

**NEW ENGLAND TRANSPORTATION CONSORTIUM  
QUARTERLY PROJECT PROGRESS REPORT**

**A. PROJECT NUMBER AND TITLE: NETC 13-3**

**B. PRINCIPAL INVESTIGATOR(s) & UNIVERSITY(s): Eshan V. Dave, University of New Hampshire**

**C. WEB SITE ADDRESS (If one exists):**

**D. START DATE (Per NETC Agreement): 3/27/2015**

**E. END DATE (Per NETC Agreement): 3/31/2016** (A no-cost extension has been filed for requesting change of end date)

**F. ANTICIPATED COMPLETION DATE: 9/30/2016**

**G. PROJECT OBJECTIVES:**

- (1) Review of current QA process used by New England DOTs for precast and prestressed concrete elements (PCE/PSE).
- (2) Review of QA specifications for PCE/PSE.
- (3) On the basis of the review and through working with the technical review committee of the project, develop common acceptance standards for PCE/PSE to be used by NETC constituents.
- (4) Develop a cost-sharing mechanism to accompany the common acceptance standards.
- (5) Identify agencies and contractors to conduct pilot implementation of the common acceptance standards.
- (6) Develop a list of additional materials and services for which common acceptance standards might be beneficial and feasible.

**H. REPORT PERIOD: 1/1/2016 – 3/31/2016**

**I. ACCOMPLISHMENTS THIS PERIOD:**

In the first quarter of 2016, a major research effort was on Task-2 of the project that deals with developing first version of the regionalized QA process for precast and prestressed elements used in highway construction. The regionalized QA process is being developed for elements in three primary categories: non-structural precast elements (examples: catch basins, drop inlets, guard barriers), structural pre-cast elements (examples: precast bearing piles, MSE wall, precast gravity walls) and prestressed elements. The specifications are being developed in form of series of tables (spreadsheets) for plant inspection and certifications, and agency inspection and testing. The plant inspection and certification includes requirements for: Inspector office requirements, QC technician/personnel qualification, quality service manual/quality control manual (testing and sampling frequency). The agency testing and inspection specifications include: pre-pour inspection (inspection activities and documentation), sampling and testing during concrete pouring, post-pour inspection (inspection activities and documentation) and curing requirements.

Researchers had a web conference meeting with the project technical advisory committee on March 3<sup>rd</sup> 2016. During this meeting researchers presented the findings of the review of QA processes from various New England agencies (Task-1 findings) and also made a proposal for the regionalized QA processes (Task-2 preliminary proposal). During the meeting the agency representatives provided feedback on a number of

items for modifying the draft report from Task-1. A revised report has been prepared and is currently under editorial review. The minutes from the web meeting as well as the presentation slides are attached with this report as appendix.

**J. PROBLEMS ENCOUNTERED (If any):**

As indicated in the last quarterly report, the project is currently behind schedule. The project fell behind due to longer than anticipated time it took for researchers to coordinate visits to various DOTs for QA review and interviews. A no-cost extension (NCE) was submitted by the researchers on February 29<sup>th</sup> 2016 requesting the project end date to be extended to 30<sup>th</sup> September 2016.

**K. TECHNOLOGY TRANSFER ACTIVITIES:**

None.

**L. STATUS BY TASK:**

**Task 1: State of the Practice Review:** Revised final report for Task-1 is under final preparation (editorial changes are being made).

**Task 2: Development of Common Acceptance Standards for PCE/PSE:** On basis of Task-1 activities preliminary recommendations for common acceptance standards were presented to the project review committee on March 3<sup>rd</sup>. The standards are now developed in set of spreadsheets and are being modified on basis of March 3<sup>rd</sup> meeting feedback from the committee.

**Task 3: Reporting and Technical Committee Meetings:** This quarterly report will serve as the next submission.

**M. PERCENT COMPLETION OF TOTAL PROJECT: 67 %**

**N. ACTIVITIES PLANNED FOR NEXT QUARTER:**

- Submission of the draft common acceptance standards for agencies to provide feedback
- Revision of the common acceptance standards on basis of agency feedback
- Selection of agencies and manufacturers for pilot implementation of common acceptance standards

**O. FINANCIAL STATUS:**

**As of: 4/4/2016**

**Total Project Budget: \$ 100,000**

**Total Expenditures: \$ 38,000**

**Note: This report should not require more than 2-3 pages & should be e-mailed to the NETC Coordinator so as to arrive no later than three (3) working days after the end of each calendar quarter.**