



## Standard Test Procedures Manual

Section: SOILS

Subject: CALIFORNIA BEARING RATIO  
SAMPLING

### 1. SCOPE

#### 1.1 Description of Test

This method describes the sampling of the subgrade for California Bearing Ratio (C.B.R.). The resulting information is used for pavement design thickness.

### 2. APPARATUS AND MATERIALS

#### 2.1 Equipment Required

A suitable rig equipped with a 150 mm auger.

Large cotton bags (with tags).

### 3. PROCEDURE

#### 3.1 Test Procedure

Take a 35 kg sample at every third group index sample location, spacing may be increased on projects where the material is found to be very uniform. The district materials engineer or his designate will advise on the spacing of sampling.

Extreme care must be taken to ensure the sample is not contaminated with prepared Subgrade material (top 5 - 15 cm).

Take a group index sample and C.B.R. sample from the same hole. The group index sample is taken first, then enlarge the hole to obtain the C.B.R. sample. Ensure neither sample is contaminated from loose surface materials.

Record control section, station and offset at which the sample was taken on two tags. Place one tag inside the bag and attach the other to the outside of the bag.

Keep samples dry while stored in the field and transport to the district lab at earliest opportune time. A special trip is not required.

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## 4. RESULTS AND CALCULATIONS

### 4.1 Reporting Results

Record control section, hole number, stationing and offset for further testing as proctor density is completed in the district lab and the C.B.R. testing is completed at the central lab in Regina.

## 5. ADDED INFORMATION

### 5.1 General

Refer to diagram in STP 104-5 for sampling procedure.

C.B.R. sampling is required on all subgrade types with the exception of clean sands.

# Standard Test Procedures Manual

STP 104-6

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## APPROVAL SHEET

New    Revision   X   Date of Previous Document 82-04-01

Effective Date:   -  

Description of Revision (Reason for Revision):

Format of test procedure updated.

Review/Implementation Process:

Reviewed by the Materials Section of the Technical Standards and Policies  
Branch.

Other Manuals/Policies Affected:

Nil

Follow Up/Training Required:

Nil

Comments/Concerns/Implications (Budget/Environment/Stakeholders):

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Electronic File Updated  
Update Mailed

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