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Meeting Agenda

ACI 562-0C - Reliability-Based Evaluation

Online Virtual Meeting

October 24, 2020 - 2:00 to 4:00pm (Central)

1. **Call to Order and Welcome**
2. **Introduction of Members and Guests**
3. **Approval of and Changes to Agenda**
4. **Chair's Report**
5. **Document Revision Plan**
   - Finalize List of Proposed Changes and Additions to ACI 562 Chapter 6 (see attachment)
   - Prioritization of Proposed Changes
   - Task Groups
   - Revision Schedule
6. **Open Discussion**
   - Research needs related to ACI 562-C
   - Potential Convention Sessions related to ACI 562-C
7. **Adjournment**

ACI 562-0C - Reliability-Based Evaluation

Proposed Topics for Consideration as Changes and Additions to
Chapter 6: Assessment, Evaluation and Analysis

Proposed New Items

Item	Description	Contributors/Authors

1.	Minimum requirements and guidance (Commentary) for collection of quantitative information during field investigations. For example:
	• Additional guidance related to sampling for material properties, member dimensions, reinforcement cover, etc.
	• Requirements for numbers of samples (e.g., cores), frequency of sampling, etc.
	• Requirements when non-destructive techniques (e.g., GPR) are used. Perhaps directing to ACI 228 or applicable ASTM standards.
	• Identification of new test methods or evaluation guidance that may be required but doesn't currently exist as a standard or guide document; investigate possible collaboration or coordination with other ACI Committees or ASTM for development.
	• Requirements may be tailored to evaluation approach used:
	  ○ Analytical strength evaluation using code load and strength reduction factors
	  ○ Reliability-based methods for strength evaluation *(requirements developed in collaboration with ACI 562-B: Loads)*
		Mike Bartlett
		Liam Butler
		Josh White
		Jeremiah Fasl

2.	Demonstration of reliability by proof load testing *(developed in collaboration with ACI 562-B: Loads)* • Ability to determine target test loads rationally, considering the probability of not achieving the target test load, and the enhancement of reliability achieved by successfully reaching the target test load • Account for uncertainty in accuracy of load test result • Number of load tests required given size of population (e.g., number of members/components to be evaluated)	Mike Bartlett Jeremiah Fasl John Lund
3.	Evaluation requirements for materials, components, and systems not currently addressed. Intent would be to include minimum requirements where possible, as well as Commentary guidance and direction to available literature. • Precast concrete elements, connections, bearings, etc. • Post-tensioned elements (bonded and unbonded)	Diego Romero Liam Butler Bill Wilson

	• Anchorage to concrete (embedded and post-installed)
	• Reinforcement splices and development/anchorage
	• Previously strengthened structures or elements:
	  o External FRP reinforcement
	  o External steel reinforcement (NSM bars, steel plates, post-tensioning, etc.)
	  o Concrete section enlargement
	  o Overlays and concrete repair
	  o Requirements would address investigation of material properties, dimensions, bond to concrete substrate, etc.
		Bill Wilson

4.	Corrosion of reinforcement. Minimum requirements and guidance for: • Corrosion evaluation (NDE, sampling for chloride analysis, etc.) • Quantification of reinforcement section loss • Determining acceptable steel section loss	John Lund

"New Business" Items Arising from ACI 562-19 Public Comments (detailed comments are attached in separate document)

Item	Description	Contributors/Authors
1.	Public Comments 346 and 369: Clarification of requirements to determine materials properties of concrete (Cl. 6.3.1) and connector steel (Cl. 6.4.7).	Mike Bartlett
2.	Public Comment 353: Consideration for historic structures	Mike Bartlett
3.	Public Comments 377, 379, 380 and 382: Improvements to Section 6.6-Structural Serviceability	