

SOIL LEGEND AND AASHTO CLASSIFICATION										CONSISTENCY OR DENSENESS				
GENERAL CLASS.	GRANULAR MATERIALS (≤ 35% PASSING #200)					SILT-CLAY MATERIALS (> 35% PASSING #200)				ORGANIC MATERIALS	PRIMARY SOIL TYPE	COMPACTNESS OR CONSISTENCY	RANGE OF STANDARD PENETRATION RESISTANCE (N - VALUE)	RANGE OF UNCONFINED COMPRESSIVE STRENGTH (q <sub>u</sub> ) (kN / m <sup>2</sup> )
GROUP CLASS.	A-1	A-3	A-2		A-4	A-5	A-6	A-7	A-1,A-2	A-4,A-5				
SYMBOL														
% PASSING	50 MX	30 MX 50 MN	15 MX 25 MN	10 MN	35 MX 35 MN	35 MX 35 MN	35 MX 35 MN	35 MX 35 MN	36 MN	36 MN	36 MN	36 MN		
(PASSING #40) LL PI	6 MX	N.P.	10 MX	10 MN	11 MN	11 MN	11 MN	11 MN	10 MX	10 MN	11 MN	11 MN		
GROUP INDEX	0	0	0	4 MX	8 MX	12 MX	16 MX	NO MX						
USUAL TYPES OF MAJOR MATERIALS	STONE FRAGS. GRAVEL & SAND	FINE GRAVEL AND SAND	SILTY OR CLAYEY GRAVEL AND SAND		SILTY SOILS		CLAYEY SOILS		SOILS WITH LITTLE OR MODERATE AMOUNTS OF ORGANIC MATTER		MUCK, PEAT		HIGHLY ORGANIC SOILS	
<p>• PI OF A-7-5 &lt; (LL-30); PI OF A-7-6 &gt; (LL-30)</p>														
TEXTURE OR GRAIN SIZE														
BOULDER		COBBLE		GRAVEL		COARSE SAND		FINE SAND		SILT		CLAY		
GRAIN (mm)		305		75		2		0.25		0.05		0.005		
SIZE (IN)		12		3										
SOIL MOISTURE - CORRELATION OF TERMS														
SOIL MOISTURE SCALE (ATTERBERG LIMITS)			FIELD MOISTURE DESCRIPTION			GUIDE FOR FIELD MOISTURE DESCRIPTION								
LL - LIQUID LIMIT			-SATURATED- (SAT.)			USUALLY LIQUID; VERY WET, USUALLY FROM BELOW THE GROUND WATER TABLE								
PLASTIC RANGE (PI) PL - PLASTIC LIMIT			-WET- (W)			SEMISOLID; REQUIRES DRYING TO ATTAIN OPTIMUM MOISTURE								
OM - OPTIMUM MOISTURE			-MOIST- (M)			SOLID; AT OR NEAR OPTIMUM MOISTURE								
SL - SHRINKAGE LIMIT			-DRY- (D)			REQUIRES ADDITIONAL WATER TO ATTAIN OPTIMUM MOISTURE								
ROCK DESCRIPTION														
<p>IN THE BROADEST MEANING, HARD ROCK IS CONSIDERED TO BE THAT INDURATED EARTH MATERIAL WHICH CANNOT BE SAMPLED BY CONVENTIONAL SOIL SAMPLING TOOLS OR TECHNIQUES. THE BOUNDARY BETWEEN SOIL AND ROCK IS ARBITRARY. TRANSITION BETWEEN SOIL AND ROCK IS OFTEN REPRESENTED BY A ZONE OF "WEATHERED ROCK". FOR THE PURPOSE OF THIS INVESTIGATION, THESE MATERIALS ARE DIVIDED AS FOLLOWS:</p>														
TERM	SYMBOLS				DESCRIPTION									
HARD ROCK (HR)	CORED ROCK		INFERRED ROCK LINE		MATERIAL THAT CANNOT BE PENETRATED BY POWER AUGERS, EXCEPT IN THIN LEDGES, AND REQUIRES ROCK CORING TOOLS FOR OBTAINING A SAMPLE									
WEATHERED ROCK (WR)					MATERIAL THAT CAN BE PENETRATED WITH GREAT DIFFICULTY USING POWER AUGERS AND YIELDS SPT REFUSAL									
					MATERIAL THAT CAN BE PENETRATED WITH SOME DIFFICULTY USING POWER AUGERS AND YIELDS SPT VALUES > 100 BLOWS BUT < SPT REFUSAL									
