TXDOT'S RESEARCH AND TECHNOLOGY IMPLEMENTATION OFFICE RESEARCH SUPERVISOR SEMI-ANNUAL PROGRESS REPORT

Fiscal Year 2002

Date of This Report	July 25, 2002	Project Number	0-4568	RMC	5

Period Covered by This Report March 28, 2002 through August 31,2002

Project Title Rapid Bridge Replacement Techniques

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Project Start Date March 28, 2002

Approved End Date August 31, 2003

1. REQUESTED CHANGES FOR POSSIBLE PROJECT MODIFICATION

Project Duration: No changes in project duration required at this time.

<u>Project Personnel</u>: Dr. Yong Bai was available and utilized during June, July, and August 2002 to accelerate the first case study. Dr. Bai's credentials and background are construction administration, which make him highly qualified to begin the case studies in this project.

Funding Needs: No additional funding is required at this time.

<u>Work Plan</u>: Changes to the work plan were implemented in Modification No. 2, activated July 8, 2002. Additional changes will probably be required as the project transitions to a pool-funded project. Required changes will be better defined following the planned September 10, 2002 meeting that will be attended by other state DOT's that anticipate fund contributions.

<u>Deliverables Table</u>: The required submittal date for Product P2 in the Deliverables Table dated 6/20/02 will have to be extended. The presentation of Case Study No. 1, Queen Isabella Causeway, will not be complete at the August 15, 2002 meeting due delays caused by TxDOT. Information to be provided by TxDOT and necessary to complete the case study has not been provided to date due to ongoing litigation of the incident. No completion date can be estimated at this time.

2. PROGRAM DEVELOPMENT INFORMATION

This project is currently scheduled to terminate at the end of FY 2003.

3. EQUIPMENT

No equipment is currently scheduled to be purchased under this project agreement.

4. PROGRESS TO DATE, BY TASK

<u>Phase I</u>

Task 1: A large number of national and international articles and sources have been identified and acquired and are currently under review. Contact has been made and input received from U.S. Army Corps of Engineers. Data bases and web sites of other federal organization have been accessed and reviewed. A preliminary list of critical TxDOT bridges has been received and is currently under review. The literature review will continue as additional sites and references become available.

Task 2: The literature review summary presentation of Task 2 is scheduled for August 15, 2002, in Austin, Texas, with TxDOT personnel being the primary audience. A second presentation is scheduled for September 10, 2002 in Austin, Texas, for other state DOT's interested in pool funding of the project. A change in scope of work is anticipated following the September 10th meeting.

<u>**Task 3:**</u> The decision to incorporate the U.S. Army Corps of Engineers in the project as a consultant was made following the June 4, 2002, Austin, Texas, meeting with key TxDOT and TechMRT personnel in attendance. This change to the contract was implemented in Modification No.2 that was activated July 8, 2002. A preliminary strategic plan will be presented at the scheduled August 15th meeting and will be finalized following the September 10th meeting.

<u>Phase II</u>

Task 4: During the next report period, potential repair techniques and procedure identified in Task 1 will be evaluated for recommendation to and use by TxDOT.

Task 5: Initiation of Task 5 was accelerated to start during Phase I with the Queen Isabella Causeway incident being selected as Case Study No. 1 during the June 4th meeting with TxDOT personnel. This acceleration was addressed in Modification No. 2. Acquisition of TxDOT held information about the incident has been slow due to ongoing litigation. Information has been requested and the request is under review the State of Texas Attorney General's Office. Little requested information has been received to date from the state. Inquires have been made to Williams Brothers Construction Co., the incident repair contractor. Initial information has been received from the contractor and evaluated. Additional case studies will be considered and selected during the following report period.

Task 6: Initiation of Task 6 was also accelerated to start during Phase II and was also addressed in Modification No. 2. A review and TxDOT's typical Emergency Response Plan was begun. Questions about contractor incentives have also been raised in discussions with Williams Brothers, the contractor used in the repair of the Queen Isabella Causeway. These efforts will continue during the next report period.

5. PROGRESS ON DEVELOPMENT OF CURRENTLY APPROVED "PRODUCT" DELIVERABLES

Product Deliverable "P2" scheduled for presentation at the August 15th meeting is currently being developed but will only be a partial delivery due to delays in acquisition of necessary information caused by ongoing litigation rising from the Queen Isabella Causeway incident.

6. MEETINGS/CONFERENCES

Weekly TechMRT research team meetings have been and will continue to be held. A joint TxDOT and TechMRT meeting was held on June 4, 2002, to discuss the transition of the project to pool funding. Two follow-on meetings are scheduled. Another TxDOT and TechMRT meeting is scheduled for August 15, 2002, to review preliminary results and to prepare to for the national audience meeting scheduled for September 10th.

7. POSSIBLE CANDIDATES FOR FORMAL PRESENTATIONS AT THE UPCOMING RMC MEETING

Not recommended at this time.

8. MISCELLANEOUS

Nothing at this time.