Special Vision 2020 Session

PROCURMENT METHODS FOR SUSTAINABLE REPAIRS

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DOCKS LOCKS AND CANALS
2017 ICRI FALL CONVENTION
NEW ORLEANS | NOV. 15-17

Vision 2020

Vision 2020
A Vision for the Concrete Repair, Protection and Strengthening Industry

2020

INTERNATIONAL CONCRETE REPAIR INSTITUTE

Vision 2020

FOREWORD

The Strategic Development Council (SDC), an inter-industry development group dedicated to supporting the concrete industry's strategic needs, has facilitated Vision 2020 at the request of the concrete repair and protection industry.

As a building material, concrete allows the use of local materials, provides flexibility in form and appearance, and has a long history of successful installations. Concrete is a long-lasting, durable material that with proper use and maintenance can serve its use for 50 to more than 200 years.

[illegible] extending the useful life of existing installations is a key factor in producing a sustainable environment. Over 100 industry leaders including contractors, engineers, material manufacturers, researchers, educators, owners and industry association executives participated in focused workshops to define the most important industry issues and needs used to establish the goals in Vision 2020.

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6. *Develop environmentally and worker friendly repair methods, equipment, and materials that will greatly reduce the adverse effects on workers, the public and the earth's ecosystem.*

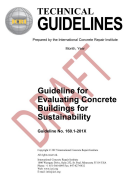
become airborne unless they are contained. These airborne particles contain the base ingredients of the concrete and, in the case of sandblasting, the abrasives used in the process. Silica-bearing aggregates are commonly used in concrete. Crystalline silica inhaled over a long period of time may cause respiratory illness. Properly worn safety gear will eliminate inhaled dust. Concrete removal is currently done by pneumatic, electric, high pressure water and hydraulic removal tools. For most jobs, the tools are hand held resulting in repetitive motion/vibration to the workers body. In addition, the impacting of concrete results in excessive noise generation. Current personal safety gear, properly worn, will reduce both the vibration and noise impact to the body, but will not eliminate it totally.

COMMITTEE 160

SUSTAINABILITY FOR REPAIRING AND MAINTAINING CONCRETE AND MASONRY BUILDINGS

BY ICRI COMMITTEE 160, SUSTAINABILITY: DONALD (LEO) WHITELEY (CHAIR), KURT GOETHERT, FRED GOODWIN, H. PETER GOLTER, JOHN KENNEDY, TANYA WATTENBURG KOMAS, JESSI MEYER, MATTHEW PETREE, BRYAN SMITH, STEPHAN TREPANIER, DAVID WHITMORE, AND PAT WINKLER

COMMITTEE 160


TECHNICAL
GUIDELINES
Prepared by the International Concrete Repair Institute
Guideline for Evaluating Concrete Buildings for Sustainability
Guideline No. 160.1-2015
DRAFT

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10. *Develop selection processes, contractual agreements, procurement methods and relationship arrangements (partnering) that will greatly reduce conflicts, rework, claims and lawsuits resulting from disagreements among contractors, general contractors, engineers and owners.*

the most qualified bidders aren't chosen. This can cause a claim-oriented process to develop where relationships are tested, corners are cut, and feelings and reputations damaged. Many bidding processes initiated by owners or their agents produce one-sided agreements that place most, if not all, risks on the engineer and contractor. These types of arrangements cause relationships to be strained and future opportunities to be lost.

