

608 – Phase C Submittal

The Architect-Engineer will furnish to Project Manager and others as determined by the Project Manager a Phase C submittal package. Generally, a minimum of three sets (two hard copy and one electronic) of submittals will be required for the Phase C review, but the Project Manager will determine the exact number needed for any given project. The Phase C submittal shall include the following:

608.1 Phase C Checklist: With the Phase C submittal, the Architect-Engineer shall prepare the Phase C Checklist. This checklist shall be placed at the beginning of the Phase C submittal.

See 600.1 Phase C - Intermediate Review Checklist for the Architect-Engineer or

See 600.2 Phase C - Final Review Checklist for the Architect-Engineer.

608.2 Federal Funding: When Federal Funding is involved, the University (Sponsor Programs) and/or Project Manager will update the status of the Federal review. If the Architect-Engineer is responsible for these reviews, then they shall provide the status of the federal review. The Architect-Engineer shall include this status in the Phase C submittal.

608.3 Final Phase C Commissioning Plan: During Phase C, the Commissioning Team will:

- Finalize the Commissioning Plan begun in Pre-Design and modified in Phase A and Phase B.
- Improve the accuracy of the plan and incorporate any alterations and/or decisions made during Phase B.
- Identify more details of the Construction Phase and Warranty Phase commissioning requirements.
- Submit this information to the Project Manager as the Commissioning Authority's Phase C Submittal Document.

608.4 Phase C Review Submittal: The Phase C Review Submittal represents complete construction documents, including drawings and specifications, for the purpose of final review and comments. All documents shall include the file number and date.

- Phase C Review Submittal drawings shall be full size, 24" x 36" black line prints or as directed by Project Manager.
- Drawing sets shall include a cover sheet, original site survey (if provided), original geotechnical survey (if provided) and all necessary civil, landscape, structural, architectural, mechanical, plumbing, fire protection, electrical, communications and other drawings as necessary to completely describe the Project.
- Phase C Review Submittal specifications shall be submitted on bound 8-1/2" x 11" double-sided hardcopy.

608.5 Ready-to-Advertise Submittal: The Ready-to-Advertise submittal represents corrected construction documents, including drawings and specifications incorporating comments from the Phase C final review. The Ready-to-Advertise documents shall be submitted ready for reproduction.

Ready-to-Advertise drawings shall be stamped and signed by the responsible design professional in a PDF format. After signing, all drawings shall be submitted bound on 24" x 36" paper or as directed by Project Manager.

Ready-to-Advertise specification master shall be submitted on electronic media in PDF format. The Aids to Advertising documents shall be submitted on electronic media in Word format. The cover sheet shall be omitted. The cover sheet for the Ready-to-Advertise specifications will be produced by DFMS.

608.6 Specifications - Division One (front end) Documents: The Project Manager will prepare the non-technical "front-end" portion of the specifications using input provided by the Architect-Engineer.

608.7 Aids to Advertising: In addition to the drawings and specifications, the Architect-Engineer is required to furnish certain "Aids to Advertising". All Aids to Advertising required with the Ready-to-Advertise submittal must be furnished in electronic media in Word format.

Aids to Advertising shall include, but may not be limited to, the following:

- **Specifications Table of Contents:** The Architect-Engineer shall prepare a "Table of Contents". The Table of Contents for all specifications sections are to be included in the main table and not provided as a supplement table at the beginning of those sections.
- **Description of Work:** The Architect-Engineer shall furnish a "Description of Work" statement. This will be a brief written description of the Work involved and will include a summary of Project requirements, principal materials and trades, restraints and abnormal site conditions. The Project title and location, including the City and County will be furnished. This description shall be suitable for insertion into the Advertisement for Bids without modification or editing.
- **List of Drawings:** The list of drawings consists of drawing sheet numbers, titles and date(s). Titles on the List of Drawings shall match the titles on the individual drawings and the drawing index on the cover sheet of the drawing set.
- **List of Additive Alternates:** Provide a list of bid additive alternates. Include a brief description of each alternate. **See Section 607 – Alternates / Allowances / Unit Prices**
- **List of Unit Prices:** Include a brief description of unit price items and the units of measure for which prices are to be provided. Limit the number of unit prices listed and include only those unit prices that are important to the Project, i.e. where there will be a likely need to modify the contract. **See 607 – Alternates / Allowances / Unit Prices**
- **List of Proposed Subcontractors:** The List of Proposed Subcontractors should include only major/important trades to the Project. Include a brief identification of each trade and a line for the insertion of the proposed subcontractor's name.
List of Proposed Materials and Equipment: The List of Proposed Materials and Equipment should include only those suppliers/manufacturers that are important to the Project. Include a brief description of each product and a line for the insertion of the proposed supplier/manufacturer.
- **List of Owner-Furnished Equipment:** Include equipment descriptions, sizes and quantities. Include in the Contract Documents who, owner or contractor, will coordinate and install all Owner-Furnished equipment.

