## **Construction Alliance**

March 15, 2019

The meeting was called to order at 7:32 am. In attendance were:

AGC

Denise Hasty, AGC of Missouri

Steve Tattitch, Murphy Company

SLCCC

ACEC/MO Dana Halladay, IMEG Corp.

**IFMA** 

Kelly Hayes, Gonzalez Companies, LLC

Joel Weinhold, Geotechnology, Inc.

Dan Wilson, Retired

CSI

AIA

Todd Jacobs, TRJ

#### **Minutes**

Minutes of the January 18, 2019 meeting were amended and approved.

# Glossary Terms for Construction Guidelines

The glossary continues on the agenda for updates at each meeting. There was one definition added to the Glossary. Revised version showing edits is attached.

## **Guidelines under Development**

Project Delivery Methods (T. Jacobs) - Alliance members reviewed the new definition of "Public/Private Partnership" as drafted by J. Danuser, make a minor addition. Discussion followed that "Construction Manager at Risk" was defined but "Construction Manager Agency" was not. T. Jacobs agreed to draft that definition for review at the next meeting. A mark-up is attached showing content thus far, but not further action was taken on the guideline.

# **Updates on Guidelines in Process**

Inspection of the Construction Project (G. Zipfel/S. Gantner) - Alliance members reviewed the draft of changes proposed, making substantial edits. Because drafters were not in attendance, the alliance asked for a final review without mark-ups evident at the next meeting. The fully marked-up version and "final" version is attached.

Due to the time, alliance members opted to adjourn early rather than begin discussion regarding another guideline.

The meeting adjourned at 8:47 AM.

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# **Project Delivery Methods**

A variety of project delivery options are available to an Owner; one may be better suited to a particular project than another.

Project Delivery Method is a system used by an agency or owner for organizing and financing design and construction services for a project. There are several options an owner may choose to execute a project. As the design and construction industry changesevolves, project delivery methods will change as well. Creative project delivery methods have become more accepted and the contractual eptions continue to change. This guideline is intended to provide a sampling of options and may not be all-inclusive.

Construction Management at Risk: Is a delivery method which entails a commitment by the construction manager to deliver the project within a Guaranteed Maximum Price (GMP). The construction manager acts as consultant to the owner in the development and design phases, and acts as the equivalent of a general contractor during the construction phase.

Design/Bid/Build: A project delivery method in which the Owner engages a designer to prepare the design of the complete facilityproject, including construction contract documents and other contract documents. Once completed, the bid package is presented to interested general contractors (GC), who prepare bids for the work. In many cases, the qualified contractor submitting the lowest responsive bid is selected to perform the construction.

**Design/Build**: The project delivery method by which a single team entity develops a project including the design as well as construction.

Construction Management at Risk: Is a delivery method which entails a commitment by the construction manager to deliver the project within a Guaranteed Maximum Price (GMP). The construction manager acts as consultant to the owner in the development and design phases, and acts as the equivalent of a general contractor during the construction phase.

Integrated Project Delivery (IPD): An relatively new-alternative project delivery method that is characterized by a formal contractual relationship between the Owner, Design Professionals, General and key Contractors and key subcentractors. IPD may be used by the Owner to optimize project results and is best utilized on large and complex projects. This incentivizes collaborative behavior and team risk-sharing to enhance project success criteria.

Public-Private Partnership (P3): A project delivery method that is utilized by governmental entities. It is a partnership between a public agency and a private-sector company utilized to finance, build and operate

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projects. These contracts are typically for a 20-30 year period. Financing a project through a P3 can allow a project to be completed sooner or make it a possibility in the first place. Financing comes partly from the private sector but requires payments from the public sector and/or users over the project's lifetime. The private partner is responsible for the design, construction, operation, maintenance and funding for the project, while the public partner focuses on defining and monitoring compliance with their objectives. The funding arrangement between public and private partners may differ based upon the type of project.

NOTE: The Project Delivery Methods above are as listed in glossary. Alliance will contemplate additional delivery methods for potential addition both here and to Glossary. Defer to next meeting.

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Gary-Duchene suggested amending D-B to include a list of various types of D-B Jon Danuser suggested adding Public/Private Partnerships to the list

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# INSPECTION OF THE CONSTRUCTION PROJECT

Proper organization of inspection activities benefits all stakeholders.

-Inspection is an important element of the construction process and can reduce the detrimental effects of errors and provide clarifications and misunderstandings-during the fabrication, and installation and operation of construction systems. The goal is to confirm the construction is compliant with contract documents.

Inspections may be performed by the following:

- Personnel of Public Agency who will receive the improvements
- · Owner's facilities management
- The design team that produced the documents
- Third party inspection service

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The inspection services need to be properly organized to be effective. This starts with a clear understanding of the terms used and the role of each of the design and construction team parties.

#### Terms:

"Inspection" is the examination of construction activities and products for the purpose of verifying compliance with the construction documents and other project requirements. The Owner normally obtains this service under a direct contract with the Inspection Service that specifically delineates the inspection scope and documentation requirements.

"Observation" <u>refer to Project Visits and Observations guideline.</u> is the collection of information, visually in most cases, during project walkthroughs. This normally occurs from time to time during the project and is intended to allow a design professional to become familiar with the progress of construction and the general conformance to the design intent.

