On-Call CM-GC Industry Workshop

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National Authority for Alternative Delivery

Design Build



Construction Manager General Contractor





Not Specifically Authorized

Alternative Delivery in Arkansas

- Alternative Delivery <u>Tool in Tool Box</u>
- Alternative Delivery Office Established
- Used for Projects with Specific Challenges
 - ✓Innovation
 - ✓ Design
 - **√Cost**
 - ✓ Schedule
- Design Bid Build Backbone of Overall Program



Value Added

Power of Collaboration
 Increased Understanding

Risk Assignment

✓ Cost Certainty

Transfer of Knowledge



Keli Wylie, P.E. Alternative Project Delivery Administrator



Mark Trickey, P.E. Alternative Delivery Project Engineer



Tom Fisher, P.E. Alternative Delivery Project Manager



Scott Eldridge Lead Alternative Delivery Project Coordinator





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ON-CALL CM-GC: NO ALTERNATIVE DELIVERY EXPERIENCE REQUIRED

Construction Manager – General Contractor (CM-GC)



• Two phase delivery method – design and construction. Separate contracts for design (if not delivered in-house) and construction.

• Act 809 of 2017 - Pilot legislation

Definition

Authority

Provision

- 3 projects; sum of construction cost estimates not to exceed \$200M total
- First project construction cost estimate not to exceed \$70M
- Act 1019 of 2019 Amended Act
 - 5 projects; sum of construction cost estimates not to exceed \$200M total
 - Single project construction cost estimate not to exceed \$100M
- Guaranteed Maximum Price (GMP)
- Independent Cost Estimator
- GMP not to exceed ICE estimate by more than 10%



What are you most interested in knowing about CM-GC?

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Benefits of Construction Manager-General Contractor



Innovation

Innovation can potentially address project **complexities**

Contractor input during the design phase can **maximize innovation** and reduce constructability issues

Transfer of knowledge

Design

Design can be tailored to accommodate the Contractor's preferred **means and methods**

Potentially **reduce delays** on projects with tight corridors, extensive third-party involvement, complex maintenance of traffic components



Cost

Improve **cost certainty** or cost control

Open book pricing

Fair Market Value rather than low bid

Built in Value Engineering



Schedule

Schedules can be optimized

Impacts on the **traveling public** may be minimized

Schedule informed from contractor early involvement on means and methods



The Power of Collaboration





Select most qualified teams using a **qualifications-based**

process



Establish a process to escalate and **resolve issues rapidly**

Establish a **fair pricing** approach via open book pricing, verified by **ICE**



Obtain maximum efficiencies from the collaborative environment



Alignment between team members on approach to pricing early in process leads to cost certainty



Establish a process to facilitate rapid Department decision making



Hold regular **collaborative meetings** to review project status and issues

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Manage the **risk register** and **innovation log** throughout project development



What types of project risk are of most concern when developing a project bid?

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Risk Allocation in CM-GC





Moving Beyond a Fixed Price Approach for Greater Project Value





Role of the Independent Cost Estimator







Qualifications

Deep understanding of contractor business practices

- Deep understanding of DOT processes
- Experience in difficult negotiations
- Ability to thoroughly vet innovations & alternate construction methods
- Ability to partner and participate as an active team member
- Extensive experience in managing and mitigating risk (threats and opportunities)

Independent Cost Estimating Team



Responsibilities

Independent Cost Estimating Team

- Partnering (Team roles and responsibilities)
- Focus on innovation (cost & time savings)
- Manage and mitigate risks
- Fair market pricing
- Construction Scheduling
- Constructability

Moana Lane Diverging Diamond Interchange





Leadership

Strong, Experienced Team Leader

- Strong ICE will keep the team focused on priorities
- Process The Experts
- Scope Flexible
- Schedule Aggressive but reasonable
- Budget Competitive
- Public relations Minimize impacts

I-80 Carlin Tunnels







Cost Controls

- ROM estimates
- OPCCs

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- Task Force Teams
- Alternate approach to Project Strategy and Logic
 - **Estimate Audits**





- Highly qualified ICE flushes out
- Scare tactics
- Hidden costs

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- Schedule float
 - **Closed mindedness**
- Suppressed innovations
- Unfair negotiation tactics







On-Call CM-GC Program Overview



Step 1 Step 2 Step 3 After shortlisted respondents are Select CM-GC contractors using a Shortlist of On-call CM-GC identified, ARDOT will issue two-phase procurement process. respondents is established **Requests for Proposals (RFPs)** The first phase of the procurement will and will remain in place for multiple include issuance of a to the shortlist as projects are identified. years. **Request for Qualifications (RFQ).**



• Facilitate introduction of the CM-GC delivery method into the Arkansas market and allow the Department to more effectively engage with potential CM-GC contractors who may be new to CM-GC delivery;



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- Allow and encourage innovative ideas to improve quality, shorten construction time, optimize costs, and/or reduce impacts to the public, the environment, and others; and



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- Allow and encourage innovative ideas to improve quality, shorten construction time, optimize costs, and/or reduce impacts to the public, the environment, and others; and
- Foster collaboration, communication, and partnership with all members of the Project delivery team and stakeholders during design and construction of each Project.

ARDOT is Committed to Industry Engagement

and the second second

On-Call CM-GC Program Process



Pre-procurement Industry Engagement



Industry Workshop



One-on-one meetings

Request For Qualifications Phase



Pre-Statement of Qualifications Meeting



Project Overview Meeting

Request For

Proposal Phase



Written Question & Answer



Written Question & Answer



One-on-one meetings



On-Call CM-GC Program Process



Pre-procurement Industry Engagement



Industry Workshop



One-on-one meetings





Pre-Statement of Qualifications Meeting



Written Question & Answer



Announcement of Shortlist



One-on-one meetings



Selection of Construction Manager



Request For

Proposal Phase



Written Question & Answer

On-Call CM-GC Program Process



Pre-procurement Industry = Engagement



Industry Workshop



One-on-one meetings

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Program Milestones





What is FHWA's Role for the ARDOT On-Call CM-GC Program?

Congress authorized CMGC for Federal-aid projects in 2012

FHWA regulations in 23 CFR 635 Subpart E

- FHWA must approve State CM-GC procedures for use on Federal-Aid projects
- CMGC is then just another project delivery tool





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FHWA Program Support

- Provide educational materials
- Team-Building Workshops
- RFP/RFQ Drafting & Review Support
- Stakeholder Training

Meeting Facilitation

- Pre-Proposal Meetings
- Project Kick-Off Meetings
- Early Work Package Meetings





What is the benefit of CM-GC from FHWA's perspective?

- 1. Innovation
- 2. Reduction of Risk
- 3. Aggressive Delivery
- 4. Cost Control
- 5. Team Selection
- 6. Constructability
- 7. Streamlined Plans
- 8. Quality
- 9. Early Work Packages
- **10. Flexibility in Changing Project Scope**



A Tale of Two Bridges



Pennywash Creek Bridge

- CM-GC delivery method
- 5 week delivery 1 week ahead of schedule
- 10% under initial budget
- Designed around pre-fab girder
- No claims, no change /GC delivery method





Kemper Road Bridge

- Low- Bid system
- 5 week delivery 1 month behind schedule
- 30% over budget
- Change orders and claims during construction







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