIN .005 6. PERPENDICULARITY & PARALLELISM OF MACHINED SURFACES .002 PER INCH, MAX .012 INCHES FOR SINGLE SURFACE.				ENGINEER	J. ERICKSON 1017/12				
Engineer						CHECKED					
NEXT ASSY Description	NEXT ASSY Number					PROJECT NO.	300058	W.F. HYDROPHONE POLE Top Level Assembly_8142-HPT-7 +Lodestar			
						PROJECT	W.F.				
Application		DO NOT SCALE DRAWING				WEIGHT	283.533 lb.	SIZE B	DWG. NO. A-201450-12.DWG	REV.	
						SCALE	1:24	CAD	FILE: MECH ENG ON TORNADO	SHEET 4 OF 6	





REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
	INITIAL RELEASE	X/XX/00	J.E.



ITEM NO.	QTY.	PART NO.	DESCRIPTION	VENDOR	MATERIAL SPECIFICATION
BILL OF MATERIALS					
Shop / Q.C.		UNLESS OTHERWISE SPECIFIED TOLERANCES ARE:		APPROVALS DATE	
Inspector		1 PLACE DIM $\pm 1/16$	2 PLACE DIM $\pm .02$	3 PLACE DIM $\pm .005$	ANGLES $\pm 1^\circ$
Shop Foreman		1. DIMENSIONS ARE IN INCHES		DRAWN J. ERICKSON 1017/12	
Engineer		2. DIMENSION LIMITS HELD AFTER PLATING.		ENGINEER J. ERICKSON 1017/12	
NEXT ASSY Description		3. REMOVE BURRS AND SHARP EDGES .015 MAX.		CHECKED	
NEXT ASSY Number		4. MACHINED FILLET RADII .0150-.030.		PROJECT NO. XXX	
Application		5. MACHINED DIAMETERS ON A COMMON CENTERLINE CONCENTRIC WITHIN .005		PROJECT ZZZZZZZZ	
		6. PERPENDICULARITY & PARALLELISM OF MACHINED SURFACES .002 PER INCH. MAX .012 INCHES FOR SINGLE SURFACE.		WEIGHT 283.533 lb.	
		DO NOT SCALE DRAWING		SIZE B DWG. NO. A-201450-12.DWG	
				SCALE 1:24 CAD FILE: MECH ENG ON TORNADO SHEET 6 OF 6	

Monterey Bay Aquarium Research Institute
MBARI
7700 Sandholdt RD.
Moss Landing, CA 95039
PH: (831) 775-1700

PROJECT NAME
Top Level Assembly_8142-HPT-7 +Lode