

U.S. DOT Federal Transit Administration TPM-20 Office of Capital Project Management Project Management Oversight

Oversight Procedure 53 - Readiness to Procure Construction Work

1.0 PURPOSE

The purpose of this Oversight Procedure (OP) is to describe the review, analysis, recommended procedures and reporting requirements that the Federal Transit Administration (FTA) expects from the Project Management Oversight Contractor (PMOC) with respect to the project sponsor's readiness to procure the major construction and equipment contracts on a project.

2.0 BACKGROUND

Issuance of design documents for bid or request for proposals marks an important milestone in project implementation, and is a final step before the project sponsor enters into construction contracts that are binding on the project sponsor as well as the construction contractor. The PMOC's review should be conducted after the project sponsor's contract package is sufficiently developed to permit an accurate assessment; typically around the ninety percent (90%) design level for traditional design-bid-build contracts. If the project sponsor plans to use an alternate delivery method such as design-build (D/B) or construction manager/general contractor (CM/GC) (also known as construction manager-at-risk (CMR), the timing of the review should be advanced accordingly.

3.0 OBJECTIVES

FTA review of the project sponsor's readiness to procure construction work helps to ensure:

- the project sponsor has developed the design documents to an appropriate level of completion given the selected delivery method;
- the procurement packages and supporting documents are complete, accurate, and consistent with the project scope, as established in the Project Development phase;
- the procurement package is consistent with appropriate Federal requirements, including Buy America requirements;
- the project sponsor's cost estimates accurately reflect contractual requirements;
- the project sponsor has addressed the project risks identified by implementing mitigation measures to the greatest extent possible;
- the project sponsor has established a plan for qualification, bid and award that follows accepted best industry practices;
- the project sponsor has established procedures in place to deal with unexpected procurement issues(e.g., no bids, single bid, unacceptably high bids and protests); and
- the project sponsor's organization is prepared to successfully manage the contract package through procurement, construction and start-up, or in the case of a D/B or CM/GC contract, through the design construction and start-up phase.

4.0 REFERENCES

The following are the principal, but by no means the only, references to Federal legislation, codification, regulation and guidance with which the PMOC should review and develop a solid understanding as related to the project sponsor's project work being reviewed under this OP:

4.1 Regulations and FTA Circulars

- Federal Acquisition Regulations
- C4220.1F, Third Party Contracting Guidance

4.2 Guidance

- Best Practices Procurement Manual, http://www.fta.dot.gov/funding/thirdpartyprocurement/grants_financing_6037.html
- Pricing Guide for FTA project sponsors, http://www.fta.dot.gov/documents/Helpline Price Guide.doc
- Procurement System Self Assessment Guide, http://www.fta.dot.gov/funding/thirdpartyprocurement/grants_financing_6326.html
- Project and Construction Management Guidelines, 2011 Update

5.0 PROJECT SPONSOR'S SUBMITTALS

In advance of performing the review, typically three (3) to six (6) months prior to advertising major construction and equipment bid packages, the PMOC should obtain and study the following project documents. The PMOC should notify FTA of important discrepancies in the project information, including incomplete or unavailable information that would hinder the review. An example would be a mismatch between drawings and cost estimate in which the drawings are current and the cost estimate is two years old.

- Scope / Project Definition / Procurement
 - o Final environmental documents and NEPA determination
 - o Construction Documents (Plans and Specifications including Division 1 Provisions)
 - o Geotechnical Baseline Report
 - o Value Engineering Reports
 - Constructability Reviews
 - o General and Supplementary Conditions of the Construction Contract
 - Request for Bid or Instructions to Proposers
 - o Vehicle design documentation
- Project Management Plan (PMP) and sub-plans completed, including but not limited to:
 - o Signed Agreements with Railroads, Utilities, other Third Parties
 - o Risk Assessment, Risk and Contingency Management Plan
 - o Safety and Security Management Plan (for application to construction)
 - o Project Delivery Plan, Contract Packaging Plan, Procurement Policies and Procedures
 - Project sponsor Management Capacity and Capability
 - o Quality Assurance / Quality Control Plan and Records
 - o If an OP 32D and/or OP 52 review has been completed, applicable findings and conclusions should be examined for consistency with elements of this review.

- Schedule
 - Project schedule in original and SCC format; schedule narrative describing critical path, expected durations, and logic
- Cost
 - o Capital cost estimate in original and SCC format, including Basis of the Estimate
 - o Full Funding Grant Agreement and Attachments (if applicable)

6.0 SCOPE OF WORK

PMO Reviewers:

The quality and usefulness of the review relies in large part on the perception and judgment of the reviewers. Ideally, they should be senior technical managers qualified to actually perform the work being reviewed. Because transit projects are complex and interdisciplinary in nature, the reviewers should have a broad range of knowledge, experience and capabilities. Structural plans should be reviewed by structural engineers; signaling plans should be reviewed by signaling engineers, etc.

