Section J.6

Cost Estimate

I. COST ESTIMATE SCOPE AND GENERAL INFORMATION

1.1 The Contractor shall prepare and deliver a separate cost estimate with each one of the design submittals and each one of the galleries of the project and be available for answering cost associated questions during the design and bidding of the associated contract(s) required for the execution of this project.

1.2 The cost estimate shall be submitted to the government on time together with the rest of the design package with each one of the submittals. No design submittal will be accepted without the cost estimate package, if a design submittal is delivered or presented without the associated cost estimate the complete design submittal will be rejected and returned to the contractor.

1.3 The Contractor shall design a project that is at or below the target "design to" number. The Contractor is responsible for developing project definition for a project that is completely functional, maintainable, operational, and within the cost and scope constraints for this project. If at any time the Contractor determines that the estimated project cost or scope of the project exceeds, or is likely to exceed, the estimated construction contract price and then approved budget or scope set forth in this Statement of Work, the Contractor shall report this fact in writing to the Contracting Officer Technical Representative (COTR). No design submittals will be accepted by the COTR with a deviation of more than 5%. The COTR will reject any design submittal presented above the 5% deviation without a written notification at least one week prior to the submittal informing the COTR of the over budget estimate. Additionally, the Contractor shall submit a control estimate and recommendations for reducing the project's cost and/or scope to within the established limits. Any proposed deviation from criteria must be approved prior to implementation.

1.1 The Contractor shall identify 15% of the project cost into design options that are severable and that can be deleted from the scope if directed by NASM at any moment.

1.2 The exhibit cost estimate shall be a detailed cost estimate itemized and organized following NASM estimate format structure described in the estimate format structure below.

II. ESTIMATE FORMAT STRUCTURE

2.1 It is important that the format of all estimates be as consistent as possible. Two formats have been established for this purpose at NASM; Work Breakdown Structure (WBS) for exhibit contract cost and Success software for construction contract cost. They are a hierarchical presentation of the scope of work. They provide a common, ordered hierarchy framework for summarizing information and for quantitative reporting to customers and management.

2.2 The purpose of the formats are to:

a) Provide an organized manner of collecting project cost data in a standard format for cost reporting and cost tracking

b) Provide a checklist for categorizing costs

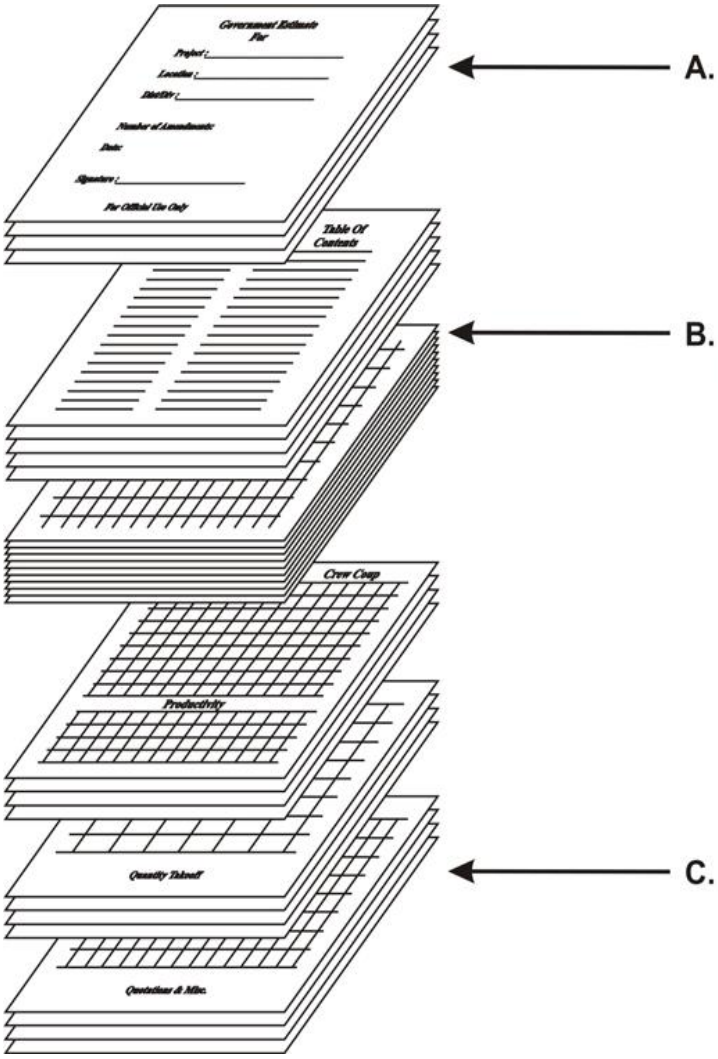
c) Provide a basis to maintain historical cost data in a standard format.

