

UNIVERSITY OF SOUTH CAROLINA

Statement of Services Required

Student Health Center Construction Project
Columbia, South Carolina

STATE PROJECT H27-6091-SG

3/19/2013

STUDENT HEALTH CENTER CONSTRUCTION PROJECT
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STATEMENT OF SERVICES REQUIRED

OVERVIEW

Acting as a member of the Project Team in cooperation with the University and the Designer, the CM-R will be tasked to provide a broad range of design support and construction services including, but not limited to: schedule and constructability reviews; value engineering (VE); identification of alternatives in project delivery phasing and early procurement options; prequalification of trade subcontractors; and preliminary pricing of general conditions site services and the general and trade contracts. These activities will first support the development of an overall Total Construction Cost and Baseline Schedule. The CM-R will then assist the University and Designer in the development of a final Maximum Allowable Construction Cost (MACC) and Project Construction Schedule as the construction documents prepared by the design team reach a point for final pricing near the end of the design phase. Subject to negotiation or adjustment by change order, the following major elements of service are anticipated for the Project. This description is, of necessity, general and the successful proposer will be expected to engage in good faith negotiations regarding the details of these or any other services required to ensure project success.

DESCRIPTION OF PHASE 1 PRECONSTRUCTION (SCHEMATIC DESIGN) SERVICES

The initial phase, which is expected to last no more than three months, shall be directed at assisting the University in the establishment of a final Facility Program founded on a realistic and achievable Total Project Cost and Baseline Construction Schedule for submission to University and State funding approval authorities. At the conclusion of Phase 1 of Preconstruction the design documents shall be considered at the Schematic Design level of definition.

PROJECT MANAGEMENT SERVICES

All preconstruction schematic design phase activities related to the Project shall be conducted in conformance with the applicable requirements of the *Manual for Planning and Execution of State Permanent Improvements–Part II* as issued by the Office of State Engineer (“the OSE Manual”). These activities include, by way of example and without limitation, the development, content, review and approval of submittals to the Office of State Engineer and other authorities; any solicitations of interest or other public notices of business opportunities related to the Project; and any public activities related to the Project, all of which are generally described in Chapters 4 through 6 of the OSE Manual. Consistent with the above, the CM-R shall provide the following specific schematic design phase services:

PROJECT CONFERENCE

At the start of the Schematic Design Phase the CM-R shall conduct a project conference attended by the Designer, the University and others as necessary. The focus of the meeting shall be establishment of a shared vision for and a full understanding of the Project and the roles, expectations and challenges faced by the project team. During the Project Conference, the CM-R shall review drafts of the Construction Management Plan, the Master Baseline Schedule, the Project and Construction Budget, and the MIS. Topics to be addressed include:

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- Project Goals and Objectives, including an understanding of why this project is important to the Project Sponsor (USC Student Services) and the University and how this project relates to other priorities and planned work.
- Master Plan, Deliverables, Structure and Responsibilities, including reporting relationships and major responsibilities of all parties. Define who is responsible, who is to be kept informed and who provides support and/or consultation.
- Critical Success Factors and Project Acceptance Criteria, including how team members will be measured on their deliverables.
- Risk and Issues Management, including how risks and issues will be identified, communicated to the team and addressed to appropriate levels in the project chain of command.
- Communication Strategies for both internal and external communications, including documentation; how issues are to be communicated to appropriate levels in the project chain of command; and how confidential information will be identified and handled.
- Change Management, including the process for managing scope or budget changes. Identify the roles and responsibilities for initiating and authorizing changes and the processes required to support the approval of changes.

CONSTRUCTION MANAGEMENT PLAN

The CM-R shall prepare a Construction Management Plan for the Project and shall make recommendations for revisions to the plan throughout the duration of the Project, as may be appropriate. In preparing the Construction Management Plan, the CM-R shall consider the University's schedule, budget, and design requirements for the Project and the requirements for review and approval by OSE, the Office of the State Fire Marshal, the South Carolina Department of Health and Environmental Control and other Authorities Having Jurisdiction. The CM-R shall then develop various alternatives for the sequencing and management of the Project and shall make recommendations to the University. The Construction Management Plan shall also include a description of the various bid packages recommended for the Project. The Construction Management Plan shall be presented to the University for its review and approval.

TIME MANAGEMENT

BASELINE SCHEDULE

In accordance with the Construction Management Plan, the CM-R shall prepare a Master Baseline Schedule for the entire Project. The Master Baseline Schedule shall specify the proposed start and finish dates for each major project activity. The CM-R shall submit the Master Schedule to the University for its review and approval.

COST MANAGEMENT

CONSTRUCTION MARKET SURVEY

The CM-R shall conduct a Construction Market Survey to provide current information regarding the general availability of local construction services, labor, materials and equipment cost and other economic factors related to the Project. A report of the Construction Market Survey shall be provided to the University, the Office of State Engineer and the Designer. The results of the survey and input from the University will provide input to the CM-R's final Vendor Outreach Plan for stimulation of local vendor interest and M/WBE involvement.

