ADDENDUM NO. 17

April 29, 2019

REQUEST FOR PROPOSALS
(BID DOCUMENTS)

FOR

STUDENT SUCCESS CENTER
PROJECT NO. 950512

The following changes, additions, or deletions shall be made to the following documents as indicated for this Project; and all other terms and conditions shall remain the same. Each Proposer (Design Builder) is responsible for transmitting this information to all affected subcontractors and suppliers before the Proposal Deadline.

1. ANNOUNCEMENT TO PREQUALIFIED PROPOSERS

Delete the "Announcement to Prequalified Proposers" and **replace** with the one issued in this Addendum.

2. REQUEST FOR PROPOSALS

A. Proposal Schedule

Delete the **"**Proposal Schedule" and **replace** with the one issued in this Addendum.

B. Request for Proposal

Delete the **"**Request for Proposal" and **replace** with the one issued in this Addendum.

C. Technical Proposal

Delete the **"**Technical Proposal" and **replace** with the one issued in this Addendum.

D. Price Proposal Form

Delete the "Price Proposal Form" and **replace** with the one issued in this Addendum.

E. Preliminary Schedule (Division 0)

Delete "Preliminary Schedule" and **replace** with the one issued in this Addendum.

F. Lump Sum Base Price Proposal Spreadsheet_ (Division 0)

Delete "Lump Sum Base Price Proposal" and **replace** with the one issued in this Addendum.

G. Scope of Work – Design Deliverables (Division 0)

Delete "Scope of Work – Design Deliverables" and **replace** with the one issued in this Addendum.

H. Agreement (Division 0)

Delete "Agreement" and **replace** with the one issued in this Addendum.

I. Standard Contract Forms Exhibits (Division 0)

1. Exhibit 36 Summary of Changes to bod, Scope and Specifications

Add the "Exhibit 36 Summary of Changes to BOD, Scope and Specifications" to Standard Contract Forms Exhibit (Division 0)

J. Project Program & Design Criteria (January 11, 2019)

1. **Add** "Transformer Location: Exterior Transformer Location Exhibit" pages 6.52 to the Table of Contents Section 6.0 Appendix.

2. **Delete** "Executive Summary" pages 1.1 and **replace** with the one issued in this addendum.

3. **Delete** "Project Introduction" pages 2.4 and **replace** with the one issued in this addendum.

4. **Delete** "Project Program" pages 3.32, 3.46, 3.50, 3.54, 3.56 & 3.58 and **replace** with the ones issued in this addendum.

5. **Delete** "Design Criteria" pages 4.4, 4.80 & 4.115 and **replace** with the ones issued in this addendum.

K. General Requirements (Division 01)

1. Section 01 2100 Allowances (Division 1)

   Delete "Section 01 2100- Allowances" and **replace** with the one issued in this Addendum.

2. Section 01 2300 – Alternates (Division 1)

   Delete "Section 01 2300 - Alternates" and **replace** with the one issued in this Addendum

3. Section 01 3100- Project Management & Coordination (Division 1)

   Delete "Section 01 3100 – Project Management & Coordination" and **replace** with the one issued in this Addendum

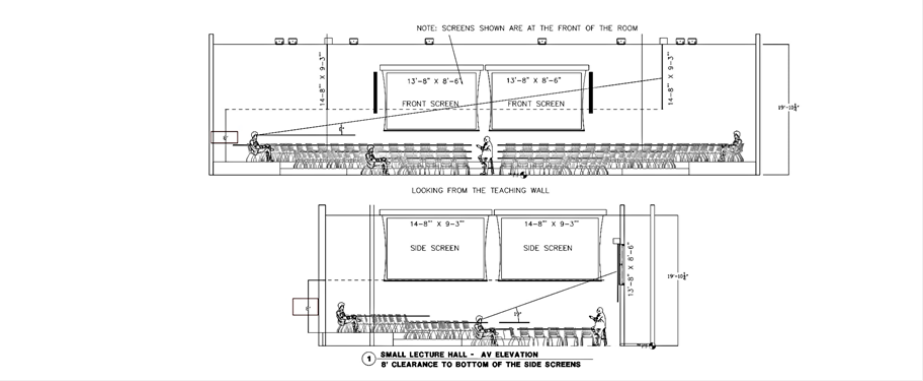
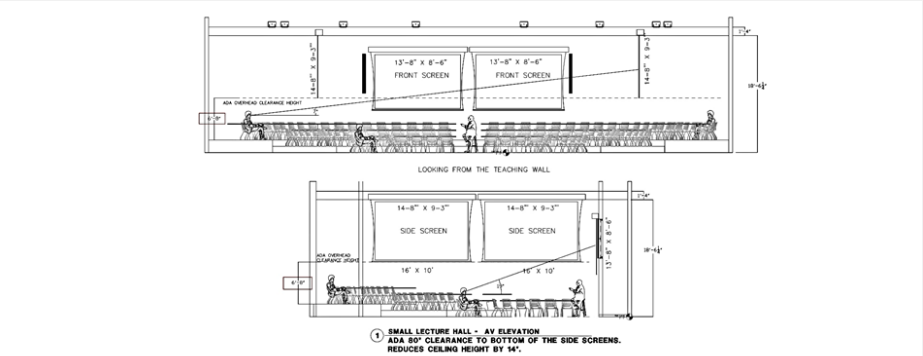
L. Specifications (Divisions 02-33)

1. Division 27-Communications

   Delete the "Division 27- Communications" and **replace** with the one issued in this Addendum

3. DESIGN BUILDER QUESTIONS & ANSWERS

Q89	Does the University require a fly through as part of its deliverables for the proposal?
A89	**The University does not require a fly through as part of the deliverables for the proposal. The deliverables for the proposal are listed in the Technical Proposal.**
Q90	RFI 69 identifies that the university will accept the use of exterior Pad mounted transformers. Since the site has so many adjacent buildings and malls- does the University have any preferred locations for where the transformer may be located?
A90	**A preferred location for the Exterior Pad mounted transformer is identified in Addendum 17.**
Q91	On page 3.58 of the BOD, the Large (2.04) Lecture Hall requires resilient flooring (or sealed concrete) under seating. On pages 3.50, 3.54 of the BOD the area under seating in the Small (2.02) and Medium (2.03) Lecture Halls requires carpet tile. The conditions in the halls could be viewed to be similar. Was there a reason for specifying the difference in the halls? Would the University consider making these the same? If so, which would be desired – resilient flooring or carpet tile?
A91	**The University will accept the use of resilient flooring under the seating of all lecture hall seating.**

Q92	The response provided in Addendum 14, Q/A71 indicates "the University may choose to entertain changing the requirement if the Design-Builder can demonstrate that a change still meets all of the intended performance criteria." Attached for your review and consideration are two diagrams demonstrating view angles for the 8'-0" mandated clearance and a 6'-8" Code minimum required clearance. The attached demonstrates intended performance criteria are still met while simultaneously improving view angles for end-users in the last row of seating and remaining neutral for end-users in the front row of seating. Please reconsider the response to Q/A71 in Addendum 14 and verify if clearances from bottom of screen to top of top tier can be adjusted from the mandated 8'-0" to Code allowed minimum 6'-8".  
A92	**The University will accept clearances below the mandated 8'-0" requirement as demonstrated above- provided that the design meets all the performance requirements for sightlines identified in the BOD**
Q93	Page 4.114 under the Wireless Access Points (WAPs) section indicates WAPs are to be cabled with CAT 6 cabling. Page 4.115 under Data Connection Standards section indicates WAPs are to be cabled with CAT6A cabling (this is the only reference to CAT6A cabling in the body of the RFP). Please verify if CAT6 or CAT6A cabling is required for WAPs.
A93	**CAT 6 cabling is required for the WAPs.**
Q94	Please advise if an anticipated date for Notice of Award for Phase 1 work can be provided to all teams, for schedule coordination.
A94	**Please find anticipated date for NTP 1 on the proposal schedule- issued as part of addendum 17.**

Q95	Will the University accept operable partitions that are 10’ high instead of 12’ in the Multipurpose room?
A95	**The three Multipurpose rooms are to be combinable in to a single room. Therefore, each room shall have their own Audio-systems to conduct functions independently and simultaneously. If the design-Builder can demonstrate that the performance and design requirements of the rooms are met, and soffits do not impede view angles and sightlines of the combined space, the University will accept the use of 10’ high operable partitions in the room.**
Q96	Will the University accept the use of roof tie-backs for use with window washing/ building maintenance equipment to meet the code minimum for Building maintenance equipment?
A96	**The University will accept the use of roof tie-backs for building maintenance.**
Q97	On pages 3.48, 3.50, 3.52, 3.54 of the BOD, tables in the Small (2.02) and Medium (2.03) Lecture Halls are noted to alternate between 18” and 30” wide. We understand the purpose of the larger table is to allow sharing with the row in front of it for group work. Based on our investigation with a leading supplier of lecture hall seating (the firm that developed the model for the Large Lecture Hall) as well as our own experience, the 24” wide table can accommodate the proposed use while improving overall performance of the space. Our study of the site lines within the two types of halls has indicated that additional distance from the front of the room, including the screens, to the front rows of seating is required to be able to fit within acceptable view angles. By using a narrower and functional table, the halls dimensions can be adjusted to provide a more useable experience for the front row. Is the use of a 24” table in the three halls acceptable?
Q97	**The University requires the use of 30” tables in the three lecture halls.**

END OF ADDENDUM

ANNOUNCEMENT TO PREQUALIFIED PROPOSERS

Subject to conditions prescribed by the University of California, Riverside, sealed proposals for a Design Build contract are invited from prequalified proposers for the following work:

STUDENT SUCCESS CENTER

DESCRIPTION OF WORK
The proposed Student Success Center will be a 60,000 GSF / 39,000 ASF facility that will address UCR's growing student population and its shortfall in classroom capacity. The Project will consist of three primary program elements: 1) General assignment classrooms designed for modern pedagogies and technology. 2) Multipurpose student life spaces for use by student organizations, and areas for scholarly activity such as tutoring, mentoring and study. 3) Shelled Dining Services venue.

Maximum Acceptance Cost: ~~$47,100,000~~ **~~$49,000,000~~** ***$49,980,000*** (funding is pending administrative approval)

The University has determined that the following Proposers have been prequalified:

HENSEL PHELPS CONSTRUCTION CO, Irvine, CA 92612
MCCARTHY BUILDING COMPANIES, INC. Newport Beach, CA 92660
SWINERTON BUILDERS, Irvine, CA 92416

PROCEDURES:
Pending administrative approval, Request for Proposals will be available beginning at **2:00 PM,** on **Friday, January 11, 2019** and will be issued at:

IB Reprographics
3363 Durahart Street
Riverside, CA 92507
Phone: (951) 682-1850
Website: https://www.ibrepro.com/

Technical Proposals must be received on or before: ~~Thursday, April 11, 2019~~ ~~Thursday, May 16, 2019,~~ ~~Thursday, April 27, 2019~~ ***Thursday, June 27, 2019,*** **2:00 PM**

Price Proposals must be received on or before: ~~Friday, April 12, 2019~~ ~~Friday, May 17, 2019,~~ ~~Friday, April 28, 2019~~ ***Friday, June 28, 2019***, **2:00 PM**

Price Proposals will be opened at: ~~Thursday, April 23, 2019~~ ~~Monday, June 3, 2019~~, ~~Thursday, July 11, 2019 11:00 AM~~ ***TBD*** at:

~~Architects & Engineers~~ Planning, Design & Construction
University of California, Riverside
1223 University Avenue, Suite 240
Riverside, California 92521
951-827-7911

Mandatory Pre-Proposal Conference & Project Site Visit. A mandatory pre-proposal conference will be conducted on **Monday, January 14, 2019**, beginning promptly at **1:30 PM**. Only proposers who participate in the pre-proposal conference and project site visit, in their entirety, will be allowed to propose on the project. Participants must arrive at or before **1:30 PM**. Persons arriving later than **1:40 PM** will not be allowed to submit proposals as design builder on the project. The Big Springs Parking Garage located on Big Springs Road will be opened for all

participants to park. A parking attendant will be issuing permits at the Big Springs Parking Garage from 12:00 PM - 1:30 PM.

