







The National Academies of Sciences, Engineering, and Medicine

Training on Post-Award Contract Administration for Highway Projects Delivered using D-B and CM-GC

Based on NCHRP Research Report 939 Volumes 1, 2, and 3

Session 3 of 8: September 8, 2022

Agenda

- 10:00-10:10 am
- 10:10-10:20 am
- 10:20-10:30 am
- 10:30-10:40 am
- 10:40-11:00 am
- 11:00-11:10 am
- 11:10-11:45 am
- 11:45-12:00 pm

Welcome and reminders

- External stakeholder coordination plan
- D-B and CM-GC-specific partnering
- Continuity of team members
- FHWA involvement overview (+guest)
- Permit commitment database
- Peer Exchange: Breakout Rooms
- Wrap-up (+poll)

Note: All times are in Pacific Daylight Time (PDT)

Permits

Overall Learning Objectives

- 1. Navigate and interpret the information in the D-B and CM-GC Guidebooks that is relevant to your project.
- 2. Select and implement appropriate tools for various types of D-B and CM-GC projects for all phases of contract administration.

Review: Last Session's Learning Objectives

- Phases and strategies Review alignment
- **Tools** Explain the following alignment tools illustrating examples from DOT:
 - Confidential one-on-one meeting
 - Glossary of terms
 - Co-Location of key personnel
 - Regulatory agency partnering
 - CM-GC management fee table
- Peer exchange Discuss issues affecting the DOTs' implementation of tools that promote alignment

Permits

Review: Last Session's Takeaway Points

- Confidential one-on-one meeting improves communication regarding ATCs.
- **Glossary of terms** creates a shared understanding of key terms for all team members.
- **Co-Location of key personnel** enhances communication.
- **Regulatory agency partnering** facilitates effective discussion of alternatives before submitting permit applications.
- **CM-GC management fee table** supports fee proposal reviews for the agency.

Tools Covered in Sessions 1, 2, and 3

Session 1

- Kickoff meeting
- Roles and responsibilities

Session 2

- Confidential one-onone meeting
- Glossary of terms
- Co-Location
- Regulatory agency partnering
- CM-GC management fee table

Session 3

- External stakeholder coordination plan
- D-B and CM-GCspecific partnering
- Continuity of team members
- FHWA involvement overview
- Permit commitment database

Today's Learning Objectives

- Phases and strategies Introduce scope strategy
- **Tools** Explain the following scope tools illustrating examples from DOT:
 - External stakeholder coordination plan
 - > D-B and CM-GC-specific partnering
 - > Continuity of team members
 - FHWA involvement overview
 - Permit commitment database
- Peer exchange Discuss issues affecting the DOTs' implementation of tools that promote scope

Logistics Reminders

- Registration (for reporting, slides, CEUs)
- Please make sure your name is correct on Zoom (so that you can receive CEUs) and use the latest version
- If more than one person is attending through your Zoom account
 - Please share all of your names in a direct chat with Hala
 - When answering polls, consider the input of everyone
- Download the Guidebooks for Post-Award Contract Administration for Highway Projects Delivered Using Alternative Contracting Methods, Vol. 1 and Vol. 2
 Welcome Coord. Plan ACM Partnering Continuity FHWA Involv. Permits Peer Experience

Logistics Reminders

- An opportunity to take your organization to the next level; challenge yourself
- No formal break; please take one if/as needed
- Kindly keep your video off and stay on mute
- Use the chat feature as needed
- Ask for help if needed
- Actively engage with your peers; participate when prompted

2 2

Chat

Permits

Record

3

Reaction

Overarching Contract Administration Strategies for D-B



Alignment Strategy



Scope Strategy



Design Quality Strategy

QUALITY

Construction Quality Strategy



Construction Efficiency Strategy

Overarching Contract Administration Strategies for CM-GC



Alignment Strategy



Scope Strategy





Preconstruction Services Quality Strategy



Construction Quality Strategy



Construction Efficiency Strategy

Welcome

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ACM Partnering

Continuity F

FHWA Involv.

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Scope Strategy

- Definition
 - Ensure the project scope and responsibilities are understood and agreed upon by all parties
- Example tools within this strategy:
 - FHWA involvement overview

A table or list that briefly describes the activities where FHWA is involved, and their actions/requirements

- Scope validation period

A pre-determined period where the contractor can review existing contract documents to identify defects, errors, or inconsistencies



Design Quality Strategy

- Definition
 - Ensure design quality through active participation in design reviews and accurate implementation of the **RFQ/RFP** requirements
- Example of a tool within this strategy:
 - Continuity of team members

Where key team members from the agency and the D-B entity remain significantly involved in design and construction

- Over-the-shoulder reviews

Meetings where the designer and agency get together to review and discuss the design documents as they progress



Welcome

Continuity

FHWA Involv.