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PROJECT AND CONSTRUCTION BUDGET

Based on the Construction Management Plan and the Construction Market Survey, the CM-R shall prepare a Project and Construction Budget based on separate divisions of the Work required for the Project and shall identify contingencies for design and construction uncertainties. The basis for the amounts and risks associated with contingencies will be fully discussed with the University and the Designer. The Construction Budget shall be prepared in conformance with the requirements of Appendix F of the *Manual for Planning and Execution of State Permanent Improvements–Part II*, formatted according to the latest version of ASTM E1557. The CM-R shall submit the Project and Construction Budget to the University for its review and approval. The Project and Construction Budget shall be revised as directed by the University.

PRELIMINARY ESTIMATE AND BUDGET ANALYSIS

The CM-R shall analyze and report to the University the cost of various design and construction alternatives, including the CM-R's assumptions in preparing its analysis, a variance analysis between budget and preliminary estimate, and recommendations for any adjustments to the budget. As a part of the budget analysis, the CM-R shall consider costs relating to efficiency, constructability, usable life, maintenance, energy, and operation so as to achieve the maximum life cycle value for the University. For all design and construction alternatives which affect LEED compliance, the CM-R shall provide the required LEED Cost-Benefit Analysis.

MANAGEMENT INFORMATION SYSTEM (MIS)

ESTABLISHING THE PROJECT MIS

The CM-R shall develop a MIS to establish communication between the University, CM-R, Designer, and other parties on the Project. In developing the MIS, the CM-R shall interview the University's key personnel and others to determine the type of information for reporting, the reporting format, and the desired frequency for distribution of the various reports.

DESIGN PHASE PROCEDURES

As part of the MIS, the CM-R shall establish procedures for reporting, communication, and administration during the Design Phase. These procedures shall be captured in a Project Coordination Manual, which shall be developed by the CM-R with input from the Designer and the University and issued with the University's concurrence. The CM-R shall revise the Project Coordination Manual as required to reflect changes in organization, external requirements or the advancement of the Project from design to construction.

DESCRIPTION OF PHASE 2 PRECONSTRUCTION (DESIGN PHASE) SERVICES

Once approved by the South Carolina Budget & Control Board, the second phase will include the completion of Preconstruction Services, including Design Completion to approximately 90%, the establishment of a Maximum Allowable Construction Cost, project bonding, the Construction Buy-Out and contract conversion to a GMP. The second phase of preconstruction activities will proceed as described below.

PROJECT MANAGEMENT

All design phase activities related to the Project shall be conducted in conformance with the applicable requirements of the *Manual for Planning and Execution of State Permanent Improvements–Part II* as issued by the

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Office of State Engineer (“the OSE Manual”). These activities include, by way of example and without limitation, the development of content, review and approval of submittals to the Office of State Engineer and other Authorities Having Jurisdiction; any solicitations of interest or other public notices of business opportunities related to the Project; and any public activities related to the Project. Consistent with the above, the CM-R shall provide the following specific Design Phase preconstruction services:

REVISIONS TO THE CONSTRUCTION MANAGEMENT PLAN

During the Design Phase, the CM-R shall make the recommendations to the University regarding revisions to the Construction Management Plan. Revisions approved by the University shall be incorporated into the Construction Management Plan.

PROJECT CONFERENCE

At the start of the Design Phase, the CM-R shall conduct a project conference attended by the Designer, the University and others as necessary. During the Project Conference, the CM-R shall review the Construction Management Plan, the Master Baseline Schedule, the Design Phase Milestone Schedule, the Project and Construction Budget, and the MIS.

DESIGN PHASE INFORMATION

The CM-R shall monitor the Project Team’s compliance with the Construction Management Plan and the MIS and the CM-R shall coordinate and expedite the flow of information between the University, Designer, and others as necessary.

PROGRESS MEETINGS

The CM-R shall conduct periodic progress meetings attended by the University, Designer and others as necessary. Such meetings shall serve as a forum for the exchange of information concerning the Project and the review of design progress. The CM-R shall prepare and distribute minutes of these meetings to the University, Designer, the Office of State Engineer and others as directed.

REVIEW OF DESIGN DOCUMENTS

The CM-R shall review the design documents for clarity, consistency, constructability and coordination among the Contractors. The results of the review shall be provided in writing as notations on the documents or otherwise documented in the Building Information Modeling (BIM) system files for the Project. The CM-R is not responsible for providing, nor does the CM-R control, the Project design and contents of the design documents. By performing the reviews described herein, the CM-R is not acting in a manner so as to assume responsibility or liability, in whole or in part, for all or any part of the Project design and design documents. The CM-R’s actions in reviewing the Project design and design documents and in making recommendations as provided herein are only advisory to the University.

It is understood by all parties that it is in the best interests of the Project for the CM-R to have adequate time to perform the required coordination and constructability checks, most especially the final coordination and constructability review. As a basis for planning the CM-R shall allow ten (10) weeks for the State’s plan check review of the completed Construction Documents. Once the State review is complete, the CM-R shall have four (4) weeks for the final coordination and constructability review and to forward any comments to the Designer for resolution. At this point the CM-R is expected to warrant the completeness of the design documents.

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DESIGN RECOMMENDATIONS

The CM-R shall make recommendations to the University and Designer with respect to constructability, construction cost, sequence of construction, construction duration, possible means and methods of construction, time for construction, and separation of the Project contracts for various categories of Work. In addition, the CM-R shall give to the Designer all data of which it or the University is aware concerning patents or copyrights for inclusion in Contract Documents.

