

MCX

CMAA
Construction Management
Association of America

Member Communication Experience

Any views and opinions expressed in this article may or may not reflect the views and opinions of the Construction Management Association of America (CMAA). By publishing this piece, CMAA is not expressing endorsement of the individual, the article, or their association, organization, or company.

cmaanet.org



NAC Executive Insights

Project Review Meeting Agenda and Checklist

Key Points

- Effective project review meetings are essential to oversight and control of projects.
- A consistent, enterprise-wide approach improves the overall quality of project reviews and facilitates the identification of enterprise risks and performance issues.
- Each project carries its own special challenges and requirements, which will dictate more attention and more in-depth reviews of particular aspects.

Introduction

A previous Executive Insight addresses the importance of project review meetings and how they benefit from a well-developed agenda and checklist to ensure consistent, complete, and comprehensive coverage. This Executive Insight presents a suggested project review meeting agenda and checklist for both engineering and construction projects.

The nature of the review will be influenced by the role of the particular company as well as the form of the contract. The various nuances associated with each of these have not been laid out and as such the suggested agenda and checklist that follow should be regarded as starting points.

Additionally, each project carries its own special challenges and requirements, which will dictate more attention and more in-depth reviews of particular aspects. Similarly, as the project progresses, emphasis will shift from initial design activities to those more construction focused. In all cases, effective regular and meaningful project reviews are essential to project success.

The use of a common project review agenda complemented by a standard project report template fosters organizational consistency and expectations.

Project Review Meeting Agenda and Checklist

1. **Confirmation of project review meeting scope** — Many projects, in particular large complex ones, may involve performance of work under multiple distinct contracts, projects, or tasks. It is important to understand the limits of the particular review, which may include only one project or a grouping of related contracts. Whatever the scope of the review meeting, it must be supported as a minimum by a project report that covers the elements of the project outlined later in the agenda.

2. **Reaffirming the baseline** — Any effective project review begins by assessing performance against the established baseline. It is essential to ensure that the project review is being conducted against the then-current project baseline. This reaffirmation should be reflected in the project report, typically on a title page listing client and project details; project description and relevant scope of work; contract type and approved value; and schedule, including key milestones. It is important that the entire review team is aligned and that no assumptions about what is being discussed are unclear. As trivial as this may seem, the author has witnessed project review meetings where various participants had different perceptions of what was being reviewed (for example, partial project vs. complete project).
3. **Safety moment and performance** — The importance of safety must be emphasized continuously and at all levels. Selection of safety topics should reflect upcoming safety challenges the project is likely to face. Relevance is key. At this point, safety performance from the prior period, planned upcoming safety actions, or areas of concern should be laid out.
4. **Action items** — Any action items identified from the prior meeting should be brought up and their current status reviewed. Completed actions should be formally closed out and completion subsequently communicated as appropriate. Actions that are overdue should be examined for cause of delay, effectiveness of management and project team efforts, and requirements and resources to complete. Impacts of delayed completion should be assessed and any systemic issues noted for additional follow-up and resolution. There should also be a discussion of the Decision Log, identifying what decisions have been made since the last update, who made them and why, what alternatives were considered, and who was informed.
5. **Issues and concerns** — A summary of the key issues the project team is facing should be discussed as well as any significant concerns of the project manager. This acts to frame the rest of the project review meeting. It allows the reviewers to agree with or challenge the project manager's assessment. It also helps identify other areas of concern. The status of relationships and communication with the client and other key stakeholders should be highlighted as well as any potential impacts on the project.
6. **Value creation or value improvement** — Often this discussion follows the safety moment. The author, however, finds it to be more effective when presented in the context of the challenges and concerns the project is facing. If a formal value improvement program is involved, including value engineering, then that program should be discussed here and should highlight the improvements and value (cost savings) created to date.
7. **Project manager's narrative on upcoming activities** — Understanding where the project needs to go in the short term, as presented by the project manager, should precede the more detailed performance review of the various project elements to date. This helps highlight the relative importance of any deviations from planned accomplishments.
8. **Changes to the baseline** — It is essential to understand how the baseline has changed since the last review meeting and from inception to date. The review team should confirm that changes were formally approved by the client and the required contract changes received. Approved changes not yet reflected by a formal contract change should be examined, communicated, and confirmed with the client. Unapproved changes should not be reflected in the project baseline. Anticipated future changes to the baseline should be discussed and those requiring timely notice confirmed. The

review team should seek to identify common drivers of change and elevate discussions as appropriate, including subsequent management team conversations with the client. Scope control is essential to project control.