Today's Learning Objectives

- Strategies Introduce scope & design strategies
- **Tools** Explain the following tools, illustrated with examples from DOTs:
 - External stakeholder coordination plan
 - D-B and CM-GC-specific partnering
 - > Continuity of team members
 - FHWA involvement overview
 - Permit commitment database
- Peer exchange Discuss issues affecting the DOTs' implementation of these tools for ACM administration

- What is it?
 - A table listing milestones, stakeholders to involve at that milestone, the person responsible for coordinating the milestone, and the goal of stakeholder-coordination events
- Why use it?
 - Helps the team define goals important to stakeholders
 - Helps prevent the spread of misinformation
 - Helps generate public support





7 D-B

4 CM-GC

Permits

- When to use it?
 - Use from the start of planning through design

	Ad	Cont minis Pha	stratio	on	Project Complexity			Project Size		
	Alignment	Design	Construction	Closeout	Noncomplex	Moderately complex	Complex	≤ \$10 million	\$10 million-\$50 million	> \$50 million
7 External Stakeholder Coordination Plan	~	~				•	•	▶	•	•

Note: \bullet = Recommended; \blacktriangleright = Consider case by case; \bigcirc = Not recommended.

Welcome

7 D-B

4 CM-GC

- How to use it?
 - At the beginning of the project, the team identifies stakeholders and milestones relevant to those stakeholders
 - Stakeholder communication includes sending information and holding meetings
 - Include stakeholder coordination in schedule and discuss at project meetings



- Synthesis of Examples
 - External stakeholders are any outside entities with an interest in a project and who can either affect or be affected by the project
 - Examples include the traveling public, local businesses, local government agencies, regulatory agencies, and advocacy groups
 - Sharing project information through memos, design updates, meetings, webinars



- Guidebook example
 - D-B, p.72-74
 - -CM-GC, p.65-67



Phase	Milestone	Action	Unit or Person Responsible	Meeting Attendees	Goal
Pre-Let	3. Preliminary design complete	Send the preliminary design and External Scoping Table with quantities and cost estimate for the list of items/betterments included in the project to external stakeholders.	Project manager within Central Project Management Unit	na	Provide the preliminary design and External Scoping Table that identifies items/betterments, quantities, and costs so stakeholders can see costs and coordinate internally to refine the list of items/betterments to be included in the project.
Post-Let 7 D-B 4 CM-GC	9. Design–build team's preliminary roadway plan submittal	Send a copy of the design-build team's preliminary roadway plan submittal to external stakeholders. or Invite external stakeholders to review the design-build team's preliminary roadway plan submittal.	Division	 External stakeholders Division 	Provide opportunity for external stakeholders to verify that agreed-upon design elements and Municipal Agreement items are shown in the design–build team's preliminary roadway plans. Ensure that the stakeholders are aware of the review period duration (usually a maximum of 10 days) and that any comments must be provided to the division before the deadline. Division has final call on what changes, if any, will be made to the design.
Welcome	Coord. F	Plan ACM Partne	ring Continuity	FHWA Involv.	Permits Peer Exchange

Today's Learning Objectives

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- **Tools** Explain the following tools, illustrated with examples from DOTs:
 - External stakeholder coordination plan
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- What is it?
 - Meetings with team members and stakeholders to clarify project goals, issues, roles and processes
- Why use it?
 - Establishes a framework for team alignment, communication, and collaboration
 - Clarifies unique aspects of alternative delivery that will impact the project



- When to use it?
 - Partnering meetings and assessments can be used throughout design and construction

	A	Contract Administration Phase				Project Complexity			Project Size		
8 Design–Build–Specific	Alignment	Design	Construction	Closeout	Noncomplex	Moderately Complex	Complex	≤ \$10 million	\$10 million-\$50 million	> \$50 million	
Partnering	\checkmark	\checkmark	\checkmark	✓							

Note: \bullet = Recommended; \flat = Consider case by case; \bigcirc = Not recommended.

