

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

A. PROJECT NUMBER AND TITLE:

NETC 13-1: Development of High Early-Strength Concrete for Accelerated Bridge Construction Closure Pour Connections

B. PRINCIPAL INVESTIGATOR(s) & UNIVERSITY(s):

Sergio F. Breña (PI) – University of Massachusetts Amherst
Scott A. Civjan (Co-PI) – University of Massachusetts Amherst

C. WEB SITE ADDRESS (If one exists):

D. START DATE (Per NETC Agreement): September 01, 2014

E. END DATE (Per NETC Agreement): April 02, 2016

F. ANTICIPATED COMPLETION DATE: August 31, 2016

A no cost extension is expected to be requested to accommodate the current coordination contract that NETC has with the University of Vermont. The proposed project period was for 24 months.

G. PROJECT OBJECTIVES:

To develop and validate concrete mixtures capable of developing high early strength without detrimentally affecting their long-term durability. The mixtures are for use in projects using accelerated bridge construction methods.

H. REPORT PERIOD: September 01, 2014 – September 30, 2014

I. ACCOMPLISHMENTS THIS PERIOD:

- Initiated the literature review by collecting and summarizing research reports and journal papers.
- Reviewed ASTM/AASHTO materials testing standards that are applicable to the project.
- Prepared a survey that was sent to New England State DOTs and precast/prestressed producer members of the PCI Northeast Bridge Technical Committee.
- Met at the PCI Northeast Bridge Technical Committee to discuss project and seek feedback.

J. PROBLEMS ENCOUNTERED (If any):

No problems encountered to date.

K. TECHNOLOGY TRANSFER ACTIVITIES:

No technology transfer activities were performed.

L. STATUS BY TASK:

Task 1: Literature Search – 40% complete

Task 2: Develop Mixture Design Specification – Work for this task has not started (0%)

Task 3: Develop Mix Design – Work for this task has not started (0%)

Task 4: Test Mixture – Work for this task has not started (0%)

M. PERCENT COMPLETION OF TOTAL PROJECT: 5 %

N. ACTIVITIES PLANNED FOR NEXT QUARTER:

- Meet with NETC Project Technical Committee
- Compile results from survey.
- Prepare concrete mixture specifications after receiving feedback from surveys and meetings with technical committees (PCI-NE Bridge Tech and NETC Project Technical Committee)

O. FINANCIAL STATUS:

As of: 09, 30, 2014

Total Project Budget: \$ 174,923

Total Expenditures : \$ 4,276

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.