Participants shall meet at:

Glen Mor Building K, Rooms K106/K108
University of California, Riverside
Riverside, California 92507
951-827-7911

Proposers shall come prepared with questions concerning needed clarifications and shall only send their project manager, design professional, or other professional intended to work on the project to attend this meeting. For further information, contact Lynn Javier, University's Consultant at (951) 827-7911, lynn.javier@ucr.edu

Proposal Security in the amount of 10% of the Lump Sum Base Proposal, excluding alternates, shall accompany each bid. The surety issuing the Bid Bond shall be, on the bid deadline, an admitted surety insurer (as defined in the California Code of Civil Procedure Section 995.120)

All insurance policies required to be obtained by Design Builder shall be subject to approval by University for form and substance. All such policies shall be issued by a company rated by Best as A- or better with a financial classification of VIII or better, or have equivalent rating by Standard and Poor's or Moody's.

The successful proposer and its subcontractors will be required to follow the nondiscrimination requirements set forth in the proposal documents and to pay prevailing wage rates at the location of the work.

No contractor or subcontractor may be listed on a Bid for this project (submitted on or after March 1, 2015) unless registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5 [with limited exceptions from this requirement for bid purposes only under Labor Code section 1771.1(a)].

No contractor or subcontractor may be awarded any portion of this project (awarded on or after April 1, 2015) unless registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5.

This project is subject to compliance monitoring and enforcement by the Department of Industrial Relations.

The successful proposer shall pay all persons providing construction services and/or any labor on site, including any University location, no less than the UC Fair Wage (defined as $13 per hour as of 10/1/15, $14 per hour as of 10/1/16, and $15 per hour as of 10/1/17) and shall comply with all applicable federal, state and local working condition requirements.

The successful proposer will be required to have the following California contractor's license at the time of the proposal opening: **General Building Contractor "B" License.**

Lynn Javier, University's Consultant, (951) 827-7911, lynn.javier@ucr.edu
Bid Board: http://ae.ucr.edu/business/contractors.html

THE REGENTS OF THE UNIVERSITY OF CALIFORNIA
University of California, Riverside
Dates of Publication: 12/21/2018 thru 01/14/2019

PROPOSAL SCHEDULE

	ACTIVITY	DATE	TIME
A	The RFP will be available to Prequalified Proposers, subcontractors and design consultants.	**1/11/19**	**2:00 PM**
B	**Pre-Proposal Conference & Site Visit – Mandatory for all Prequalified Proposers.** Participants must arrive at University of California, Riverside, Glen Mor, Building K, Room K106/K108, Riverside, CA 92507 at or before the established time.	**1/14/19**	**1:30 PM**
C	The University will hold confidential One-on-One meetings with each Proposer prior to the Technical Proposal Submittal for the purpose of answering questions, clarifying RFP and program requirements, reviewing and validating preliminary designs etc. Meeting location: University of California, Riverside, Pentland Hills Bear Cave B107/C101, Riverside, CA 92507.	**2/7/19**	**8:30 AM (SB)** **11:00 AM (HP)** **1:30 PM (MB)**
	The University will hold confidential One-on-One meetings with each Proposer prior to the Technical Proposal Submittal for the purpose of answering questions, clarifying RFP and program requirements, reviewing and validating preliminary designs etc. Meeting location: University of California, Riverside, University Village, 1299 University Ave., Room EUV-1103, Riverside, CA 92507.	**3/1/19**	**8:00 AM (MB)** **10:30 AM (SB)** **1:00 PM (HP)**
	The University will hold confidential One-on-One meetings with each Proposer prior to the Technical Proposal Submittal for the purpose of answering questions, clarifying RFP and program requirements, reviewing and validating preliminary designs etc. Meeting location: University of California, Riverside- ***TBD***.	**3/21/19**	**8:30 AM (HP)** **11:00 AM (MB)** **1:30 PM (SB)**
		~~4/24/19~~ ***05/21/2019***	***9:30 AM (SB)*** ***12:00 PM (HP)*** ***2:00 PM (MB)***
D	**Technical Proposal Submittal is due from Proposers and will be received only at University of California, Riverside, Planning, Design & Construction, 1223 University Avenue, Suite 240, Riverside, CA 92507. The Technical Proposal Submittal is defined in the *Technical Proposal*.**	~~5/16/19~~ **06/27/2019**	**2:00 PM**
E	**Lump Sum Base Price Proposal Submittal is due from Proposers and will be received only at University of California, Riverside, Planning, Design & Construction, 1223 University Avenue, Suite 240, Riverside, CA 92507. The Lump Sum Base Price Proposal Submittal is defined in the *Lump Sum Base Price Proposal*.**	~~5/17/19~~ **06/28/2019**	**2:00 PM**

F	The University's Technical Review Committee will meet to review timely submitted Technical Proposals as described in the Proposal Evaluation Process document.	~~5/29/19-5/30/19~~ ***TBD***	**8:00 AM – 5:00 PM**
G	Proposers shall make an Oral Presentation and describe the best value aspects of their proposals. Cost shall not be discussed during the Oral Presentation.	~~5/31/19~~ ***TBD***	**8:00 – 5:00 PM**
H	Timely submitted Lump Sum Base Price Proposals shall be publicly opened at University of California, Riverside, Planning, Design & Construction, 1223 University Avenue, Conference Room Suite 210-16, Riverside, CA 92507. The University will acknowledge the timely receipt of submittals and whether or not the submittals appear to be responsive. No cost or point scoring information will be disclosed to the public at this time.	~~6/3/19~~ ***TBD***	**11:00 AM**
I	***The University will issue Notice to Proceed- Phase 1 to the successful proposer.***	***08/23/2019***	

Late Proposals: Any proposal, modification, or revision that is received at the designated University of California, Riverside, Planning, Design & Construction location after the exact time specified for receipt of proposals is "late" and will not be considered unless it was the only proposal received. Late proposals and modifications that are not considered will be held unopened, unless opened for identification, and then returned to the Proposer after award.

REQUEST FOR PROPOSAL

CONTENTS

1. INTRODUCTION

The Regents of the University of California (the "University") intend to award a contract to the prequalified Design Build team (the "Proposer") that is deemed to offer the best value for design build services to construct the Student Success Center project (the "project") located on the University of California, Riverside campus.

The University of California has completed the prequalification process for design build services relating to the project. **Proposals will be accepted only from prequalified Design Builders, herein after referred to as "Proposers."** This Request for Proposal (RFP) establishes the requirements for proposal submission.

The University reserves the right to reject any, or all, proposals or to withhold the award of this project for any reason it may determine.

1.1 Purpose

The University's primary objective in utilizing the design build approach for this project is to bring the best available design and construction experience and expertise together to work with the University as a team, and successfully meet the requirements of this project.

The University desires to select a responsive, highly qualified Proposer to deliver a design build project that fully meets the University's established needs and expectations with respect to the scope of work, budget, quality, functionality, flexibility, and operational design standards. The design build approach is intended to allow designers and contractors to work together to address each project requirement and to deliver an effective and comprehensive project that meets all the established requirements.

The University requests integrated solutions with quality design and construction within the established Maximum Acceptance Cost.

1.2 Project Description

The University of California Riverside (UCR) proposes to develop a Student Success Center (Project), a new facility of 60,000 GSF / 39,000 ASF. The purpose of the Project is to address UCR's growing student population and its shortfall in classroom capacity. UCR envisions the Project to increase utilization of instructional and student space and uphold UCR's academic mission through its explicit focus on "student success". The Project consists of three primary program elements:

- General assignment classrooms designed for modern pedagogies and technology;
- Multipurpose student life spaces for use by student organizations, and areas for scholarly activity such as tutoring, mentoring, and study;
- Shelled Dining Services venue.

The overall goal for the Student Success Center is to create a visionary and transformational facility that supports education and student success through active learning, collaboration, and community-building, while also responding to the external site and climate conditions in a manner that integrates the building into the surrounding campus landscape. Bringing together classrooms and student life space, the Project has a unique opportunity to create highly utilized instructional, collaborative, and social spaces by capitalizing on synergies between these two facets of the student experience.

The University envisions the Project to be a showcase piece; a unique and dynamic location that becomes the number one stop on the campus tour. While function and practicality are key, the facility shall also inspire creativity and create a memorable place, one that engenders a deep emotional attachment for the students, faculty, and staff who inhabit the space. Located at the prominent intersection of the Arts Mall and Carillon Mall, the Project shall be a gateway building, providing an enhanced identity to the Academic Core.

1.3 Proposal Documents

Proposers must comply with the specific requirements herein as well as the provisions contained in the Design Build Agreement (the "contract"). By submitting its proposal, the Proposer agrees to all of the terms and conditions contained therein and further agrees, if selected for award, to execute a contract including such terms and conditions.

The University makes copies of the RFP Documents available, on the aforementioned terms, for the sole purpose of obtaining Proposals for the Work (as defined in Section 2, The Work) and does not confer a license or grant permission for any other use of the Proposal Documents.

This RFP includes the following Proposal Documents, as may be modified by addenda, for use by Proposers in the preparation of their proposals and for incorporation into the awarded contract.

.1 REQUEST FOR PROPOSAL DOCUMENTS:

a. Proposal Schedule
b. Request for Proposal
c. Technical Proposal
d. Lump Sum Base Price Proposal
e. Price Proposal Form
f. Bid Bond
g. Lump Sum Base Price Proposal Spreadsheet
h. Proposal Evaluation Process
i. Preliminary Schedule
j. University Furnished Information

.2 DESIGN BUILD CONTRACT / EXHIBITS:

a. Agreement
b. General Conditions
c. Supplementary Conditions
d. Project Program & Design Criteria (January 11, 2019)
e. Basis of Criteria Compliance Matrix
f. Project Directory
g. Scope of Work
h. General Requirements (Division 01)
i. Specifications (Divisions 02-33)
j. Design Professional Rate Schedule for Additional Services
k. Proposal
l. Standard Contract Forms (Exhibits)

1.4 Maximum Acceptance Cost

.1 The Maximum Acceptance Cost (MAC) for this project has been established by the Regents of the University of California as ~~$49,000,000~~ ***~~$49,980,000~~***

The MAC represents the maximum total available funding for contract award.

.2 Proposals submitted that exceed the MAC will be deemed nonresponsive and excluded from consideration for contract award.

The MAC = Lump Sum Base Price Proposal (including any applicable design fees)

1.5 Basis of Selection and Contract Award

Selection shall be based upon a "best value" determination, which is calculated on a "cost per point" basis as identified in the Proposal Evaluation Process section in this RFP. The responsive Proposer with the lowest best value score (lowest cost per technical point) and with a Price Proposal that does not exceed the MAC will be determined to be the apparent Lowest Responsible Proposer. University will have the right to waive nonmaterial irregularities in a proposal.

University will select the best value proposal and notify such Proposer on University's form within **90 Days** after the proposal deadline or reject all proposals. Within 10 days after receipt of the Notice of Selection as the successful Proposer, Proposer shall submit the following items:

.1 Three (3) originals of the Agreement signed by Design Builder.
.2 Three (3) originals of the Payment Bond required under Article 11 of the General Conditions.
.3 Three (3) originals of the Performance Bond required under Article 11 of the General Conditions.
.4 Original Certificates of Insurance on the form provided by University required under Article 11 of the General Conditions.
.5 Fully executed "Declaration of Bidder Minimum Occupational Safety and Health Qualifications" form. Proposer need not submit this form with proposal if it was previously submitted during the prequalification process.
.6 If Proposer wishes to utilize securities in lieu of retention or deposit retention into escrow *beginning with the initial Application for Payment*, (1) Selection of Retention Options accompanied by (3) completed Escrow Agreements for Deposit of Securities in Lieu of Retention and Deposit of Retention (refer to Article 9.5 of the General Conditions).

