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PROJECT OVERVIEW REPORT

1. UTC Identifying Number
   69A3551847102

2. Center Identifying Number
   CAIT-UTC-REG 2B

3. Project Title
   Sustainable, Rapid Repair Utilizing Advanced Cementitious Materials

4. Principal Investigator & Contact Information
   Ravi Ranade
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5. Rutgers/CAIT Project Manager
   Patrick Szary, Ph.D.

6. Customer Principal
   John J. Picard, Regional 5 Bridge Maintenance Engineer
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   Buffalo, NY, 14203

7. Project Description
   The primary goal of this proposal is to understand the combined impact of corrosion and earthquake hazards on existing bridges, and the impact of repairs using cementitious composites on the vulnerability of bridges to these hazards. This will be achieved by establishing a probabilistic framework which can then be used to evaluate the impact of rapid and sustainable repairs on the resiliency against the combined effects of other hazards with corrosion.

8. Implementation of Research Outcomes (or why not implemented)
   The intended outcome of the project will be documented by obtaining input from maintenance engineers, by distributing a survey to New York State regional bridge maintenance engineers on their likelihood for adopting the framework and rapid repair using advanced cementitious materials in their regions. A presentation or a webinar will be created to educate engineers about the new methodology.

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9. Impacts/Benefits of Implementation (actual, not anticipated)
   To Be Determined

10. Dates and Budget
    Start date: 10/1/2018
    End date: 9/30/2019
    UTC (CAIT) Dollars: $65,150
    Cost Sharing: $63,266
    Total Dollars: $128,416

11. Keywords
    Engineered cementitious composites, fragility, repair, service life, resiliency, corrosion, deterioration, loss of functionality

12. Web Links (Reports and Project Website)
    https://cait.rutgers.edu/research/sustainable-rapid-repair-using-advanced-cementitious-materials/