UNIVERSITY DESIGN REVIEWS

The CM-R shall expedite the University's design reviews by compiling and conveying the University's comments to the Designer and, as necessary, documenting those reviews in the BIM system files for the Project.

APPROVALS BY REGULATORY AGENCIES

The CM-R shall coordinate transmittal of documents to regulatory agencies for review and shall advise of potential problems in completing such reviews.

PUBLIC RELATIONS

The CM-R shall assist the University in public relations activities and shall prepare information for and attend public meetings regarding the Project.

PROJECT FUNDING

The CM-R shall assist the University in preparing documents concerning the Project and Construction Budget and for use in obtaining or reporting on project funding. The documents shall be prepared in a form approved by the University.

TIME MANAGEMENT

REVISIONS TO MASTER BASELINE SCHEDULE

As necessary throughout the Design Phase, the CM-R shall recommend schedule recovery adjustments and, if absolutely necessary, revisions to the Master Baseline Schedule. The University shall issue change orders as needed to the appropriate parties to implement any revisions to the Master Baseline Schedule.

PHASE 2 PRECONSTRUCTION (DESIGN) PHASE MILESTONE SCHEDULE

After the University accepts the Master Schedule in Phase 1 the CM-R shall prepare a more detailed Milestone Schedule for the Design Phase. The Design Phase Milestone Schedule shall be a method for judging progress during the Phase 2 of the Preconstruction Services (the "Design Phase").

Monitoring the Design Phase Milestone Schedule

The CM-R shall monitor compliance with the Design Phase Milestone Schedule and work with the Designer to expedite the successful completion of the Design Work for the Project.

PRE-BID CONSTRUCTION SCHEDULES

Prior to transmitting Contract Documents to bidders, the CM-R shall prepare a Pre-Bid Construction Schedule for each part of the Project and make the schedule available to the bidders during the Construction Buy-Out Phase.

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COST MANAGEMENT

COST CONTROL

Following the completion of each design phase milestone, the CM-R shall prepare an estimate of the construction cost for the Design Drawings and Specifications furnished by the Designer. Each estimate shall be accompanied by a report to the University and Designer identifying variances from the Baseline Project and Construction Budget as well as CM-R's assumptions in preparing the estimate. The CM-R shall coordinate the activities of the University and Designer when changes to the design are required to remain within the Project and Construction Budget.

PROJECT AND CONSTRUCTION BUDGET REVISION

The CM-R shall make recommendations to the University concerning the design changes that may result in revisions to the Project and Construction Budget and divisions of the Work required for the Project. CM-R shall not advise or cause the reduction or elimination of construction necessary for fire and life safety or for compliance with applicable codes, standards, laws or regulations.

VALUE ENGINEERING STUDIES

The CM-R shall provide value engineering recommendations to the University and Designer for major construction components, including cost evaluations of alternative materials and systems. CM-R shall not advise or cause the reduction or elimination of construction necessary for fire and life safety or for compliance with applicable codes, standards, laws or regulations.

MANAGEMENT INFORMATION SYSTEM (MIS)

SCHEDULE REPORTS

In conjunction with the services provided as part of Time Management Services, the CM-R shall prepare and distribute schedule maintenance reports that shall contrast actual progress against scheduled progress for the Design Phase and the overall Project and shall make recommendations to the University for corrective actions to recover any loss of progress.

PROJECT COST REPORTS

The CM-R shall prepare and distribute project cost reports that shall indicate estimated costs compared to the Project and Construction Budget and shall make recommendations to the University for corrective action to conform the Project Cost to the approved Total Project Cost.

CASH FLOW REPORT

The CM-R shall periodically (at least monthly and as otherwise directed) prepare and distribute a cash flow report.

DESIGN PHASE CHANGE ORDER REPORT

The CM-R shall prepare and distribute Design Phase change order reports that shall list all University-approved change orders as of the date of the report and shall clearly identify the effect of the change orders on the Total Project and Construction Budgets and the Master Baseline Schedule. The impact of such changes shall be distinguished so as to be clearly reviewable for audit purposes.

CONSTRUCTION BUY-OUT PHASE

PROJECT MANAGEMENT

All procurement activities related to the Project shall be conducted in conformance with the applicable requirements of the *Manual for Planning and Execution of State Permanent Improvements–Part II* as issued by the Office of State Engineer (“the OSE Manual”). These requirements are generally described in Chapters 5 through 7 of the OSE Manual. Consistent with the above, the CM-R shall provide the following procurement services.

VENDOR OUTREACH CAMPAIGN

The CM-R, in implementing the Vendor Outreach Plan, shall conduct a telephonic and correspondence campaign to attempt to create interest among qualified bidders and suppliers. The CM-R shall prepare and place notices and advertisements to solicit expressions of interest for prequalification and bids for construction, supplies and services required by the Project. Such notices shall, at a minimum, be published in *South Carolina Business Opportunities* (“SCBO”), and in other media intended to maximize the awareness of the project in the small and disadvantaged business community.