If all submitted items are in compliance with the requirements of the RFP Documents, the University will award the Contract by returning a fully executed copy of the Agreement to Design Builder.

The University may reject the successful Proposer if the Proposer: (1) withdraws its proposal; (2) fails or refuses to sign all of the items required by the Proposal Documents within 10 days after receipt of Notice of Selection; or (3) is not financially or otherwise qualified to perform the Contract. In such case, the University will select the next best value proposal until all proposals are exhausted or reject all proposals.

1.6 General Proposal Requirements, Terms and Provisions

.1 *Key RFP Definitions:*

***Definitions**:* Except as otherwise specifically provided, definitions set forth in the General Conditions or in other Contract Documents are applicable to all Proposal Documents.

***Addenda**:* Written, electronic or graphic supplements issued by University not later than 3 business days prior to the Proposal Deadline, which modify or interpret the Proposal Documents by addition, deletion, clarification, or correction. No other form of communication, oral or written, modifies the Proposal Documents.

Basis of Design: The terms "Basis of Design," and "Design Criteria," may be used interchangeably.

***Business Day**:* Any day other than a Saturday, a Sunday or University designated holiday.

Conflict of Interest: Occurs when an architect, engineer, or other consultant works on a project on behalf of more than one client. To avoid any such conflict of interest, any consultant hired with the primary role of developing the project program plan or project proposal documents on behalf of the University is precluded from participating as a member of the Design Build Team.

***Facility**:* As used in this RFP, the University's Facility office issuing the Proposal Documents.

***One-on-One Meetings**:* Confidential discussions between the University and each Proposer to clarify RFP and program requirements, review preliminary designs and obtain the University's validation. Any changes to the Proposal Documents will be made only by Addenda issued by the University (see the *University Responses* provision below**).**

***Planholder**:* A person or entity who is known by the issuing office to have received a complete set of Proposal Documents and who has provided contact information for receipt of pre-proposal communications.

***Proposal Deadline**:* The date and time on or before which Proposals must be received, as designated in the Proposal Schedule and which may be revised by Addenda.

***Proposal Documents**:* The documents (including electronic files) prepared and issued with the RFP including all Addenda thereto.

***Proposer**:* A prequalified person or firm(s) that submits a proposal. Note: The terms "Proposer," "Design Builder," "Design Build Entity", and "Design Build Team" may be used interchangeably.

.2 *Form and Content of Proposal:* The format and content of the proposal submittal are specified in the *Technical Proposal and Lump Sum Base Price Proposal sections of this Document*. Proposals should be concise, straightforward, prepared simply and economically. Expensive displays, bindings, or promotional materials are neither required nor desired.

.3 *Proposer Understanding:* By submitting its proposal(s), Proposer acknowledges that it has read, understood, and submitted its proposal(s) in accordance with the provisions of the Proposal Documents.

.4 *Additional Proposal Requirements:* Proposer shall, before submitting its proposal, carefully study and compare the components of the Proposal Documents with any other work being bid concurrently or presently under construction which relates to the Work for which the Proposal is submitted; shall examine the project site, the conditions under which the Work is to be performed, the local conditions; and shall at once report to University's Representative errors, inconsistencies, or ambiguities discovered. If Proposer is awarded the contract, Proposer waives any claim arising from any errors, inconsistencies or ambiguities resulting from such examinations that Proposer, its subcontractors or suppliers, or any person or entity under Proposer became aware of, or reasonably should have become aware of, prior to Proposer's submission of its proposal.

.5 *Requests for Clarification:* Requests for clarification or interpretation of the Proposal Documents shall be addressed only to the person(s) designated by the University to receive such information. Any other communication to any other person(s) or firm(s) shall be deemed invalid.

.6 *University Responses:* Clarifications, interpretations, corrections, and changes to the RFP Documents will be made by Addenda. **CLARIFICATIONS, INTERPRETATIONS, CORRECTIONS, AND CHANGES TO THE RFP DOCUMENTS MADE IN ANY OTHER MANNER SHALL NOT BE BINDING AND PROPOSERS SHALL NOT RELY UPON THEM.**

.7 *Distribution of Addenda:* Addenda will be issued only by the University and only in writing. Addenda will be identified as such and will be distributed via e-mail, mail, fax, courier, or through other services to all Planholders.

Copies: Copies of Addenda will be made available for inspection wherever RFP Documents are on file for inspection. Addenda will be issued such that they should be received by Planholders who have provided contact information for receipt of Addenda, no later than 3 business days prior to the Proposal Deadline. Addenda withdrawing the RFP or postponing the Proposal Deadline may be issued anytime prior to the Proposal Deadline.

Receipt of Addenda: Each Proposer shall be responsible for ascertaining, prior to submitting a proposal, that it has received all issued Addenda.

.8 *Subcontractor Disclosure & Listing:* Proposer shall list all Subcontractors identified at the time of submitting its Proposal, using the Expanded List of Subcontractors in the Exhibits. See General Conditions for requirements in updating additional Subcontractors during the course of the Work.

.9 *Equal Opportunity:* Every effort will be made to ensure that all persons have equal access to contracts and other business opportunities with the University within the limits imposed

by law or University policy. Each Proposer may be required to show evidence of its equal employment opportunity policy. The successful Proposer and its subcontractors will be required to follow the nondiscrimination requirements set forth in the Bidding Documents and to pay prevailing wage at the location of the work.

The work described in the contract is a public work subject to section 1771 of the California Labor Code.

.10 No contractor or subcontractor, regardless of tier, may be listed on a Proposal for, or engage in the performance of, any portion of this project, unless registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5 and 1771.1.

The successful Proposer shall pay all persons providing construction services and/or any labor on site, including any University location, no less than the UC Fair Wage (defined as $13 per hour as of 10/1/15, $14 per hour as of 10/1/16, and $15 per hour as of 10/1/17) and shall comply with all applicable federal, state and local working condition requirements.

.11 *Prevailing Wages:* Proposer shall pay prevailing wage rates at the location of the work as published on the DIR website and provided with this RFP as University Furnished Information.

.12 *Return of Bid Security:* Bid security will be returned after the contract has been awarded. **Notwithstanding the preceding, if a Proposer fails or refuses, within 10 days after receipt of Notice of Selection, to sign the Agreement, or submit to University all of the items required by the RFP Documents, the University will retain the Proposer's bid security.** If the bid security is in the form of a Bid Bond, the Bid Security will be retained until the University has been appropriately compensated. If the Bid Security is in the form of a certified check, the University will negotiate said check and, after deducting its damages, return any balance to Proposer.

.13 *Oral Presentations:* Proposer shall make an oral presentation of its proposal that describes the most important aspects of its approach to the project and provide proposal clarifications requested by the University's Technical Evaluation Committee.

.14 *Incorporation of Proposal Clarifications into the Proposal*: The University's summation of Proposal Clarifications as confirmed by Proposer, shall be accepted by signature of selected Proposer and incorporated into their proposal by reference.

.15 *Incorporation of Proposal into the Contract:* The selected Proposer's proposal shall be incorporated into, and shall be an integral part of the Contract.

.16 *Award Upon Receipt of Initial Proposal:* The University intends to evaluate initial proposals and award a contract without allowing Proposers to revise their proposals. Therefore, initial proposals should contain the best terms from a price and technical standpoint.

.17 The University reserves the right to proceed to a "Best and Final Offer" (BAFO) phase by requesting Proposal Revisions and conducting discussions with the Proposers if it later determines them to be necessary. At the conclusion of discussions with all Proposers, the University will establish a deadline for receipt of BAFO proposals. Discussions with Proposers after receipt of a proposal do not constitute a rejection or counteroffer by the University. As used in this provision, the following definitions apply:

"BAFO Discussions" are exchanges between the University and the Proposer that occur after the submittal of proposals should it be necessary to call for a BAFO. During the BAFO process, the Proposer will be allowed to submit a revised proposal.

BAFO PROPOSALS (IF REQUESTED) THAT EXCEED THE MAC WILL NOT BE CONSIDERED FOR CONTRACT AWARD. FAILURE TO SUBMIT PROPOSAL REVISIONS WILL RESULT IN THE PROPOSER BEING DEEMED NONRESPONSIVE.

.18 Occupational Safety and Health Qualification: Proposer and each Subcontractor at all tiers meet the following minimum occupational safety and health qualifications:

a. Proposer and each Subcontractor have no Final Order (declared by OSHA) Willful violations in California of Part 1 (commencing with Section 6300) of Division 5 of the Labor Code during the five-year period prior to bid opening.

b. Proposer and each Subcontractor have maintained a workers' compensation Experience Modification Rate (EMR) that averages below 1.25 for the past five years.

c. Proposer and each Subcontractor have instituted an injury prevention program pursuant to Section 3201.5 or 6401.7 of the Labor Code.

After selection of the apparent best value responsive and responsible Proposer and issuance of the Notice of Selection, and prior to contract award, Proposer shall furnish to the University a "Declaration of Bidder Minimum Occupational Safety and Health Qualifications" form completed by Proposer and each listed Subcontractor.

After contract award, Proposer will require each of its Subcontractors at all tiers to furnish a fully executed Exhibit form prior to Subcontractor's commencement of Work.

.19 Key Technical Submittal Definitions:

.1 *Unallowable Changes in Technical Submittals*

a. *Program Change:* Any project scope change that: (1) deviates from the required elements in the Proposal Documents, or (2) is inconsistent with the requirements expressed in the Contract Documents as issued. Examples of unallowable changes include substantial changes in project siting or adjacencies, reduction in usable space, limitations of planned utilization or limitations on future expansion.

b. *Performance Change:* Any change, revision, alteration or deviation from the Proposal Document requirements that would increase energy usage, reduce useful life, impair accessibility, increase maintainability, or affect life cycle as required.

.2 *Cost Realism (with respect to proposal pricing)*

a. *Cost Realism Analysis:* All pricing, including Unit Prices, Alternates and Compensable Delay rates must reflect a clear understanding of the project requirements with realistic prices representing probable cost. The University will perform a cost realism analysis using its best estimate of probable cost to determine if the proposed prices are fair and reasonable.

b. *Unbalanced Pricing:* Unbalanced pricing exists when, despite an acceptable total price, the price of one or more contract line items is significantly over or understated as indicated by the application of a cost realism analysis.

IF THE UNIVERSITY DETERMINES THAT ANY CONTRACT LINE ITEMS ARE NOT FAIR AND REASONABLE, OR ARE UNBALANCED, THE UNIVERSITY MAY REJECT THE OFFER IF THE RESULTING AWARD POSES AN UNACCEPTABLE RISK TO THE UNIVERSITY.

1.7 Stipend for Proposal Preparation

In an effort to help defray the cost for the development of this proposal submittal, the University will compensate each unsuccessful responsive Proposer the sum of ~~**Three Hundred Forty Thousand Dollars ($340,000)**~~ ***Three Hundred and Seventy Thousand Dollars ($370,000)*** for the preparation and submission of a responsive proposal. A responsive proposal is one that materially complies with the form and content requirements of the proposal documents. A

Proposer will not be eligible for the stipend if it should withdraw from the solicitation process prior to the date that the Contract is issued by the University.

Unsuccessful Proposers may submit an invoice for the stipend at any time after contract award. Stipend invoice processing and payment will be on a net-30 day basis.

Proposer agrees that in exchange for the money paid by the University for proposal preparation all material prepared by Proposer in conjunction therewith, shall become the property of the University. The University shall have unlimited rights, for the benefit of the University, in all documentation prepared in conjunction with the proposal(s), including the right to use the design elements and details in the proposal on any University project at no additional cost to the University.

