Quarterly Progress Report For the period January 1, 2011 to March 31 2011 TPF-5(224)

Project Dates: November 11, 2009 – June 30, 2012

Project Title: Investigation of Deterioration of Joints in Concrete Pavements, Addendum 361

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

Progress Report:

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

Problems (current or anticipated):

None

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

• A presentation has been developed that discusses the current state of knowledge. It has been used in team meetings, discussions with IA DOT and at several sessions in IA, and KS.

Interaction with Technical Monitor and/or Project Advisory Committee:

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

- Responses from the questionnaire have been reviewed and sites for coring have been selected
- Indiana has had core samples delivered to their lab fur further investigation
- Work has continued on the permeability rig
- A second round of modified C666 tests have been started.
- Plans are being developed to investigate moisture content of cores, and to assess the effects of sawing variables on damage.
- The assessment of drying and wetting in concrete elements has been documented by the Indiana research team; the work clearly shows the importance of surface tension, viscosity, and equilibrium relative humidity on the rate of absorption and the drying processes.
- Samples have been cast and testing is showing significant benefits of sealers as well as complex behavior from the sealers requiring a more complex testing protocol be developed to assess sealer behavior.
- Imaging has been done on the samples with and without the sealers after exposure to salts

Main emphasis for next quarter:

- Continue work on all tasks above
- A report outline new freezing-saturation series of data

		Completion Date	% completed
No.	Task Description	Expected	
1	Field sampling and testing	December 2009	50
2	Develop permeability test	February 2010	25
3	Laboratory tests	March 2010	40

QUARTERLY BUDGET REPORT FOR Project Title: Investigation of Deterioration of Joints in Concrete Pavements

DATA FOR THE QUARTER ENDING MARCH 31, 2011

BUDGET CATEGORY	AMOUNT	EXPENDITURES	CUMULATIVE
DESCRIPTION	BUDGETED	THIS PERIOD	EXPENDITURES
SALARIES/WAGES	\$8,367.00	\$654.75	\$8,388.48
BENEFITS	\$2,887.00	\$190.91	\$2,138.67
TRAVEL	\$650.00	\$0.00	\$2,052.70
SUPPLIES/MATERIALS	\$1,000.00	\$0.00	\$2,107.54
SUBCONTRACTS(subj to IDC)	\$50,000.00	\$4,915.76	\$4,915.76
SUBCONTRACTS(not subj to)	\$49,963.00	\$0.00	\$0.00
OTHER DIRECT COSTS	\$4,586.00	\$0.00	\$8,258.05
TOTAL DIRECT COSTS	\$117,453.00	\$5,761.42	\$27,861.20
INDIRECT COSTS (University			
Overhead)	\$17,547.00	\$2,484.17	\$5,969.29
CATEGORY TOTALS	\$135,000.00	\$8,245.59	\$33,830.49

NOTES:

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