"Testing" <u>— refer to Testing Services During Construction guideline</u> is the physical measurement of attributes of the construction products such as strength, density, flow, temperature, system performance etc.

#### Inspection Responsibilities:

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#### Owner (Owner's Inspection Agent)

The Owner or -the independent inspection agent can provide complete-inspection of workall systems to give the Owner confidence that the project is accurately constructed in accordance with the Construction Documents and applicable codes.

The Owner may expand the normal services of one or more of the Design Professionals to include more participation in the field up to and including providing inspection services. This can be advantageous to the entire project team since the Design Professionals have a thorough knowledge of the project and are already committed to achieving success.

Different building codes mandate independent inspection for critical portions of the projected much of the (structural work, soils, masonry, etc.) to be performed for most commercial projects. The When required the Rregistered Design Professional, in responsible charge, shall submit a list statement of special inspections identifying the inspection services required, and approved providers as a condition for issuance of the building permit.

Any deviations from the Contract Documents must be brought to the attention of the Owner, Design Professional and Contractor as soon as practical.

#### Designer Professional

On most projects the Designer Professional willmay make site visits for inspection periodic site visits. During these visits which are generally scheduled at intervals appropriate to the "Contractor's operations", the Designer will observe the Work to ensure that it is consistent with the design intent and approximate percentage of completed work. The Designer must advise the Owner of any deviations from the Contract Documents. The inspections include Substantial and Final Completion in order to identify work that is not complete and items requiring corrective action before occupancy or acceptance of the improvements.

The frequency and nature of these visits does not constitute "inspection". These visits should give the Owner confidence that the intent of the design is being properly installed. Providing "inspection" services would be beyond normal basic services provided by Design Professionals, and may be included as additional services.

For a more complete description see the Guideline "Project Visits".

#### Contractor

The General Contractor and the Subcontractors have the responsibile for overall quality, safety and execution of the project, in accordance with contract documents. As such they are

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responsible to inspect their own work. Quality Control. The specifications may require some other types of inspection as well.

These inspection efforts vary widely and are not under the control of the Owner or Designer except to monitor their effectiveness from time to time.

#### Testing Agency

The Testing Agency performs the material acceptance and other tests required in the Specifications and any other testing that may be ordered. Many Testing Agencies provide Inspection also but only if specifically ordered.

For a more complete description see the Guideline "Testing Services During Construction."

#### Recommendations:

The Owner should retain an independent Inspection Agency or expand the services of one or more of the Design Professionals to perform and document complete inspection services.

- This may also include quality assurance services to provide confidence that the testing and inspection required by the contract documents is also being properly performed.
- That the contract documents clearly indicate the inspection and testing required of the Contractor and the services planned to be provided by the Owner or Owner's Agent.
- That any deviations from the Contract Documents be brought to the attention of the Owner,
   Designer and Contractor as soon as practical.
- Inspection services are different than Testing Services. Refer to the separate Construction Guideline on "Testing Services During Construction."

#### REFERENCES:

International Code Council Code Books

AIA Standard Form of Agreement between Owner and Architect

EJCDC (Engineers' Joint Contract Documents Committee) Standard Form of Agreement between Owner and Engineer for Professional Services

Construction Guidelines "Project Visits", "Commissioning" and "Testing Services During Construction" CSI Project Resource Manual Project Delivery Practice Guide

AIA A201 General Conditions

ConsensusDOCS Form 240 Agreement between Owner and A/E

Consensus DOCS Form 200 Agreement between Owner/Contract and General Conditions

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Inspection is an important element of the construction process and can reduce the detrimental effects of errors and provide clarifications during the fabrication, installation and operation of construction systems. The goal is to confirm the construction is compliant with contract documents.

Inspections may be performed by the following:

- Personnel of Public Agency who will receive the improvements
- Owner's facilities management
- The design team that produced the documents
- Third party inspection service

The inspection services need to be properly organized to be effective. This starts with a clear understanding of the terms used and the role of each of the design and construction team parties.

# Terms:

"Observation" - refer to Project Visits and Observations guideline.

"Testing" - refer to Testing Services During Construction guideline.

# Inspection Responsibilities:

# Owner (Owner's Inspection Agent)

The Owner or the independent inspection agent can provide inspection of work to give the Owner confidence that the project is accurately constructed in accordance with the Construction Documents and applicable codes.

The Owner may expand the normal services of one or more of the Design Professionals to include more participation in the field up to and including providing inspection services. This can be advantageous to the entire project team since the Design Professionals have a thorough knowledge

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of the project and are already committed to achieving success.

Different building codes mandate independent inspection for critical portions of the project (structural work, soils, masonry, etc.) When required the registered Design Professional, in responsible charge, shall submit a list of special inspections required.

Any deviations from the Contract Documents must be brought to the attention of the Owner, Design Professional and Contractor as soon as practical.

# Design Professional

On most projects the Design Professional may make site visits for inspection. The inspections include Substantial and Final Completion in order to identify work that is not complete and items requiring corrective action before occupancy or acceptance of the improvements.

#### Contractor

The General Contractor and the Subcontractors are responsible for overall quality, safety and execution of the project, in accordance with contract documents. As such they are responsible to inspect their own work.

## **REFERENCES:**

International Code Council Code Books

AIA Standard Form of Agreement between Owner and Architect

EJCDC (Engineers' Joint Contract Documents Committee) Standard Form of Agreement between Owner and Engineer for Professional Services

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