

## Owner's Supplemental Designer Requirements

### **1. Construction Manager at Risk or Agent (CM or CMR or CMA):**

For projects on which a Construction Manager is employed, the Designer shall partner with the CM throughout the project.

- A. Selection: assist the Owner with CMR evaluation and selection, including the shortlisting and interviews.
- B. Design Phase (CMR Preconstruction)
  - 1) Reconcile Cost Estimates at each design submittal
  - 2) Incorporate CMR constructability comments
  - 3) Coordinate alignment of project scope and budget
  - 4) Meetings with the Owner, CMR and consultants as required to sufficiently coordinate and address items 2 and 3
- C. Bid Phase
  - 1) Assist CM in structuring bid packages to facilitate greatest HUB participation.
  - 2) Attend pre-bid meeting and bid openings

### **2. Document Submittals and Reviews:**

- A. University Required Meetings and Document Review:
  - 1. Project Meetings: The Designer shall lead project meetings at regular intervals throughout the design process at a minimum of every 3-4 weeks during Schematic Design and Design Development. During the Construction Document (CD) phase, meetings shall occur at 30%, 60% and 90% completion intervals.
  - 2. Design Review Meetings: At the conclusion of each of the SD and DD phases, the Designer will meet with the ASU Project Manager and stakeholders to discuss the University's review comments. The goal of these meetings is to discuss the comments and to reach consensus on their resolution. At CD phase, the Designer will meet twice with the CPM Project Manager and stakeholders: once, to discuss review comments, and again, to verify that comments have been addressed in the documents. It is only after these meetings that the Designer will be issued a letter to advance to the next phase.
  - 3. Phase Submittal Documentation Requirements Include:

- a. Cost Estimates: Both the Designer and CM or CMR (if utilized on project) shall provide independently derived cost estimates at each phase of design. Estimates provided by the CM or CMR and Designer shall be reconciled at the conclusion of each phase, and a project budget shall be agreed to by all parties before the next design phase is initiated. The CM and Designer shall use the same estimating format to facilitate estimate reconciliation.
- b. Program Reconciliation: Based on the Program as developed by ASU and the Designer, the Designer shall meet with the ASU Project Manager and University Architect at the end of each phase of design to reconcile the Program with the initial Program. Documentation of the program requirements will be in a format approved by the Owner.
- c. Design Development: shall include a narrative that describes the operation of the mechanical systems. Exhaust and HVAC under normal and fault conditions and in smoke management mode, fire alarm, sprinkler, and smoke detection system operation and assumptions shall be clearly delineated. These may be in addition to the code requirements.
- d. Work with the Owner (and possibly Commissioning Agent) to develop the Owner's Project Requirements for the basis of design and implement these throughout the project delivery.
- e. ~~Design Development shall include a pressure differential analysis for Lab buildings or buildings with large exhaust quantities. Analysis to determine that egress from building and proper exhaust containment can be simultaneously achieved during emergencies (fire alarm activation and AHU shut down).~~
- f. Three (3) hard copies and one (1) digital copy of any studies, Advanced Planning, SD, DD and/ or CD submittals as required by the project scope.

- g. At DD and CD phases, provide electronic overlay drawing indicating locations of all equipment for all trades.

### **3. University Special Requirements:**

- (a) Design work under this contract shall comply with the following:  
Appalachian State University Campus Master Plan 20/20  
[www.masterplan2025.appstate.edu](http://www.masterplan2025.appstate.edu)  
Appalachian State Design & Construction Guidelines
- (b) Environmental Assessment (EA): The Designer shall prepare an EA for the project and shall coordinate submittal of the EA to the State Clearinghouse with pre-approval from Appalachian State University.
- (c) Designer shall employ Universal Design Concepts.
- (d) Designer shall provide an Engineer Assessment Analysis of Demolition Areas as required by OSHA 1926, where required.
- (e) Designer and consultants shall be responsible for field verifying existing conditions and dimensions of rooms, building systems and infrastructure for all projects. Existing building plans supplied by the Owner are for general information and are not to be construed as accurate, as-built documents.
- (f) New and buildings and renovations to the extent possible shall be LEED certified Silver as a minimum.