Tasks:

This review is divided into three sub-reviews described in tables below. Review items may be modified somewhat to accommodate the particular circumstances associated with a project.

- Confirmation of the readiness for procurement of a complete bid package, including plans, specifications, and contract provisions, and that federal procurement requirements are addressed;
- 2) Confirmation that the procurement package is consistent with the scope, schedule, and budget established during the Project Development Phase; Confirmation of the readiness of the project sponsor's organization with respect to having in place the necessary qualified project staff; consistent project management plans, procurement and construction management procedures, including project controls procedures; needed interagency, third party, and real estate agreements; and required financial resources. Additionally, that the project sponsor has sufficiently addressed the project risks identified during the Risk Assessment and mitigated them to the extent possible;

Confirmation of the readiness for bidding of the construction procurement package is accomplished by the following specific reviews:

Review Item	Review Objective	Review Method	
Construction Plans and	To confirm that the plans and	Review by qualified engineer(s)	
Specifications	specifications completely and	with expertise in the area(s) of	
	clearly define the required work	design.	
	and that there are no		
	major/significant omissions.		
	To confirm that construction documents reflect results of constructability reviews.		

Review Item	Review Objective	Review Method	
	To confirm that any project		
	sponsor accepted Value		
	Engineering alternatives have		
	been incorporated into the		
	construction documents.		
	To confirm consistency with any		
	project sponsor plans for owner		
	furnished equipment.		
Construction Plans and	To confirm that the construction	Review by qualified engineer(s)	
Specifications for Design-Build	plans, specifications, bridging	and construction manager(s)	
Delivery or other alternate	documents and/or performance		
delivery method	requirements for design and		
	construction are at the		
	appropriate level of completion		
	to adequately define the scope of		
	work. A separate review of the		
	project sponsor's D/B		
	procurement documents may be		
	required to confirm that the		
	process is sound and conforms		
	to FTA C-4220.1F.	D : 1	
Construction Contract Terms	To confirm that the construction	Review by a person or contract	
and Conditions	contract completely and clearly	administrator with experience in	
	defines the terms and conditions	managing construction contracts	
	under which the Work will be	of similar scope and complexity	
	performed.		
	To confirm that federal		
	procurement requirements are		
	addressed, including Buy		
	America requirements.		
Construction Contract	To ensure consistency between	Review by a person or contract	
Document Terms and	the bid package and the contract	administrator with experience in	
Conditions for Design-Build	packaging plan.	managing a design-build	
Delivery and other alternate	For D/B Contracts, to confirm	contract of similar scope and	
delivery methods	that the contract clearly defines	complexity.	
,	both design and construction		
	requirements.		
	For CM/GC contracts, to		
	confirm that both design phase		
	and construction phase services		
	are adequately defined and		
	calculation of the contractor's		
	fee has been precisely defined.		
	For CM/GC delivery, a review		
	of the project sponsor's design		

Review Item	Review Objective	Review Method
	contract should be conducted to	
	confirm that the requirements	
	correspond with those in the	
	CM/GC contract.	
Quality assurance records	To confirm that quality	Review QA audits and
	assurance checks and reviews	observations by a person with
	have been performed in	experience in performing quality
	accordance with the approved	assurance reviews or audits.
	Quality Assurance Program Plan	
	(QAPP)	
Construction Cost Estimate	To confirm that the estimate as	Review by a cost estimator with
	prepared is consistent with the	experience in cost estimating,
	Plans, Specifications, and	including the estimation of the
	Contract General and Special	construction cost impacts of
	Conditions, and that it is based	contract special provisions
	upon contemporary cost	related to risk transfer and
	information.	construction limitations.
		Consider interview of agency /
	To confirm that the estimate of	consultant estimator to confirm
	General Conditions' costs	that they have reviewed contract
	reflects actual contract	terms and conditions and made
	requirements and not an industry	appropriate allowances.
	average factor.	

Confirmation that the bid package is consistent with project management plans with respect to delivery method, scope, schedule and budget. The following reviews and comparisons provide confirmation that the bid package is consistent with the Environmental Documents and previously accepted project management plans.

