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PROJECT OVERVIEW REPORT

1. UTC Identifying Number
   69A3551847102

2. Center Identifying Number
   CAIT-UTC-REG67

3. Project Title
   Enhancing the Resilience of Coastal Box Girder Bridges through Geometric Modifications

4. Principal Investigator & Contact Information
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5. Rutgers/CAIT Project Manager
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6. Customer Principal
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7. Project Description
   The primary goal of this proposal is to enhance the resilience of coastal box girder bridges subject to storm and/or tsunami wave loading through an evaluation of their design geometry. Specifically, the geometry to be studied is the angle of inclination of the web plates, the width of the bottom flange (where a width of zero implies a triangular form), and the integration of the rail/parapet as a structural element. The desired outcome would be to equip coastal bridge designers with resilient strategies for new coastal bridge designs as well as retrofit strategies of existing T-type and box type decks.

8. Implementation of Research Outcomes (or why not implemented)
   The intended outcome of the project is to equip coastal bridge designers with resilient strategies for new designs and retrofits of existing bridges. This outcome will be disseminated in reports, papers, and oral presentations as described previously.

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

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10. Dates and Budget
    Start date: 6/1/2022
    End date: 5/31/2023
    UTC (CAIT) Dollars: $80,000
    Cost Sharing: $80,000
    Total Dollars: $160,000

11. Keywords
    Coastal, resilience, bridges, storm surge, box girder, bridge deck, wave load

12. Web Links (Reports and Project Website)
    https://cait.rutgers.edu/research/enhancing-the-resilience-of-coastal-box-girder-bridges-through-geometric-modifications/