PREQUALIFYING BIDDERS

The CM-R, in cooperation with the Designer and University, shall implement the Vendor Outreach Plan to develop lists of possible bidders and shall prequalify bidders for Trade Subcontracts. This prequalification process shall be in accordance with the *Prequalification Handbook* as issued by the Office of State Engineer. This service shall include the following: preparation and transmission of questionnaires; receiving and analyzing completed questionnaires; interviewing possible bidders, bonding agents, and financial institutions; and preparing summary reports regarding this activity to the University. The CM-R shall also prepare and transmit to the University a proposed bidders list for each bid package. The University shall notify the CM-R promptly of any reasonable objections to a proposed bidder, and the CM-R shall remove that bidder from the bidders list.

DELIVERY OF BID DOCUMENTS

The CM-R shall expedite the delivery of bid documents to the bidders. The CM-R shall obtain documents from the Designer and arrange for dissemination to the bidders. The CM-R shall maintain a record of bidders receiving documents.

PRE-BID CONFERENCES

In conjunction with the Designer, the CM-R shall conduct a Pre-Bid Conference for each bid package. In accordance with the OSE Manual, these conferences shall not require mandatory attendance by subcontractors. These conferences shall be forums for the CM-R and Designer to explain to the bidders and other interested parties the Project requirements, including information concerning schedule requirements, time and cost control requirements, access requirements, contractor interfaces, the project administrative requirements and technical information.

INFORMATION TO BIDDERS

The CM-R shall develop and coordinate procedures to provide answers to bidders’ questions.

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ADDENDA

The CM-R shall receive from the Designer a copy of all addenda. The CM-R shall review addenda for clarity, consistency and coordination. By performing the reviews described herein, the CM-R is not acting in a manner so as to assume responsibility or liability, in whole or in part, for all or any part of the Project design or the content of the design documents. The CM-R shall also distribute a copy of all addenda to each bidder receiving documents. The requirements for Addenda to Bidding Documents are set forth in the OSE Manual.

BID OPENING

The CM-R shall conduct bid openings and shall evaluate the bids to determine the lowest responsive and responsible bidder. The CM-R shall make recommendations to the University concerning the acceptance or rejection of bids. All Bid Openings shall be conducted in accordance with Section 6.9 of the OSE Manual, provided however that bids shall be opened publically by the CM-R in the presence of one or more witnesses of the University. A tabulation of those submitting offers shall be made a public record. The contents of competing offers shall be analyzed by the CM-R in private and shall not be revealed until contract award is made. No award may be made until the University, in consultation with the Designer as necessary, has reviewed and evaluated the results of the bids and any post-bid negotiations conducted by the CM-R.

CONSTRUCTION CONTRACTS

At the direction of the University, the CM-R shall prepare, execute, and deliver the Contract Documents between the CM-R and the Contractors. The CM-R shall also issue the notices to proceed.

PERMITS, INSURANCE AND LABOR AFFIDAVITS

The CM-R shall verify that the Contractor has secured the required building permits, bonds, insurance, labor affidavits, and waivers.

TIME MANAGEMENT

PRE-BID CONSTRUCTION SCHEDULE

The CM-R shall inform the bidders of their responsibilities regarding the Pre-Bid Construction Schedule specified in the Instructions to Bidders or Contract Documents.

CONTRACTOR'S CONSTRUCTION SCHEDULE

The CM-R shall provide a copy of the Master Schedule to the bidders. As part of the Notice of Award, the CM-R shall inform each Contractor of the requirements for the preparation of a Contractor's construction schedule that supports the Master Schedule. The Contractor shall prepare and maintain its own construction schedule in accordance with the requirements of the Contract Documents. The CM-R shall define the form, content and timing of schedule maintenance reports to be submitted by the Contractor.

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COST MANAGEMENT

ESTIMATES FOR ADDENDA

The CM-R shall prepare an estimate of costs for all addenda and shall submit the estimates to the University for approval. After approval by the University, the addenda shall be transmitted to bidders and the Guaranteed Maximum Price shall be adjusted as provided in the Contract Documents.

ANALYZING BIDS

Upon receipt of bids, the CM-R shall evaluate the bids, including alternate prices and unit prices. All bids received by the CM-R shall be evaluated for responsiveness and responsibility. The University shall assist the CM-R in this evaluation.

TRADE CONTRACT AWARD

Based on its analysis of bids and any negotiations with bidders, the CM-R will advise the University of its intent to award specific contracts. The notification shall be accompanied by a Memorandum of Negotiation. The University, with the assistance of the Designer as necessary, has the right to review the bids and any negotiations and must concur with the CM-R's intent prior to award of any subcontract.

MANAGEMENT INFORMATION SYSTEM (MIS)

SCHEDULE MAINTENANCE REPORTS

The CM-R shall prepare and distribute schedule maintenance reports during the Procurement Phase. The reports shall compare the actual bid and award dates to scheduled bid and award dates and shall summarize the progress of the Project.

PROJECT COST REPORTS

The CM-R shall prepare and distribute the project cost reports during the Construction Buy-Out Phase. The reports shall specify the actual award prices and construction costs for the Project, compared to the Total Project and Construction Budget.