2. THE WORK

2.1 General Requirements

The University will award a contract to the successful Proposer for the production of Design Development Documents, Construction Documents and Construction.

The Design Builder provides services for Design Development and Construction document preparation for the project that may include, but not be limited to, architectural, structural, civil, fire protection, mechanical, electrical, and plumbing drawings and specifications; interdisciplinary construction coordination drawings (also defined as “Shop Drawings”); as well as appropriate calculations necessary to complete the project. Additionally, the Design Builder, its consultants, sub-consultants, or suppliers performs Work required to construct the project as described and specified in the RFP Documents.

All Construction Drawings and Shop Drawings prepared by Design Builder are to be complete and in sufficient detail for a comprehensive review by the University including Design and Construction Services, the State Fire Marshal, Division of State Architect (DSA) if applicable, and the University’s plan review service consultants. The drawings and engineering calculations shall include, but not be limited to: applicable plans, elevations, sections, schedules and details. These drawings shall comprehensively illustrate the complete and coordinated design of applicable systems. The Design Builder will be required to use an Architect registered in the State of California to prepare all Construction Drawings and shop drawings to the extent required by the Campus Master Specifications.

The Lump Sum Base Price Proposal must provide for the complete design and construction of the project, as identified in Division 01, General Requirements of the Proposal Documents, including any temporary or interim facilities required to maintain essential existing functions in operation throughout the construction period.

Details of the design services and construction responsibilities are described in greater detail in the Proposal Documents.

2.2 Architectural/Engineering Consultants

All architectural and engineering services to be provided by Proposer must be in accordance with the professional registration requirements of the State of California. Consultants listed must meet State licensing requirements.

2.3 University Controlled Insurance Program.

As further defined and limited by Article 11.1 of the General Conditions:

.1 The University shall pay for, obtain and maintain a University Controlled Insurance Program (“UCIP”) providing workers’ compensation and employer’s liability insurance coverage, commercial general liability insurance coverage, and excess liability insurance coverage, to

persons and entities enrolled in the UCIP, for Work performed on or at the Project site during Phase 3 ("UCIP Coverages"). A summary of the UCIP Coverages is included as an Exhibit to the Contract. The summary descriptions of the UCIP Coverages in the Exhibit, the General Conditions, or elsewhere, are not intended to be complete or to alter or amend any provision of the actual UCIP Coverages. In the event that any provision of this Article, the Contract Documents, or elsewhere, conflicts with the UCIP insurance policies, the provisions of the actual UCIP insurance policies shall govern. The University's provision of its standard UCIP insurance policies meets the University's obligation to provide UCIP insurance under the Contract and, in the event of a conflict between the provisions of the policies and any summary or description of the provisions contained herein or otherwise, the provisions of the policy shall control and shall be conclusively presumed to fulfill the University's obligation to provide UCIP insurance.

.2 Parties eligible to participate in the UCIP (generally Design Builder and all Subcontractors of all tiers who perform Work at the Project Site during Phase 3, unless excluded under General Conditions Article 11.1.5) shall not include in their bids for any Work to be performed at the Project Site any projected or actual cost to provide the workers' compensation and employer's liability insurance, commercial general liability insurance, and excess liability insurance that is being provided under the UCIP. The University may reduce the Contract Sum by an amount commensurate with any projected or actual costs included contrary to the requirements of this Article 2.2.2.2.

.3 Notwithstanding the UCIP, Design Builder and all Subcontractors are required to provide insurance as set forth in General Conditions Article 11.1.10 (including certificates of insurance evidencing the required coverages).

.4 UCIP Workers' Compensation Insurance will be primary for all covered occurrences within the 50 United States, except that this insurance does not apply in any monopolistic workers' compensation state.

2.4 Subcontractors

.1 Prequalified Subcontractors:

Proposers shall require Prequalified Warm-Air Heating, Ventilating & Air Conditioning and Plumbing subcontractors hold a license that is current and in good standing permitting them to perform Work in their respective trade and in accordance with the requirements of the University's Prequalification Criteria.

The following subcontractors have been prequalified by the University and are eligible to perform work as first-tier subcontractors for their respective trades:

Prequalified Subcontractors

WARM-AIR HEATING, VENTILATING & AIR CONDITIONING SUBTRADE		
Company	**Address**	**Phone**
ACCO Engineered Systems	265 McCormick Ave., Costa Mesa, CA 92626	714-873-2335
A.O. Reed & Co.	4777 Ruffner Street, San Diego, CA 92111	858-565-4131
Critchfield Mechanical Inc. of Southern California	15391 Springdale Street, Huntington Beach, CA 92649	949-390-2900
Jackson & Blanc	7929 Arjons Drive, San Diego, CA 92126	858-831-7900
Southland Industries	12131 Western Avenue, Garden Grove, CA 92841	714-901-5800
University Mechanical & Engineering Contractors, Inc.	1290 No. Hancock St., Suite 100, Anaheim, CA 92807	714-632-2600

PLUMBING SUBTRADE		
Company	**Address**	**Phone**

A.O. Reed & Co.	4777 Ruffner Street, San Diego, CA 92111	858-565-4131
Pan Pacific Mechanical LLC	18250 Euclid Street, Fountain Valley, CA 92708	949-474-9170
Southland Industries	12131 Western Avenue, Garden Grove, CA 92841	714-901-5800
University Mechanical & Engineering Contractors, Inc.	1290 No. Hancock St., Suite 100, Anaheim, CA 92807	714-632-2600

Proposers are not permitted to use subcontractors that have not been prequalified for the prequalified trades. However, a Proposer may elect to self-perform any prequalified trade work for which it is duly licensed.

The University reserves the right to prequalify additional subcontractors or waive the prequalification requirement if the University determines the proposal process is being negatively impacted by an inadequate number of prequalified subcontractors in a given trade.

.2 **Electrical** Subcontractor Qualification

Proposers shall certify that the **Electrical** subcontractor has met the following minimum qualification criteria:

Electrical subcontractors must have:

(a) The proper license, and the license is current and active.

(b) A minimum of five classroom, student services or office building projects completed in the last ten years that meet the criteria listed below and demonstrate the Subcontractor's ability to successfully complete the project with respect to project size, cost, use, complexity, etc.:

- At least three (3) projects completed for INSTITUTIONS OF HIGHER LEARNING FOR PRIVATE OR PUBLIC AGENCIES for which the electrical construction cost was at least $4 million each.
- At least three (3) projects located in the STATE OF CALIFORNIA for which the electrical construction cost was at least $4 million each.
- At least two (2) projects which used DESIGN BUILD delivery for which the electrical construction cost was at least $4 million each.
- At least one (1) project that included a 200 SEAT LECTURE HALL for which the electrical construction cost was at least $4 million.
- At least one (1) project that included a minimum of 500 GENERAL ASSIGNMENT CLASSROOM STATIONS including a HIGH-QUALITY TEACHING CLASSROOM that included an acoustical panel partition system with STC-50 rating, video displays, sound system and power data infrastructure, etc., for which the electrical construction cost was at least $4 million.
- At least one (1) project that included a DINING AND RETAIL SPACE for which the electrical construction cost was at least $4 million.
- At least two (2) projects that were a minimum of THREE (3) STORIES IN HEIGHT for which the electrical construction cost was at least $4 million each.

(c) Project personnel have demonstrated adequate experience with similar projects.

(d) Have not had a claim filed against them of $20,000 or more in the last five (5) years by Owner or Surety.

(e) Have submitted information in their qualification statement and all attachments thereto that is true, accurate, complete and not misleading

.3 **Concrete** Subcontractor Qualification

Proposers shall certify that the **Concrete** subcontractor has met the following minimum qualification criteria:

Concrete subcontractors must have:

(f) The proper license, and the license is current and active.

(g) A minimum of five classroom, student services or office building projects completed in the last ten years that meet the criteria listed below and demonstrate the Subcontractor's ability to successfully complete the project with respect to project size, cost, use, complexity, etc.:

- At least three (3) projects completed for INSTITUTIONS OF HIGHER LEARNING FOR PRIVATE OR PUBLIC AGENCIES for which the concrete construction cost was at least $2 million each.
- At least three (3) projects located in the STATE OF CALIFORNIA for which the concrete construction cost was at least $2 million each.
- At least two (2) projects which used DESIGN BUILD delivery for which the concrete construction cost was at least $2 million each.
- At least one (1) project that included a 200 SEAT LECTURE HALL for which the concrete construction cost was at least $2 million.
- At least one (1) project that included a minimum of 500 GENERAL ASSIGNMENT CLASSROOM STATIONS including a HIGH-QUALITY TEACHING CLASSROOM that included an acoustical panel partition system with STC-50 rating, video displays, sound system and power data infrastructure, etc., for which the concrete construction cost was at least $2 million.
- At least one (1) project that included a DINING AND RETAIL SPACE for which the concrete construction cost was at least $2 million.
- At least two (2) projects that were a minimum of THREE (3) STORIES IN HEIGHT for which the concrete construction cost was at least $2 million each.

(h) Project personnel have demonstrated adequate experience with similar projects.

(i) Have not had a claim filed against them of $20,000 or more in the last five (5) years by Owner or Surety.

(j) Have submitted information in their qualification statement and all attachments thereto that is true, accurate, complete and not misleading.

.3 **Structural Steel** Subcontractor Qualification

Proposers shall certify that the **Structural Steel** subcontractor has met the following minimum qualification criteria:

Structural Steel subcontractors must have:

(a) A minimum of five classroom, student services or office building projects completed in the last ten years that meet the criteria listed below and demonstrate the Subcontractor's ability to successfully complete the project with respect to project size, cost, use, complexity, etc.:

- At least three (3) projects completed for INSTITUTIONS OF HIGHER LEARNING FOR PRIVATE OR PUBLIC AGENCIES for which the structural

steel construction cost was at least $1.5 million each.

- At least three (3) projects located in the STATE OF CALIFORNIA for which the structural steel construction cost was at least $1.5 million each.
- At least two (2) projects which used DESIGN BUILD delivery for which the structural steel construction cost was at least $1.5 million each.
- At least one (1) project that included a 200 SEAT LECTURE HALL for which the structural steel construction cost was at least $1.5 million.
- At least one (1) project that included a minimum of 500 GENERAL ASSIGNMENT CLASSROOM STATIONS including a HIGH-QUALITY TEACHING CLASSROOM that included an acoustical panel partition system with STC-50 rating, video displays, sound system and power data infrastructure, etc., for which the structural steel construction cost was at least $1.5 million.
- At least one (1) project that included a DINING AND RETAIL SPACE for which the structural steel construction cost was at least $1.5 million.
- At least two (2) projects that were a minimum of THREE (3) STORIES IN HEIGHT for which the structural steel construction cost was at least $1.5 million each.

(b) Project personnel have demonstrated adequate experience with similar projects.

(c) Have not had a claim filed against them of $20,000 or more in the last five (5) years by Owner or Surety.

(d) Have submitted information in their qualification statement and all attachments thereto that is true, accurate, complete and not misleading.

.3 Subcontract Trades not Prequalified by the University.

.1 Proposer shall require that all subcontractors hold an appropriate license that is current and in good standing allowing them to perform Work for their respective trade.

.2 Proposer shall verify that subcontractor project personnel have demonstrated adequate experience with similar projects.

.3 The University maintains the right to request documentation to support Proposer's qualification and selection of subcontractors. Refer to the General Conditions, Article 5, regarding the University's right to make modifications to the Proposer's subcontractor selections.

2.5 Work Phases

The successful Proposer will be responsible for providing services for the development of the project including Design Development (Phase 1), Construction Documents (Phase 2), and Construction (Phase 3), refer to Specification Section 01000 – Summary of the General Requirements (Division 01).

The Notice to Proceed for Phases 2 and 3 is contingent upon funding approval from The University of California, Office of the President.