8 D-B 8 CM-GC

- How to use it?
 - The agency can develop a D-B or CM-GC-specific partnering process and include it in the RFP and contract
 - Focus on roles and process that are different from D-B-B such as accelerated review times by the agency or quality verification instead of quality assurance performed by the agency



- Synthesis of Examples
 - Initiate with a meeting or workshop at the beginning of a project or at the beginning of significant project phases
 - Address project mission, staffing, expectations, issue resolution, scheduling future partnering engagements
 - Summarize partnering agreements in the project team plan



- Guidebook example
 - D-B, p.77-78
 - -CM-GC, p.79



Example: US 60 and Bell Road, ADOT

6.1 ROLES, PROJECT COMMUNICATION, AND THE WINNING TECHNICAL PROPOSAL

An Initial Partnering Workshop, with all key stakeholders, should commence immediately after the award of the contract. A goal of the workshop is to develop a Project Team Plan. This plan describes the roles, interactions, and responsibilities of [Arizona DOT's] and the Design–Builder's key project Team members including the Project Manager, the Resident Engineer the Design Quality Manager, technical sections, the general consultant, and the Design–Builder. One of the primary goals of the document is to determine how the [Arizona DOT] Team makes decisions and how it interacts with the Design–Builder's Team.

8 D-B 8 CM-GC

Today's Learning Objectives

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- What is it?
 - Key team members from the agency and the D-B entity remain significantly involved in design and construction
- Why use it?
 - Creates ownership and understanding of design intent during construction
 - Project decisions are remembered and not rediscussed
 - Promotes decisions during construction that are consistent with design intent since construction personnel were present during design



Permits

• When to use it?

9 D-B

9 CM-GC

- From planning through closeout

	Adn	Contract Administration Phase				Project Complexity			Project Size		
9 Continuity of Team	Alignment	Design	Construction	Closeout	Noncomplex	Moderately complex	Complex	≤ \$10 million	\$10 million-\$50 million	> \$50 million	
Members	\checkmark	\checkmark	\checkmark	\checkmark							

Note: \bullet = Recommended; \blacktriangleright = Consider case by case; \bigcirc = Not recommended.

- How to use it?
 - Assign team members from the design and construction sides of the D-B entity and from the agency to continue involvement throughout the life of the project
 - For unavoidable reassignments, assign qualified personnel and provide briefings on the project



- Synthesis of Examples
 - Select appropriate staff form the agency and dedicate adequate time to give to the project
 - Communicate the expectation of continuity of team members in the contract. Identify specific roles. Explain the process for replacing team members.
 - Have an onboarding plan for new team members



- Guidebook example
 - D-B, p.80-84
 - -CM-GC, p.81-82



Example: Lahaina Bypass, HiDOT and CFLHD

Key Personnel, Subcontractors, and Outside Associates or Consultants

In connection with the services covered by this contract, any in-house personnel, subcontractors, and outside associates or consultants will be limited to the key individuals or firms that were specifically identified and agreed to during the RFQ submittal process. The Contractor shall obtain the Contracting Officer's written consent before making any substitution for these designated in-house personnel, subcontractors, associates, or consultants.



Example: TxDOT

Texas Department of Transportation Design–Build Agreement Template

Position	Key Personnel Change Liquidated Damages (dollars per day)
Project Manager	\$[]
Construction Manager	\$[]
Design Manager	\$[]
Independent Quality Firm Manager	\$[]
Professional Services Quality Services Manager	\$[]
Environmental Compliance Manager	\$[]
Safety Manager	\$[]
Revise and insert others as applicable	\$[]

9 D-B 9 CM-GC

Continuity of Team Members

Food for thought:

What happens when a key team member gets promoted, retires, or goes on sick leave?

Think of such instances at your agency. You can post your answers in the chat.

9 D-B 9 CM-GC

Today's Learning Objectives

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- What is it?
 - A table summarizing FHWA involvement in project activities and specifying roles and actions (consult, invite, authorize, review, approve, concur)
- Why use it?

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10 D-B

10 CM-GC

Welcome

Ensure FHWA involvement at the appropriate times in a project to prevent changes and delays

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Peer Exchange

• When to use it?

10 D-B

10 CM-GC

Welcome

 Create during the initial project development phase and use throughout the project

	;	Contract administration phase				Project complexity			Project size			
	Alignment	Design	Preconstruction	Construction	Closeout	Non-complex	Moderately complex	Complex	≤\$10 M	\$10 M - \$50 M	> \$50 M	
10 FHWA involvement overview	×	1	×	~	~	•	•	•	•	•	•	
$\bullet = \text{Recommended}; \bullet = \text{Construction}$ Coord. Plan ACM Partnerin								nmeno A Inv				ermits

- How to use it?
 - Check if project is a project of division interest to FHWA
 - Involve FHWA in a federally funded project at appropriate times
 - FHWA may need to be informed, consulted, invited to meetings, or asked to review documents



10 D-B

- Synthesis of Examples
 - Work closely with FHWA
 - Determine if the project is a project of division interest
 - Alert team members to needed FHWA coordination
 - Allocate time in the schedule for coordination with FHWA