CASH FLOW REPORTS

The CM-R shall prepare and distribute cash flow reports during the Construction Buy-Out Phase. The reports shall be based on actual award prices and construction costs for the Project and the reports shall specify the actual cash flow compared to the projected cash flow.

DESCRIPTION OF CONSTRUCTION PHASE SERVICES

PROJECT MANAGEMENT

Upon commencement of the Construction Phase, the CM-R shall assume the responsibilities of a General Contractor. All construction activities related to the Project shall be conducted in conformance with the applicable requirements of the *Manual for Planning and Execution of State Permanent Improvements–Part II* as issued by the Office of State Engineer (“the OSE Manual”). Construction related responsibilities, procedures and contract

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administration forms are described in Chapter 7 and Appendices B and C of the OSE Manual. Consistent with the above, the CM-R shall provide the following Construction Phase services:

PRE-CONSTRUCTION CONFERENCE

In connection with the Designer, the CM-R shall conduct one or more Pre-Construction Conferences during which the CM-R shall review the reporting procedures, site operations and other contractual requirements.

ONSITE MANAGEMENT AND CONSTRUCTION PHASE COMMUNICATION PROCEDURES

The CM-R shall provide and maintain a management team on the Project site to provide contract administration and the CM-R shall establish and implement coordination and communication procedures among the CM-R, University, Designer, and Contractors.

CONTRACT ADMINISTRATION PROCEDURES

The CM-R shall establish and implement procedures for expediting and processing requests for information, shop drawings, material and equipment sample submittals, Contractor schedule adjustments, change orders, substitutes, payment requests and the maintenance of logs. The CM-R shall maintain daily job reports. The CM-R shall be the party to whom requests for information, submittals, Contractor schedule adjustments, substitutes, change order requests and payment requests shall be submitted.

PROJECT SITE MEETINGS

The CM-R shall conduct meetings at the Project site with each Contractor as necessary to ensure the Contractor's efforts remain in alignment with the project expectations for quality and schedule and to resolve problems. The CM-R shall schedule and conduct regular coordination meetings with all Contractors, the University and Designer. The CM-R shall record, transcribe and distribute minutes to all attendees, the University and Designer. Project coordination meetings shall occur weekly or as otherwise directed by University.

COORDINATION OF OTHER INDEPENDENT CONSULTANTS

Technical inspection and testing provided by the University shall be coordinated by the CM-R, who shall provide timely notice to the University's inspectors that the Work has progressed to a point where inspection is required. The CM-R shall be provided with a copy of all inspection and testing reports on the day of the inspection or test or when issued. The CM-R is not responsible for providing, nor does the CM-R control, the actual performance of technical inspection and testing. The CM-R is performing a coordination function and is not acting in a manner so as to assume responsibility, in part or in whole, for all or any part of such inspection and testing. This subparagraph shall not relieve the CM-R or its Contractors from their collective responsibility to perform any and all tests and inspections required of them by the approved plans and specifications or as deemed necessary by CM-R to assure itself that the work conforms to the requirements of the plans and specifications.

REVIEW OF REQUESTS FOR CHANGES TO THE CONTRACT TIME AND PRICE

The CM-R shall review the contents of a request for changes to the construction contract time or price submitted by a Contractor, assemble information concerning the request and endeavor to determine the cause of the requests. In instances where the CM-R's analysis reveals that the request is valid, the CM-R shall prepare a detailed written analysis.

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QUALITY REVIEW

The CM-R shall establish and implement a program to monitor the quality of construction. The purpose of the program shall be to guard the University against defects and deficiency in the work of the Contractor. The CM-R shall transmit to the Contractor a notice of nonconforming work and may reject work when it is the opinion of the CM-R that the work does not conform to the requirements of the Contract Documents. Except for minor variations as stated herein, the CM-R is not authorized as part of this service to change, evoke, enlarge, relax, alter, or to release any requirement of the Contract Documents or to approve or accept any portion of the Work not performed in accordance with the Contract Documents.

CM-R's quality program shall assure effective and timely action is taken to repair or otherwise remediate any defective construction identified by inspection or testing, whether performed by the CM-R, its Contractors, or the University's Inspectors. All deficiencies or non-compliances shall be actively traced and reported separately to the University, the Designer and the Office of State Engineer until an acceptable resolution is achieved.

OPERATION AND MAINTENANCE MATERIALS

The CM-R shall receive from the Contractors operation and maintenance manuals, warranties and guarantees for materials and equipment installed in the Project, in accordance with the Contract Documents.

SUBSTANTIAL COMPLETION

When the CM-R considers that the Work, or a portion thereof that the University agrees to accept separately, is substantially complete, then the CM-R, shall provide the Designer and the University with a complete and comprehensive listing of all items or work or supply that remain to be corrected or completed prior to any request for final payment. The CM-R's failure to include any item of work or supply required by the Contract Documents does not relieve the CM-R of its responsibility to complete all Work in accordance with the Contract Documents.

