# NEW ENGLAND TRANSPORTATION CONSORTIUM QUARTERLY PROJECT PROGRESS REPORT

# A. PROJECT NUMBER AND TITLE:

NETC 20-3 Investigating Thermal Imaging Technologies and UAV to Improve Bridge Inspections

## **B. PRINCIPAL INVESTIGATOR(s) & UNIVERSITY(s):** Kevin Ahearn, PE, AECOM

- C. WEB SITE ADDRESS (If one exists): None
- **D. START DATE** (*Per NETC Agreement*): 2/19/2021
- E. END DATE (Per NETC Agreement): 3/31/2023
- *F.* ANTICIPATED COMPLETION DATE: 3/31/2023

#### G. PROJECT OBJECTIVES:

Develop UAV-based inspection and analysis protocols using infrared thermal imaging to determine the existence and extend of concrete delamination, with emphasis on the underside of bridge decks.

## H. REPORT PERIOD:

3rd Quarter, 2022

## I. ACCOMPLISHMENTS THIS PERIOD:

Task 3 Interim Report was submitted on 7/15/22 and approved at the TC progress meeting on 8/11/22. Task 4 is in progress with an anticipated submission date of 11/23/22.

#### J. PROBLEMS ENCOUNTERED (If any):

None

## K. TECHNOLOGY TRANSFER ACTIVITIES:

None

# L. STATUS BY TASK:

Task	Description	% Complete
Task 1	Desk scan of current technologies	100%
Task 2	Field demonstration of chosen IR/UAV models and data analysis	100%
Task 3	Develop inspection and analysis protocols	100%
Task 4	Draft final report, technology transfer strategy, and toolbox	30%
Task 5	Final report	Not started

# M. PERCENT COMPLETION OF TOTAL PROJECT: 75%

# N. ACTIVITIES PLANNED FOR NEXT QUARTER:

The following activities are anticipated for the next quarter: Task 4 Interim Report will be completed and submitted to TC for review.

# **O. FINANCIAL STATUS:**

As of: October 10th, 2022 Total Project Budget: \$174,931.41 Total Expenditures: \$117,055.16

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.