THE CONCRETE CONSERVATION PROCESS

CONSERVING MODERN ARCHITECTURE

An initiative of Getty Conservation Institute

1. PROJECT PLANNING

START HERE

1. Identify a suitably skilled team
2. Define project goals
3. Identify stakeholders
4. Identify regulatory requirements

Is there a statement of significance?

no → 2.1. ASSESS SIGNIFICANCE

yes → 2.1. ASSESS SIGNIFICANCE

2. UNDERSTAND THE BUILDING AND CONSERVATION NEEDS

2.1. ASSESS SIGNIFICANCE

1. Gather information to support identification of values: history, uses, associations, documentation
2. Identify key elements
3. Develop statement of significance
4. Identify contribution of concrete to significance
5. Identify degree of significance of concrete relative to significance of other elements

2.2. EVALUATE THE BUILDING

2.2.1. Preliminary Investigation

1. Review of available documentation and building's history
2. Conduct visual condition survey
3. Non-destructive evaluation in the field and limited sampling and testing
4. Preliminary analysis and evaluation of results
5. Develop hypothesis of deterioration mechanism, causes, and influencing factors

Is further investigation required?

no → 2.2. EVALUATE THE BUILDING

yes → 2.2. EVALUATE THE BUILDING

2.2. EVALUATE THE BUILDING

2.2.3. Identify Threats and Opportunities

2.2.4. Identify User and Stakeholder Needs

2.2.5. Identify Constraints

2.2.6. Evaluate Results

2.2. EVALUATE THE BUILDING

2.2.2. Detailed Investigation

1. Develop detailed investigation strategy
2. Review of additional documents
3. Non-destructive evaluation in the field
4. Sample removal and laboratory testing
5. Structural evaluation/appraisal, if needed
6. Monitoring, if needed
7. Detailed analysis and evaluation

3. DEVELOP CONSERVATION STRATEGIES

3.1. CONSERVATION CRITERIA

1. Develop conservation criteria
2. Consider different conservation approaches
3. Assess impact of proposed strategy on significance
4. Select appropriate materials and methods

3.2. UNDERTAKE TRIALS, MOCK-UPS, AND TESTING

1. Undertake trials/mock-ups off the structure
2. Test and evaluate trials/mock-ups

Does it satisfy conservation criteria?

yes → 3. Undertake trials/mock-ups on the structure

no → 4. Select appropriate materials and methods

3. Undertake trials/mock-ups on the structure
4. Test and evaluate trials/mock-ups
5. Develop final construction drawings and specifications

4. IMPLEMENTATION

1. Select contractors prioritizing necessary skill level
2. Undertake on-site training for contractors
3. Implement conservation work
4. Quality control
5. Documentation of work process and result

5. MAINTENANCE AND MONITORING

1. Develop maintenance plan
2. Monitor threats, opportunities, treatments, and repairs

From *Conservation Principles for Concrete of Cultural Significance* © J. Paul Getty Trust, 2020, www.getty.edu/conservation.