The CM-R's list of items of work or supply to be completed or corrected shall be in writing and attached to the "Certificate of Substantial Completion" (AIA G704). The AIA G704 shall be submitted at least ten (10) days in advance of the proposed date of inspection and shall be forwarded through the Designer, who will attach its written endorsement as to whether or not it concurs with the CM-R's statement that the Work will be ready for inspection and testing on the date given. The Designer's endorsement is a convenience to the University only and shall not relieve the CM-R of its responsibility in the matter, nor shall the Designer's endorsement be deemed to be evidence that the Work was substantially complete and ready for inspection and testing. In the event that the Designer does not concur with the CM-R's statement, the Designer shall inform the CM-R of the basis for the Designer's non-concurrence. The CM-R may then, at its sole option, (1) defer the inspection; or, (2) request the inspection be performed as set forth below.

Inspection and testing shall take place at a time(s) mutually agreeable to the CM-R, the University, the OSE, the University's Third-Party Inspectors and the Designer. The inspection shall include a demonstration by the Contractor that all equipment, systems and operable components of the Work function properly and in accordance with the Contract Documents. The CM-R shall not be responsible for design defects that prevent the Work from functioning properly. The Contractor shall furnish access for the inspection and testing as provided in this Contract. The inspection and testing shall determine whether Substantial Completion has been accomplished and shall result in the Designer's issuance of a written list of Unfinished Work and Defective Work, commonly referred to as a "punch list", each item of which must be finished and corrected prior to Final Completion.

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The Designer and its Consultants shall conduct all Substantial Completion inspections. The University may elect to have other persons of its choosing also participate in the inspections. Representatives of the State Fire Marshal's Office, the Office of State Engineer and other authorities may be present, at their sole discretion, at the Substantial Completion inspection or otherwise inspect the Work and advise the University whether the Work meets their respective requirements.

If the inspection discloses any item which is not in accordance with the requirements of the Contract Documents and will prevent the University from occupying or utilizing the Work for its intended use, the CM-R shall complete or correct such item upon notification by the A/E. The CM-R shall then submit a request for a follow-up inspection by the A/E to determine Substantial Completion.

The CM-R shall proceed promptly and diligently to complete and correct items on the list of Unfinished or Defective Work. Failure to include an item on such list does not alter the responsibility of the CM-R to complete all Work in accordance with the Contract Documents.

If more than one Substantial Completion inspection is required, the CM-R shall reimburse the University for all costs of reinspection or, at the University's option, the costs may be deducted from payments due to the CM-R.

In consultation with the Designer and the OSE, the University shall determine when the CM-R's Work is substantially complete. In consultation with University and the OSE the Designer shall, prior to issuing a Certificate of Substantial Completion, prepare a list of work that does not conform to the Contract Documents. This list shall be attached to the Certificate of Substantial Completion (AIA G704).

FINAL COMPLETION

Final Completion shall be achieved on or before the date established in the Baseline Schedule and in no event no later than ninety (90) days after Substantial Completion unless otherwise stated in the Contract Documents or modified by a Change Order. Failure of the CM-R to achieve Final Completion within the time allowed under this Subparagraph shall entitle University to consider the CM-R in substantial breach of its obligations under this Contract.

The CM-R shall notify the University and the Designer in writing on of the date when the Work has reached or will reach Final Completion and will be ready for final inspection and testing. The notice shall be given at least ten (10) days in advance of said date and shall be forwarded through the Designer, who will attach its endorsement as to whether or not it concurs in the CM-R's statement that the Work will be ready for inspection and testing on the date stated. The Designer's endorsement is a convenience to the University only and shall not relieve the CM-R of its responsibility in the matter, nor shall the Designer's endorsement be deemed to be evidence that the Work was finally complete and ready for inspection and testing. In the event that the Designer does not concur with the CM-R's statement, the Designer shall inform the Contractor of the basis for the Designer's non-concurrence. The CM-R may then, at its sole option, (1) defer the inspection; or, (2) request the inspection be performed as set forth below. The final inspection and testing shall be conducted in the same manner as the inspection for Substantial Completion.

Representatives of the State Fire Marshal's Office, the Office of State Engineer and other authorities may be present at the Final Completion inspection or otherwise inspect the completed Work and advise the University whether the Work meets their respective requirements for the Project.

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In consultation with the Designer, the University shall determine when the CM-R's Work is finally completed and, following completion of corrections, shall issue a Certificate of Final Completion to the CM-R. Following the receipt of payment from the University, the CM-R shall make all payments due to Contractors. Receipt of payment from the University is a condition precedent to payment of the Contractors.

If more than one Final Completion inspection is required, the CM-R shall reimburse the University for all costs of reinspection or, at the University's option, the costs may be deducted from payments otherwise due to the CM-R as a Cost of the Project.

Approval of Work at or as a result of any inspection required herein shall not release the CM-R or its surety from responsibility for complying with the Contract.

TIME MANAGEMENT

MASTER BASELINE SCHEDULE

The CM-R shall adjust and update the Master Baseline Schedule and distribute copies to the University and Designer. All adjustments to the Master Baseline Schedule shall be made for the benefit of the Project.

CONTRACTOR'S CONSTRUCTION SCHEDULE

The CM-R shall review each Contractor's Construction Schedule and shall verify that the schedule is prepared in accordance with the requirements of the Contract Documents and that it establishes completion dates that comply with the requirements of the Master Baseline Schedule.