The contract time is as follows:

Phase 1	Phases 2 & 3	Total Contract Time
66 Calendar Days	**637 Calendar Days**	**703 Calendar Days**

.1 Design Development, Construction Documents, and Construction – Phases 1, 2 and 3:

The successful Proposer shall be responsible for the development of the project through Final Design Development of the project as identified in the Contract Documents. Design Builder shall be responsible for the development of 1) final Design Development documents incorporating the Specifications, Addenda, Design Builder Questions and Answers, any changes to the work proposed by the Design Builder and accepted by the University at the time of proposal; 2) Construction Documents, and 3) Construction of the project as identified in the Design Build Contract. **THE PROJECT SHALL BE COMPLETED ON OR BEFORE May 1, 2021.**

.2 The total contract time includes **35** days for rain delays, refer to Supplementary Conditions.

3. CONTRACT SUM

The Total Contract Sum shall be the Lump Sum Base Price proposed for all work associated with Design Development, Construction Documents, Construction, and selected Alternates, if any.

.1 University has established the fixed fee for the work associated with the Design Development of the project as **One Million One Hundred Thousand Dollars ($1,100,000)**. This fee shall be included in the Lump Sum Base Price proposed by the successful Proposer.

.2 Liquidated Damages

a. Liquidated damages will only apply to Phase 3. See Article 6 of the Agreement for detailed requirements.

b. Liquidated damages daily rate for Phase 3: **$2,000** per calendar day, on or before substantial completion.

c. Liquidated damages daily rate for Phase 3: **$0** per calendar day, after substantial completion.

4. MANDATORY PROPOSAL REQUIREMENTS *(THE ABSENCE OF WHICH RENDERS THE PROPOSAL NON-RESPONSIVE)*

A responsive proposal is one that materially complies with the form and content requirements of the proposal documents. Mandatory proposal requirements include, but are not limited to:

.1 Attendance at the Mandatory Pre-Proposal Conference and project site visit. University requires all Pre-Proposal Conference attendees to sign an attendance list, used as verification of attendance.

.2 Proper proposal delivery method.

.3 Timely submittals at the designated location.

.4 At the time of proposal opening and throughout the duration of the project, Proposer and all Subcontractors shall hold the appropriate current licenses issued by the State of California Contractor's State License Board. If Proposer is a Joint Venture, the Proposer shall hold the applicable joint venture license in which each member of the joint venture shall also have the appropriate license prior to contract award. The State of California Business and Professions Code, Division 3, Chapter 9, known as the "Contractor's License Law," establishes licensing requirements for contractors.

.5 Proposer and first-tier subcontractors must have the required bonding and insurance including the required professional liability and contractor's pollution liability insurance. Refer to Article 11 of the General Conditions and the Supplementary Conditions for project specific insurance requirements.

.6 Price Proposal and Bid Bond must be submitted on the University's forms provided in the RFP.

.7 Price Proposal Form must be signed and dated by the Proposer's Representative legally authorized to bind Proposer to a contract and include all applicable attachments.

.8 The sum of the Lump Sum Base Price Proposal (including all associated design fees) must be within the Maximum Acceptance Cost for Best and Final Offer submittals (BAFO), if requested.

.9 Bid Security in the sufficient amount as described in the Lump Sum Base Price Proposal document.

5. PROPOSAL MODIFICATIONS OR WITHDRAWALS

Prior to the Proposal Deadline, a submitted proposal may be modified or withdrawn by notice to the Facility receiving proposals at the location designated for receipt of proposals. Such notice shall be in writing over the signature of Proposer, delivered by hand, facsimile or PDF email attachment. If notice is by facsimile or email, written confirmation over the signature of Proposer shall be mailed and postmarked on or before the Proposal Deadline. A change made shall not reveal the amount of the original proposal.

Modified or withdrawn proposals may be resubmitted up to the Proposal Deadline, provided that it then fully complies with the Proposal Requirements.

Proposals may not be modified, withdrawn, or canceled for 90 Days following the Proposal Deadline.

6. PROPOSAL (BID) PROTEST

.1 Any Proposer, person, or entity may file a Proposal (Bid) protest. The protest shall specify the reasons and facts upon which the protest is based and shall be in writing and received by the Facility not later than 5:00 pm on the 3rd business days after a written notice of the determination of the apparent best value proposal has been issued by the University.

.2 If a Bid is rejected by the Facility, and such rejection is not in response to a Bid protest, any Proposer, person or entity may dispute that rejection by filing a Bid protest (limited to the rejection) in writing and received by the Facility not later than 5:00 pm on the 3rd business day following the rejected Proposer's receipt of the notice of rejection.

.3 For the purpose of computing any time period in this section, the date of receipt of any notice shall be the date on which the intended recipient of such notice actually received it. Delivery of any notice may be by any means, with verbal or written confirmation of receipt by the intended recipient.

.4 The facility will investigate the basis for the Bid protest and analyze the facts. Facility will notify Proposer whose Bid is the subject of the Bid protest of evidence presented in the Bid protest and evidence found as a result of the investigation, and, if deemed appropriate, afford Proposer an opportunity to rebut such evidence, and permit Proposer to present evidence that it should be allowed to perform the Work. If deemed appropriate by Facility, an informal hearing will be held. Facility will issue a written decision within 15 days following receipt of the Bid protest, unless factors beyond Facility's reasonable control prevent such a resolution, in which event such decision will be issued as expeditiously as circumstances reasonably permit. The decision will state the reasons for the action taken by Facility. A written copy of the decision will be furnished to the protestor, the Proposer whose Bid is the subject of the Bid protest, and all Proposers affected by the decision. As used in this Section, a Proposer is affected by the decision on a Bid protest if a decision on the protest could have resulted in the Proposer not being the best value, responsible and responsive Proposer for the Contract. A written copy of the Facility's decision must be received by the protester, the Proposer whose is the subject of the Bid protest, and all Proposers affected by the decision no later than 3 business days prior to award of the contract**.**

.5 Notwithstanding the provisions of this Section, at the election of Facility, a Bid protest may be referred directly to University's Construction Review Board without prior investigation and review by Facility. The Chair of the Construction Review Board will either decide the Bid protest or appoint a Hearing Officer. If a Hearing Officer is appointed, the Hearing Officer will review the Bid protest in accordance with the provisions of this Section.

.6 The Proposer whose Bid is the subject of the protest, all Proposers affected by the Facility's decision on the protest, and the protestor have the right to appeal to the Construction Review Board

if not satisfied with Facility's decision. The appeal must be in writing and shall specify the decision being appealed and all the facts and circumstances relied upon in support of the appeal. The appeal must be received by the Chair, Construction Review Board, not later than 5:00 pm on the 3rd business day following appellant's receipt of the written decision of Facility, at the following address:

Chair, Construction Review Board
Attention: Director, Construction Services
University of California Office of the President
1111 Franklin Street, 6th Floor
Oakland, CA 94607-5200

And

constructionreviewboard@ucop.edu

.7 A copy of the appeal shall be sent to all parties involved in the Bid protest and to Facility. An appeal received after close of business is considered received as of the next business day. If the final date for receipt of an appeal falls on a Saturday, Sunday, or University holiday, the appeal will be considered timely only if received by close of business on the following business day.

.8 The Chair of the Construction Review Board will review the Facility's decision and the appeal, and issue a written decision, or if appropriate, appoint a Hearing Officer to conduct a hearing and issue a written decision. If a hearing is held, the hearing shall be held not later than the 10th day following the appointment of the Hearing Officer unless the Hearing Officer for good cause determines otherwise. The written decision of the Chair or Hearing Officer will state the basis of the decision, and the decision will be final and not subject to any further appeal to University. The Chair or Hearing Officer may consult with the University's Office of the General Counsel on the decision as to legal form. The University will complete its internal Bid protest procedures before award of the Contract.

7. CONFLICTS

.1 The intent of this RFP is to provide an overview of the proposal process, the subsequent award, and the work required of the successful Proposer. The provisions herein are a summary only and the Proposers should in all cases review the provisions of the Design Build Contract documents for the specific requirements.

.2 If the Proposer believes there are conflicts between this document and any other Contract Documents, the Proposer must immediately, and in writing, bring it to the attention of the University and request written clarification.

END OF REQUEST FOR PROPOSAL SECTION

TECHNICAL PROPOSAL

CONTENTS

TECHNICAL PROPOSAL SUBMITTAL CHECKLIST

☐ Submittal in a separate sealed container identifies the: Project Name & Number, Submittal Date, Technical Proposal Submittal, and Identification Number. Submittal is properly addressed and delivered.

☐ One (1) original and ten (10) copies of the written portion of the TECHNICAL PROPOSAL. Include:

- ☐ Electronic copy in PDF format on a Memory Stick

☐ One (1) set of up to no more than fifteen (15) PRESENTATION BOARDS, not larger than 30” x 42”. Include:

- ☐ Copies of boards within the technical proposal binder as 11" x 17" sheets
- ☐ Electronic copy in PDF format on a Memory Stick

☐ One (1) bound set of the SCHEMATIC DESIGN SUBMITTAL shall be submitted not smaller than 30” x 42”. Include:

- ☐ Within the technical proposal binder as 11” x 17” sheets
- ☐ Electronic copy in PDF format on a Memory Stick

☐ One (1) study model

1. TECHNICAL PROPOSAL SUBMITTAL

Proposers shall submit a Technical Proposal conforming to the format outlined herein and shall provide all requested information. **FAILURE TO COMPLY WITH THE REQUIRED FORMAT AND/OR PROVIDE THE INFORMATION REQUESTED MAY RESULT IN A NON-RESPONSIVE SUBMITTAL**.

Technical Proposals may be comprised of design narratives, drawings (no larger than 30" x 42"), presentation boards, study model to illustrate integration with existing buildings and site (no larger than 36"L x 36"W x 24"H), outline specifications, preliminary sizing calculations, catalog cut sheets, and other information as required and appropriate. **ALL REFERENCES THAT MAY IDENTIFY THE DESIGN BUILD TEAM SHALL BE REMOVED.**

1.1 Technical Proposal Delivery

.1 Proposal Delivery Date:

Refer to the Proposal Schedule for the Technical Proposal Submittal due date and time.

.2 Marking and Identification of Submittals

Proposer shall clearly mark the outside of each package to identify the following:

Project Name: **Student Success Center**
Project Number: 950512
Marked: "Technical Proposal Submittal"
Date of Submittal:
Design Builder Identification Number:

If the Proposals are sent by mail, courier or delivery service, the sealed package shall be marked with the notation "SEALED PROPOSAL ENCLOSED" on the face thereof.

.3 Designated Location for Receipt of Technical Proposals

Proposer shall assume full responsibility for timely delivery of proposals. Proposals shall be properly addressed to be received at:

University of California, Riverside
Planning, Design & Construction Department – **BID BOX**
1223 University Ave, Suite 240
Riverside, CA 92521
Attention Lynn Javier

<u>LATE PROPOSALS:</u> ANY PROPOSAL, MODIFICATION, OR REVISION, THAT IS RECEIVED AT THE DESIGNATED UCR PLANNING, DESIGN & CONSTRUCTION LOCATION AFTER THE EXACT TIME SPECIFIED FOR RECEIPT OF PROPOSALS IS "LATE" AND WILL NOT BE CONSIDERED UNLESS IT WAS THE ONLY PROPOSAL RECEIVED. LATE PROPOSALS AND MODIFICATIONS THAT ARE NOT CONSIDERED WILL BE HELD UNOPENED, UNLESS OPENED FOR IDENTIFICATION, AND THEN RETURNED TO THE PROPOSER AFTER AWARD.