<p><sup>1</sup> SPT REFUSAL ≤ 2.5 cm OF PENETRATION PER 50 BLOWS IN SPT.  <sup>2</sup> AN INFERRED ROCK LINE INDICATES THE LEVEL AT WHICH AUGERS COULD NO LONGER PENETRATE. THE HARD ROCK SYMBOL IS SHOWN WHEN ROCK IS CORED AND ONLY TO THAT DEPTH CORED. A DESCRIPTION OF ROCK IS GIVEN, INCLUDING:</p>														
<p><u>CORE RECOVERY (REC.)</u> - TOTAL LENGTH OF ROCK RECOVERED IN THE CORE BARREL DIVIDED BY THE TOTAL LENGTH OF THE CORE RUN TIMES 100%.</p>														
<p><u>ROCK QUALITY DESIGNATION (ROD)</u> - TOTAL LENGTH OF SOUND ROCK SEGMENTS RECOVERED THAT ARE LONGER THAN OR EQUAL TO 0.1 m DIVIDED BY THE TOTAL LENGTH OF THE CORE RUN TIMES 100%.</p>														
GROUND WATER														
<p>▽ WATER LEVEL IN BORE HOLE [IMMEDIATELY AFTER DRILLING (I.A.D.) SOON AFTER DRILLING (____ HRS.)]</p> <p>▽ STATIC WATER LEVEL (AFTER 24 HRS.)</p> <p>▽ PERCHED WATER (PW). SATURATED ZONE. OR WATER BEARING STRATA</p> <p>QW → SPRING OR SEEPAGE</p>														
MISCELLANEOUS SYMBOLS AND ABBREVIATIONS														
ROADWAY EMBANKMENT WITH SOIL DESCRIPTION			SPT TEST BORING			SAMPLE DESIGNATIONS								
SOIL SYMBOL			AUGER BORING			S-BULK SAMPLE								
ARTIFICIAL FILL OTHER THAN ROADWAY EMBANKMENTS			CORE BORING			SS-SPLIT SPOON SAMPLE								
INFERRED SOIL BOUNDARIES			PIEZOMETER INSTALLATION			ST-SHELBY TUBE SAMPLE								
STRIKE AND DIP			SLOPE INDICATOR INSTALLATION			RS-ROCK SAMPLE								
APPARENT DIP (NORMAL TO _____)			SPT N-VALUE											
ROD SOUNDING			MONITORING WELL											
ABBREVIATIONS														
ALLUV.	ALLUVIUM	MIC.	MICACEOUS											
AR	AUGER REFUSAL	MOT.	MOTTLED											
BLDR.	BOULDER	N	BLOWS / 30 CM											
CALC.	CALCAREOUS	NS	NO SAMPLE TAKEN											
CL.	CLAY	ORG.	ORGANIC											
CLY.	CLAYEY	P.P.	POCKET PENETROMETER											
COB.	COBBLE	REF.	REFER TO											
CSE.	COARSE	RES.	RESIDUAL											
DPT	DYNAMIC PENETRATION TEST	S.	SOFT											
EST.	ESTIMATED	SAT.	SATURATED											
F.	FINE	SD.	SAND											
FIAD	FILLED IMMED. AFTER DRILLING	SDY.	SANDY											
FOSS.	FOSSILIFEROUS	SED(S).	SEDIMENT(S)											
FRAC.	FRACTURED	SL.	SILT, SILTY											
FRAG(S).	FRAGMENT(S)	SLI.	SLIGHTLY											
GR.	GRAVEL	SPT	STANDARD PENETRATION TEST											
GS	SPECIFIC GRAVITY	TS.	TOPSOIL											
GW	GROUND WATER	VST	VANE SHEAR TEST											
MED.	MEDIUM	V.	VERY											
		W/	WITH											
BENCH MARK: BL-831, PINC-118+08.052.														
-L2- Sta. 110+81.000, Offset 10.0m LT														
ELEVATION: 58.275m														

## CAUTION NOTICE

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