CONSTRUCTION SCHEDULE REPORT

The CM-R shall review the progress of construction of each Contractor on a monthly basis, shall evaluate the percentage complete of each construction activity as indicated in the Contractor's Construction Schedule and shall review such percentages with the Contractor. This evaluation shall serve as data for input to the periodic Construction Schedule report that shall be prepared and distributed to the Contractor, the University and Designer. The report shall indicate the actual progress compared to scheduled progress and shall serve as the basis for the progress payment to the Contractor. The CM-R shall determine and implement alternative courses of action that may be necessary to achieve contract compliance by the Contractor.

CM-R REVIEW OF TIME EXTENSION REQUESTS

The CM-R shall, as a prerequisite to any request for a change order, determine the effect on the Master Baseline Schedule of time extensions requested by the Contractor.

RECOVERY SCHEDULES

As part of any request for time extensions, the CM-R shall require the Contractor to prepare and submit a recovery schedule as specified in the Contract Documents.

PROJECT CLOSEOUT SCHEDULE

At approximately 80% completion and no less than ninety (90) days prior to the scheduled date for Substantial Completion, the CM-R will conduct a Project Closeout Review with the University, the Designer, representatives of

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all end-user organizations and all trade contractors or suppliers whose work is underway or is required for Substantial Completion. The OSE and third-party inspectors will be invited to attend.

Discussions shall focus on the identification and mitigation of possible delays during the project closeout process. Discussions at the meeting shall include all known construction and fiscal issues to be addressed before Substantial Completion and the parties responsible for resolution and the required resolution dates. The CM-R shall prepare a Project Closeout Schedule to document the results of the initial meeting. During the meeting,

- The CM-R and Designer will review the as-built drawings commensurate with the status of the completed construction.
- The CM-R and the University will review any approved or pending contract modifications and identify any prospective requests for modification, including a review of current cash flow and uncommitted funds.
- The University and the end-user will discuss any specialty equipment required prior to occupying the facility.

Other items to be discussed and scheduled include:

- The Above-Ceiling Inspection
- O&M Manual submission, approval and turn-over
- O&M Training
- Preliminary Operational and Functional Testing of Systems
- Mechanical Test & Balance (dry and wet sides)
- Elevator, Fire Alarm and Sprinkler System testing and acceptance
- Final Operational Testing of Mechanical and Electrical Systems
- Commissioning
- System Tagging, Charts and Diagrams
- Delivery of Spare Parts, Tools and Excess Materials
- Installation and Testing of Owner-Furnished Equipment
- Landscaping and Outside Utilities
- Exterior Finish (paving, lighting, sidewalks)
- Signage
- Keying
- Final Cleanup
- Occupancy Plan

Additional Closeout meetings will be conducted at least weekly to review progress and address any issues that arise.

COST MANAGEMENT

CONTRACTOR SCHEDULE OF VALUES

The CM-R shall, in participation with the Contractors, determine a Schedule of Values for each of the construction contracts. The Schedule of Values shall be the basis for the allocation of the Construction Contract price to the activities shown on the Contractor's Construction Schedule.

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ALLOCATION OF COSTS TO CONTRACTOR'S CONSTRUCTION SCHEDULE

The Contractor's Construction Schedule shall have the total Construction Contract price allocated among the Contractor's scheduled activities so that each of the Contractor's activities shall be allocated a price and the sum of the prices of the activities shall equal the total Construction Contract price. The CM-R shall review the contract price allocations and verify that such allocations are made in accordance with the requirements of the Contract Documents. Progress Payments to the Contractor shall be based on the Contractor's percentage of completion of the scheduled activities as set out in the Construction Schedule report and the Contractor's compliance in accordance with the Contract Documents.

CHANGE ORDER CONTROL

The CM-R shall establish and implement a change order control system. The control system established by the CM-R shall include an affirmative determination by USC that the resultant changed construction is in conformance with the applicable building and other codes. CM-R's scheduling process shall recognize that such a determination may require USC to refer the matter to the OSE or other authorities as part of the review and approval process. The control system shall also reflect the limits of the University's authority to authorize changes to the GMP and shall support the University in fulfilling University's responsibility to conform to said limitation.

All proposed University-initiated change orders shall first be described in detail in writing by the University to the CM-R and then shall be forwarded in a request for proposal to the affected Contractors, accompanied by technical drawings and specifications prepared by the Designer. In response to the request for a proposal, the Contractor shall submit to the CM-R for evaluation detailed information concerning the costs and time adjustments, if any, necessary to perform the proposed change order work. The CM-R shall review each Contractor's proposal, shall discuss the proposed change order with the Contractor and endeavor to determine the Contractors' basis for the cost and time to perform the Work and, as applicable, the effect, if any, on the Guaranteed Maximum Price. The CM-R shall present its findings to the University and, following review by the Designer and University acceptance, shall prepare the change order documents for signature by the CM-R and University. Upon execution of the change order documents between the CM-R and University, the CM-R shall prepare change order documents for signature by the affected Contractor. The CM-R shall verify that the Work and any adjustment of time required by approved change orders has been incorporated into the Project Baseline Schedule and the affected Contractors' Construction Schedules.

