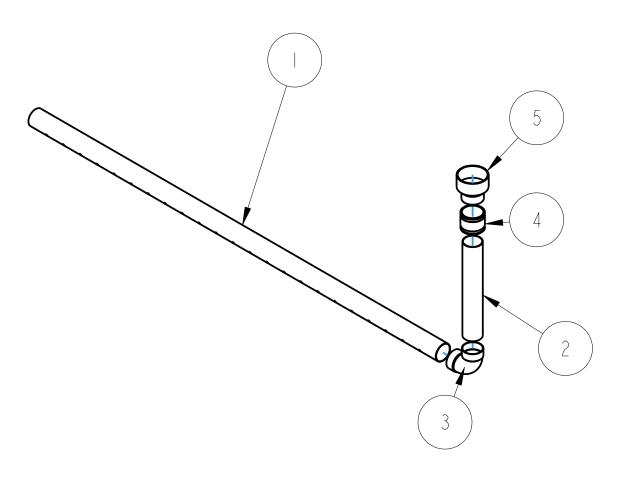
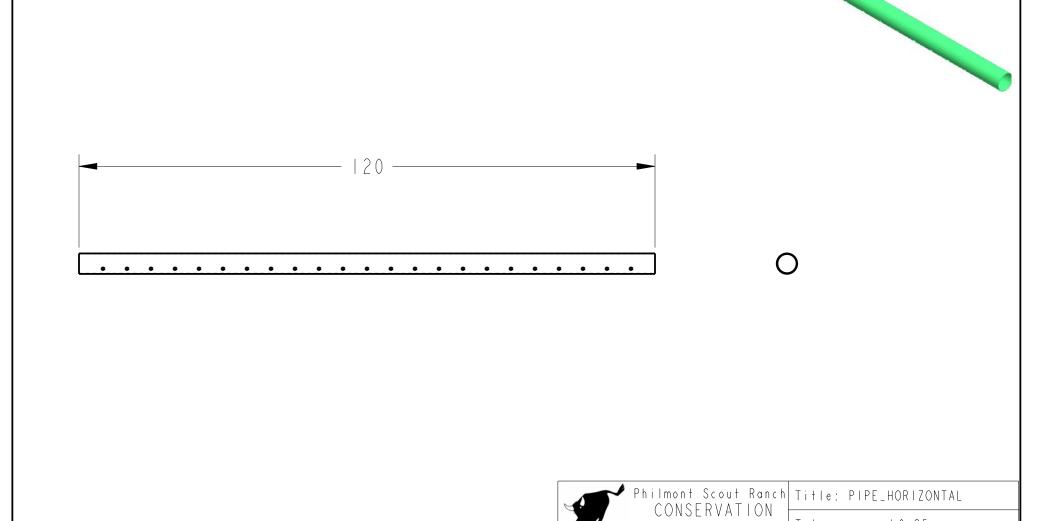


Index	Part Name	Description	Qty
	PIPE_HORIZONTAL	4" Diameter PVC Sewer Pipe	1
2	PIPE_VERTICAL	4" Diameter PVC Sewer Pipe	1
3	ELBOW	4" PVC I/4 Bend EII Sewer	1
4	NECK	4"x4" Flexible Coupling	1
5	HEAD	6"x4" PVC Adapter	1



1	Philmont Scout Ranch CONSERVATION	Title: SUMP EXPLODE		
T	SUMP	Tolerances: ±0.25		
Drawn by	: Ronald La Curan	N / A	Index: N/A	
Date: 10	/21/08 Scale: 1:20	Version: I	Page 3 of 10	



