

Royal BC Museum Modernization

Royal British Columbia Museum Modernization - Museum Project

Appendix V – Procurement Options Descriptions

December 2021

MUSEUM MODERNIZATION PROJECT PROCUREMENT OBJECTIVES

The following procurement objectives provide the analytical framework for evaluating the procurement options:

Table 1: Procurement Objectives

Procurement Objectives	Considerations
Design process and team selection	<ul style="list-style-type: none"> • Extent of Owner's control over the design process and team selection; • Ability to attract acclaimed and emerging design firms under given models; and • Indigenous and community partners engagement in design
Design functionality	<ul style="list-style-type: none"> • Contributes to a functional, constructable and maintainable design solution
Cost Certainty and Affordability	<ul style="list-style-type: none"> • Level of cost certainty provided by the model. • The project is affordable.
Schedule	<ul style="list-style-type: none"> • Impact on total schedule; and • Impact on schedule certainty.

PROCUREMENT OPTION DESCRIPTION

1.1 CONSTRUCTION MANAGEMENT

In a Construction Management (CM) arrangement, the Royal BC Museum would hire a construction manager to assist with the planning and management of the project and engage an architect to develop a detailed design (working drawings) for the proposed facility.

The architect would be procured through a traditional RFP soliciting proposals from qualified architects that would include the firms' past work on relevant projects, proposed approach to designing and delivering the project, and how they would work with the Owner. The construction manager would be solicited from a similar process where proposals would include their experience as a construction manager on complex, multi-phase projects as well as their approach to delivering the project.

Once working drawings were complete, the construction manager would tender a stipulated sum construction contract or a series of tender packages. The lowest qualified price (or prices) would be selected and an industry standard fixed-price construction contract would be used. The construction contractor would take responsibility for constructing the building to the issued for construction drawings and specifications developed by the architect. The construction manager would manage the contractors to complete their contracts. While CM provides flexibility with the tendering process, all schedule and costs risks are retained by the Royal BC Museum. Once the building is complete, the Royal BC Museum would take possession and maintain and operate the asset for its entire lifespan.

CM is most typically used to verify cost/constructability as the design evolves and in high inflation environments in order to more immediately secure pricing through sequential tenders and fast track the project delivery.

CM has been used on arts and culture facilities such as the Museum of Human Rights (circa 2014) and Royal Ontario Museum (circa 2007).

1.2 DESIGN BID BUILD

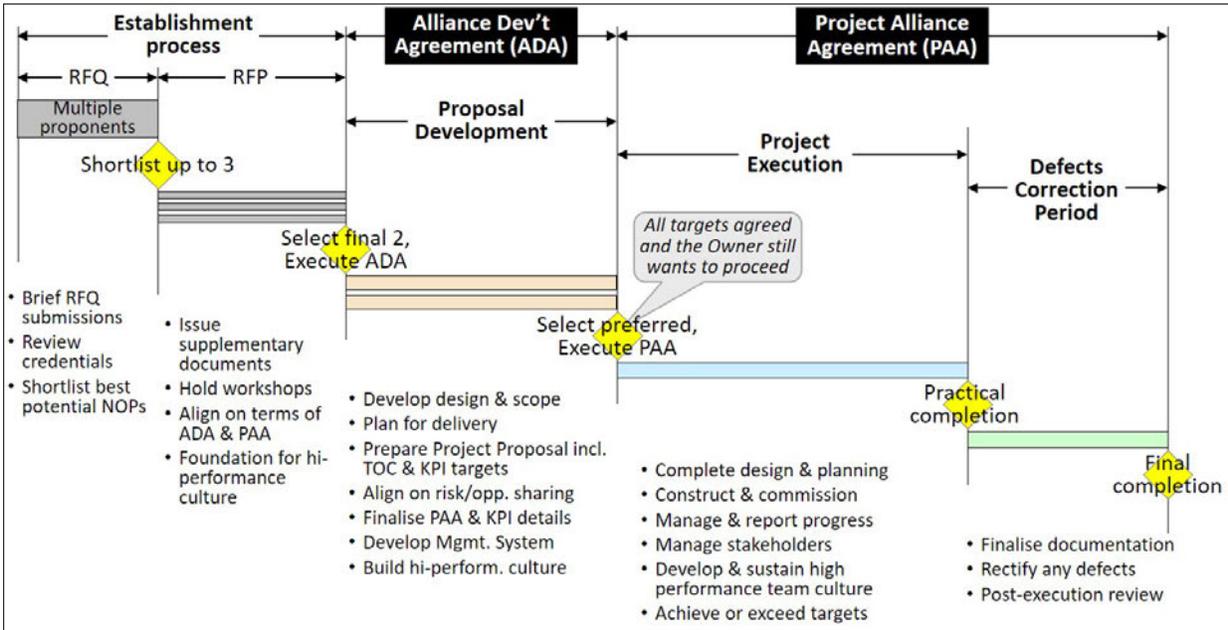
Using a Design Bid Build (DBB) model, the Royal BC Museum would engage an architect to develop a detailed design (working drawings) for the facility. Once the working drawings were completed, a tender call for a construction contract would be issued. The lowest qualified price would be selected and an industry standard fixed-price construction contract would be used. The construction contractor would take responsibility for constructing the building to the specifications detailed in the working drawings developed for the owner by the architect. The Royal BC Museum would remain responsible for errors and omissions and would make monthly progress payments to the contractor. Once the building is complete, the owner would take possession and maintain and operate the asset for its entire lifespan.

