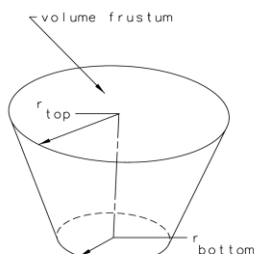
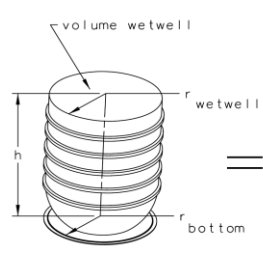
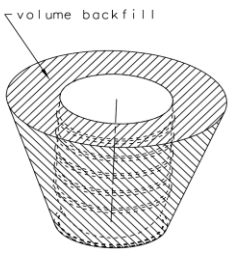
	<b>WET WELL BUOYANCY CALCULATIONS NO SECONDARY ANCHORS</b>		<b>PROJECT NAME</b>	
			<b>BY:</b>	<b>DATE</b>
<b>WET WELL DATA</b>		<i>CALCULATED WITH WATER TABLE AT FINISHED GRADE</i>	<b>INSTALLATION DATA</b>	
NOMINAL SHELL DIAMETER (FT) =	10		HEIGHT BELOW GRADE (FT) =	21.00
DIAMETER OF BOTTOM (FT) =	10		DEPTH TO WATER TABLE FROM FINISHED GRADE (FT) =	0.00
ANTI-FLOTATION FLANGE (IN) =	6		VOLUME, BALLAST (GAL) =	0.00
NUMBER OF RIBS =	16			
WEIGHT OF WET WELL (LBS) =	3750			
<b>RESULTS</b>				
*****				
<b>SAFETY FACTOR</b>	=	<b>DOWN FORCE</b> <b>UP FORCE</b>	=	<b>SAFETY FACTOR</b> <b>4.35:1</b>
		454436 LBS 104415 LBS		
*****				
<b>WORKSHEET SUMMARY</b>				
<b>DOWN FORCES:</b>		<b>UP FORCES:</b>		
BACKFILL, TOTAL WEIGHT (LBS) =	450686.22	TOTAL DISPLACEMENT (GAL) =	12519.81	
+ WET WELL, WEIGHT (LBS) =	3750.00	x UNIT WEIGHT, WATER (LB/GAL) =	8.34	
+ BALLAST, WEIGHT (LBS) =	0.00	= TOTAL UP FORCE (LBS) =	104415.21	
= TOTAL DOWN FORCE (LBS) =	454436.22			
<b>WORKSHEET</b>				
<b>EQUATIONS:</b>				
$Volume_{frustum} = \frac{1}{3} \pi h (r_{top}^2 + r_{top} r_{bottom} + r_{bottom}^2)$				
$Volume_{wetwell} = \pi r_{wetwell}^2 h_{cylinder} + Volume_{bottom}$				
$Volume_{backfill} = Volume_{frustum} - Volume_{wetwell}$				
<b>ASSUMPTIONS:</b>				
SOIL FRICTION ANGLE (DEG) =	30.00	UNIT WEIGHT, WET SOIL (LB/FT <sup>3</sup> ) =	60.00	
WATER, UNIT WEIGHT (LB/GAL) =	8.34	UNIT WEIGHT, DRY SOIL (LB/FT <sup>3</sup> ) =	100.00	
<b>CALCULATIONS:</b>				
TOP RADIUS (AT GRADE) (FT) =	17.12	FRUSTUM, PORTION BELOW WATER TABLE (FT <sup>3</sup> ) =	9185.21	
RADIUS (AT WATER TABLE) (FT) =	17.12	FRUSTUM, PORTION ABOVE WATER TABLE (FT <sup>3</sup> ) =	0.00	
RADIUS AT BOTTOM (FT) =	5.50	FRUSTUM, TOTAL VOLUME (FT <sup>3</sup> ) =	9185.21	
CYLINDRICAL PORTION, HEIGHT (FT) =	20.48	CYLINDER, PORTION BELOW WATER TABLE (FT <sup>3</sup> ) =	1608.43	
BOTTOM PORTION, HEIGHT (FT) =	0.52	CYLINDER, PORTION ABOVE WATER TABLE (FT <sup>3</sup> ) =	0.00	
WET WELL, TOTAL VOLUME (GAL) =	12519.81	BOTTOM PORTION, VOLUME (FT <sup>3</sup> ) =	40.98	
WET BACKFILL, WEIGHT (LBS) =	450686.22	RIBS, VOLUME (FT <sup>3</sup> ) =	24.36	
DRY BACKFILL, WEIGHT (LBS) =	0.00	WET WELL, TOTAL VOLUME (FT <sup>3</sup> ) =	1673.77	
BACKFILL, TOTAL WEIGHT (LBS) =	450686.22	WET BACKFILL, VOLUME (FT <sup>3</sup> ) =	7511.44	
		DRY BACKFILL, VOLUME (FT <sup>3</sup> ) =	0.00	