9. **Project risks** — These should include current assessments of risks related to safety, cost, schedule, quality, sustainability (environmental and social), and contract. Risks that have emerged to date and their associated costs and impacts should be compared to the established risk reserves and decisions made as to whether any portions of the risk reserve should be released. Risks likely to emerge in the near term should be discussed to ensure adequate risk reserves are available and sufficient management and mitigation measures have been taken. Opportunities should be discussed similar to those described for project risks. Assumptions should be confirmed, and any assumption migration assessed for impacts.
10. **Master schedule review** — The influence of time (schedule performance) and cost on project outcomes cannot be overstated. Review of the schedule before detailed performance and cost reviews of various project elements helps provide context for particularly impactful areas and identifies areas requiring alternative execution approaches. The master schedule review should reflect both overall major milestones as well as those specific to the project being reviewed. All phases of the project should be considered—engineering, procurement, construction, and startup and commissioning. Engineering deliverables touch all phases of the project. The focus on phases and areas of emphasis will change. Reviews should highlight schedule progress, ensuring the correct schedule performance index is being used. Forecasts should be challenged where measurable improvements in productivity or other performance rates are assumed.
11. **Element performance reviews** — This series of detailed examinations of the various project elements includes:
 - a. Engineering (discipline- or task-focused)
 - b. Procurement (long lead; high value; supply chain challenges)
 - c. Construction (site; early works; major trades; specialty trades)
 - d. Commissioning and startup

Reviews will consider staffing and labor-related performance as well as any specialty equipment and its performance (e.g., tunnel boring machine). Various review elements are discussed subsequently.

12. **Engineering** — Engineering reviews should include:
 - a. Planned vs. actual engineering staffing (by discipline as appropriate). This should include any lead engineering office and any secondary engineering locations, including any specialty engineering subcontractors. Support staff should be similarly reviewed for appropriateness and level.
 - b. Forecast staffing needs and a review of any issues or concerns related to staffing.
 - c. Engineering performance and progress for each location and discipline. Any performance issues should be examined with respect to cause and strategies to address. Earned value or other performance factors for engineering efforts should be compared with planned and forecast factors. Persistent shortfalls in performance should not be allowed to distort anticipated future performance (forecast must reflect likely realities).

- d. The status of engineering reviews and quality approvals should be examined and any quality assurance trends discussed.
 - e. Client review and approval status should be examined and impacts on performance delay and approach to improvement reviewed.
 - f. Delayed inputs from clients, vendors, or others should be reviewed, tracked, and resolution of outstanding items discussed.
 - g. The level and nature of engineering holds should be reviewed.
 - h. Issued for procurement or issued for construction (IFC) should be reported, including an assessment of project impacts.
 - i. The nature and types of requests for information (RFIs) received should be reviewed to identify any potential engineering quality issues.
 - j. Status of Building Information Models (BIMs) should be reviewed for current and intended use, such as construction planning, progress assessment, and completeness for client asset management usage.
13. **Procurement** — procurement and fabrication reviews should be conducted for both the final project site as well as any module or fabrication yards or facilities. Staffing profiles and performance should be reviewed similar to that described for engineering labor. Specific focus and review should be placed on:
- a. Owner Furnished Equipment — availability, timing, adequacy for intended purpose; operating or warranty limitations.
 - b. Mechanical equipment — vessels, tanks, pumps and other rotating equipment, heat exchangers, and heaters. Progress should be reviewed against plan and any holds resulting from client or other approvals; engineering holds or unaddressed RFIs; or material or subcontractor issues. Potential impacts should be discussed. Vendor shop loads should be reviewed as appropriate and current progress against the plan assessed. Status of equipment lists should be confirmed.
 - c. Electrical equipment and instrumentation progress should be reviewed against tag status and any delayed items discussed with respect to potential construction impacts. Any common vendor quality issues should be highlighted.
 - d. Bulk materials — aggregate, concrete, steel (excluding specialty steels or custom shapes), piping (excluding specialty piping but including status against line lists), and electrical bulks and instrumentation bulks.
 - e. Specialty materials — specialty steels and custom shapes; specialty piping and other specialty items that may impact overall project execution. Ensure overall material and testing status and documentation.
 - f. Valving — status of procurement against valve lists.
 - g. Logistics and expediting — export/import permit status; shipping, special transporters (e.g., self-propelled modular transport, SPMT), traffic and logistics; and warehousing (other than site).