.4 Technical Proposal Delivery Methods (*See marking instructions in 1.1.2 above*)

a. Mail
b. Courier (Hand Delivery)
c. Delivery service

.5 Unacceptable Delivery Methods

a. Oral

b. Telephonic
c. Facsimile
d. Email or other electronic means

1.2 Technical Proposal Submittal Instructions

.1 Required Copies

One (1) original and ten (10) copies of the written portion of the Technical Proposal shall be submitted in sealed boxes, envelopes, or other appropriate sealed containers. Include **one (1) electronic copy** of the written portion of the Technical Proposal and presentation boards **(in PDF format).**

.2 Technical Proposal Format

All Technical Proposals shall be submitted in 8.5" x 11" or 11" x 17" 3-ring or spiral bound binders. Items not physically suitable for inclusion may be submitted separately with a clear proposal reference to the separately furnished items.

ALL NARRATIVES WITHIN THE TECHNICAL PROPOSAL SHALL BE TYPED IN TIMES NEW ROMAN OR A COMPARABLE FONT THAT IS EASY TO READ UTILIZING 11 POINT FONT OR LARGER.

.3 Design Builder Identification Number

Prior to the Technical Proposal submittal, the University will assign a Design Builder Identification Number to each Proposer. The Design Builder Identification Number shall be used by each Proposer to identify its Technical Proposal submittal.

Blind Evaluation: To provide an impartial review of each Proposer's Technical Proposal submittal, the Technical Evaluation Committee will conduct a Blind Evaluation. Therefore, **the entire contents of the Technical Proposal submittal shall have all references to the Proposer's identity removed**. All references that may identify the Design Build team including, but not limited to, firm or team names, staff identification, consultant identification, addresses, telephone numbers, logos, letterhead, stationary, binders, or business cards or specifics about the firm or its size and history shall be removed.

1.3 Presentation Boards Submittal Requirements

.1 Submit **one (1)** set of up to, but **no more than fifteen (15)** presentation boards, not larger than 30" x 42" with the following:

a. Construction Site Logistics – Indicate staging, colocation, tree protection, fencing, parking, fire access, vehicular and pedestrian access/patterns, pedestrian safety accommodations, acoustic barriers and camera locations during all phases of construction.
b. Vicinity Plan - Color rendered showing proposed building in relation adjacent campus spaces.
c. Site Plan – Color rendered indicating landscape/hardscape around building and showing:
    i. Landscape features shall include trees, shrubs, ground covers, special fill areas and lawns, if any.
    ii. Hardscape features shall include roadway, service and loading dock parking, plazas, retaining and landscape walls, and site lighting. Include access/patterns for ADA, pedestrian circulation, bike paths, public transportation, emergency vehicle access, and fire hydrants.
    iii. Include all above-grade utilities, if any.
d. Perspectives:
    i. One (1) color rendered perspective demonstrating the building's contextual relationship with the Carillon mall (facing east toward the bell tower- from Hinderaker-at pedestrian line of sight)

ii. One (1) color rendered perspective demonstrating the building's contextual relationship with the Carillon mall (facing west toward Hinderaker- From Student Services Center at pedestrian line of sight.)

iii. Two (2) color rendered perspectives of building exterior to demonstrate the relationship between surrounding buildings.

iv. One (1) color rendered perspective of main entrance lobby interior and ***interaction spaces (atria etc).***

v. Two (2) color rendered perspective to demonstrate key academic program spaces.

e. Floor Plans, Sections and Elevations – Color rendered plans indicating program elements such as circulation, spatial relationships.

f. Materials – Provide samples of actual interior and exterior materials.

.2 Include copies of boards not smaller than ½ size scale drawings within the technical proposal binder **AND ELECTRONICALLY ON A MEMORY STICK (in PDF format).**

1.4 Study Model

Each Proposer shall provide a study model of their proposed project design with the content and format as described:

.1 Study Model

a. Approximate Size = 36"L x 36"W x 24"H
b. Model to illustrate integration and relationships with existing buildings with spaces. All buildings and spaces within this area shall be included.

1.5 Technical Proposal Scoring

The Technical Proposal will be scored as follows:

Description	Points Available
Executive Summary	0
TAB 1 – Architectural Design	65
TAB 2 – Program Functionality	30
TAB 3 – Project Program Compliance	Pass/Fail
TAB 4 – Site, Civil, and Circulation Design	25
TAB 5 – Mechanical, Electrical, and Plumbing Systems Design	30
TAB 6 – Sustainability Features Incorporated into Design and LEED ~~Gold~~ ***Silver*** Scorecard	20
TAB 7 – Structural Design	Pass/Fail
TAB 8 – Enhancements and Added Value	40
TAB 9 - Alternates	10
TAB 10 – Project Schedule & Work Plan	15
TAB 11 – Mitigation of Subsurface Conditions and Negative Construction Impacts	10
TAB 12 – Quality Control Plan	10
TAB 13 – Deviations from Request for Proposal	Pass/Fail
Design Builder Prequalification Level II Interview	10
Oral Presentation	15

Subtotal:	**280**
Best and Final Offer (if necessary)	20
Total:	**300**

2. TECHNICAL PROPOSAL SUBMITTAL

Each Proposer shall provide the following information in the content and format as described. Proposal shall be indexed with tabs numbered and labeled in bold type denoting the sections. Narratives may incorporate graphic information and/or presentation boards.

EXECUTIVE SUMMARY — *0 POINTS*

Suggested Text Length: 1 – 2 pages

The Executive Summary should stand on its own to convey the primary design, program and technical elements of your proposal that clearly and collectively demonstrate why your project approach represents the overall **best value** to the University.

TAB 1 — *65 POINTS*

Suggested Text Length: 1 – 7 pages

ARCHITECTURAL DESIGN

Proposer shall:

A. Identify the design context and philosophical design intent.

B. Demonstrate how the proposed design:

1. Achieves the architectural goals outlined in the Basis of Design and is consistent with the *UC Riverside Physical Design Framework.*
2. Achieves or facilitates the desired space, performance and outcomes referenced in the basis of design.
3. Provides building spaces that fosters interaction; including spaces for collaboration and opportunities for casual conversation.
4. Incorporates the following elements:
   - i. Architectural themes and materials consistent with the contextual design principles of the campus.
   - ii. A clear and identifiable building entrance with a usable entry/lobby space to create a distinctive presence for student activities.
   - iii. The use of architectural elements and space to create way finding in and around the building without complete dependence on signage.
   - iv. The use of architectural planning to create integrated accessways and wayfinding cues with the building's surroundings.
   - v. Building siting and design that will integrate with the design of the adjacent buildings and campus surroundings.
   - vi. Incorporate architectural and design ingenuity that creates unique spaces for instruction, scholarly activities and learning.
   - vii. Incorporate indoor- outdoor connections that provide human comfort for the Riverside climate conditions and add value to the student experience.

viii. The use of natural light for building occupant comfort and connection with the environment.
ix. Functional and inviting exterior public spaces, plazas, courtyards, (solar orientation, wind, and engagement with adjacent buildings.
x. Development of an architectural vocabulary that will unite the existing elements of the Carillon Mall & the Arts Mall and the campus.
xi. Durability and extended deferred maintenance with quality construction.
xii. Building facades that are an expression of basic structure with evident organizing principles and a lack of gratuitous ornament.
xiii. Other architectural design and aesthetic considerations.

TAB 2	***30 POINTS***

Suggested Text Length: 1 – 5 pages

PROGRAM FUNCTIONALITY

Proposer shall demonstrate how space and functional configurations, adjacencies, and room layouts:

A. Enable the school to create new educational pathways and partnerships, demonstrate new teaching technologies, and adapt for evolving pedagogies.

B. Foster an environment of scholarly interaction and peer to peer learning that supports small group interactions and informal interactions between students and faculty.

C. Allow for an environment that provides a flexible framework for future programmatic adjustments.

D. Facilitate high quality lifelong learning for the changing professional and meets the needs of local and international students.

E. Optimize building circulation and paths of travel to minimize congestion between lecture hall and classroom usage.

F. Enhance considerations for acoustical, audio/visual, and other technical challenges.

TAB 3	***PASS/FAIL***

Suggested Text Length: 1 page (excluding matrix)

PROJECT PROGRAM COMPLIANCE

Proposer shall demonstrate compliance with the *Student Success Center Program* by submitting the required Basis of Design Compliance Matrix and specifying the assignable square footage for each space and unit.

A REDUCTION GREATER THAN 5% OF THE ASSIGNABLE SQUARE FOOTAGE FOR EACH SPACE WILL RENDER THE PROPOSAL NON-RESPONSIVE

TAB 4	***25 POINTS***

Suggested Text Length: 1 – 5 pages

SITE, CIVIL AND CIRCULATION DESIGN

Proposer shall:

A. Demonstrate how the proposed site, civil and circulation designs are responsive to the Project Site Analysis and consistent with the Site Plan Concept.

B. Demonstrate that the proposed **site design** includes:

1. Innovative and cost-effective solutions to design and construct the site, building, and systems.
2. Optimum use of outdoor spaces to take advantage of the southern California climate.
3. Enhance campus connections with adjacent buildings, campus malls, adjacent courts & open spaces and campus surroundings.
4. Accommodates loading and back-of-house access for auxiliary facilities that are screened from view with minimal visual impact to adjacent public walkways and spaces.
5. Promotes an environment of health and well-being for the campus community.
6. Creates a collegial and professional interaction space for faculty and students.
7. Other design and aesthetic considerations.

C. Demonstrate that the proposed **civil design** includes:

1. Innovative use of the existing topography, drainage, and soil.
2. An efficient site utility design that includes considerations to mitigate negative impacts on existing utilities, campus grounds, adjacent buildings, and communities.

D. Demonstrate that the proposed **circulation design** is consistent with the UC Riverside Physical Design Framework and includes:

1. Efficient interface with existing campus circulation pathways (pedestrian and bicycle), vehicular access, building services and emergency access
2. Compliance with all accessibility codes and other applicable documents referenced in the RFP.

TAB 5	***30 POINTS***

Suggested Text Length: 1 – 3 pages

MECHANICAL, ELECTRICAL, AND PLUMBING SYSTEMS DESIGN

Proposer shall include a description of the proposed mechanical, electrical, and plumbing designs and identify their features and system advantages; and demonstrate that they will:

A. Meet or exceed the requirements of the Project Planning Guidelines and Basis of Design, Specifications, campus energy goals, and project planning guidelines and campus Building Energy Efficiency Standards.

B. Provide durability, ease of maintenance, aesthetic, and energy efficiency/conservation considerations.

C. Support the acoustic and sustainable requirements of the project.

D. Provide future flexibility of systems as the building program requirements and needs changes.

TAB 6	***20 POINTS***

Suggested Text Length: 1 – 5 pages (excluding scorecard)

SUSTAINABILITY FEATURES INCORPORATED INTO DESIGN AND LEED ~~GOLD~~ *SILVER* SCORECARD

Proposer shall:

A. Demonstrate how the proposed design incorporates sustainability features outlined in the RFP, including:

1. Reduction of the carbon footprint.
2. Achievement of LEED ~~Gold~~ ***Silver*** certification or higher.
3. Alternative means and methods to provide the required building(s) energy performance.

B. Submit LEED scorecards indicating which credits would be pursued for LEED ~~Gold~~ ***Silver***, or higher certification.

TAB 7	***PASS/FAIL***

Suggested Text Length: 1 – 4 pages

STRUCTURAL DESIGN

Proposer shall:

A. Include a description of the proposed structural design and identify proposed materials and system advantages.

B. Demonstrate that the proposed structural design:

1. Will meet or exceed the requirements of the RFP requirements, including, but not limited to the California Building Code and University of California Seismic Safety Policy.
2. Includes considerations for wind, vibration, and deflection control.

TAB 8	***40 POINTS***

Suggested Text Length: 1 – 2 pages *(excluding matrix)*

ENHANCEMENTS AND ADDED VALUE

Proposer shall:

A. Submit the *Enhancements and Added Value Matrix.*

1. List enhancements and added value with appropriate descriptions. Enhancements provide the University with added value to the base bid requirements.
2. Provides the desired space, performance and outcomes referenced in the basis of design.