Tolerances:  $\pm 0.25$ 

Version: I

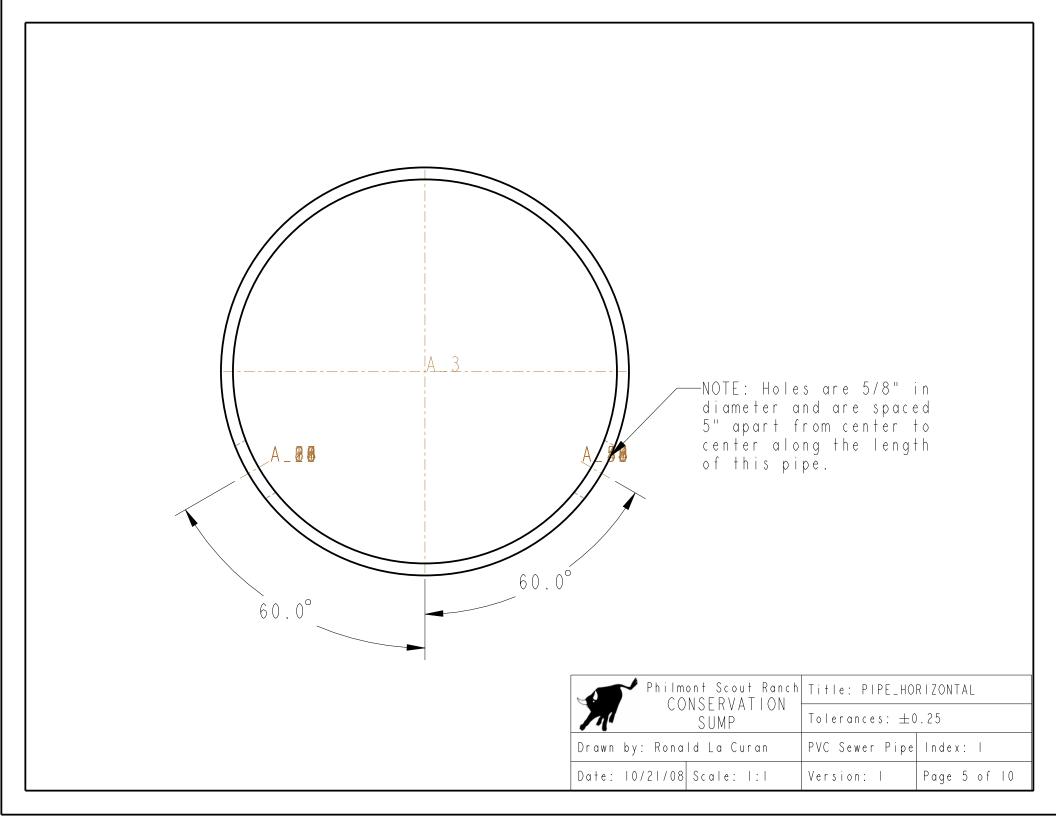
PVC Sewer Pipe Index: I

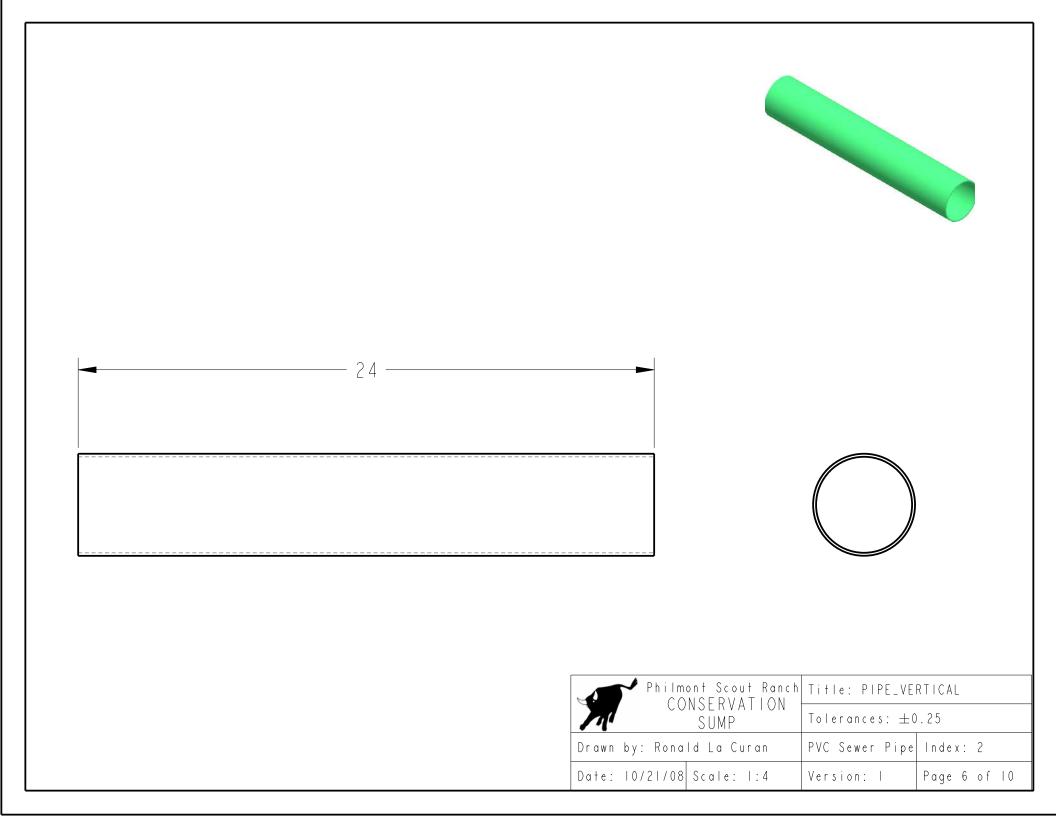
Page 4 of 10

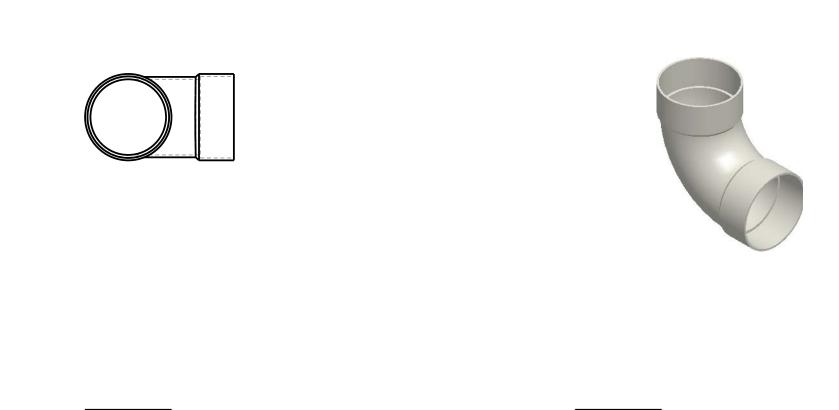
SUMP

Drawn by: Ronald La Curan

Date: 10/21/08 Scale:

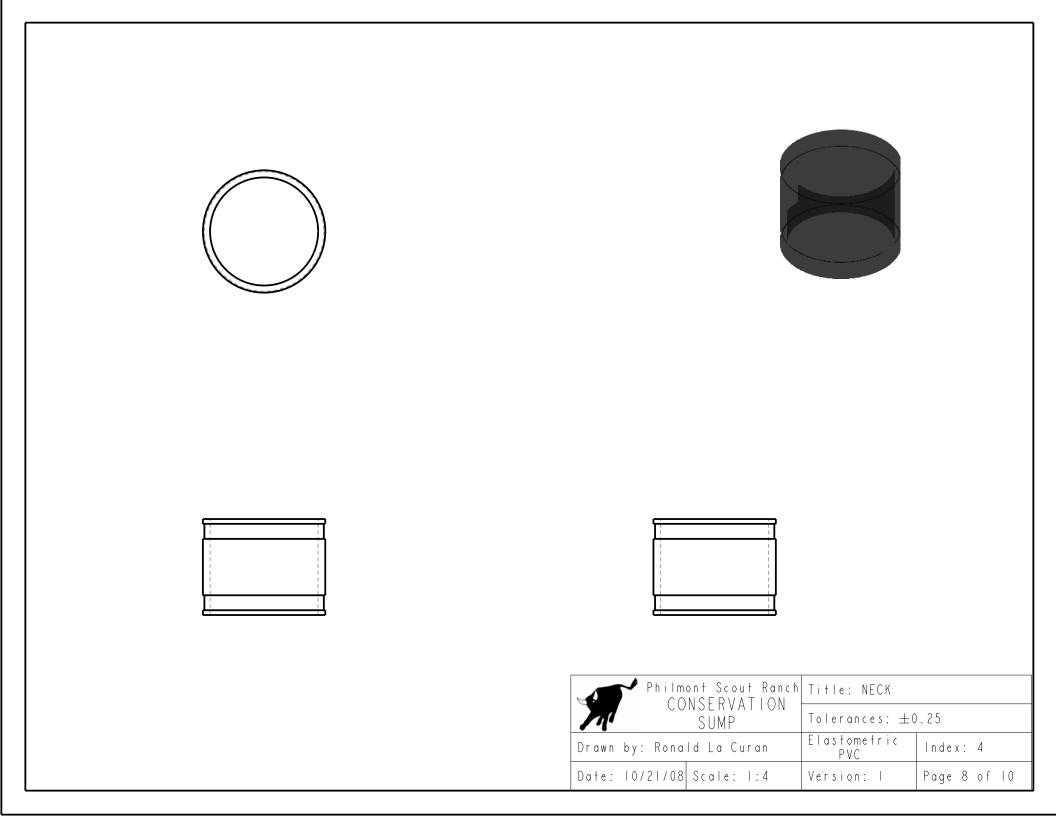


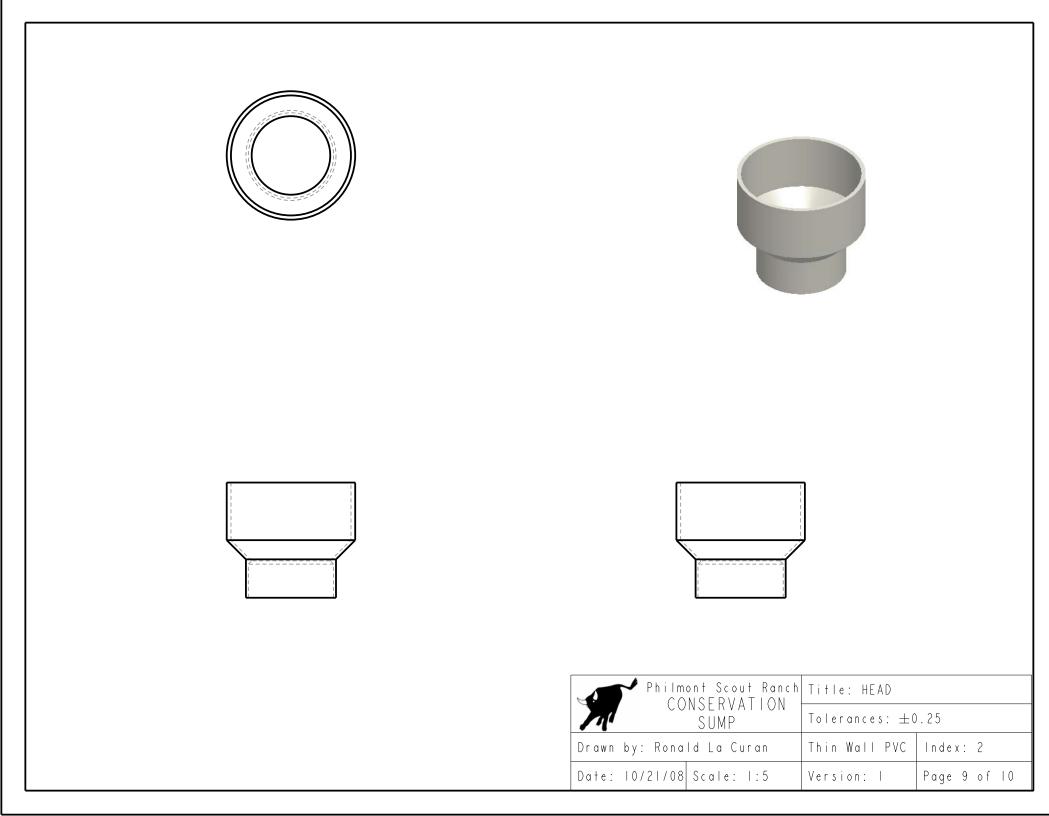






Philmont Scout Ranch CONSERVATION	Title: ELBOW		
SUMP	Tolerances: ±0.25		
Drawn by: Ronald La Curan	Thin Wall PVC	Index: I	
Date: 10/21/08 Scale: 1:5	Version: I	Page 7 of 10	





NOTE: Cut an 8"x8" square of screen out and place it—
over the top of the head of the Sump. Using a
(5"x7") hose clamp, press the excess screen
against the sides of the head and hold in place with
the hose clamp.

NOTE: Hose clamps (3"x5") are used here to hold the neck to both-the vertical pipe and the head. KEEP LOOSE. If a bear desides to investigate a loose clamp will prevent permanent damage to the sump. This will allow the head and neck to pop off and they can be easily reattached

Not Glued-

Glued-

NOTE: pipe\_vertical is not glued into the elbow because if for some reason a bear or participant damages that portion of the sump, the entire sump does not need to be dug out, only the vertical pipe would need to be excavated and then a new one could very easily be plugged right in in the broken one's place.

NOTE: When installing Sump, be sure the lower pipe, pipe\_horizontal, is installed on a bed of gravel to assist in the percolation of the sump water to the surrounding soil

