# **Request for Proposals**

Project to Create a Course Plan for a Comprehensive Lean Construction Curriculum



The Associated General Contractors of America 2300 Wilson Blvd., Suite 400 Arlington, VA 22201

August 5, 2009

# **Request for Proposals** A Course Plan for a Lean Construction Curriculum

# **Description of the Project**

The Associated General Contractors of America, hereinafter referred to as "AGC," wishes to enter into a <u>written work for hire contract</u> (or "agreement") with a developer (hereinafter referred to as the "Developer") to provide research and create a Course Plan (hereinafter "The Course Plan") that will be used for development of a curriculum for educating professionals in the commercial construction community at all experience levels on Lean construction (hereinafter "the Curriculum"). **All materials will become the exclusive property of AGC.** The selected Developer agrees not to seek royalties from the sale and/or delivery of any of the modules in a eventual curriculum. Familiarity with current and future Lean construction principals and practice is critical; previous experience performing like research and developing commercial construction industry educational tools is preferred; demonstration of knowledge, experience, and abilities in the area of Lean construction is a requirement of the Developer. The Developer must demonstrate that it has a defined and proven methodology for conducting training needs analysis.

# **Industry Challenge**

Lean construction is an adaptation of lean manufacturing principles and practices from the beginning to end of the design and construction process. It is a culture and a process focused on creating the greatest amount of value for a construction project through a reduction in waste of materials, time and effort. The construction industry faces several challenges in the adoption of Lean construction principals. A commonly accessible and sustained educational effort for construction stakeholders should help in the following areas. First, there is widely held misconception that Lean is only for manufacturing, especially the automotive industry. Second, the construction industry is comprised of companies ranging in size from local, smaller firms to Fortune 500 firms that span all geographic regions. Larger firms have the resources to formally train employees, while smaller companies do not. Third, construction projects range in size and scope, making standardization troublesome. While complete standardization is not attainable, a common education platform should enable a more consistent application of Lean principles, regardless of project characteristics. Fourth, construction projects operate based on definitive time-lines, causing teams to constantly assemble and disband. A common education platform should lower resistance to Lean practices and the time necessary to create a shared vision for the project team. Overall, it is critical that the education effort produce Lean practitioners, who can facilitate the teaching and learning process within their own organizations.

# **Scope of Services**

AGC wishes to use the findings of the research and suggested Course Plan to develop an educational Curriculum to be administered to construction professionals. AGC wishes that this Course Plan comply with the national standard, ANSI/IACET 1-2007, for designing, developing and delivering education and training. Organizations submitting proposals and qualifications should describe their skills and abilities to define a Course Plan which will identify the precise means and methods for development of the Curriculum identified in the Scope of Work outlined below.

AGC wishes that the Course Plan outline the Curriculum and any meaningful and related credentials, ranging from continuing education credits to professional certification. Organizations submitting proposals and qualifications should describe experience with professional credentialing.

# Scope of Work to Be Provided By Developer

The research and a Course Plan will meet the following goals and objectives:

- A detailed design of the Curriculum that will meet the practical needs of the commercial construction stakeholders who wish to train their employees on Lean construction implementation practices.
- A Course Plan that includes, <u>but is not limited to</u>, soft skills, such as leadership, communication, and change management.
- The details of a Curriculum that can be administered in a timeframe and class structure that is compatible with employee's full-time work schedule.
- A Course Plan which contains all components necessary to award students who successfully complete the Curriculum with the recommended recognition or credential.

The Course Plan must include the following five components:

Component 1: Research

- Comprehensive literature review, including AGC's collaboration-related documents as well as a detailed description of all materials that have been reviewed and consulted.
- Evidence that such research demonstrates a clear need for the Curriculum.
- An appendix which documents all referenced sources including, but not limited to, publications and interviews with industry experts, owners and construction practitioners.
- Results from detailed surveys and interviews with industry experts, owners and practitioners who are proficient in the practice of Lean.

Component 2: Curriculum Details

- Identification of the levels that would comprise the Curriculum.
  - Identification of the courses within each level.
  - Identification of the modules within each course.
- Identification of the specific audience for the Curriculum.
- Detailed learning outcomes for each course within the Curriculum that are listed clearly and meet the following criteria:
  - Written using Bloom's Taxonomy.
  - Create statements that specify what learners should know or be able to do as result of a learning activity. These specified actions should be: observable, measurable, and performed by the learner.
  - Be expressed as knowledge, skills or attitudes.
  - Written using action verbs for each outcome that can be simple or complex.
- Identification of the knowledge, skills and abilities required of an individual that would demonstrate competency in Lean.
- Identification of the methods of instruction or learning for each course of the Curriculum to encompass a blended solution (i.e. mixture of eLearning and in seat classroom).
- Identification of the time period required for completion of each course within the various levels of instruction.