B. Demonstrate that the proposed design, materials, and construction quality exceed the requirements of the base bid.

ENHANCEMENTS AND ADDED VALUE	
ITEMIZED LIST OF ENHANCEMENTS	**DESCRIPTION**
ADDITIONAL INSTRUCTIONAL SPACE	Provide any additional space that meet the requirements for instructional space or scholarly activity space. The additional space provided to meet the program and performance criteria; set forth in the space program and room criteria.
ENHANCED OPEN AREAS AND STUDY SEATS	Enhanced open areas throughout the building for scholarly activity and classroom support and an additional 80-student study seats through increased quantities of indoor and outdoor open break-out study spaces throughout the building
ADDITIONAL LECTURE HALL SEATS	Provide an additional 30-lecture hall seats by increasing the number of seats in the lecture halls.

TAB 9	***10 POINTS***

Suggested Text Length: 1 – 2 pages *(excluding matrix)*

ALTERNATES

Proposer shall:

A. Submit the *Alternates.*

1. Indicate whether project Alternates are included in the base bid *at no additional cost*.
2. Provides the desired space, performance and outcomes referenced in the basis of design.

B. Demonstrate that the proposed design, materials, and construction quality exceed the requirements of the base bid.

PROJECT ALTERNATES MATRIX[1] (TAB 9)		
ALTERNATES		
ALTERNATE NO.	**ALTERNATE DESCRIPTION**	**INCLUDED IN BASE BID?**
1	Site Development: Student Services Court	YES ☐ NO ☐
2	Site Development: Athletics/ Dance Court	YES ☐ NO ☐
3	***LEED Gold Certification***	YES ☐ NO ☐
4	***Motorized Blackout shades in the Group Meeting Rooms and Large Classroom***	YES ☐ NO ☐

TAB 10 — *15 POINTS*

Suggested Text Length: 1 – 2 pages *(excluding schedule)*

PROJECT SCHEDULE & WORK PLAN

Proposer shall:

A. Submit a **Work Plan** demonstrating how it intends to staff and manage tasks and resources necessary to accomplish the work, commencing with the Notice to Proceed and ending with the completion of Construction by May 1, 2021.

1. Identify the project approach and address:
   i. Key elements of project management and administration (staffing plan).
   ii. Strategies for addressing and overcoming potential project constraints and challenges associated with each project phase including mobilization, parking, sequencing of activities with other concurrent campus projects and the university calendar.
   iii. Strategy to minimize construction impact on the surrounding site. Sequence of work with minimal interruption for the surrounding community, specifically the occupied facilities immediately adjacent to the site.
   iv. Maintaining security of spaces during construction.
   v. Adopting safety precautions throughout the project duration for building and construction staff safety.
   vi. Adopting a safety strategy and precautions for pedestrian traffic to the occupied surrounding buildings.
   vii. Environmental mitigation measures around laydown area.

B. Submit a **Preliminary Schedule** that is consistent with the Work Plan and identifies:

1. The approach to the fast-track design and construction of the project
2. Significant contract activities including shoulder to shoulder sessions, and procurement activities and durations, including the activities required to complete the Construction Documents and obtain required approvals
3. The division of work by construction drawing packages (limited to no more than six (6) Construction Document Packages) with a breakdown of drawings and specification sections to be included in each package. Specify how the design package strategy contributes to successful schedule

[1] Suggested Format

implementation.

TAB 11	*10 POINTS*

Suggested Text Length: 1 – 2 pages

MITIGATION OF SUBSURFACE CONDITIONS AND NEGATIVE CONSTRUCTION IMPACTS

Proposer shall demonstrate that it will minimize or eliminate the risk of increased costs or adjustments to the Contract Time with consideration of the following:

A. Excavation and grading requirements including proposed shoring and monitoring of existing structures.

B. Underground utility identification, relocation, and/or removal.

C. Existing groundwater conditions. Description includes discussion of potential mitigation of shallow groundwater conditions including the need for dewatering and the potential use of excavated soils as backfill.

D. Existing geotechnical conditions including the presence of groundwater, rock, or fill.

E. Subsurface contamination.

F. Mitigation of construction noise, vibration, dust, etc. affecting surrounding community.

G. Minimize or mitigate site impacts (access and visual impacts) to surrounding campus, and to occupied adjacent facilities.

TAB 12	*10 POINTS*

Suggested Text Length: 1 – 2 pages

QUALITY CONTROL PLAN

The Proposer shall:

A. Demonstrate compliance with Division 01 General Requirements, Section 01 4000, Quality Requirements and include descriptions of:

   1. The organizational and reporting relationships of the project team members responsible for quality control. Submit a table indicating quality control resource loading through completion of the project.

   2. Quality control procedures during design and construction document development (include internal QC and CDA processes) to assure compliance with program requirements and avoid scope expansion.

   3. Quality control procedures for mock-ups used by the University to make final materials selections and establish the quality of construction that will be incorporated into the work.

B. Submit a Tracking and Compliance Log that includes the incorporation of University comments during the review and approval process.

TAB 13	*PASS/FAIL*

DEVIATIONS FROM REQUEST FOR PROPOSAL

Proposers shall submit the Deviations Matrix, (located at the end of this document), to summarize each instance where the Lump Sum Base Price Proposal, or Alternate Pricing deviates from the requirements established in the Proposal Documents. Absent an appropriate reference in the Deviations Matrix, the University will assume that the Design Builder will comply with all the specific requirements of the Proposal

Documents during both the design and construction phases of the project.

The Lump Sum Base Price Proposal and Alternate Prices shall include the cost of all proposed deviations from the Proposal Documents. Deviations from the Proposal Documents will not be allowed without prior written approval from Design and Construction Services. After the Award of Contract, proposed product substitutions shall be made according to Specification Section 01 6000, *Product Requirements*.

DEVIATIONS MATRIX[2] (TAB 13)

(Deviations from Master Specifications and/or RFP)

SPECIFICATION SECTION/CAMPUS STANDARDS AND BASIS OF DESIGN		
ITEM DESCRIPTION	DESCRIPTIVE DETAILS	IMPACT OR EFFECT ON PROJECT DESIGN

DESIGN BUILDER PREQUALIFICATION - LEVEL II INTERVIEW	*10 POINTS*

University will add the Design Builder Prequalification - Level II Interview score to the Technical Proposal Score.

ORAL PRESENTATION — *15 POINTS*

Proposer shall make an oral presentation of its proposal following the University's evaluation of Technical Proposals and prior to the public opening of the Lump Sum Base Price Proposals. However, if at the conclusion of the evaluation of Technical Proposals, the University determines that requesting a BAFO would be in its best interests, the University will defer the oral presentation and proceed directly to a BAFO process. The University may elect to request written proposal clarifications from the Proposers prior to holding BAFO discussions.

During the oral presentation, Proposers will be allowed 30 minutes to present the most important aspects of their proposals and 1 hour and 30 minutes to answer questions and provide clarifications requested by the Technical Evaluation Committee. Discussions may cover any of the requirements described in the RFP.

Proposed cost shall not be discussed during the oral presentation. The University's summation of Proposal Clarifications shall be accepted by signature of selected Proposer and incorporated into their Proposal by reference.

BEST AND FINAL OFFER (BAFO) — *20 POINTS*

The University may determine that clarifications to the initial proposals and additional discussions with the Proposers are necessary to obtain proposals that are responsive with respect to program and cost requirements, and to optimize the ability to obtain best value for this project. In this case, the University will

[2] Suggested format

conduct discussions with each Proposer following the technical evaluation with the intent of allowing the Proposers to submit a BAFO. The University will request BAFO submittals from the Proposers to clarify and document understandings reached during discussions. Instructions for the BAFO submittals including the deadline, format, and content requirements will be issued in writing by the University.

The BAFO submittal will consist of two components:

A. A revised technical proposal or technical proposal supplement covering all additions, changes, or clarifications to the original technical submittal. Revised drawings, presentation boards and other supplements may also be submitted as appropriate and in accordance with the University's written instructions for the BAFO submittal.

B. A revised Lump Sum Base Price Proposal, Lump Sum Base Price Proposal Spreadsheet, and a new Proposal Security, in accordance with the University's written instructions for the BAFO submittal.

3. SCHEMATIC DESIGN SUBMITTAL REQUIREMENTS

The following drawings shall be submitted; 1) as **one (1)** bound set not smaller than 30" x 42", 2) within the technical proposal binder as 11" x 17" sheets, and 3) **ELECTRONICALLY ON A Memory Stick (in PDF format):**

SHEET		SCALE
.1	Demolition Plan	None
.2	Grading and Drainage Plan	None
.3	Site Plan	1" = 20'
.4	Landscape and Hardscape Construction Plan	1" = 20'
.5	Conceptual Structural Plan	1/16" = 1'
.6	Architectural	
	1) Code Information Plans (All Levels and Roof)	1/16" = 1'
	2) Floor Plans (All Levels and Roof)	1/8" = 1'
	3) Roof Plan	1/8" = 1'
	4) Conceptual Reflected Ceiling Plans	1/16" = 1'
	5) Exterior Elevations	1/8" = 1'
	6) Building Sections	1/8" = 1'
	7) Enlarged Partial Exterior Building Elevations	1/4" = 1'
	8) Typical Exterior Details	1/2" = 1'
.7	Mechanical Conceptual Floor Plans and Roof Plans	1/8" = 1'
.8	Electrical Conceptual Floor Plans, Roof Plans, and Single Line Diagrams	1/8" = 1'

.1 Demolition Plans:

a. Sequence for demolition; including locating, identifying, disconnecting, sealing / capping / safeing-off, and protecting utility services.

b. Locations of temporary dust and noise control partitions and means of egress relative to adjacent communities.

c. Path of hazardous and non-hazardous waste removal.

.2 Grading and Drainage Plan:

Storm Water Pollution Prevention Plan (SWPPP) compliance and other environmental mitigation measures, including:

a. Locations of drain inlets used to capture sheet flows. Include inlet protection measures, if required.

b. Finished ground contours and spot grade elevations as required for ridge lines, flow lines, or grade breaks.

c. Best Management Practices required for limiting erosion of graded slopes and controlling sediment entering storm drain inlets. Show gravel bags, straw waddles, silt fencing, or other devices, if any.

.3 Site Plan

Illustrate relationships with existing site elements and buildings, and include:

a. Location of proposed building and pedestrian bridge in relation to adjacent buildings

b. Location and descriptions of proposed hardscape design elements in relation to existing facilities and site amenities

c. Location of proposed surface parking, roads, service areas, walks, plaza(s), tree groupings, landscape screening, retaining walls, and other various site/building features, including appropriate descriptions

d. Building(s) and site (ADA) accessibility

e. Location of existing and proposed site lighting

f. Location of existing and proposed site electrical equipment

.4 Landscape and Hardscape Construction Plan

Show all new and existing landscape and hardscape features, including plaza and/or courtyard elements:

a. Landscape features shall include trees, tree-protection, shrubs, planters, ground covers, special fill areas, and other amenities, if any.

b. Hardscape features shall include paving; ramps; retaining, landscape, and seat walls; stairs; and site/integral lighting. Include access/patterns for ADA, pedestrian circulation, bike paths, emergency vehicle access, fire hydrants, if any.

.5 Conceptual Structural Plan

All levels, typical floor plan shall include:

a. Conceptual foundation plans illustrating structural design concept

b. Dimensioned structural grid

c. Conceptual Structural Floor/Roof Framing Plan illustrating structural design concept:

1) Dimensioned and structural grid

2) Concept and location of lateral bracing system

3) Location and size of structural columns.