Review Item	Review Objective	Review Method	
Plans, specifications, and special	To confirm compliance of the	Comparison, using qualified	
contract conditions with respect	Work to be constructed with the	personnel, of the design and	
to Environmental Documents	Environmental Documents	construction requirements of the	
	Environmental Document wit		
		the designs and requirements of	
		the bid package.	
Plans, specifications, and special	To ensure that the documents	Compare bid package scope of	
contract conditions with respect	reflect the scope of work	work with that developed during	
to the project Scope of Work.	developed during the Project	Project Development and	
	Development and Engineering	Engineering phases using	
	phases.	qualified personnel.	
Plans, specifications, and special	To ensure consistency between	Compare bid package schedule	
contract conditions with respect	the bid package and the Project	information with Project Master	
to Project Master Schedule Master Schedule. Review the S		Schedule using qualified	
	schedule in context with the	personnel. Identify management	

Review Item	Review Objective	Review Method
	Cost Estimate(s); ensuring that cost associated with all work activities have been properly accounted for in the cost estimate and vice versa	baseline data used and modifications made through the procurement phase. Particular attention should be paid to schedule contingency for delay and re-bid, and ensuring that predecessor activities will not interfere with construction per the bid package schedule (examples: preceding contractors, utilities relocations, real estate acquisition).
Construction Cost Estimate with respect to Project Budget	To confirm that the Construction Cost Estimate plus appropriate contingencies is affordable within the overall Project Budget. To confirm consistency of Cost (and Schedule) Package Level products and documentation with package management baselines.	Compare Construction Cost Estimate with Project Budget using qualified personnel. Identify management baseline data used and modifications made through the procurement phase
	To confirm that the Project Schedule & Cost Estimate are in sync, i.e. time allocated for work activities in the cost estimate agrees with time allocation is schedule	

Confirmation that the project sponsor's organization has in place the necessary precursors to begin construction, and that the organization is ready to enter the construction phase of the project. The PMOC should verify the review items are consistent and updated in applicable project management plans.

Review Item	Review Objective	Review Method
Third Party Agreements	To confirm that necessary third party agreements are in place to support the construction.	Review third party agreements in the overall context of the project with qualified personnel. Particular attention should be provided to design standards; utility agreements; agreement with other railroads; inclusion of enhancements; concurrent non-project activities, and timing of reviews, permits, land transfers, and funds transfers.
Real Estate requirements in contract documents	To confirm that all necessary rights-of-way (ROW) will be available for use by the contractor at Notice to Proceed (NTP). If all ROW will not be available at NTP, confirm that the contract documents, including plans, clearly identify those parcels that are not immediately available, when each parcel will be available for use by the contractor and any associated contract conditions for further delays.	Compare the Real Estate requirements in the contract documents with the approved Real Estate Acquisition and Management Plan (RAMP).
Procurement Policies and Procedures	To ensure Procurement Policies and Procedures are in place that are in compliance with federal policies, ensure a fair bidding environment, and are able to efficiently resolve issues and disputes that may arise during the course of the Construction Contract.	Review project sponsor's policies and procedures by qualified personnel.
Project Staffing Plan	To ensure that the Project Sponsor has adequately implemented a project staffing plan that ensures the necessary qualified staff will be available at an appropriate time to manage and support the work that is being bid.	Review staffing plan to ensure it is consistent with the PMP approved for construction.

Review Item	Review Objective	Review Method	
Risk Register, Risk and	To confirm that the project	Review Risk Register and RCMP and	
Contingency Management	sponsor has incorporated	compare to contract documents by	
Plan (RCMP)	appropriate risk mitigation	qualified staff.	
	measures into the contract plans		
	and specifications.		
	To confirm that the project		
	sponsor has a plan to mitigate		
	project budget and schedule risks		
	if they come to fruition.		
Financing Plan	To ensure that money will be	To be performed by the Financial	
	available to pay the contractor for	Management Oversight Contractor	
	the work on a timely basis	(FMOC). Review the funds availability	
		in the context of all project	
		requirements to confirm that adequate	
		funds will be available on the schedule	
		called out in the bid package. Confirm	
		the current validity of any underlying	
		assumptions associated with the	
		Financing Plan (for example that	
		borrowing will occur at a given time).	

The PMOC readiness report shall include:

- 1) Executive summary in three pages or less that includes the following:
 - a) Summary of findings of the procurement documents related to the project's scope, schedule, and cost
 - b) Listing of any significant omissions or uncertainties and characterization of them in terms of likelihood (probable, remote, improbable) and their consequence (catastrophic, critical, serious, moderate, marginal)
 - c) Professional opinion regarding the consistency of the project scope, schedule and cost and the ability of the project sponsor to manage the project
 - d) Statement of potential range of procurement cost (bids) (lower and upper bound
 - e) Recommendation to FTA (if PMOC considers a recommendation appropriate) of the readiness of the project (or procurement package) to proceed with bidding (or advertisement)
- 2) Review procedures and personnel (including capsule of reviewers qualifications; to the extent possible, the reviewers should be same individuals that performed the prior review of the project documents, and should be regular participants in project reviews).
- 3) Readiness of plans and specifications for the type of procurement contemplated
 - a) Design completeness
 - b) Contract terms and conditions are consistent with federal requirements, including Buy America requirements
 - c) Procurement bid and award process consistent with best industry practices
 - d) Cost Estimate accurately reflects contractual requirements

