IN-PLACE DENSITY DETERMINATION - SAND-CONE METHOD

1. PROJECT	2. DATE

3. JOB NUMBER	4. TEST SITE	5. SAMPLE NUMBER

6. ADDITIONAL SPECIFICATIONS

CONVERSION FACTORS: 1 in = 2.54 cm 1 cu ft = 1728 cu in Unit weight of water: 1 cc = 1 gram
1 lb = 453.6 gm 1 cu ft = 62.4 lb

CALIBRATION OF SAND (STANDARD MATERIAL)

APPARATUS OR TARE NUMBER		UNITS						
7. WEIGHT OF APPARATUS OR TARE FILLED		Grams						
8. WEIGHT OF APPARATUS OR TARE EMPTY		Grams						
9. WEIGHT OF MATERIAL	*(7 - 8)*	Grams						
10. VOLUME OF APPARATUS OR TARE		Cu ft						
11. UNIT WEIGHT OF MATERIAL	*([9/453.6]/10)**	Pcf						
12. AVERAGE UNIT WEIGHT OF MATERIAL		Pcf						

CALIBRATION OF APPARATUS			TEMPLATE NUMBER	CONE NUMBER
13. INITIAL WEIGHT OF APPARATUS + SAND		Grams		
14. FINAL WEIGHT OF APPARATUS + SAND		Grams		
15. WEIGHT OF SAND IN TEMPLATE AND/OR CONE	*(13 - 14)*	Grams		

VOLUME OF THE HOLE

16. INITIAL WEIGHT OF APPARATUS + SAND		Grams		
17. FINAL WEIGHT OF APPARATUS + SAND		Grams		
18. WEIGHT OF SAND RELEASED	*(16 - 17)*	Grams		
19. WEIGHT OF SAND IN THE HOLE	*(18 - 15)*	Grams		
20. VOLUME OF THE HOLE	*([19/453.6]/12)**	Cu ft		

WATER-CONTENT DETERMINATION

TARE NUMBER						
21. WEIGHT OF WET SOIL AND TARE		Grams				
22. WEIGHT OF DRY SOIL AND TARE		Grams				
23. WEIGHT OF WATER	*(21 - 22)*	Grams				
24. WEIGHT OF TARE		Grams				
25. WEIGHT OF DRY SOIL	*(22 - 24)*	Grams				
26. WATER CONTENT	*([23/25] x 100)*	Percent				
27. AVERAGE WATER CONTENT		Percent				

UNIT-WEIGHT DETERMINATION

TARE NUMBER				
28. WEIGHT OF WET SOIL AND TARE		Grams		
29. WEIGHT OF TARE		Grams		
30. WEIGHT OF WET SOIL	*(28 - 29)*	Grams		
31. WET UNIT WEIGHT	*([30/453.6]/20)**	Pcf		
32. DRY UNIT WEIGHT	*(31 x [100/(100 + 27)])*	Pcf		

33. REMARKS

* This formula contains the conversion from grams to pounds. Omit the conversion factor if the unit weight used is not grams.

34. TECHNICIAN *(Signature)*	35. COMPUTED BY *(Signature)*	36. CHECKED BY *(Signature)*