SOIL DE-COMPACTION AND TESTING REQUIREMENTS

A. SOIL COMPACTION TESTING REQUIREMENTS:

1. SUBGRADE SOILS PRIOR TO THE APPLICATION OF TOPSOIL (SEE PERMANENT SEEDING AND STABILIZATION NOTES) FOR TOPSOIL REQUIREMENTS) SHALL BE FREE OF EXCESSIVE COMPACTION TO A DEPTH OF 6.0 INCHES TO ENHANCE THE ESTABLISHMENT OF PERMANENT VEGETATIVE COVER.

2. AREAS OF THE SITE WHICH ARE SUBJECT TO COMPACTION TESTING AND/OR MITIGATION ARE GRAPHICALLY LIMITED ON THE CERTIFIED SOIL EROSION CONTROL PLAN.

3. COMPACTION TESTING LOCATIONS ARE DEPICTED ON THIS PLAN. LOCATION IS SHALL BE USED TO COMPLETE THE COMPACTION MITIGATION FORM AVAILABLE FROM THE LOCAL SOIL CONSERVATION DISTRICT. THIS FORM MUST BE FILLED OUT AND SUBMITTED PRIOR TO ISSUING A CERTIFICATE OF COMPLIANCE FROM THE DISTRICT.

4. IN THE EVENT THAT TESTING INDICATES COMPACTION IN EXCESS OF THE MAXIMUM THRESHOLDS INDICATED FOR THE SPECIFIED TESTING METHODS (SEE DETAILS BELOW), THE CONTRACTOR/OWNER SHALL HAVE THE OPTION TO PERFORM EITHER (1) COMPACTION MITIGATION OVER THE ENTIRE MITIGATION AREA IDENTIFIED ON THE PLAN (EXCLUDING EXEMPT AREAS), OR (2) PERFORM ADDITIONAL MORE DETAILED TESTING TO ESTABLISH THE LIMIT OF EXCESSIVE COMPACTION WHEREUPON ONLY THE EXCESSIVELY COMPACTED AREAS WOULD REQUIRE COMPACTION MITIGATION. ADDITIONAL DETAILED TESTING SHALL BE PERFORMED BY A TRAINED, LICENSED PROFESSIONAL.

B. COMPACTION TESTING METHODS:

1. PROBING WIRE TEST (SEE DETAIL)

2. HAND-HELD PENETROMETER TEST (SEE DETAIL)

3. TURE BULK DENSITY TEST (LICENSED PROFESSIONAL REQUIRED)

4. NUCLEAR DENSITY TEST (LICENSED PROFESSIONAL REQUIRED)

5. NOTE: ADDITIONAL TESTING METHODS WHICH CONFORM TO ASTM STANDARDS AND SPECIFICATIONS, AND WHICH PRODUCE A DRY WEIGHT, SOIL BULK DENSITY MEASUREMENT MAY BE ALLOWED SUBJECT TO DISTRICT APPROVAL.

6. DETAILED REQUIREMENTS FOR EACH COMPACTION TESTING METHOD CAN BE FOUND IN SECTION 10 "STANDARD FOR LAND GRADING" OF THE NJ STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL, LATEST EDITION.

7. SOIL COMPACTION TESTING IS NOT REQUIRED IF/WHEN SUBSOIL COMPACTION REMEDIATION (SCARIFICATION/TILLAGE OF MINIMUM DEPTH OF 6INCHES) IS PROPOSED AS PART OF THE SEQUENCE OF CONSTRUCTION.

C. PROCEDURES FOR SOIL COMPACTION MITIGATION:

1. PROCEDURES SHALL BE USED TO MITIGATE EXCESSIVE SOIL COMPACTION PRIOR TO PLACEMENT OF TOPSOIL AND ESTABLISHMENT OF PERMANENT VEGETATIVE COVER.

2. RESTORATION OF COMPACTED SOILS SHALL BE THROUGH DEEP SCARIFICATION/TILLAGE OF MINIMUM DEPTH, WHERE THERE IS NO DAMAGE TO UNDERGROUND UTILITIES (CABLES, IRRIGATION SYSTEMS, ETC.). IN THE ALTERNATIVE ANOTHER METHOD AS SPECIFIED BY A NEW JERSEY LICENSED PROFESSIONAL ENGINEER (NJPE) SUBSTITUTED SUBJECT TO DISTRICT APPROVAL.

NOTE: SOIL SHOULD BE MOIST BUT NOT SATURATED. DO NOT TEST WHEN SOIL IS EXCESSIVELY DRY OR SUBJECT TO FREEZING TEMPERATURES. SLOW, STEADY DOWNWARD PRESSURE USED TO ADVANCE THE WIRE.

* WIRE MAY BE RE-INSERTED IF/WHEN AN OBSTRUCTION (ROCK, ROOT, DEBRIS) IS ENCOUNTERED.

RECORD DEPTH OF PENETRATION WHEN WIRE DEFORMS. MINIMUM DEPTH OF 6" TO PASS TEST. EITHER PREMEDIATE OR PERFORM THE NEXT TEST.

6" MIN. VISIBLE MARK ON WIRE AT DEPTH

PROBING WIRE TEST
15.5 GA. STEEL WIRE (SURVEY FLAG)
N.T.S.

NOTE: SOIL SHOULD BE MOIST BUT NOT SATURATED. DO NOT TEST WHEN SOIL IS EXCESSIVELY DRY OR SUBJECT TO FREEZING TEMPERATURES. SLOW, STEADY DOWNWARD PRESSURE USED TO ADVANCE THE PROBE MEASURE DEPTH WHEN GAGE READING READING 300 PSI OR DEPTH OF 6"

GAGE READING 300 PSI OR LESS AT 6"

6" MIN. VISIBLE MARK ON SHAFT AT DEPTH

* PENETROMETER MAY BE RE-INSERTED IF/WHEN AN OBSTRUCTION (ROCK, ROOT, DEBRIS) IS ENCOUNTERED.

USE CORRECT SIZE TIP FOR SOIL TYPE

HANDHELD SOIL PENETROMETER TEST
N.T.S.

LEGEND

SOIL COMPACTION TESTING AREAS

RECOMMENDED SOIL COMPACTION TEST LOCATION (APPROX. 1 PER/5 ACRE)

COMPACTION TEST LOCATION (TYP.)

TESTING NOT REQUIRED WITHIN 20' AREA AROUND FOUNDATION W/ BASEMENT

12' AREA AROUND FOUNDATION WITH CRAWL SPACE OR SLAB

A. SINGLE FAMILY UNIT

B. TOWNHOUSE BUILDING

C. MULTI-FAMILY HOUSING OR OTHER NON-RESIDENTIAL BUILDING/STRUCTURE

TYPICAL SOIL COMPACTION TESTING LOCATIONS
N.T.S.

GRAPHIC SCALE 1 inch = 150 ft.