- 4) Consistency with Environmental Document and Project Plans
 - a) Consistent with Environmental Documents and Project Development Plans
 - b) Consistent with PMP, RAMP and QAPP
 - c) Consistent with Risk Assessment and RCMP
 - d) Consistent with Project Master Schedule
 - e) Consistency with Project Budget
- 5) Agency Readiness
 - a) Organization and Staffing
 - b) Third party agreements and project sponsor furnished permits
 - c) Funding availability (FMOC)
- 6) Conclusions and Recommendations (detailed)
- 7) Provide appropriate back-up information in appendices

7.0 REPORT, PRESENTATION, RECONCILIATION

The PMOC shall provide FTA with a written report of its findings, analysis, recommendations, professional opinions, and a description of the review activities undertaken. The report shall identify any and all omissions, discrepancies, shortcomings or fatal flaws. After FTA approval, the PMOC should share the report with the project sponsor. In the event that differences of opinion exist between the PMOC and the project sponsor regarding the PMOC's findings, the FTA may direct the PMOC to reconcile its findings with the project sponsor and provide FTA with a report addendum covering the agreed modifications by the project sponsor and PMOC.

The report formatting requirements of OP 01 apply. When necessary, PMOC shall perform data analysis and develop data models that meet FTA requirements using Microsoft Office products such as Excel and Word and use FTA-templates when provided. The PMOC may add other software as required but documentation and report data shall be made available to FTA.

APPENDIX A

Acceptable Quality Level

	DESIRED OUTCOME	PERFORMANCE REQUIREMENT	CHECK	PERFORMANCE MEASURE	ACCEPTABLE QUALITY LEVEL	MONITORING METHOD
1	The PMOC shall review and analyze Project documents to determine that project sponsor has advanced the Project to the position of being ready to procure construction work.	R1a. The PMOC shall develop and document a process for review and analysis of Project documents to confirm that the Project has been advanced by project sponsor to the position of readiness to procure construction work.		M1a. Review of the process documentation.	Q1a. PMOC provides documentation of the process.	MM1a. Periodic review by FTA or its agent.
		R1b. The PMOC shall use its process and project management judgment to review and analyze Project documents to determine that project sponsor has advanced the Project to the position of being ready to procure construction work.		M1b. Documented review and analysis of Project documents to determine that project sponsor has advanced the Project to the position of being ready to bid construction work.	Q1b. Review must be made and the PMOC provides internal verification that the process as documented has been followed.	MM1b. Periodic review by FTA or its agent and the PMOC's internal verification.
	The PMOC shall form a professional opinion as to whether or not the construction procurement packages and supporting documentation are complete, accurate and consistent with the PMP and confirm that 's	R2a. The PMOC shall perform a review and analysis of the project documentation and confirm that the construction procurement package, including plans, specifications and contract provisions is ready for bidding.		M2a. PMOC's review and opinion as to the readiness of the construction procurement package for bidding demonstrates sound management and engineering practices and professional experience.	Q2a. Professional opinion of the readiness of the construction procurement package for bidding.	MM2a. Periodic review by FTA or its agent.
2	organization is prepared to successfully manage the procurement and construction processes.	R2b. The PMOC shall perform a review and analysis of the Project documentation and confirm that the construction procurement package is consistent with the PMP with respect to scope, schedule and budget.		M2b. PMOC's review and opinion as to the consistency of project sponsor's construction procurement package with Project documents demonstrates sound management and engineering practices and professional experience.	Q2b. Professional opinion of the consistency of the project sponsor's construction procurement package with the PMP with respect to scope, schedule and budget.	MM2b. Periodic review by FTA or its agent.
3	The PMOC shall provide FTA with a written report of its findings, analysis, recommendations and professional opinions.	R3. The PMOC shall present its findings, analysis, recommendations and professional opinions to FTA in a written report and, when so directed by FTA, augment the written report with oral presentations.		M3. Review of the PMOC's presentation of findings, analysis, recommendations and professional opinions by the FTA.	Q3. Reports and presentations are professional, clear, concise, and well written. The findings and conclusions have been reconciled with other PMOC reports and have been reconciled with the project sponsor to the extent possible.	MM3. Periodic review by FTA or its agent.