

## 1.0 ORIENTATION

### 1.1.1 INTRODUCTION

This manual is for use by design consultants providing services to the University of Missouri and describes the minimum design and submittal criteria for University projects. The manual has the following sections.

**Section I, Orientation**, describes the general business relationship between the consultant and University.

**Section II, Planning and Contract Document Development Guidelines**, lists University codes, standards, design review, drawing and project manual requirements.

**Section III** presents **Design Guidelines** to be used in the design of University facilities.

**Section IV** presents **Outline Specifications and Details** to be incorporated in specifications and construction documents.

**Appendices** follow the sections with additional information supporting this document.

### 1.1.2 THE UNIVERSITY OF MISSOURI

The University of Missouri System (UM) is made up of four campuses (Columbia, Kansas City, Rolla and St. Louis). Each campus has a separate administration. Design and construction projects are typically funded and administered by the local campus administration.

The University of Missouri System manages the design phases of projects with a construction cost greater than \$100,000.

Board of Curators must approve design agreements where the fee is greater than \$250,000. The Board of Curators must also approve schematic designs on major new construction, major renovation projects and projects which change the exterior appearance of buildings.

## 1.2 AGREEMENTS BETWEEN THE UNIVERSITY AND CONSULTANT

- 1.2.1 The University's **Project Manager** [PM] is the **Owner's Representative** while completing the agreement between the University and the consultant. All instructions and approvals come to the consultant from the PM.
- 1.2.2 The University uses the University of Missouri Standard Form of Agreement between Owner and Consultant as the contract between the consultant and the University. Review this document carefully, as the University allows no exceptions to this agreement form. A copy can be found in Appendix. Other agreements in Appendix are used depending on project scope and type.
- 1.2.3 The consultant will provide all basic services for the project except geotechnical, survey, and environmental. On major projects, the University will hire a 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.
- 1.2.4 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.
- 1.2.5 **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.
- 1.2.6 The University will negotiate not-to-exceed fees for limited/special scope projects and percentage of construction cost fees for major projects. The PM will tell the consultant the expected fee structure and what exceptions may apply.
- 1.2.7 **Reimbursable and non reimbursable expenses** are described in the agreement. Reimbursable expenses must be approved in advance by the PM, will be paid at cost, and must be accompanied by supporting documentation and/or receipts. The cost to reproduce and distribute bidding documents is reimbursable. Other than this cost, percentage of construction cost fees should include all miscellaneous expenses like copying, long distance telephone, faxes, overnight mail, computer usage/plotting, and mileage. Reimbursable expenses for travel have limits; the PM will give the consultant a schedule. The consultant will be provided with a tax-exempt certificate to use for University project expenses.
- 1.2.8 The consultant's proposal shall identify **project milestones** and include two weeks for University review of submittals. The PM will provide the consultant with any University schedule requirements.

- 1.2.9 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.
- 1.2.10 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.
- 1.2.11 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.
- 1.2.12 The University requires a minimum of **\$1,000,000 professional liability insurance**.
- 1.2.13 Proof of the required insurance must be submitted for approval with signed agreement. The University will not execute the agreement or approve payments without approved insurance.
- 1.2.14 The consultant's first consultant payment request form [or voucher for UMC] and a transmittal letter with instructions will be issued to the consultant with a copy of the executed agreement. No payments will be processed unless an executed agreement is on file.
- 1.2.15 Submit payment requests to the PM for services performed. Payment requests submitted by the consultant must be accompanied by invoices detailing work completed, must summarize the total bill for services to date, and the amount of the current request.

### 1.3 DESIGN PROCESS AND APPROVAL

#### 1.3.1 PROJECT MANAGEMENT

1.3.1.1 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. Projects with a construction cost more than \$100,000 will have a PM from the UM System office working in association with a campus PM. The PMs collaborate to bring about a successful project.
2. Projects with a construction cost less than \$100,000 will have a campus PM who will serve as the University's PM.

1.3.1.2 The University manages the total project budget and requires the consultant to manage the construction budget.

1.3.1.3 The PM will manage internal University approvals and instruct the consultant accordingly.

1.3.1.4 The consultant should insist on the timely owner provided information and approvals. The University asks the consultant to notify the PM of owner related delays before the schedule is jeopardized.

1.3.1.5 The consultant must notify the PM immediately if the consultant believes additional services are requested by the University. This also applies to abandoned work. A fee must be negotiated and the agreement adjusted immediately.

