DATE: December 6, 2018

TO: Division Engineers, Consultant Engineering Firms, and Ready-Mix Concrete Producers

FROM: Christopher A. Peoples, PE
State Materials Engineer

SUBJECT: Pre-requisite Requirements – Concrete Field Technician Certification

Obtaining a NCDOT Concrete Field Technician certification requires successful completion of two written examinations along with performance examinations of seven different concrete field tests. These requirements are demanding when considering the training class is three days in length (including examinations). Based on six Concrete Field Training Classes recently held, the passing rate is 71% and currently, the passing rate for “re-test” exams is only 31%.

As with any training class we offer, our goal is for attendees to develop a minimum level of proficiency and competence regarding the certification. The addition of a pre-requisite requirement is designed to improve knowledge and overall efficiency for first time attendees that have no experience testing concrete. Ultimately the goal is to improve the passing rate for students and reduce time need for re-tests. The pre-requisite requirement only applies to first time attendees to the Concrete Field Technician training class. This training is not required for students who already have an ACI Concrete Field Testing Technician - Grade I certification.

The attached document must be used to report the tests performed during the pre-requisite process. Once completed, the document should be sent to Sandra Williams (shwilliams3@ncdot.gov or fax 919-733-8742) prior to the student attending class. Additional information (i.e. manual, study guide, videos, etc.) is provided on our website for the student to study and prepare for the concrete field technician training class:

https://connect.ncdot.gov/resources/Materials/Pages/ConcreteCertificationSchools.aspx
Please contact Jim Sawyer or your Area Materials Engineer should you have any questions.

jcs

Attachment

cc:  Tim Little, PE
     Ron Hancock, PE
     Lamar Sylvester, PE
     Sherrell Williams
     District Engineers
     Resident Engineers
     Carolinas Ready Mixed Concrete Association, Inc
     Todd Whittington, PE
     Sam Frederick
     Jim Sawyer, PE
     Rusty Tucker
     Mark Thomas
     Darrell Lumley
North Carolina Department of Transportation  
Materials and Tests Unit  
Concrete Field Technician – Pre-requisite Checklist  

Technician: ____________________________  S.S.N. ____________________________  
Print (First)  (Middle)  (Last)  (Last Four Digits)  

Division (NCDOT): ____________  Company (Non-DOT): ____________________________  
Registered Class Date: ____________  Registered Class Location: ____________________________  

As a minimum, any technician attending the Concrete Field Technician training course for the first time must complete the following tasks prior to attending the course (not required for experienced technicians renewing a concrete certification):  
- Review presentations and testing procedure videos (located on the M&T website)  
- Perform practice tests (designated below) while being observed by an ACI and NCDOT certified Concrete Field Technician.  
- Send completed pre-requisite checklist to Sandra Williams prior to attending certification class (email-shwilliams3@ncdot.gov or fax 919-733-8742).  

<table>
<thead>
<tr>
<th>Concrete Test (perform a minimum of 6 times)</th>
<th>Date Range Tests Performed</th>
<th>Trainee Initials</th>
<th>*Observed by (Print - Name and ACI and NCDOT Certification Numbers)</th>
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<tbody>
<tr>
<td>Slump (ASTM C143)</td>
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<tr>
<td>Temperature (ASTM C1064)</td>
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<tr>
<td>Air Content (Pressure Method) (ASTM C231)</td>
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<td>Test Specimens (ASTM C31)</td>
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<tr>
<td>Unit Weight (ASTM C138)</td>
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<tr>
<td>Air Content (Volumetric Method) (ASTM C173)</td>
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Any person who falsifies information on the Pre-requisite Checklist will have automatic removal of NCDOT Certification(s) and a formal request of ACI Certification removal will be sent to the ACI Carolinas Board of Directors.

* I certify that the above named technician has satisfactorily completed all listed requirements on this checklist. This was done under an ACI and NCDOT certified Concrete Field Technician while adhering to ASTM testing procedures. I further certify that the above named technician has reviewed all required testing procedures, and has general understanding of concrete testing and specifications.

** As final review of the pre-requisite process, I certify that the above training/review process has been completed.

Date  **Printed Name of Proctor  

**Signature of Proctor