Any questions concerning the above-listed Aids-to-Advertising submittals should be directed to the Project Manager or Project Contracting Officer for resolution prior to submission of the Ready-to-Advertise documents.

608.8 Special Conditions: The Architect-Engineer shall prepare the Special Conditions for the Project. The Special Conditions shall be coordinated with the University's standard General Conditions.

The Special Conditions shall not duplicate or modify any provisions of the General Conditions without concurrence from the Project Manager.

The Special Conditions shall include project-specific special provisions that address unusual situations that are not otherwise addressed in the technical specifications. The following categories are typical (but are not to be considered an exhaustive list):

- Times for completion (establish times both Substantial and Final)
- Liquidated damages (establish amount)
- Electrical Inspections and fees
- Testing and fees
- Identification of work to be performed "by others"
- Site office
- Site communications (contractor phone, fax, etc)
- Resident Observer – Include requirements for space including desk, chair, legal file cabinet, data connection, etc.
- Employee conduct
- Temporary utilities
- Site access
- Security/safety requirements
- Material storage
- Contractor staging
- Construction sequences/phasing
- Building occupation during construction
- Interface Issues
- Utility outages
- Commissioning
- Builder's Risk Insurable Value
- Project Management Software Requirements

608.9 Temporary Utility Services (Power, Lights, Temporary Heat and Water): Typically, the General Contractor shall be responsible for providing and paying for temporary electrical service, temporary heat and water. The Project Manager may direct otherwise for certain Projects.

608.10 Phase C Cost Estimate: The Architect-Engineer shall verify and further develop the Phase B estimate. The Architect/Engineer shall:

- Consider the economics that will affect the construction cost of the Project. The estimate must be researched for cost trends, escalation and industry factors to ensure its sufficiency through the design phases, the bidding process and construction.
- Prepare the cost estimate on the Phase C Estimate of Construction Cost form, provided by DFMS (available in Excel format). Additional sheets with detailed breakout cost information shall be provided as appropriate. **See Section 611 for the Phase C Estimate of Construction Cost.**
- Do not include any contingency as part of the estimate. Contingency factors are included in separate DFMS documents.
- Notify the Project Manager and the Owner Representative if the final estimate exceeds the last approved estimate. Explain fully the reasons for the increase. This must be done a minimum of two (2) weeks before any review of final plans will be considered. Failure to obtain approval of the increased cost will result in delay and a possible directive to redesign.
- Update the schedule information on the Phase C Estimate of Construction Cost
- Update the Space Study Statement on the Phase C Estimate of Construction Cost
- The authorized Owner representative shall accept Phase C Submittal of Construction Cost.

608.11 Builder's Risk Insurable Value: Normally, the insurable value for builders risk insurance is the construction contract amount. Deviations may be made from the "construction contract amount" when a building project involves a large amount of site excavation, etc. However, the main point of emphasis is that the "insurable value" must always be defined.

- The special conditions shall read, "The insurable value is the contract amount" or "The insurable value is the contract amount less the value of certain designated phases of work."
- The Project Manager shall coordinate this determination with the Associate Director of DFMS.

608.12 Other Specification Requirements: The Architect-Engineer is advised of the following expectations:

- **Pre-Qualifications:** Specifications requiring pre-qualification of subcontractors, suppliers, and manufacturers are allowed as specifically authorized by DFMS.
- **Geotechnical Exploration Report (if necessary):** The geotechnical exploration report shall be included in the Project Manual. Drawings indicating boring locations and/or logs of borings may be included in the Project Manual or in the drawing set.
- **Earth and Rock Excavation:** Earth and rock excavation shall be UNCLASSIFIED unless specifically authorized by DFMS. Geotechnical information shall be included in the bid documents. Coordination is expected in regard to this matter among the Architect-Engineer and all Sub-Consultants.
- **Inspection and Testing of Materials:** All inspection and testing costs required by the Contract Documents, other than those required by Special Inspections shall be paid by the Contractor. Special Inspections shall be paid and/or contracted by DFMS. Testing reports shall be transmitted directly to the Architect-Engineer and the

Project Manager by and from the testing agency. Reports shall also be transmitted to the Contractor and/or appropriate Subcontractors.