10 D-B

- Guidebook example
 - D-B, p.86-87
 - -CM-GC, p.84-87



	MANUAL	WORK ACTIVITY	PROJE DIVISION 1 (PO	INTEREST	NON-PODI						
	SECTION		MnDOT Action	FHWA Action	MnDOT Action	FHWA Action					
Γ	PROJECT SELECTION AND INITIAL PROJECT DEVELOPMENT—SECTION 2										
Ī	2.2.3	Project Goal Setting	Consult	Consult	Consult	Consult					
	2.3	Project Delivery Selection	Invite	None	Invite	None					
		ADMINIST	FRATION —SE	CCTION 3							
	3.4	Potential Conflict of Interest	Notify	Notify None		None					
		PROCURING THE CM	I-GC CONTRA	ACTOR—SEC	TION 4						
Ī	4.3	Notify Legislature—Intent to Use CM-GC	Сору	None	Сору	None					
	4.9	At-Risk Final Design	Notify	None	Notify	None					
B A-GC	4.12	Contract Payment Provisions	Consult	Consult	Consult	Consult					
lcome	Coord. P	lan ACM Partnering	Continuity	FHWA Invo	plv. Pe	ermits					

10 D-B 10 CM-GC

Today's Learning Objectives

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Permit Commitment

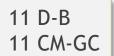
Database

- What is it?
 - A summary of all key information about all the permit commitments on a project
- Why use it?
 - Ensure permit commitments are communicated to and fulfilled by the designer and the builder



- When to use it?
 - Include it in the RFP and continue to update it and meet commitments throughout the project

	Contract administration phase				1	Project mplexi		Project size			
	Alignment	Design	Construction	Closeout	Non-complex	Moderately complex	Complex	≤ \$10 M	\$10 M - \$50 M	> \$50M	
11 Permit commitment database	✓	~	~	~	▶	•	•	•	•	•	
• = Recommended; • = Consider Case-by-Case; \bigcirc = Not Recommended											



- How to use it?
 - Can be created by the agency or the designer
 - Include the name of the jurisdiction issuing the permit, permit number, description, who is responsible, and where to locate specific requirements in the permit



- Synthesis of Examples
 - Summarize permit commitments in the RFP
 - Create a database summarizing details of permit commitments
 - Indicate status for each permit (fulfilled, or on track)
 - Make database searchable based on topic, responsible person, permit status, etc.



- Guidebook example
 - D-B, p.90
 - -CM-GC, p.89-90

Permit Number	-	Торіс	Requirement	Responsibility	Source Reference Heading	Source Reference Page	Status	Check- In Date
	1							
	2							



PROGRESS UPDATE

	ad		Contrac istration		ase	Project complexity			Project size		
Tools for D-B and CM-GC contract administration	Alignment	Design	Preconstruction (CM-GC only)	Construction	Closeout	Non-complex	Moderately complex	Complex	≤ \$10 M	\$10 M - \$50 M	> \$50M
Kickoff meeting	\checkmark							\bullet			
Roles and responsibilities	\checkmark									\bullet	\bullet
Confidential one-on-one meeting	\checkmark						\bullet			igodot	
Glossary of terms	\checkmark							\bullet		\bullet	
Co-location of key personnel	\checkmark	\checkmark	~			0		\bullet	0		
Regulatory agency partnering	\checkmark	\checkmark	\checkmark			0	\bullet	\bullet		lacksquare	\bullet
External stakeholder coordination plan	\checkmark	\checkmark						\bullet		\bullet	
CM-GC management fee table	✓	✓	~	~	~	▶	•	•	₽	•	
ACM-specific partnering	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark						
Continuity of team members	✓	✓	✓	✓	✓		•	•	D	•	
FHWA involvement overview	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark			ullet	ullet	ullet	
Permit commitment database	\checkmark	\checkmark	\checkmark	✓	\checkmark						\bullet

	Contract administration phase						roje nplez		Project size		
Tools for D-B and CM-GC contract administration	Alignment	Design	Preconstruction (CM-GC only)	Construction	Closeout	Non-complex	Moderately complex	Complex	≤ \$10 M	\$10 M - \$50 M	> \$50M
Plan standards		✓	✓								
Deviations from agency standards		~	~			•	•	•	►	•	•
Discipline task force		✓				0		\bullet			\bullet
Independent party design review		~				0			0		•
Cost savings matrix		\checkmark						•		•	

• = Recommended; • = Consider Case-by-Case; \bigcirc = Not Recommended

Welcome

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Today's Learning Objectives

- Strategies Introduce scope & design strategies
- Tools Explain the following tools, illustrated with examples from DOTs:
 - External stakeholder coordination plan
 - > D-B and CM-GC-specific partnering
 - > Continuity of team members
 - FHWA involvement overview
 - Permit commitment database
- **Peer exchange** Discuss issues affecting the DOTs' implementation of these tools for ACM administration

Peer Exchange: Breakout Rooms

Peer Exchange: Breakout Room Instructions

Exercise time: 20 minutes. You will be randomly assigned to a room. When you have 2 minutes left, you will be informed. At the end you will be redirected to the main session automatically.

