**Federal Contract # DTFH6117D0001 – Task Order # 693JJ318F000303**

**LONG-TERM INFRASTRUCTURE PERFORMANCE PROGRAM (LTIP) TEAM**

**PROGRESS REPORT NO. 9**

**Report Period: July 01, 2019 – July 31, 2019**

Prepared For:

**Federal Highway Administration**

Prepared By:



**A. Account of work performed in this period**

**1. Subtask 1.2 - Monthly Meetings between the Contractor and FHWA/LTIP Group**

The Rutgers team had a conference call meeting with FHWA LTIP team in July 2019.

**2. Subtask 3 - Construction, Material Testing, Instrumentation, and Lab Preparation**

The Rutgers team accomplished the following tasks for the month of July:

* The deck was totally poured and cured. SHM data has been continuously collected.
* ARA Company attended the BEAST site to maintain and fine-tune the BEAST system.
* NJIT continued experimenting the lab specimens (such as compressive, flexural, split, etc.)

**B. Work to be accomplished during the next period**

**1. Subtask 1.2 - Monthly Meetings between the Contractor and FHWA/LTIP Group**

The Rutgers team will have a monthly conference call with the FHWA/LTIP group in August.

**2. Subtask 3 - Construction, Material Testing, Instrumentation, and Lab Preparation**

* For the monthly period of August, the Rutgers team will continue fine-tuning the BEAST.

**3. Subtask 4 - Phase 1 Accelerated Testing (Unconditioned State Experiments)**

* Toward the end of August, it is anticipated that the Rutgers team will kick in the Phase I accelerated testing and data collection.

**4. Subtask 10 – Quarterly Progress Report**

The Rutgers team will prepare the electronic version of the monthly progress report for the month of July and submit it to FHWA.

**C. Problems/Recommended Solutions**

No problems encountered during this period.

**D. How the results of the work performed supports one or more of the FHWA, DOT, and LTIP Goals**

All of the work conducted under this task order aims to ensure that the accelerated full-scale testing at the BEAST facility will be conducted in the right way in order to meet the overall objectives of the LTIP program. With the proper specimen design as well as the appropriate instrumentation and periodic data collection campaigns on the specimen, this will result in satisfying the primary objectives of the LTIP program, inclusive of:

(1) Establish the long-term performance of bare reinforced concrete bridges decks, common bridge joints, and various steel coatings under realistic environmental, live load, and maintenance-related influences

(2) Establish the long-term performance and effectiveness of various common overlay systems applied to aging reinforced concrete bridges decks (and perhaps some intervention/repair strategies for other bridge components) under realistic environmental, live load, and maintenance-related influences

(3) Determine and quantify the ability of various nondestructive evaluation, global sensing approaches, and their integration to identify and track deterioration within bare reinforced concrete bridges decks and decks protected with common overlay systems

**E. Purchases and Rentals**

Per attached, Rutgers purchased a number of items during the instrumentation and pouring of deck.

**F. Travel Details for Reporting Period**

None

**G. A tabulation of the current and cumulative costs** (cost shown includes benefits and overhead)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Institution | Current Expenditures  07/01/2019-07/31/2019 | | Cumulative Expenditures  10/18/2018-07/31/2019 | |
| Labor | Other Costs | Labor | Other Costs |
| Rutgers, the State University of New Jersey | $ 2,489.00 | $ 48,748.36 | $ 50,992.99 | $ 50,063.61 |
| New Jersey Institute of Technology (NJIT) | $5,744.67 | $61.30 | $35,477.45 | $2,284.56 |
| Wiss, Janney, Elstner Associates (WJE) | $ - | - | $ 19,171.78 | - |
| Bridge Diagnostics Inc. (BDI) | - | $ 5,043.0 |  | $ 59,975.62 |

**H. Subcontractors’ Progress Report**