

MATERIALS SURVEY CODES

MATERIAL DESCRIPTION CODES	PLASTICITY INDEX (AASHTO T89 & 90)
01 Basalt (Malpais) 02 Cinders 03 Andesite or rhyolite 04 Tuff or compacted ash 05 Diabase 06 Granite 07 Disintegrated (Decomposed) Granite 08 Slate 09 Schist 10 Quartzite 11 Shale 12 Siltstone 13 Sandstone 14 Conglomerate 15 Limestone 16 Chert (Flint) 17 Caliche 20 Sand and gravel, with cobbles or boulders. 21 Silty-Sand and gravel, with cobbles or boulders. 22 Clayey-Sand and gravel, with cobbles or boulders. 23 Sand and gravel 24 Silty-Sand and gravel 25 Clayey-Sand and gravel 26 Sand 27 Silty-Sand 28 Clayey-Sand 29 Sandy Silt 30 Silt 31 Clayey Silt 32 Clay or silty-clay, gravelly 33 Clay or silty-clay, sandy 34 Clay or silty-clay 35 Clay	LIQUID LIMIT (LL): BOTTLE # _____ BOTTLE TARE WT _____ # BLOWS _____ % MOISTURE = $\frac{(\text{WET WT. WITH BOTTLE}) - (\text{DRY WT. WITH BOTTLE})}{(\text{DRY WT. WITH BOTTLE}) - (\text{TARE WT. OF BOTTLE})} \times 100$ $= \frac{(\quad) - (\quad)}{(\quad) - (\quad)} \times 100 = \quad \%$ LIQUID LIMIT = _____ (FOR 25 BLOWS) PLASTIC LIMIT (PL): BOTTLE # _____ BOTTLE TARE WT _____ PLASTIC LIMIT = $\frac{(\text{WET WT. WITH BOTTLE}) - (\text{DRY WT. WITH BOTTLE})}{(\text{DRY WT. WITH BOTTLE}) - (\text{TARE WT. OF BOTTLE})} \times 100$ $= \frac{(\quad) - (\quad)}{(\quad) - (\quad)} \times 100 = \quad \%$ PLASTICITY INDEX (PI): PI = LL - PL = () - () = _____ <hr/> MOISTURE CONTENT = $\frac{(\text{WET WT.}) - (\text{DRY WT.})}{(\text{DRY WT.})} \times 100$ $= \frac{[(\quad) - (\quad)]}{(\quad)} \times 100$ $= \quad \%$ (Record to the nearest 0.1 percent)

MATERIAL CODES		RDWY CODES:
SG = SUBGRADE SB= STRUCTURE BACKFULL NG = NATURAL GROUND BM = BEDDING MATERIAL AB = AGGREGATE BASE CM= COVER MATERIAL MA = MINERAL AGGREGATE CA = COARSE AGGREGATE FA = FINE AGGREGATE AG = AGGREGATE EM = EMBANKMENT	CB = CEMENT TREATED BASE CS = CEMENT TREATED SUBGRADE RR = RIP RAP BO = BORROW TS = TOP SOIL BF = BACKFILL AC = ASPHALTIC CONCRETE BB = BITUMINOUS TREATED BASE FC = ACFC FM = ROAD MIX RC = RECYCLED ASPHALTIC CONCRETE	NB = NORTH BOUND SB = SOUTH BOUND ETC RA = RAMP A RB = RAMP B ETC FR = FRONTAGE ROAD XR = CROSS ROAD