Ph	Philmont Scout Ranch CONSERVATION		Title: ASSEMBLY AND INSTALL		
M	SUMP	Tolerances: ±0.25			
Drawn by: F	Ronald La Curan	N / A	Index: N/A		
Date: 10/21	1/08 Scale: 3:40	Version: I	Page 10 of 10		

## Sump Parts List and Cost Estimate

The following list is provided as an estimate of the required lumber to build Sump:

					Price
Index	Part Name	Description	Company	Part #	(in \$)
			US		
1	pipe_horizontal	4" Diameter Sewer Pipe	Plastics	31003	11.9
			US		
2	pipe_vertical	4" Diameter Sewer Pipe	Plastics	31003	2.38
		4" PVC 1/4 Bend Ell Sewer	US		
3	elbow	Pipe	Plastics	31110	3.31
			US		
4	neck	4"x4" Flexible Coupling	Plastics	30552	6.81
			US		
5	head	6"x4" PVC Adapter	Plastics	31056	11.23
			US		
6	Hose Clamp	5"x7" Clamp	Plastics	24332	4.09
			US		
7	Hose Clamps	2 - 3"x5" Clamps	Plastics	24331	6.80
				TOTAL	46.52

<sup>\*</sup>Segments should be glued together using a PVC glue.

The price listed above reflects current market values for United States Plastic Corp. and is given only as an estimate. Prices will vary both by location and random market fluctuations. Pricing was provided by catalog from US Plastics. Contact information for this company is as follows:

United States Plastic Corp. 1390 Newbrecht Road Lima, OH 45801

Phone: 800-537-9724 Fax: 800-854-5498 <u>www.usplastic.com</u>

Date: October 21, 2008