

# Concrete Engineering Solutions, LLC

Project : Hancock, VT - Rt 125  
 Task : 14x8 BC  
 Job No. : 7929

Client: J Hutchins, Inc  
 File: Hancock 14x8 Design.etc

Sht \_\_\_\_ of \_\_\_\_  
 By: \_\_\_\_\_  
 Ck: \_\_\_\_\_  
 5/15/2017 11:30:29 AM  
 p. 1 of 4

Spec.: LRFD 6th ed. 2012  
 Type of Culvert: Precast

**Physical Dimensions**

Clear Span:	14'-0"
Clear Height:	8'-0"
Top Slab:	1'-0"
Bottom Slab:	1'-0"
Ext. Wall:	10"
Fill Depth Range	
Maximum:	3.00 ft
Minimum:	1.00 ft
Increment:	1.00 ft
Length:	8'-0"
Skew Angle:	30.00 deg
Bottom Slab Support:	Full Slab
Top Haunch, Width:	9"
Top Haunch, Height:	9"
Bottom Haunch, Width:	9"
Bottom Haunch, Height:	9"

**Material Properties**

<b>Concrete</b>	
Strength, f <sub>c</sub> :	5.500 ksi
Density:	0.150 kcf
Elasticity, E <sub>c</sub> :	4496 ksi
Type:	Normal wt
<b>Steel</b>	
Yield, f <sub>y</sub> :	60 ksi
Allow Stress:	24 ksi
Elasticity, E <sub>s</sub> :	29000 ksi
<b>Soil</b>	
Density:	0.140 kcf
<b>Exposure Factor</b>	
Class 2 Exposure	
<b>Reinforcement Covers</b>	
Ext. Cover Top Slab:	2"
Ext. Cover Bottom Slab:	2"
Ext. Cover Walls:	2"
Int. Cover Walls:	2"
Int. Top Slab:	2"
Int. Cover Bottom Slab:	2"

**Loads**

<b>Live Load</b>	
Vehicle Names:	HL-93 3S2 6 Axle Trailer 3 Axle Trailer 4 Axle Trailer 5 Axle Semi
Traffic Direction:	Parallel
Eq. Height of Soil:	2.00 ft (Entered)
Max No. of Lanes:	1
<b>Dead Load</b>	
Future Wearing Surface:	0.040 klf
Additional Dead Load:	0.000 klf
Concentrated Loads:	none
<b>Lateral Soil Loads</b>	
Eq. Fluid Press. Max:	60.00 pcf
Eq. Fluid Press. Min:	30.00 pcf
Consider Int. Water Press.:	no

