



CAIT

Center for Advanced Infrastructure & Transportation
Rutgers, The State University of New Jersey

QUARTERLY PROGRESS REPORT

Project Title:	A Proposal for the Development of High Performances Concrete for Transportation Structures in New Jersey		
RFP NUMBER:			NJDOT RESEARCH PROJECT MANAGER: Tony Chmiel
TASK ORDER NUMBER/Study Number: 62 / 4-23806	PRINCIPAL INVESTIGATOR: Hani Nassif		
Period Starting: (Start Date of Study) 5/10/1999	Period Ending: 6/30/2000		

Task	% of Total	% of Task this quarter	% of Task to date	% of Total Complete
Collection and Synthesis of Data	5%	0%	96%	4.8%
Selection of Mix Proportions and Test Methods	30%	64%	95%	28.5%
Evaluation of Mechanical and Long-term Properties	25%	0%	70%	17.5%
Collection of Data and Preparation of Samples During the Field Samples	15%	0%	15%	2.25%
Evaluation of Field Samples	15%	0%	0%	0%
Preparation of Specifications for HPC	5%	0%	0%	0%
Final Report	5%	0%	0%	0%
TOTAL	100%			53.05%

1. Progress this quarter by task:

- A. Mixes of Group C (w/c=0.3) and Group D (w/c=0.33) are performed to achieve a strength of 10,000 psi.
- B. Contact with NJDOT laboratories personal have been initiated. Few Chloride Permeability tests are underway. Students are performing tests under supervision of NJDOT personal. However, the logistics of the tests is complicated. It takes the students at least 3 days to perform one RCP test. It is necessary to purchase an in-house equipment to allow the students to work on multi tasks and speed-up the process of checking the RCP for all mixes. Rutgers Team has allocated about \$10k for the purchase of 4 RCP cells and equipment.
- C. Arrangements are being made with RMC suppliers to develop a field mix and to perform tests on field specimen. The field work was postponed per request from NJDOT on March 8 meeting until after the RCP tests are performed and also to allow for NJDOT personal to provide names of specific contractors that are currently working on HPC Projects.

2. Proposed activities for next quarter by task

- A. Continue mixing group C and D with the same parameters as the group A and B mixes.

3. List of deliverables provided in this quarter by task (product date)

4. Progress on Implementation and Training Activities

N/A

5. Problems/Proposed Solutions

- A. Need to speed RCP tests by purchasing equipment and having it in house. Each test takes about 3 days.

6. Budget Summary

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Total Project Budget(# of years)	1.5 yr	\$70,814.00
Total Project Expenditure to date		
% of Total Project Budget Expended		%
Task Order Number/Study Number:		62 / 4-23806
Current Task Order Budget (# of years)	Yr. 1.5	\$70,814.00
Actual Expenditure to date against current task order		
% of current task order budget expended		%

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