• Identification of the subjects for each course.

Component 3: Credentialing

• Identification of meaningful and related credentialing for individuals in the construction community.

Component 4: Assessment

- Standardized criteria required for assessing successful completion of each level of Lean training.
- Identification and examples of the best means to test or assess completion of a course in the respective level of the Curriculum.

Component 5: Instructor Training

- Identification of qualifications required of an instructor to successfully teach the courses. It is understood that these qualifications could vary from course to course and level to level.
- Identification of an effective Train-the-Trainer program, components and topics to be covered and learning outcomes.

# Working With the Review Task Group

The AGC Lean Construction Advisory Group has been given the responsibility for the coordination of actual development activities for this project. The group consists of AGC members and chapter staff committed to educating the industry on the developments in technology and practice that effect the constructors role in Lean construction implementation.

# **Scope of Response**

Those wishing to respond to this Request for Proposals should provide, at a minimum, the following information in Microsoft Word or Adobe PDF:

- 1. A brief letter of interest.
- 2. A description of the individual or organization's *approach* to research and course plan development.
- 3. A description of the consultant's general *understanding of the scope of work* to be performed and tasks to be performed.
- 4. A *development plan* that conforms to the following schedule:

<u>Deadline</u>	Deliverable
August 19, 2009	Phone inquiries concerning this RFP
September 2, 2009	Phone inquiries concerning this RFP
September 15, 2009	Proposals due to AGC
October 5, 2009	Award project and contract execution
October 12, 2009	Contract signed and project kick-off
December 31, 2009	Project complete and final submitted to AGC

5. A *proposed budget* which includes both a total fee and a payment schedule; schedule should include the Course Plan development and delivery milestones to which payments are to be tied; budget is to include a separate line item for anticipated Developer travel expenses (reimbursed at actual) to attend an Advisory Group kick-off meeting, if needed or asked to do so; the total fee will be a "not to exceed..." dollar amount. A final presentation of the research and Course Plan to be scheduled and presented by the development team.

- 6. A clearly defined *plan for coordinating final product handover*, material submission and follow-up. AGC will require one comprehensive report for the five components described in the Scope of Work to be provided by the Developer in digital format. The report will be provided in Microsoft Word 2007 delivered via CD-ROM. Related charges or graphics will be provided electronically via CD-ROM. All material should be in a final edited format. The proposal should be submitted Times New Roman, 12 point font.
- 7. A description of *past experience* of the organization submitting qualifications, including a brief description of the past experience, the client's name, address and telephone number. Also provide a description of the consultant's exact responsibilities on the project.
- 8. A qualifications statement including information about the *consultant's personnel* working on this project including primary researcher(s) and others, stating their role in the project, education, title, related qualifications, past relevant experience and the date in which that person joined the firm. Include a list of qualifications, demonstrating experience and previous projects successfully completed.
- 9. A one page *writing sample* prepared by the primary researcher/project manager. This sample should be illustrative of this individual's writing skills as well as management capabilities.
- 10. A list of two references to include name, title, address and telephone number.
- 11. A listing of any additional information that will assist AGC in this process.

# **Inquiries Concerning this RFP**

Please send questions via email with your name, phone number, organization's name to <u>fieldsa@agc.org</u>. Phone calls to answer inquiries will be scheduled on August 19, 2009 and September 2, 2009; email <u>fieldsa@agc.org</u> for scheduling.

# **Submittal Information**

Responses to this Request for Qualifications should be submitted electronically by email to Amy Fields at fieldsa@agc.org by 5:00pm EST on September 15, 2009.

Amy Fields Senior Director, Curriculum & Program Development AGC of America 2300 Wilson Blvd., Suite 400 Arlington, VA 22201 Email: fieldsa@agc.org Web: www.agc.org

#### ABOUT AGC

AGC is the largest and most diverse trade association in the construction industry. The Association has more than 32,000 members and 95 state and local chapters throughout The United States. Among AGC's members are more than 7,000 of the nation's leading general construction contractors and approximately 25,000 specialty contractors and other firms engaged in the construction of highways, bridges, tunnels, airport runways and terminals, buildings, factories, warehouses, shopping centers, and both water and wastewater treatment facilities. AGC is dedicated to furthering the ever-changing agenda of commercial construction contractors, improving job site safety, expanding the use of cutting-edge technologies and techniques and strengthening the dialogue between contractors and owners. AGC offers a variety of industry-acclaimed professional development programs that meet the needs of construction professionals at any experience level.