The CM-R shall review the contents of all Contractor-requested changes to the contract time or price, endeavor to determine the effect, if any, on the Guaranteed Maximum Price. The CM-R shall provide the Designer a copy of each change request, and the CM-R shall, in its evaluations of the Contractor's request, consider the Designer's comments regarding the proposed changes. Changes which represent a reallocation of scope and cost from one contractor to another or the resolution of an internal issue with no change in net cost to the University shall be reported to the University for information. All changes that result in: (1) a proposed change in Construction contingency funds; or, (2) a change in the GMP shall be submitted to the University for review and approval. The CM-R shall prepare the necessary change order documents for review by the Designer and signature by the CM-R and University. The form of the Change Order documents shall be as provided in Chapter 7 and Appendix B of the OSE Manual. The CM-R shall prepare change order documents for signature by the affected Contractor.

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COST RECORDS

In instances where a lump sum or unit price is not determined prior to performing Work described in a request for proposal the CM-R shall request from the Contractor records of the cost of payroll, materials and equipment and the amount of payments to subcontractors incurred by the Contractor in performing the Work.

TRADE-OFF STUDIES

The CM-R shall provide trade-off studies for various minor construction components. The results of the trade-off studies shall be in report form and distributed to the University and Designer.

PROGRESS PAYMENTS

In consultation with the Designer, the CM-R shall review the payment applications submitted by each Contractor and determine whether the amount requested reflects the actual progress of the Contractor's Work that has been acceptably performed in accordance with the design documents. The CM-R shall make appropriate adjustments to each payment application and shall prepare and forward to the University a progress payment report. The report shall state the total contract price, payments to date, current payment requested, retainage and actual amounts owed for the current period. Included in this report shall be a certificate of payment that shall be signed by the CM-R and delivered to the University.

MANAGEMENT INFORMATION SYSTEM (MIS)

SCHEDULE MAINTENANCE REPORTS

The CM-R shall prepare and distribute schedule maintenance reports during the Construction Phase. The reports shall compare the actual construction dates to scheduled construction dates of each separate construction contract and to the Master Baseline Schedule for the Project.

PROJECT COST REPORTS

The CM-R shall prepare and distribute Project cost reports during the Construction Phase. The reports shall specify actual Project and construction costs compared to the Project and Construction Budgets and report the status of the CM-R's contingency fund accounts.

PROJECT AND CONSTRUCTION BUDGET REVISIONS

The CM-R shall make recommendations to the University concerning construction changes that may result in revisions to the Project and Construction Budgets or Guaranteed Maximum Price or may require the release of either the Owner's or CM-R's contingency funds.

Cash Flow Reports

The CM-R shall prepare and distribute cash flow reports during the Construction Phase. The reports shall specify actual cash flow as compared to projected cash flow.

CONTRACTOR PROGRESS PAYMENT REPORTS

The CM-R shall prepare and distribute progress payment reports for each contractor. The reports shall state the total construction contract price, payment to date, current payment requested, retainage and actual amounts owed this period. A portion of this report shall be a certificate of payment that shall be signed by the CM-R and delivered to the University for use by the University in making payments to the CM-R.

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CHANGE ORDER REPORTS

The CM-R shall periodically prepare and distribute change order reports during the Construction Phase. The report shall list all University-approved change orders by number, a brief description of the change order work, the cost established in the change order and percent of completion of the change order work. The report shall also include similar information for potential change orders of which the CM-R may be aware.

POST CONSTRUCTION PHASE

PROJECT MANAGEMENT

All post-construction activities related to the Project shall be conducted in conformance with the applicable requirements of the *Manual for Planning and Execution of State Permanent Improvements–Part II* as issued by the Office of State Engineer (“the OSE Manual”) and the University’s requirements for close-out documents.

RECORD DOCUMENTS

The CM-R shall coordinate and expedite submittals of information from the Contractors for preparation of record drawings and specifications, and shall coordinate and expedite the transmittal of such record documents to the University.

ORGANIZE AND INDEX OPERATIONS AND MAINTENANCE MATERIALS

Prior to final completion of the Project the CM-R shall compile manufacturers’ operations and maintenance manuals, warranties and guarantees and bind such documents in an organized manner. This information shall then be provided to the University.

OCCUPANCY PERMIT

The CM-R shall assist the University in obtaining an occupancy permit by accompanying representatives of the Office of State Engineer and others during occupancy inspections of the Project, preparing and submitting documentation to OSE and other governmental agencies and coordinating final testing and other activities.

WARRANTY SERVICES

CM-R shall assist University and Designer in performing warranty inspections during the warranty period of the Project. CM-R shall coordinate the work of Contractors as required to address warranty phase issues to the satisfaction of the University.

TIME MANAGEMENT

OCCUPANCY PLAN

Working with the University and the end users, the CM-R shall prepare an Occupancy Plan for the Project. This plan shall be provided to the University as part of the Project Closeout Schedule.

COST MANAGEMENT

CHANGE ORDERS

The CM-R shall continue to provide services related to change orders as required until project completion.

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MANAGEMENT INFORMATION SYSTEM (MIS)

CLOSEOUT REPORTS

At the conclusion of the Project, the CM-R shall prepare final project accounting and closeout reports.

MIS REPORTS FOR MOVE-IN AND OCCUPANCY

The CM-R shall prepare and distribute reports associated with the Occupancy Plan.