- DFMS shall approve all proposed testing agencies prior to the work being performed.

608.13 Special Inspections: The following is an excerpt from the Kentucky Building Code:

SECTION 1704 - SPECIAL INSPECTIONS

1704.1 General. Special inspections are required for all buildings and structures that require the services of a registered design professional per Section 106, Section 122 and Table 122.1. Where application is made for construction as described in this section, the owner or the registered design professional in responsible charge acting as the owner's agent, shall employ one or more special inspectors, as defined in 1702, to provide inspections during construction on the types of work listed under Section 1704. These inspections are in addition to the inspections specified in section 109.

It is the responsibility of the Architect-Engineer to include in the specifications the Special Inspections required by the Kentucky Building Code.

Special inspections will be contracted either through the Architect-Engineer, by separate contract with the Special Inspection firm or a combination of the two depending on the specific inspections required.

608.14 Electrical, Plumbing and Mechanical Inspections: The Contractor shall not use private inspectors. All electrical, plumbing and mechanical inspections will be performed by inspectors from the Kentucky Division of Building Code Enforcement. **Review Department of Housing Building and Construction**

The contractor shall be responsible for requesting, scheduling, and coordinating all inspections through the Inspections Section.

608.15 Building Design Criteria and Code Analysis Plan: The Architect-Engineer shall provide a floor plan showing the minimum standards required to comply with applicable building codes. Information shown shall include, but not be limited to the following:

- Required codes referencing edition used.
- Use and Occupancy Classification.
- General Building Height and Area (with calculations).
- Type of Construction; Fire-Resistance-Rated Construction.
- Fire Protection Systems.
- Means of Egress (with occupant loads per space noted on plans).

608.16 Renderings and Models: The Architect-Engineer shall submit the rendering in electronic media and photographs in accordance with the Architect-Engineer's Agreement, on or before the date of the final review.

- **Renderings:** When required by the Architect-Engineer Agreement, the Architect-Engineer shall prepare a colored perspective rendering of the principal element of the project (i.e.: building exterior, site layout, etc.). The Architect-Engineer shall submit a sample or a copy of a previous colored rendering, indicating the proposed artistic style. The proposed views of the project rendering shall also be submitted. The actual rendering shall not to be executed until the artistic style and selected views are approved by the Project Manager. The format and details of the deliverables shall be as agreed upon with the Project Manager.
- **Models:** When required by the Architect-Engineer Agreement, the Architect-Engineer shall prepare a working model constructed of crescent board, styrene

board or other appropriate modeling materials. Specific modeling techniques and level of detail shall be appropriate for the Project and as agreed upon with the Project Manager.

- **Computer Animations:** When required by the Architect-Engineer Agreement, the Architect-Engineer shall prepare computerized “fly-throughs” or other visualizations. Specific techniques and level of detail shall be appropriate for the Project and as agreed upon with the Project Manager.

608.17 Project Signage: A project sign is to be specified only when authorized by the Project Manager. When authorized, a detailed drawing of the project sign is to be included in the bid documents. Provide a reproduction-ready digital signage graphics file. See **Section 608.21 Project Sign** for a guide drawing of a typical project sign. Alternate sign formats or graphics must be approved by the Project Manager.

608.18 Contractor Commissioning Requirements: Commissioning Process activities shall be included in the Bid Documents as follows:

- The specifications will describe the roles, communications methodologies, and reporting requirements necessary for the Project.
- The specifications will not necessarily dictate the means and methods for satisfying the Commissioning Process but shall describe the required activities and deliverables.
- The Bid Documents shall instruct the Contractor to provide for these activities in their bids.

608.19 Commissioning: The Architect-Engineer shall revise or include any Commissioning requirements and review comments into the Contract Documents.

608.20 LEED: During Phase C, the Architect-Engineer shall perform the following for Projects seeking LEED Certification:

- Ensure that the Contract Documents incorporate information including drawings, details and specifications necessary to meet the LEED requirements for credits being pursued.
- Include Contractor requirements relating to LEED documentation, process, etc.