CONSOLIDATION TEST

(Specimen Data)

Date _____

Project _____

Boring No. _____ Sample No. _____

Classification

			Before Test		After Test
			Specimen	Trimmings	Specimen
Tare No.			Ring and Plates		
Weight in grams	Tare plus wet soil				
	Tare plus dry soil				
	Water	W_W	W_{wo}		W_{wf}
	Tare				
	Dry Soil	W_S			
Water content		w	w_o		w_f

Consolidometor No.		Area of specimen, A, sq cm	
Weight of ring, g		Height of specimen, H, in.	
Weight of plates, g		Sp gr of solids, G_s	

Height of solids, $H_s = \frac{W_s}{A \times G_s \times \gamma_w} = \frac{\quad}{\quad \times \quad \times 1 \times 2.54} =$ in.

Original height of water, $H_{wo} = \frac{W_{wo}}{A \times \gamma_w} = \frac{\quad}{\quad \times 1 \times 2.54} =$ in.

Final height of water, $H_{wf} = \frac{W_{wf}}{A \times \gamma_w} = \frac{\quad}{\quad \times 1 \times 2.54} =$ in.

Net change in height of specimen at end of test, $\Delta H =$ in.

Height of specimen at end of test, $H_f = H - \Delta H =$ in.

Void ratio before test, $e_o = \frac{H - H_s}{H_s} = \frac{\quad}{\quad} =$

Void ratio after test, $e_f = \frac{H_f - H_s}{H_s} = \frac{\quad}{\quad} =$

Degree of saturation before test, $S_o = \frac{H_{wo}}{H - H_s} = \frac{\quad}{\quad} =$

Degree of saturation after test, $S_f = \frac{H_{wf}}{H_f - H_s} = \frac{\quad}{\quad} =$

Dry density before test, $\gamma_d = \frac{W_s}{H \times A} = \frac{\quad \times 62.4}{\quad \times 2.54} =$ lb/cu ft

Remarks _____

Technician _____ Computed by _____ Checked by _____