14. **Construction** — review of labor, materials, and equipment; review of construction progress, considering both earned value and schedule performance index.
 - a. Labor reviews should include staffing levels by trade vs. plan; overtime and shift work usage; productivity, trends, and factors impacting productivity; safety performance; retention rates; indirect labor; and subcontract labor and performance.
 - b. Material reviews — receipts; quantities installed and installation rates; inventories; wastage; forecast needs and any likely receipt shortfalls; and quality testing results.
 - c. Construction equipment usage (hours); fuel and fills consumption; maintenance status and schedule; specialty equipment requirements; and equipment release dates.
 - d. Indirect Field Costs
 - e. Construction progress by account — civil, concrete, structural steel, buildings, mechanical equipment, piping, electrical, instrumentation, painting, insulation, scaffolding, and others.
 - f. Status of key subcontracts – staffing, performance, progress, change orders, claims, and payments.
 - g. The appropriateness and effectiveness of construction technology used should be reviewed.
 - h. Compliance reviews to address both Buy America(n) and any project labor agreements as well as any social programs such as minority-owned or disadvantaged individuals-owned business enterprises (MBE/DBE) requirements.
15. **Startup and commissioning** — plan completion, staffing, system turnover, including associated system testing and overall plant startup. Specific review items should include:
 - a. Startup staffing levels.
 - b. Startup document status, including operating and maintenance manuals.
 - c. Mechanical completion and turnover.
 - d. Overall startup progress.
16. **Quality Management System** — review of project quality performance, including quality system audits, discipline audits, construction audits, and project closeout audits.
17. **Project administration** — performance of project systems, including human resources (HR), project administration, document management, IT (project cybersecurity; appropriate use of artificial intelligence), and site security.
18. **Overall project financial status** — essentially consolidates costs from a client perspective and forecasts cost to complete. This is reviewed against client budgets and contractual commitments (e.g., not-to-exceed price).
19. **Company project financial status** — a review of the commercial performance of the project. Principal aspects of this review include:
 - a. Contract status
 - i. Approved and unapproved changes

- ii. Open “notices”
 - iii. Claims and disputes
 - b. Revenue
 - i. Client furnished materials (CFM)
 - ii. Payments received
 - iii. Revenue reserves (advanced payments; payments in dispute)
 - iv. Unbilled amounts (earned but not yet billed)
 - c. Cost
 - i. CFM
 - ii. Labor
 - iii. Materials
 - iv. Equipment
 - v. Subcontracts
 - vi. Indirect field costs
 - vii. Commissioning and startup costs
 - viii. Cost reserves (contingency breakdown and analysis)
 - ix. Risk reserves
 - x. Event risk reserves
 - xi. Bonds and other financial costs
 - d. Cash
 - i. Cash balance and forecast (anticipated receipts and bills coming due)
 - ii. Invested cash
 - iii. Receivable status and aging
 - iv. Outstanding mobilization payments
 - e. Available incentives — earned, unearned, forfeited; likely amount at completion. These are often related to project Key Performance Indicators (KPI)
 - f. Remaining risks
 - g. Profit & Loss (P&L) – comparison to project plan (as-sold values/as contracted values) and forecast at completion
 - i. Gross project margin
 - ii. General & Administrative (G&A) and overhead including unbillable expenses
 - iii. Earnings before interest and taxes (EBIT)
- 20. **Project audits** — review of findings and status of corrective actions; focus on any systemic issues identified.
- 21. **Completion and closeout** — status review
- 22. **Action items** — document action items from meeting and assign responsibilities and due dates.
- 23. **Prepare meeting minutes** — after meeting and distribute.

Summary

Effective project review meetings are essential to oversight and control of projects. A consistent, enterprise-wide approach (project report; project agenda) improves the overall quality of project reviews and facilitates the identification of enterprise risks and performance issues.

About the Author

Bob Prieto was elected to the National Academy of Construction in 2011. He is a senior executive who is effective in shaping and executing business strategy and a recognized leader within the infrastructure, engineering, and construction industries.

Although the author and NAC have made every effort to ensure accuracy and completeness of the advice or information presented within, NAC and the author assume no responsibility for any errors, inaccuracies, omissions or inconsistencies it may contain, or for any results obtained from the use of this information. The information is provided on an "as is" basis with no guarantees of completeness, accuracy, usefulness or timeliness, and without any warranties of any kind whatsoever, express or implied. Reliance on any information provided by NAC or the author is solely at your own risk.