1.3 ALLIANCE

In a conventional, risk-allocated contract each party is motivated to protect its own interests, and when risks occur the actions required to protect individual positions can easily overwhelm the actions which would improve project outcomes. The central feature of Alliance Contracting is that most risks are borne collectively by the Alliance participants, which include the owner and non-owner participants, so when difficulties, or opportunities, arise all Alliance participants are motivated to optimize the collective outcome because they all 'sink or swim together'. An Alliance Contract occupies a position near the mid-point on the spectrum of fixed price (all financial risks borne by the contractor) to cost-plus (all financial risks borne by the owner in order to mitigate non-financial risks) – enabling a balance of cost- and non-cost incentives which aligns contractor objectives with the owner's objectives.

Alliance is a three-stage partnership procurement model as described in Figure 1 below.

Figure 1: Alliance Establishment Process



The first stage would entail an RFQ whereby respondent teams would submit qualifications along with a concept design to be evaluated by the Royal BC Museum. The evaluation process would result in a shortlist of up to three proponents who would then be invited to participate in the two stage RFP process.

The purpose of the second stage (or the first phase of the RFP) is to select up to two proponents with whom the Royal BC Museum may enter into the Alliance Development Agreement (ADA). During the first phase of the RFP, the three Proponents would develop concept designs using the indicative design and functional program as a reference. The first RFP evaluation would score the concept designs, the Proponent's approach to achieving the Project objectives and the behaviour's demonstrated during the behavioural and commercial alignment workshops to determine the top two Proponents to enter into the ADA with.

The third stage, the Alliance Development Phase (ADP), would see the final two Proponents further develop their concepts through traditional technical collaborative meetings, but also continue through commercial alignment on adjustment events and develop a target cost estimate, all of which will be included in the Project Proposal which scores technical solution, people and price. Competitive pricing tension is maintained through a target cost threshold around which scores for price are based and proponents that exceed the threshold have their score penalized.

The Project Alliance Agreement (PAA) governs the delivery phase, commencing once the Royal BC Museum selects the preferred Project Proposal, and continuing through to the expiry of the Defects Correction Period (DCP).

Alliance has been used on arts and culture facilities such as the National Museum of Australia (circa 2001) and is presently being implemented on the Cowichan District Hospital.

