



## QUARTERLY PROGRESS REPORT

Project Title:	Seismic Analysis of Retaining Walls, Buried Structures, Embankments, and Integral Abutments		
RFP NUMBER: 2000-25	NJDOT RESEARCH PROJECT MANAGER: Mr. Anthony Chmiel		
TASK ORDER NUMBER/Study Number: Task Order No. 127 / 4-26995	PRINCIPAL INVESTIGATOR: Dr. Husam Najm		
Study Start Date: 01/01/2003 Study End Date: 12/31/2003	Period Covered: 2 <sup>nd</sup> Quarter 2003		

Task	% of Total	% of Task this quarter	% of Task to date	% of Total Complete
Literature Review on Seismic Design of Abutments, Retaining Structures, Buried Structures, and Embankments	10	30	50	5
Provide Analysis, Design, and Detailing of Free Standing Abut and Retaining Walls	20	25	22	6
Provide Analysis, Design, and Detailing of Integral (Diaphragm) Abutments	20	25	22	6
Provide Guide Specifications Manual to Assist Designers in Designing Free-Standing and Integral Abutments, Embankments, Buried Structures and Retaining Walls	30	0	0	0
Prepare Progress reports	10	2	4	4
Prepare Technical Memorandum and Final Report	10	0	0	0
<b>TOTAL</b>	<b>100%</b>	<b>13</b>	<b>13</b>	<b>21</b>

1. Progress this quarter by task:  
Run bridge design for several cases comparing proposed and old LRFD criteria. This will include bridges in North, Central, and South Jersey. It will evaluate the impact of soil conditions, EQ intensity, and detailing requirements on typical bridges in those zones and how the design compares with that of the existing specs. A comparison of results and cost will be presented to show the impact of proposed 12-49 provisions of seismic design of bridges in various NJ zones.
2. Proposed activities for next quarter by task:  
Prepare design criteria. Prepare a detailed design example. Work on buried structures.
3. List of deliverables provided in this quarter by task (product date):  
None
4. Progress on Implementation and Training Activities:  
None



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5. Problems/Proposed Solutions:

None

6. Budget Summary\*

Total Project Budget (# of years)	1 Year	\$173,017
Total Project Expenditure to date		\$33,332
% of Total Project Budget Expended		19%
Task Order Number/Study Number:		127 / 4-26995
Current Task Order Budget (# of years)	Year 1	\$173,017
Actual Expenditure to date against current task order		\$33,332
% of current task order budget expended		19%

\* These are approximate expended amounts for the project; these estimates are for reference only and should not be used for official accounting purposes. For a more accurate project accounting please review the quarterly invoice for this project.

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