

SECTION 1.3, ORIENTATION FOR CONSTRUCTION MANAGER AT RISK DELIVERY METHOD

1.3.0 THE UNIVERSITY OF MISSOURI

1.3.0.1 The University of Missouri System (UM) is made up of four campuses: University of Missouri-Columbia (MU), University of Missouri-St. Louis (UMSL), University of Missouri-Kansas City (UMKC), and Missouri University of Science and Technology (S&T). Each campus has a separate administration. Design and construction projects are typically funded and administered by the local campus administration.

1.3.0.2 The campus assigns a Project Manager (PM) for each project.

1.3.0.3 The University Board of Curators shall approve the architectural and engineering consultant fees, the project budget, funding and scope of work for projects with a total project cost of \$5,000,000 or more, or on debt financed projects, before the design of the project is started. This does not include the pre-design programming and planning to develop estimated project cost, scope of work, and justification. The University Board of Curators shall also approve the architectural and engineering consultant when the fees are greater than \$500,000. Additional approvals may be required if scope or budget changes significantly. The PM will inform the A/E what approvals are necessary and what approval support is required.

1.3.1 AGREEMENTS BETWEEN THE UNIVERSITY AND CONSULTANT

1.3.1.1 The University's **Project Manager** [PM] is the **Owner's Representative** while completing the agreement between the University and the A/E. All instructions and approvals come to the consultant from the PM.

1.3.1.2 The University uses the University of Missouri [Standard Consultant Agreement](#) as the contract between the consultant and the University for Design Services. Review this document carefully; the University allows no exceptions to this agreement form. Agreements for non-design services ([General Consulting Agreement](#), [Geotechnical Engineer Agreement](#) and [Land Surveyor Services Agreement](#)) may be used as necessary.

1.3.1.3 The consultant will provide all basic services noted in the Standard Consultant Agreement form for the project. Examples of Additional Services include: Life Cycle Cost Alternatives, geotechnical services, environmental services, surveying, laboratory planning services, kitchen equipment design services, multiple bid packages, etc.

1.3.1.4 On major projects, the University may hire an independent code consultant to audit the design and assist the University in its role as the Authority Having Jurisdiction. The University may also hire other consultants as necessary.

1.3.1.5 Renovation projects normally include a review of existing conditions as a part of the basic services. The University will make all existing documentation available to the consultant.

- 1.3.1.6 On major projects, the University will stipulate the maximum design fee in the Request for Qualifications. On other engagements, the consultant will be asked for a fee proposal.
- 1.3.1.7 **Fee proposals** should include the consultant's perception of the University's project scope of work and recommended scope of services. The consultant will include proposed fee and estimate of reimbursable expenses, project schedule, and University provided information. On projects where the University has set a maximum fee in the Request for Qualifications, the consultant's proposed fee must be within the maximum fee stated in the RFQ. If the University adds additional scope of work to the project, a separate proposal will be requested for those services and it will be treated as additional services.
- 1.3.1.8 The PM will tell the consultant the expected fee structure [lump sum, not to exceed, or percentage of construction cost] and what exceptions may apply.
- 1.3.1.9 **Reimbursable and non-reimbursable expenses** are described in Exhibit B of the agreement. The consultant should discuss any potential reimbursable expenses with the PM before the proposal is submitted and a reimbursable budget should be established. Reimbursable expenses shall be approved in advance by the PM, will be paid at cost, and must be accompanied by supporting documentation and/or receipts.
- 1.3.1.10 The consultant's proposal shall identify **project milestones** and include two weeks for University review of submittals. For larger, more complex projects especially at later phases of review, longer review periods should be considered. The PM will provide the consultant with any University schedule requirements.
- 1.3.1.11 All **design review meetings** should be included in the consultant's basic services fee. Also, basic services include a prebid meeting, a pre-construction meeting, a punch-list inspection, and a final inspection.
- 1.3.1.12 The number of proposed **construction observation trips** should be identified by the consultant as a part of basic services during construction. Also, a per trip unit cost for additional construction trips should be identified. A trip refers to one person on site for one day and includes the issuance of any related meeting minutes and site visit reports.
- 1.3.1.13 Unless requested to provide services involving **asbestos containing materials [ACM]**, the University will provide the consultant with the specification for ACM removal. The consultant assumes no design responsibility for work related to ACM removal.
- 1.3.1.14 The University requires a minimum of **\$1,000,000 professional liability insurance**. The PM will tell the consultant if additional professional liability insurance is required. Additional coverage may be required on major projects and/or projects that present unusual risks. The PM may require this as a reimbursable expense. The consultant may be asked to detail their current professional liability coverage and costs in determining the additional cost to the university.

- 1.3.1.15 The consultant shall submit proof of the required insurance with the signed agreement. The University will not execute the agreement or approve payments without approved insurance.
- 1.3.1.16 The University and/or the PM will provide instructions on how to submit payment requests. The process can vary from campus to campus. The university will not process payments unless an executed agreement is on file. In general, invoices must include a detail of the work completed, summarize the total bill for services to date, and note the amount of the current request.