1.4 DESIGN BUILD WITH CONSTRUCTION MANAGEMENT

Under this option, the main contract would be a DB competition with a fixed fee and maximum value evaluation approach with the gallery fit out to be managed by the design builder under a CM contract. Hazmat and deconstruction would be isolated and delivered under a CM as described in Table 2 below:

Table 2: Scope Combinations

Scope	Procurement Methodology
Hazardous Materials Abatement	Construction Management
Demolition and Deconstruction	
Base Building Construction	Design-Build with Construction Management
Exhibition and Gallery Fit Out	

Following the CM process described in Section 1.1, hazardous materials abatement and deconstruction would be procured first as an early works package. The DB procurement would include the design and construction of the base building as well as the proposed CM fees for managing the exhibition and gallery fit-out.

The DB model is a two-stage procurement model. The first stage entails a request for qualifications (RFQ) whereby respondent teams submit qualifications to be evaluated by the owner. The evaluation process would assess the respondents demonstrated strength, experience and capability of leading, designing and constructing similar projects and would result in a shortlist of up to three proponents who would then be invited to participate in the second stage, a request for proposals (RFP).

The RFP process provides the opportunity to select a design build team to undertake the detailed design and construction of the facility, based primarily upon the output specifications prepared by the Royal BC Museum's compliance team. In this RFP phase, the proponents will advance the design in collaboration with Royal BC Museum to approximately 30 percent prior to contract award.

Innovation in the RFP evaluation process would see the project move away from a lowest adjusted price competition to a 100% scoring on design and technical proposals, therefore taking price out of the equation so long as the financial proposal is under or at the DB price ceiling. The successful team would enter into a fixed price contract with payments being made by the Royal BC Museum at specific progress milestones, typically monthly. CM fees for the exhibition fit-out would be included in the Financial Submission allowing the CM fees to be competitively tendered.

Unsuccessful proponents are provided partial compensation to offset some of their pursuit costs. Upon completion of construction, the design-builder is responsible for testing and commissioning, after which

the new asset is transferred to the Royal BC Museum who will be responsible for operations, maintenance and life cycle.

DB models have been used recently on arts and culture facilities such as the Royal Alberta Museum (circa 2018), with the DB/CM model currently being used on multiple health care projects in BC that include both new construction and renovation/tenant improvement components.

1.5 DESIGN BUILD FINANCE WITH CONSTRUCTION MANAGEMENT

In addition to the characteristics described under the DB model above, the Design Build Finance (DBF) approach involves the successful design build team entering into a fixed price contract with partial progress payments being made by the owner during construction. The balance of the construction payments would be made through partial short-term financing provided by the design builder. The partial short-term financing in the DBF model provides the owner with liquid security to better ensure design builder performance in its obligations. This security ensures the design builder has enough “skin in the game” to provide appropriate incentive to effectively and appropriately meet its obligations such as delivery on schedule. Added benefits include the due diligence and oversight applied by construction finance lenders during the design and construction phase to ensure that the design builder’s deliverables and obligations are being met, that appropriate remedial actions are taken if progress falls behind schedule, limitation of owner driven scope changes, and simplified contract enforcement through payment retention.

1.6 DESIGN BUILD FINANCE MAINTAIN WITH CONSTRUCTION MANAGEMENT

In addition to the characteristics described under the DB model above, the Royal BC Museum would enter into an agreement with the private partner who would be required to design, build, partially finance and maintain the facility over the specified term of the agreement. At the RFP stage, the Royal BC Museum would provide performance specifications and seek proposals to design, build, partially finance and maintain the facility. Under a DBFM structure, The FM services scope assumed to be included in the DBFM model would be modified to include prevailing labour requirements consistent with other public private partnerships implemented in the province. Performance payments would be made monthly to the private partner over the life of the agreement at a fixed rate determined at contract close. These payments consist of progress payments during construction, and annual service payments, which only commence once the asset is completed to the owner’s satisfaction. To ensure that the private partner receives full payment, it must meet defined and measurable performance and availability standards on a continuous basis. The inclusion of private sector equity and external financiers as required in a performance-based contract provides greater assurance of a long-term commitment and due diligence to the project that results in a degree of owner-type behaviour from the private sector.