Colorado Procedure – Laboratory 3201-10

Standard Method of Test for

Continuous Penetration Test

1. SCOPE

1.1 This method describes a procedure for driving a washer to obtain a measure of the resistance of the soil to penetration.

2. APPARATUS

2.1 Washer Assembly - The washer shall be two inches in diameter and not less than 1/8 inch in thickness with a center hole not more than 13/16 inch in diameter. The drive shoe for the washer shall be of the same diameter as the drive rod ("A" rod) and shall have the dimensions indicated in the attached drawing (See Figure No.1).

3. PROCEDURE

3.1 With the washer mounted on the drive shoe and resting on the ground surface, drive the washer with blows from the 140 lb. hammer falling 30 inches until the rate of penetration reaches 120 blows per foot.

NOTE 1: The height of hammer fall may be visually estimated by the hammer operator.

3.2 Record the number of blows required to effect each foot of penetration.

NOTE 2: If less than 1 foot is penetrated at the end of the drive, the log shall state the number of blows and the fraction of 1 foot penetration.

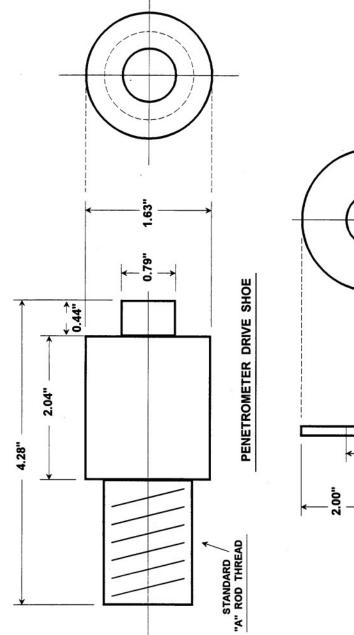
3.3 Record blow counts on CDOT Form #334, Penetrometer Log.

3.4 Plot data from the test in graph form showing depth at which each blow count was obtained as a function of the blow count obtained, for each foot of penetration.

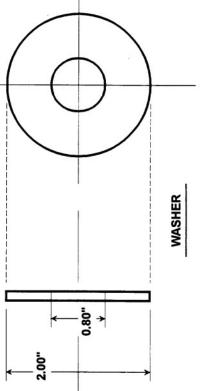
4. REPORT

4.1 Record in the field the data obtained from penetration tests and include the following:

- 4.1.1 Name and location of job.
- 4.1.2 Date of penetration test.
- 4.1.3 Surface elevation (if available).
- 4.1.4 Names of crewmen.
- 4.1.5 Centerline station and offset (if available).
- 4.1.6 Number of blows per foot.



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Figure