

N.C.DOT LEGEND SUPPLEMENT

In addition to the terms and abbreviations listed on the N.C.DOT Legend Sheet, the following is used to further describe rock quality on this project.

WEATHERING

Fresh	Rock fresh, crystals bright, few joints may show slight staining. Rock rings under hammer is crystalline.
Very Slight (V.SLI.)	Rock generally fresh, joints stained, some joints may show thin clay coatings if open, crystals on a broken specimen face shine brightly. Rock rings under hammer blows if or a crystalline nature.
Slight (SLI.)	Rock generally fresh, joints stained and discoloration extends into rock up to 25 mm (1 in.). Open joints may contain clay. In granitoid rocks some occasional feldspar crystals are dull and discolored. Crystalline rocks ring under hammer blows.
Moderate (MOD.)	Significant portions of rock show discoloration and weathering effects. In granitoid rocks, most feldspars are dull and discolored, some show clay. Rock has dull sound under hammer blows and show significant loss or strength as compared with fresh rock.
Moderately Severe (MOD.SEV.)	All rock except quartz discolored or stained. In granitoid rocks, all feldspars dull and discolored and a majority show kaolinization. Rock shows sever loss of strength and can be excavated with geologist's pick. Rock gives "clunk" sound when struck. Comparable to hard weathered rock
Severe (SEV.)	All rocks except quartz discolored or stained. Rock "fabric" clear and evident but reduced in strength to strong soil. In granitoid rocks all feldspars are kaolinized to some extent. Some fragments of strong rock usually remain. Comparable to soft weathered rock
Very Severe (V.SEV.)	All rock except quartz discolored or stained. Rock fabric elements are discernible but the mass is effectively reduced to soil status, with only fragments of strong rock remaining. Saprolite is an example of rock weathered to a degree such that only minor vestiges of the original rock fabric remain. Comparable to soil
Complete	Rock reduced to soil. Rock fabric not discernible only in small and scattered concentrations. Quartz may be present as dikes or stringers. Saprolite is also an example. Comparable to soil

ROCK CONTINUITY

Sound-	Core pieces larger than 20 cms.
Slightly Fractured (SLI.FRACT.)-	Core pieces between 10 and 20 cms.
Moderately Fractured (MOD.FRACT.)-	Core pieces between 2.5 and 10 cms.
Extremely Fractured (EXT.FRACT.)-	Core pieces less than 2.5 cms.

JOINT SPACING

Average Discontinuity Spacing (ADS)

The average measured distance (in centimeters) between joints in the same set. Will not apply to individual joints.

JOINT THICKNESS

Average Discontinuity Thickness (ADT)

The average thickness or width of gap in the joint.

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SHEET NO.	TOTAL SHEETS
3	107

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HARDNESS

Very Hard	Cannot be scratched with knife or sharp pick. Breaking of hand specimens requires several hard blows of geologist's pick.
Hard	Can be scratched with knife or pick only with difficulty. Hard blow of hammer required to detach hand specimen
Moderately Hard	Can be scratched with knife or pick. Gouges or grooves to 0.6 cm deep can be excavated by hard blow of point of geologist's pick. Hand specimens can be detached by moderate blow.
Medium	Can be grooved or gouged 0.2 cm deep by firm pressure or knife or pick point. Can be excavated in small chips to pieces about 2.5-cm maximum size by hard blows of the point of a geologist's pick.
Soft	Can be gouged or grooved readily with knife or pick point. Can be excavated in chips to pieces several centimeters in size by moderate blows of a pick point. Small thin pieces can be broken by finger pressure.
Very Soft	Can be carved with knife. Can be excavated readily with point of pick. Pieces 2.5 cm or so in thickness can be broken by finger pressure. Can be scratched readily by fingernail.

STRATUM CORE RECOVERY (REC)

$$\text{Stratum Core Recovery} = 100\% \times \frac{\text{Total length of core recovered within stratum}}{\text{Total length of Stratum}}$$

STRATUM ROCK QUALITY DESCRIPTION (RQD)

$$\text{Stratum Rock Quality Designation (RQD)} = 100\% \times \frac{\text{Total length of sound rock segments recovered longer than 10 cm}}{\text{Total length of stratum}}$$