- 1. When prompted, select Join.
- 2. Please start by **unmuting** and showing your **video**.
- 3. Briefly introduce yourselves to your teammates.
- 4. Assign a team **leader** who can facilitate the discussion and take notes. Your team leader can also be your presenter if your group was selected to share your thoughts with everyone.
- 5. Discuss your individual answers for the 2 questions in small groups.
- 6. Report out in the main session, if called upon.

Question 1 of 2:

External Stakeholder Coordination Plan

Think of your current project (or another project of your choice).

- 1. What external stakeholders are/were relevant to your project?
- 2. Are any of those stakeholders unique to this project?
- 3. Are there any stakeholders that might have been missed or were not identified at the time?
- 4. On what project items, issues, or milestones, should your agency be interacting with these stakeholders?

Resources

– Tool in D-B guide p.71 and CM-GC guide p.64

<u>Question 2 of 2:</u> Permit Commitment Database

Think of your current project (or another project of your choice).

- 1. List your project's permit commitments.
- 2. Discuss how these commitments were communicated, and to whom.

Resources

- Tool in D-B guide p.88 and CM-GC guide p.88

Peer Exchange: Breakout Room

Question 1

Think of your current project (or another project of your choice).

- 1. What external stakeholders are/were relevant to your project?
- 2. Are any of those stakeholders unique to this project?
- 3. Are there any stakeholders that might have been missed or were not identified at the time?
- 4. On what project items, issues, or milestones, should your agency be interacting with these stakeholders?

Question 2

Download

Think of your current project (or another project of your choice).

- 1. List your project's permit commitments.
- 2. Discuss how these commitments were communicated, and to whom.

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Wrap up

Today's Learning Objectives

- Strategies Introduce scope & design strategies
- **Tools** Explain the following tools, illustrated with examples from DOTs:
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- **Peer exchange** Discuss issues affecting the DOTs' implementation of these tools for ACM administration

Key Takeaway Points

- An external stakeholder coordination plan helps identify key stakeholders and their goals, and communicate with them to receive timely feedback.
- **D-B and CM-GC-specific partnering** clarifies aspects unique to alternative delivery and helps establish team alignment.
- Continuity of team members keeps key team members involved and better-informed across all phases.
- FHWA involvement overview organizes and helps manage FHWA's engagement in the project.
- A permit commitment database documents and communicates permit commitments to ensure they are fulfilled.

Welcome

Continuity

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Tools Covered in Sessions 1, 2, 3, and 4

Session 1

- Kickoff meeting
- Roles and responsibilities

Session 2

- Confidential oneon-one meeting
- Glossary of terms
- Co-Location
- Regulatory agency partnering
- CM-GC management fee table

Session 3

- External stakeholder coordination plan
- D-B and CM-GCspecific partnering
- Continuity of team members
- FHWA involvement overview
- Permit commitment database

Session 4

- Plan standards
- Deviations from agency standards
- Discipline task force
- Independent party design review
- Cost-savings matrix

WelcomeCoord. PlanACM PartneringContinuityFHWA Involv.PermitsPeer Exchange

Next: Session 4

- Thursday September 22, at 10:00 AM Pacific
- For preparation, preview the following 5 tools:
 - Plan standards
 - Deviations from agency standards
 - Discipline task force
 - Independent party design review
 - Cost-savings matrix

Learning Assessment

- 1. Single choice: External stakeholders are ...
- 2. Single choice: One primary goal of DB partnering ...
- 3. Single choice: While one or a few team ...
- 4. Single choice: The permit commitments database
- 5. Multiple choice: Continuity of team members ...
- 6. Open feedback.

OPEN DISCUSSION



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OFFICIAL ROSTER: WE NEED YOUR HELP

- Check if your name is on the most current roster (attached in the chat)
 - If it is, no further action needed
 - If it is not, please register at this link: <u>https://asu.co1.qualtrics.com/jfe/form/SV_3ekcmZAAp5P2LUq</u>
- Registration helps with
 - NCHRP Reporting
 - Receiving slides
 - Receiving CEUs









The National Academies of Sciences, Engineering, and Medicine

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