### **4. Construction Administration:**

- (a) The Designer shall respond to Contractors requests within the following timeframes:
  - 1. RFI's – Seven (7) calendar days
  - 2. Proposed Change Order Review & Approval – Fourteen (14) calendar days
  - 3. Product Submittals and Shop Drawings – Twenty (20) calendar days
  - 4. Pay Applications – Five (5) calendar days
- (b) The designer is required to attend weekly contractor progress meetings.

(c) Warranty Inspection: At one month prior to the expiration of the warranty period, the Designer and each of his consultants, including specialty consultants (whether in-house, or listed as a consultant) shall attend an inspection (scheduled by the Designer) of the project and shall report, in writing, a warranty punch list under guarantees provided by the construction contracts. They shall coordinate this inspection with the Appalachian State University's Planning, Design and Construction Project Manager. Within seven (7) calendar days of the visual inspection, the Designer shall forward the written report of discrepancies to the appropriate Contractor(s), with a copy to ASU. The Designer and his consultants shall then follow up on the warranty punch list with the contractor(s) as required, verifying corrections and providing documentation regarding same to the ASU representative.

## **5. Commissioning:**

Commissioning Agents are retained by ASU in a separate contract. The Designer shall integrate specifications provided by the Commissioning agent into the bid package. The Designer will respond to the Commissioning agent's design phase comments and coordinate with their consultants to resolve issues. The Designer shall assist in the coordination of, and attend the pre-function and functional tests/start-up tests as required by the project. The agent shall receive a minimum of one (1) set of documents at the conclusion of each design phase.

## **6. Interior Design/Wayfinding**

The Designer shall provide limited interior design services to include:

- (a) A Room Data Sheet for each space, indicating a preliminary furniture and equipment layout plan.
- (b) A Color Board at the end of Design Development, including major exterior and interior building materials and finish elements. The University Architect will review the Color Board. Colors shall be selected and included in the bid package as a basis for design and pricing.
- (c) Coordinate systems furniture power and data requirements with furniture vendor during Design Development.
- (d) A design for Room Numbering, Interior Sign System and Wayfinding according to ASU "Interior Signage Standards" shall be included. The Designer shall coordinate with the Owner and provide plans and schedules for permanent room identification

and directional signage as part of the construction documents submittal for review and approval by the Owner.

## **7. Testing:**

All soil, hydrant flow tests and environmental testing that occurs during design phases is to be coordinated through the University Project Manager. All Construction phase-related materials testing is to be coordinated through the University Project Manager. The Designer shall assist the University Project Manager with the selection of the testing agent. The testing agent will coordinate testing directly with the Contractor, or CM.

## **8. Asbestos/Lead Abatement Design:**

Within the scope of the project's budget and schedule, the Designer shall, working with a licensed asbestos designer, coordinate and incorporate into the contract documents the design of the asbestos and/or lead abatement. The licensed asbestos designer may be a sub-consultant to the lead firm or contracted with separately by the University.

## **9. Final Documentation Requirements:**

**Designer or CM shall transmit copies of approved shop drawings and a copy of official shop drawing log to the ASU Project Manager at the conclusion of construction.** The Designer shall also transmit three (3) copies of Operation and Maintenance manuals for all equipment provided for the project to the ASU Project Manager at the date of final completion and building acceptance.

(a) ASU requires the following:

1. Two (2) sets of bond copy drawings
2. Three (3) sets of Operations and Maintenance Manuals (hardcopy)
3. One (1) Digital Record Set of Project Manual (Specifications), Maintenance Manuals and Drawings in PDF, DWF or TIFF files
4. One (1) AutoCAD file of drawings. AutoCAD to be current to within two (2) years of CD submittal date
5. One (1) set of approved submittals
6. Two (2) copies of final report (hard copy) for the University (in addition to SCO requirements.)
7. Two (2) copies of Final Acceptance/Occupancy Book for the University (in addition to SCO requirements.)