

**RHODE ISLAND DEPARTMENT OF TRANSPORTATION
MATERIALS MANAGEMENT**

Office _____

Resident: _____

DENSITY TEST OF SOILS REPORT - SAND CONE METHOD

Item No: _____		Date: _____
RI Contract No: _____	PTSID: _____	F.A.P. No: _____
Project: _____	Location: _____	

Acceptance

Independent

Info Only

Soil Description:	Lab No:
A Theoretical Max Dry Density (lb/ft ³): Corrected for oversize, AMDD from Proctor Test T-180	Opt. Moisture (%): From Proctor Test T-180

Test Section (Lot) Details / Notes: _____

Station:	Offset:	Approx. Lift Thickness:	Elevation:
Gauge No:	Daily Std:	Density	Moisture:
Density reading from Nuclear Gauge (lbs/ft ³):		Moisture reading from Nuclear Gauge (%):	

B	Tare Weight of Pan ₁	lbs (0.01)
C	Weight of Pan ₁ plus Excavated Soil Wet:	lbs (0.01)
D	Wet Weight of Excavated Soil: [C - B]	lbs (0.01)

Moisture Content Determination

E	Tare Weight of Pan ₂	lbs (0.01)
F	Weight of Pan ₂ plus Moisture Specimen Wet:	lbs (0.01)
G	Weight of Pan ₂ plus Moisture Specimen Dry:	lbs (0.01)
H	Dry Weight of Moisture Specimen: [G - E]	lbs (0.01)
J	Weight of Moisture: [F - G]	lbs (0.01)
K	Calculated Field Moisture Content: [J ÷ H] Express as decimal	X 100 = % (0.1)

Calculate Dry Density

L	Initial Weight of Sand Cone Apparatus:	lbs (0.01)
M	Final Weight of Sand Cone Apparatus:	lbs (0.01)
N	Cone Correction:	lbs (0.01)
P	Weight of Sand in Hole: [L - M - N]	lbs (0.01)
Q	Bulk Density of Sand:	lbs/ft ³ (0.0001)
R	Volume of Hole: [P ÷ Q]	ft ³ (0.0001)
S	Calculated Field Dry Density: D ÷ (K+1) ÷ R	lbs/ft ³ (0.1)
	% Theoretical Max Dry Density: [(P ÷ A) x 100]	% (0.1)
	Specification:	%

Meets Spec

Does Not Meet Spec

Info Only

Remarks: _____

Technician
Date

(Print / Sign)

Date

Reviewed By

(Print / Sign)