

**Quarterly Progress Report – December 2008**  
**For the period October 1, 2008 to December 31, 2008**  
**ISU/FHWA Cooperative Agreement No. DTFH 61-01-H-00011**  
**Pooled Fund Project**

**Project Dates:** March 6, 2008 – March 5, 2010

**Project Title:** Development of Performance Properties of Ternary Mixtures:  
Laboratory Study on Concrete, Addendum 241

**ISU Principal Investigator:** Peter Taylor, 515-294-8103, email: ptaylor@iastate.edu

**Uof U Principal Investigator:** Paul Tikalsky, 801-581-6931 email: tikalsky@civil.utah.edu

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**Progress Report:**

|  |     |
|--|-----|
| Project is on schedule                     | Yes |
| Project is within budget                   | Yes |
| Significant changes in project description | No  |

**Problems** (current or anticipated):

**Products and tangible results this quarter** (reports/articles written, oral reports/interviews given):

**Interaction with Technical Monitor and/or Project Advisory Committee:**

**Brief summary of this quarter’s research and activities pertaining to the project:**

- Sample preparation at Utah is nearly complete. Test data are being collected.
- The freeze thaw chamber at ISU has been commissioned and test mixtures have been started
- TAC Meeting is being planned for Fall 09

**Main emphasis for next quarter:**

- Continue producing concrete specimens and testing them according to the workplan.
- Get Phase III field testing defined and under contract

| No. | Task Description                        | Completion Date Expected | % completed |
|-----|---|--------------------------|-------------|
| 1   | Determine matrix of concrete mixtures   | July 2008                | 100         |
| 2   | Concrete performance properties         | September 2009           | 60          |
| 3   | Temperature effects                     | May 2009                 | 10          |
| 4   | Investigate existing ternary concrete   | September 2009           | 0           |
| 5   | Analysis of data                        | December 2009            | 10          |
| 6   | Trial mixture designs for field studies | December 2009            | 0           |
| 7   | Summary report                          | March 2010               | 0           |

**QUARTERLY BUDGET REPORT FOR**  
**Project Title: Performance Properties of Ternary Mixes**

**DATA FOR THE QUARTER ENDING DECEMBER 31, 2008**

| <b>BUDGET CATEGORY<br/>DESCRIPTION</b>  | <b>AMOUNT<br/>BUDGETED</b> | <b>EXPENDITURES<br/>THIS PERIOD</b> | <b>CUMULATIVE<br/>EXPENDITURES</b> |
|---|----------------------------|-------------------------------------|------------------------------------|
| SALARIES/WAGES                          | \$85,413.00                | \$982.04                            | \$103,304.03                       |
| BENEFITS                                | \$17,294.00                | \$205.43                            | \$13,567.99                        |
| TRAVEL                                  | \$25,000.00                | \$0.00                              | \$17,118.02                        |
| SUPPLIES/MATERIALS                      | \$4,500.00                 | \$0.00                              | \$2,308.67                         |
| SUBCONTRACTS(subj to IDC)               | \$50,000.00                | \$0.00                              | \$50,000.00                        |
| SUBCONTRACTS(not subj to)               | \$248,806.00               | \$0.00                              | \$248,806.00                       |
| OTHER DIRECT COSTS                      | \$33,026.00                | \$0.00                              | \$22,184.27                        |
| <b>TOTAL DIRECT COSTS</b>               | <b>\$464,039.00</b>        | <b>\$1,187.47</b>                   | <b>\$457,288.98</b>                |
| INDIRECT COSTS (University<br>Overhead) | \$55,961.00                | \$381.35                            | \$54,205.57                        |
| <b>CATEGORY TOTALS</b>                  | <b>\$520,000.00</b>        | <b>\$1,568.82</b>                   | <b>\$511,494.55</b>                |

**NOTES:**

THE ISU SPONSORED PROGRAM ACCOUNTANT IS THE ONLY PERSON ABLE TO CERTIFY THE ACCURACY OF FINANCIAL DATA. THE INFORMATION PROVIDED ABOVE IS BASED ON DATA AVAILABLE TO DEPARTMENT PERSONNEL AND MAY DEVIATE SLIGHTLY FROM FINANCIAL REPORTS SUBMITTED BY OFFICIAL ISU ACCOUNTANT.