# 4510701 PRESTRESSED SOIL ANCHORS INTERNAL/INDUSTRY REVIEW COMMENTS

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Comments: (9-28-16)

451-7.1 "Perform creep testing and performance testing at the beginning of the anchor installation, prior to installation of the remaining soil anchors, unless directed otherwise by the Engineer. The purpose of these initial tests is to verify the Contractor's installation procedures, the performance of the bond length and, the calibration of testing Equipment." The text implies that tests are done in the initial installation, but further on the text says the Dept wants to test 5% and 10% of anchors. This would imply that testing will be done randomly throughout the installation. Suggest the spec. clarify that an initial test be done on the at some point within the first "x" anchors installed and then 5/10% after that. The text also says when an anchor is selected to be tested (initial or the 5/10%) the installation of remaining anchors is stopped. Please clarify if this is for the initial tests or all tests.

### Response:

## Art Berger

Comments: (10-11-16)

1. 451-7.1

451-7.1 General: Test each prestressed soil anchor. Perform performance tests as follows: The Engineer will select the prestressed soil anchors to be performance tested and those to be creep tested and, at his discretion, may increase or decrease the number of tests.

An the first two soil anchors installed on the project prior to the grouting of any additional soil anchors. The purpose of these initial tests is to verify the Contractor's installation procedures and the performance of the bond length. Perform creep testing and performance testing at the beginning of the anchor installation, prior to installation of the remaining soil anchors, unless directed otherwise by the Engineer. In projects with multiple anchor row levels, the Engineer may request performance and creep testing at the beginning of the installation of soil anchors for subsequent levels. The purpose of these initial tests is to verify the Contractor's installation procedures, the performance of the bond length and other calibration of testing equipment.

Perform creep testing as follows:

#### Response:

## 2. 451-7.1(3)

Calendar 4510701 All Jobs

less, or calibrated load cell with readout box, to measure the applied load. Ensure that the jack and pressure gauge are calibrated by an independent firm as a unit, and that the calibration is performed within 4560 working days of the date submitted.

3. When Provide an electrical resistance load cells will and readout to be

3. When Provide an electrical resistance load cells will and readout to be used forwhen performing a creep test. Load cell may also be used in performance and proof tests, at the Contractor's discretion. eEnsure that the load cell is calibrated by an independent firm and that the calibration is performed within 4560 working days of the date submitted. Obtain the Engineer's approval of the calibration before testing commences. In case of disagreement between the load cell and pressure gage, use the load cell measurement.

# Response:

# 3. 451-7.1, last paragraph

If, at any time, a pressure gauge, reference pressure gauge, or load cell is repaired or replaced, obtain the Engineer's approval of calibration data of the repaired or the new measuring device (load cell or pressure gauge, or reference gauge) prior to resuming testing.

Perform additional performance tests, at no expense to the Department, on the first two soil anchors using a new measuring device to verify the calibration of the equipment.

# Response:

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