The repair and protection industry envisions:

a. Developing standard warranty and indemnification language that will offer clear motivation to the material supplier and contractor to perform in alignment with owner interests, yet not be excessive. *(By 2008)*
b. Developing an owner guide for design-build procurement bringing both speed and innovation to cost-effective solutions. *(By 2012)*
c. Developing a guide for project partnering arrangements. *(By 2012)*

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10. *Develop selection processes, contractual agreements, procurement methods and relationship arrangements (partnering) that will greatly reduce conflicts, rework, claims and lawsuits resulting from disagreements among contractors, general contractors, engineers and owners.*

Successful repair and protection projects are a result of the owner, engineer, and contractor establishing and maintaining healthy cooperative relationships, and with realistic expectations that are understood by all parties. The success of all repair projects is the result of the combined experience, attitudes and wisdom of the project team. Selecting the lowest bidder for repair design or construction services often fails to produce the best value because the most qualified bidders aren't chosen. This can cause a claim-oriented process to develop where relationships are tested, corners are cut, and feelings and reputations damaged. Many bidding processes initiated by owners or their agents produce one-sided agreements that place most, if not all, risks on the engineer and contractor. These types of arrangements

b. Developing an owner guide for design-build procurement bringing both speed and innovation to cost-effective solutions. *(By 2012)*
c. Developing a guide for project partnering arrangements. *(By 2012)*

COMMITTEE 130

TECHNICAL GUIDELINES

Prepared by the International Concrete Repair Institute

November 2017

Guideline for Procurement of Concrete Repair Services

Guideline No. 130.2-2017

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7.2 Design-Build

With this method, the owner describes symptoms of problems being exhibited by a structure. Bidders submit proposals for analysis and design to create construction documents for performance of the repairs, as well as for actually performing the repairs and the Owner selects one proposal. Either licensed design professionals or contractors may be lead partner and the party actually contracted to the owner in such an arrangement.

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Benefits and limitations of design-build procurement are summarized as follows:

Benefits	Limitations	General Comments
• Single source responsibility can provide benefits and reduce risk to Owner:	• Because most jurisdictions require work to be performed by a licensed contractor; the prime contract holder and owner's point of contact will be the contractor, not the LDP;	• Unless the organization acting as prime contractor has repair design and construction management services in-house, they may be responsible for aspects of project on which they have no expertise;
• Can minimize project duration by overlapping some portions of design and execution of repairs; and	• Design-build arrangement may limit the client's involvement in repair design process, and not wholly embrace client considerations outside functionality of the repair as part of the design	• A general contractor as contractor becomes responsible for creating repair specifications and designs;
		• A design professional as contractor becomes responsible for managing construction project and performing field work; and
		• The contractor's involvement in design process may encourage use of cheaper or faster repairs that are not necessarily the best and most durable repairs.

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7.5 Partnering

Partnering generally occurs when a single service provider does not have the capability to perform a complete project. In this relationship structure, a separate contractual agreement is entered between service providers whether they are multiple contractors, licensed design professionals or combinations thereof. The partnered service providers then enter a contractual relationship with the owner in response to design-bid-build or design-build project opportunities.

For formal partnerships, a new company must be established whose existence and roles of member partners is defined by the partnership agreement. The owner would then formally contact with that partnership. More typically, one member of an informal partnership will assume the role as prime contractor to the owner, with the other member partners then joining the team as subcontractors.

Benefits and limitations of partnering procurement are summarized as follows:

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Benefits	Limitations	General Comments
• Service providers that are unable to meet some project requirements but who have experience and assets which could add value to the project can be involved, make profit, build resumes, and establish or continue a working relationship with Owner; and	• Formal incorporation of partnerships can be time-consuming, expensive, and complex;	
• Owners gain the benefit of experience, skills, capabilities they might not derive from a single service provider.	• Service Providers in partnering arrangements may be involved in such an agreement due to weakness or limitation (capability, financial, or other) concerning some aspect of scope or contract requirement. Such limitations may impact success of project;	
	• Partner companies may not work well together;	
	• Partner companies may have communication issues, either with owner, design professional, or internally; and	
	• The owner may not have single source of long-term project liability or responsibility when partnered arrangement is dissolved.	

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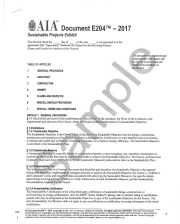
AIA Document E204™ – 2017

Sustainable Projects Exhibit

Sample