1.3.2 DESIGN PROCESS AND APPROVAL

1.3.2.1 Project Management

- 1.3.2.1.1 The University's Project Manager [PM] is the Owner's Representative during the design of the project. All instructions and approvals come to the consultant from the PM. Services rendered but not requested by the PM will not be compensated.
- 1.3.2.1.2 The PM manages the total project budget and requires the consultant to manage the construction budget in conjunction with the Construction Manager at Risk (CMR).
- 1.3.2.1.3 The PM will manage internal University approvals and instruct the consultant accordingly.
- 1.3.2.1.4 The consultant should insist on timely owner provided information and approvals. The University asks the consultant to notify the PM of owner related delays before the schedule is jeopardized.
- 1.3.2.1.5 The consultant must notify the PM immediately if the consultant believes additional services are being requested by the University. This also applies to abandoned work. A fee must be negotiated and the agreement adjusted immediately.

1.3.2.2 Meetings and Stakeholders

- 1.3.2.2.1 University projects normally involve many academic, student, and service groups as stakeholders in a project. The PM arranges for and coordinates the consultant's contact with these groups as well as with the CMR. Meetings are scheduled by the PM's office.
- 1.3.2.2.2 Campus Facilities Management organizations provide numerous and varied services at each campus. The PM will arrange for and coordinate the consultant's contact with these groups.
- 1.3.2.2.3 Meeting minutes are kept by the consultant and reviewed by the PM before issue. Meeting minutes should be issued to all participants within five working days.

1.3.2.2.4 The University asks the consultant to respect the University's time and conduct effective, productive meetings. The consultant should review meeting agendas with the PM in advance.

1.3.2.3 Submittals

1.3.2.3.1 The consultant is responsible for providing timely and complete submittals. The University will review the consultant's work for program conformance and constructability. Incomplete and/or poor quality submittals waste University and consultant time. The PM is authorized to reject incomplete submittals.

1.3.2.3.2 The consultant is responsible for the management and performance of their sub-consultants. Delay of a sub-consultant's part of a submittal is considered an incomplete submittal from the consultant.

1.3.2.3.3 Delay of a project due to incomplete submittals is the responsibility of the consultant.

1.3.2.3.4 Detailed submittal requirements are described in Section II.

1.3.2.3.5 The consultant will allow two weeks of University review time between submittal of review documents and the review meeting. The University considers the milestone achieved only when the review is complete per the consulting agreement.

1.3.2.3.6 Final review documents should be ready to issue for bid. This includes the technical specifications and required logs (Shop Drawing and Submittal Log, Operating Instructions and Service Manual Log, and Close Out Submittal Log) in the Special Conditions.

1.3.2.3.7 The University will supply the CMR with an electronic copy of the Special Conditions. The PM will work with the CMR to tailor this for the project. The PM will supply the pre-printed Division 1 bidding documents when the CMR is instructed to advertise the project. The consultant will be given a copy to review.

1.3.2.4 Electronic Documents

1.3.2.4.1 The University requires electronic files of design drawings to interface with campus facilities management software. The consultant should coordinate the format and media with the PM. All contract documents and studies shall be furnished to the University in an electronic format, in addition to a hard copy format.

1.3.2.4.2 Each review submittal will be provided in PDF format to the campus PM. The PM may elect to print review sets from the PDF file provided. Electronic versions provided shall be identical to any printed or plotted versions provided by the consultant.

- 1.3.2.4.3 The Project Manual will be submitted as one file per volume of project manual to be printed and bound with a direct correlation between electronic files and printed volume. Bookmarks will be set in the file for title page, table of contents and each numbered technical specification section.
- 1.3.2.4.4 Drawings shall be submitted as one file per drawing volume to be printed and bound. Bookmarks shall be set for each sheet of the drawings by drawing designation, i.e. sheet number.

1.3.3 BIDDING

- 1.3.3.1 The PM coordinates the **advertisement** with the CMR after the final review documents are approved.
- 1.3.3.2 **Addenda** are part of the contract documents and will be expeditiously distributed to all planholders and plan rooms at least 72 hours before the bids are due.
- 1.3.3.3 The CMR assisted by the PM and consultant, will hold a **prebid meeting** if required by the agreement. Plan holders are invited to attend to ask questions about the drawings and specifications and to inspect the project site. The consultant will be asked to describe the project and point out important facets of the work and schedule. Simple clarifications can be made in response to questions. Other questions will be recorded and clarified by addenda. Questions requiring interpretations by the consultant will be answered by addenda. Pre-bid meeting minutes are not required and in no case will pre-bid meeting minutes be sent out with an addendum.
- 1.3.3.4 The Consultant will assist the owner in evaluating the bids received by the CMR.

1.3.4 CONSTRUCTION

- 1.3.4.1 Once the project is in construction, the **Owner's Representative** is no longer the PM. The construction project manager (CPM) is now the Owner's Representative. All instructions and approvals come to the consultant from the CPM. Services rendered but not requested by the CPM will not be compensated. This includes site visits.
- 1.3.4.2 **Communications** during construction, including letters, memos, directives, etc., flow through the CPM with the exception of shop drawings which are submitted directly to the consultant. The CPM will review communications with the consultant and the contractor at the pre-construction meeting.
- 1.3.4.3 The consultant must prepare a final **punch list**, by room, system, or area, and send the requested number of copies to the owner's representative, who will make them available to the contractor. The consultant must field verify completion of punch list.
- 1.3.4.4 The CPM will schedule the **final inspection**. The consultant, owner, and contractor must inspect the work, system by system and room by room, if appropriate, making a record of deficiencies or corrections required to fully comply with the contract documents.

- 1.3.4.5 The University will not make final fee payment until all outstanding items, including the **Record Drawings** in the format required by the University, have been received.