The NASM cost estimate shall be in one package divided in three parts as described below:

Part A – Administrative Section

Part B – Exhibit contract cost section (WBS format provided by NASM)

Part C – Construction contract cost section (Success estimate)



Part A – Administrative Section

- Administrative Information
- Title Page
- Signature Page
- List of Exceptions

Part B – Exhibit Cost Section

- WBS1 – **NOT USED (INTERNAL NASM ONLY)**
- WBS2 - **NOT USED (INTERNAL NASM ONLY)**
- WBS3 - **NOT USED (INTERNAL NASM ONLY)**
- WBS4 – Exhibit Gen. Cont.
- WBS5 – **NOT USED (INTERNAL NASM ONLY)**
- WBS6 – Consultation Support
- WBS7 – Collections
- WBS8 – Maintenance
- WBS9 - **NOT USED (INTERNAL NASM ONLY)**

Part C – Construction Cost Section

- WBS4.14 – Construction (Summary)

III. Deliverables

3.1 Concept Design Estimate (Charrette Report 10%) – The Contractor shall prepare and deliver at the Charrette a Parametric Cost Estimate for each one of the options presented based on assemblies or systems grouping the work of several trades, disciplines and/or work items into a single unit for estimating purposes. This cost estimate will be use to set the budget for the rest of the project. The contractor will coordinate this project with the NASM project delivery team and will conduct two presentations to the senior leadership of the museum (one to the associate directors and a presentation to the museum director for approval).

3.2 Design Development (35% design) – The contractor shall develop the selected charrette concept using both Parametric Cost Estimation techniques and quantity take offs of available information.

3.3 Construction Documents (65% design) The contractor shall prepare and deliver for approval as much as know at the Quantity Take Off (QTO) Estimating, the work is divided into the smallest possible work increments, and a "unit price" is established for each piece. These work increments are typically organized in part C by MasterFormat™ and in part B by the NASM WBS. The unit price is then multiplied by the required quantity to find the cost for the increment of work. All costs are summed to obtain the total estimated cost. This method provides the most accurate estimate, which is typically between -7.5% to +10% of construction costs notwithstanding abnormal market conditions (i.e. natural disasters, market volatility, etc).

3.4 Construction Documents (95% design) The contractor shall prepare and deliver for approval a Quantity Take Off (QTO) Estimating. These work increments are typically organized in part C by MasterFormat™ and in part B by WBS. The unit price is then multiplied by the required quantity to find the cost for the increment of work. All costs are summed to obtain the total estimated cost. This method provides the most accurate estimate, which is typically between -3.5% to +5% of construction costs notwithstanding abnormal market conditions (i.e. natural disasters, market volatility, etc).

3.5 BID Document (100% design) The contractor shall prepare and deliver for approval a Quantity Take Off (QTO) Estimating. These work increments are typically organized in part C by MasterFormat™ and in part B by WBS. The unit price is then multiplied by the required quantity to find the cost for the increment of work. All costs are summed to obtain the total estimated cost. This method provides the most accurate estimate, which is typically between -3.5% to +5% of construction costs notwithstanding abnormal market conditions (i.e. natural disasters, market volatility, etc).

IV. CONTINGENCIES

4.1 Contingencies are used to cover unknowns, unforeseen uncertainties, and/or unanticipated conditions that are not possible to adequately evaluate from the data on hand at the time the cost estimate is prepared, but must be represented by a sufficient cost to cover the identified risks. Contingencies relate to a known and defined project scope and are not a prediction of future project scope or schedule changes.

4.2 Elements of Contingencies - Contingencies are normally separated into two elements - design contingencies and construction contingencies.

4.3 Design Contingencies - Design contingencies are assigned to cover construction cost increases due to design incompleteness, detail changes, alternative design changes, and associated costing inaccuracy.

Design contingencies will normally decrease, as design information becomes known and be zero out at the 100% design submittal.

4.4 Construction Contingencies - Construction contingencies are a reserve for construction cost increases due to adverse or unexpected conditions such as unforeseeable relocations; foundation conditions; utility lines in unknown locations; quantity overruns; or other unforeseen problems beyond interpretation at the time of or after contract award.

V. SAFEGUARDING COST ESTIMATES

6.1 Marking the Government Estimate - The Government estimate will ensure that the protective marking "For Official Use Only" (FOUO) is properly applied to all pertinent documents, computer files, compact discs (CDs), printouts, and other documents prepared manually or electronically for incorporation into the Government estimate.

6.2 Disclosure Outside of the Government - After contract award, ordinarily, only the title page, signature page, and price schedule are disclosed outside the Government. The Government estimate back-up data should not be released since it contains sensitive cost data (e.g., contractor quotes, crews and productivity) that are proprietary or might compromise cost estimates for future similar procurement.

6.3 Although not required by regulations, estimates based on less than completed design should be handled in a discretionary manner. Access to each estimate and its contents will be limited to those persons whose duties require knowledge of the estimate. Estimates prepared by A-E's will also be similarly handled. Any request by the public for information and pricing in the estimate will not be provided until coordination, verification of data, and approvals have been given by the Contracting Officer.

VI. RELEASE OF GOVERNMENT ESTIMATES UNDER THE FREEDOM OF INFORMATION ACT (FOIA)

7.1 The Government estimate and Government estimate back-up data, prepared for construction contracts and modifications, are sensitive procurement information and should in many cases be withheld under the FOIA.

7.2 Requests for Government Estimates and Back-Up Data - Government estimates and Government estimate back-up data are intra-agency memoranda, which may be withheld under FOIA Exemption 5, "confidential commercial information" and "deliberative process" privileges. Proper use of Exemption 5, however, requires a showing that release of information will harm the Government's interests. Therefore, requests for Government estimates and back-up data will be reviewed on a case-by-case basis, based on the following guidance, to determine whether release will harm the interests of the Government. In reviewing requests, the FOIA Officer will seek the assistance of the cost professional. If the FOIA Officer determines that release will harm the interests of the Government, the information will be withheld.