#### 1.3.2 MEETINGS AND SHAREHOLDERS

1.3.2.1 University projects normally involve many academic, student, and service groups as shareholders in a project. The PM arranges for and coordinates the consultant's contact with these groups. Meetings are scheduled by the PM's office.

1.3.2.2 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.

1.3.2.3 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.

1.3.2.4 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.

### 1.3.3 SUBMITTALS

- 1.3.3.1 The University asks the consultant to provide 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.
- 1.3.3.2 The consultant is responsible for the management and performance of their subconsultants. Delay of a subconsultant's part of a submittal is considered an incomplete submittal from the consultant.
- 1.3.3.3 Delay of a project due to incomplete submittals is the responsibility of the consultant.
- 1.3.3.4 Detailed submittal requirements are described in Section II.
- 1.3.3.5 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.
- 1.3.3.6 Final review documents should be ready to issue for bid. Do not include the pre-printed UM bidding documents [Advertisement for Bids, General Conditions, Information for Bidders, Bidders Statement of Qualifications, Prevailing Wage Rates] to keep reproduction costs down.
- 1.3.3.7 The University will supply the consultant with an electronic copy of the bid form and special conditions. The PM will work with the consultant to tailor these for the project. The PM will supply the pre-printed Division 1 bidding documents when the consultant is instructed to advertise the project.

### 1.3.4 ELECTRONIC DOCUMENTS

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.

#### 1.4. BIDDING

1.4.1 The PM coordinates the **advertisement** after the final review documents are approved. The PM sets the advertisement date.

1.4.2 The PM will tell the consultant, by transmittal, the number of plan sets to print and where and when to deliver the plans. The transmittal includes:

- One copy of the advertisement for bids
- One copy of the list of plan rooms
- Information for Bidders
- General Conditions of the Contract for Construction
- Bidder's Statement of Qualifications
- Bidder's Statement of Qualifications for Asbestos Abatement (if required)
- MBE/WBE Participation Requirements
- Prevailing Wage Rates

1.4.3 The University will distribute plans.

1.4.4 As directed, reviewed, and approved by the PM, the consultant shall prepare and distribute **addenda** related to document interpretation as outlined in the University of Missouri Information for Bidders, which is then incorporated in the contract for construction.

1. Addenda are issued prior to the bid opening and are part of the contract documents. Addenda items will be approved by the PM before issuing. The consultant will prepare and distribute addenda directly to plan holders. The list of plan holders is maintained by University.
2. Addenda must be mailed at least seven (7) days before the bid date. If addenda must be issued six (6) days or less before the bid date, either the bid date is extended or the consultant must verify each plan holder has a copy of the addenda at least 72 hours before the bid opening.
3. If the bid form is revised by addenda, the revised bid form must be printed on different colored paper to distinguish the revisions.
4. In addition to issuing addenda to plan holders, copies of addenda must be placed in each set of the bidding documents that have not yet been issued to a campus distribution point.

1.4.5 The PM assisted by the 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.

1.4.6. To assure an adequate number of bids is received:

1. The consultant will review the local bidding climate prior to the preparation of bidding documents. The size and composition of projects will be considered to encourage competitive bidding. If it appears a conflict among projects will occur in the bidding market, the rescheduling of the bids will be considered if time permits and if this rescheduling can result in additional bids.
2. The consultant will review the bidders list after the project has been on the market for seven (7) to ten (10) days to determine if there is adequate interest in the project. The consultant will contact several prospective bidders to assure an adequate number of bids will be received (minimum of three).
3. If little interest is shown in the project, the consultant will contact potential bidders and determine the cause.

1.4.6 The campus construction administrator will conduct a **public bid opening**. The consultant will attend the bid opening if required by the agreement.

1.4.7 The Consultant performs the **Bid Evaluation** to determine if the bids are responsive and the bidders responsible. The PM reviews the M/WBE goal. The Consultant's review and analysis, includes, but not limited to:

1. A thorough analysis of the "Bidder's Statement of Qualifications" to determine if the low bidder is responsible [qualified].
2. A thorough analysis of the low bidder's breakdown of cost against the scope of work to determine if the bid is responsive.
3. An analysis and explanation of the bid spread and its' comparison to the consultant's prebid construction estimate.
4. An analysis and explanation of why there were variations in the bids

## 1.5. CONSTRUCTION

- 1.5.1 Once the contract is awarded, 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.
- 1.5.2 **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.
- 1.5.3 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.
- 1.5.4 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.
- 1.5.5 The University will not make final fee payment until all outstanding items, including the **Record Drawings**, have been received.