.6 Architectural (All Levels and Roof)

1) Code Information Plans to include the following:

a. Identification of fire and smoke rated walls and openings

b. Identification of all exits

c. Identification of all room names

d. Identification, location and fire rating of building(s) or occupancy separations

e. Identification and limits of building(s) occupancies

f. Description of summarized code review, including exit calculations

2) Floor Plans shall include:

a. Dimensioned structural grid

b. Exterior walls, doors, frames, and openings

c. Interior walls, doors, frames, and openings

d. Room names

e. Applicable equipment and furnishings

f. Fixture locations
g. Appropriate descriptions

3) Roof Plan(s) shall include:
   a. Dimensioned structural grid
   b. Screen walls, roof system and openings
   c. Roof top equipment
   d. Appropriate descriptions
4) Conceptual Reflected Ceiling Plans shall include:
   a. Exterior and interior walls, doors, and openings
   b. Ceiling height designations
   c. Room names
   d. Reflected ceiling grids
   e. Interior and exterior soffits and bulkheads
   f. Light fixtures
   g. Item and material designations
   h. Ceiling mounted equipment
   i. Appropriate descriptions
5) Architectural Exterior Elevations
   a. All major building elevations
   b. Structural grid designations
   c. Vertical floor elevation designations
   d. perspectives
   e. Material designations
   f. Include appropriate descriptions
6) Architectural Building Sections
   a. Longitudinal (Minimum 2)
   b. Latitudinal (Minimum 2)
7) Architectural Enlarged Partial Exterior Building Elevations (All Elevations)
   a. Building(s) entrances
   b. Structural grid designations
   c. Vertical floor elevation designations
   d. Material designations
   e. Include appropriate descriptions
8) Architectural Typical Exterior Details (All Exterior Details)
   a. Illustration of building systems relationship

b. Typical exterior details
c. Structural grid designations
d. Vertical floor elevation designations
e. Grid to exterior wall dimensions
f. Item and material designations
g. Include appropriate descriptions

.7 Mechanical Conceptual Floor Plans and Roof Plans (All Levels and Roof)

a. Place over architectural background.
b. HVAC and plumbing information may be combined for all levels.
c. Conceptual HVAC and plumbing floor plans shall include:
    1) Single line HVAC main ducts and risers
    2) Single line exhaust ducts and risers
    3) HVAC and exhaust equipment and associated system components layout in mechanical room and/or on roof
    4) Identification and location of main plumbing lines, equipment and valves
    5) Identification of plumbing fixtures
    6) Identification and location of floor drains and sinks
    7) Location and identification of mechanical equipment and HVAC temperature control zones
    8) Overall dimensions of mechanical equipment and service clearance dimensions to be provided

.8 Electrical Conceptual Floor Plans, Roof Plans, and Single Line Diagrams (All Levels and Roof)

a. Place over architectural background.
b. Lighting and power information may be combined for all levels. Typical spaces do not need to be repeated.
c. Conceptual floor plans shall include:
    1) Location and identification of light fixtures
    2) Location and identification of exit lighting
    3) Location and identification of emergency lighting
    4) Location and identification of electrical panels
    5) Location and identification of electrical equipment
    6) Location of transformers and generators
    7) Conceptual single line power diagram

END OF SECTION

PRICE PROPOSAL FORM

FOR

STUDENT SUCCESS CENTER
PROJECT NO. 950512

UNIVERSITY OF CALIFORNIA, RIVERSIDE
RIVERSIDE, CALIFORNIA 92507

January 2019

PROPOSAL TO: UNIVERSITY OF CALIFORNIA, RIVERSIDE
Planning, Design & Construction
1223 University Avenue, Suite 240
Riverside, California, 92507
(951) 827-4064

PROPOSAL FROM:

_____
(Name of Firm Submitting Proposal)

_____
(Address)

_____
(City, State, Zip Code)

_____
(Telephone & Fax Number)

_____
(Date Proposal Submitted)

Note: All portions of this Price Proposal Form must be completed and must include the signed Declaration on the last page of this form before the Proposal is submitted. Failure to execute the Declaration will result in the Proposal being rejected as nonresponsive.

1.0 PROPOSER'S REPRESENTATIONS

Proposer, represents that a) it has the appropriate active Contractor's license required by the State of California; b) it has carefully read and examined the Proposal Documents for the proposed Work on this Project; c) it has examined the site of the proposed Work and all Information Available to Prequalified Proposers; d) it has become familiar with all the conditions related to the proposed Work, including the availability of labor, materials, and equipment; e) that all information and submittals provided as part of the prequalification process are accurate and correct; f) Proposer and all Subcontractors, regardless of tier, are currently registered with the California Department of Industrial Relations pursuant to California Labor Code Section 1725.5 and 1771.1. Proposer hereby offers to furnish all labor, materials, equipment, tools, transportation, and services necessary to complete the proposed Work on this Project in accordance with the Contract Documents for the sums quoted. Proposer further agrees that it will not withdraw its Proposal within **90** days after the Proposal Deadline, and that, if it is selected as the apparent lowest responsive and responsible Proposer, that it will, within **10** days after receipt of notice of selection, sign and deliver to University the Agreement in triplicate and furnish to University all items required by the Proposal Documents. If awarded the Contract, Proposer agrees to complete the proposed Work within the number of days specified in the Agreement.

2.0 ADDENDA

Proposer acknowledges that it is Proposer's responsibility to ascertain whether any Addenda have been issued and if so, to obtain copies of such Addenda from University's facility at the appropriate address stated on Page 1 of this Price Proposal Form. Proposer therefore agrees to be bound by all Addenda that have been issued for this Proposal.

3.0 LUMP SUM BASE PROPOSAL

LUMP SUM BASE PROPOSAL

MAXIMUM ACCEPTANCE COST = *~~$49,000,000~~ $49,980,000*

$ | | | | , | | | | , | | | | *****

(Place figures in appropriate boxes)

*****Proposer includes the following allowances in the Lump Sum Base Proposal (Refer to Specification Section 01 2100);

Allowance No. 1: Partnering
Allow $20,000 for project partnering expenses, including meals, rentals, etc.

Allowance No. 2: Signage (Exterior, Interior & Other Interior Signage)
Allow $100,000 for Building Signage.

Allowance No. 3: Design Refinements
Allow ***$300,000*** for University directed design refinements/clarifications.

Allowance No. 4: Audio Visual Equipment
Allow $1,200,000 for University directed design refinements/clarifications.

If Lump Sum Base Proposal exceeds the Maximum Acceptance Cost in Request for Proposal, Proposal will be determined to be nonresponsive.

4.0 UNIT PRICES

The quantities set forth in Specification Section 01 2200, Unit Prices, are estimates. University does not represent that the actual quantity of any unit price item will equal the Estimated Quantity stated below. University will perform the extension of the Unit Price times the respective Estimated Quantity.

Item No. 1 – Compensation for Compensable Delays As specified in Section 5.0 of this Price Proposal Form.	
Item No. 2 – Rock Excavation	$ ☐☐ , ☐☐☐ Unit Price per cubic yard (Place Unit Price in appropriate boxes)
Item No. 3 – Over-Excavation	$ ☐☐ , ☐☐☐ Unit Price per cubic yard (Place Unit Price in appropriate boxes)
Item No. 4 – Backfill and Compaction for Over Excavation	$ ☐☐ , ☐☐☐ Unit Price per cubic yard (Place Unit Price in appropriate boxes)
Item No. 5 – Trenching, Backfilling and Compacting for Utilities	$ ☐☐ , ☐☐☐ Unit Price per cubic yard (Place Unit Price in appropriate boxes)
Item No. 6 – Lean Concrete	$ ☐☐ , ☐☐☐ Unit Price per cubic yard (Place Unit Price in appropriate boxes)
Item No. 7 – Transite Pipe Removal	$ ☐☐ , ☐☐☐ Unit Price per lineal foot (Place Unit Price in appropriate boxes)
Item No. 8 – Imported Topsoil	$ ☐☐ , ☐☐☐ Unit Price per cubic yard (Place Unit Price in appropriate boxes)
Item No. 9 – Drainage Fabric	$ ☐☐ , ☐☐☐ Unit Price per square foot (Place Unit Price in appropriate boxes)
Item No. 10 – 120V Electrical Outlet	$ ☐☐ , ☐☐☐ Unit Price per one outlet (Place Unit Price in appropriate boxes)

Item No. 11 – Data Outlet	$ ☐☐ , ☐☐☐ Unit Price per one outlet (Place Unit Price in appropriate boxes)
Item No. 12 – Video Surveillance Camera	$ ☐☐ , ☐☐☐ Unit Price per one camera (Place Unit Price in appropriate boxes)
Item No. 13 – Card Reader Lock	$ ☐☐ , ☐☐☐ Unit Price per one card reader lock (Place Unit Price in appropriate boxes)
~~**Item No. 14 – Wireless Access Point**~~	~~$~~ ☐☐ ~~,~~ ☐☐☐ ~~Unit Price per one wireless access point~~ ~~(Place Unit Price in appropriate boxes)~~
~~**Item No. 15 – Wi-Fi Router**~~	~~$~~ ☐☐ ~~,~~ ☐☐☐ ~~Unit Price per one card wi-fi router~~ ~~(Place Unit Price in appropriate boxes)~~

5.0 DAILY RATE OF COMPENSATION FOR COMPENSABLE DELAYS

Proposer shall determine and provide in the space below, the daily rate of compensation for any compensable delay caused by University at any time during the performance of the Work:

$ ☐ , ☐☐☐ **x** 60 days (multiplier)

(Place Daily Rate in appropriate boxes.)

Failure to fill in a dollar figure for the daily rate for Compensable Delay shall be interpreted as a daily rate of "zero." University will perform the extension of the daily rate times the multiplier.

The daily rate shown above will be the total amount of Proposer entitlement for each day of compensable delay. The number of days of compensable delay shown as a "multiplier" above is not intended as an estimate of the number of days of compensable delay anticipated by the University. The University will pay the daily rate of compensation only for the actual number of days of compensable delay, as defined in the General Conditions; the actual number of days of compensable delay may be greater or lesser than the "multiplier" shown above.

6.0 NOT USED

7.0 SELECTION OF APPARENT LOW PROPOSER

The apparent low proposer will be determined in accordance with the evaluation process attached to the Request for Proposal.

8.0 ALTERNATES (Refer to Specification (Section 01 2300)

Provide all design, engineering, coordination, labor, materials, equipment, accessories, and Design Builder and subcontractor overhead, mark-up, and profit required for the following Alternates. Indicate by marking only **one** of the three boxes ("Add", "Deduct", or "No Change") and state the amount by placing figures in the corresponding boxes. Check the "No Change" box when there is no change in the Lump Sum Base Proposal. **(Note: No amount is required if the "No Change" box is selected).** Failure to quote an amount or check "No Change" or the insertion of any words that qualify the Price Proposal will result in the Proposal being rejected as nonresponsive. No extension of time will be granted if the Alternate is accepted.

Alternate No. 1 – Site Development Area: Student Services Court	$ ☐ , ☐☐☐ , ☐☐☐ (Place figures in appropriate boxes.) University reserves the right to accept this alternate concurrent with the Notice to Proceed for Phase 1.	☐ Add ☐ Deduct ☐ No Change
Alternate No. 2 – Site Development Area: Athletics/Dance Court	$ ☐ , ☐☐☐ , ☐☐☐ (Place figures in appropriate boxes.) University reserves the right to accept this alternate concurrent with the Notice to Proceed for Phase 1.	☐ Add ☐ Deduct ☐ No Change
Alternate No. 3 – LEED Gold Certification	$ ☐ , ☐☐☐ , ☐☐☐ ***(Place figures in appropriate boxes.)*** ***University reserves the right to accept this alternate concurrent with the Notice to Proceed for Phase 1.***	☐ ***Add*** ☐ ***Deduct*** ☐ ***No Change***
Alternate No. 4 – Motorized Blackout shades in the Group Meeting room and Large Classroom	$ ☐ , ☐☐☐ , ☐☐☐ ***(Place figures in appropriate boxes.)*** ***University reserves the right to accept this alternate concurrent with the Notice to Proceed for Phase 1.***	☐ ***Add*** ☐ ***Deduct*** ☐ ***No Change***

[Intentionally Left Blank)

9.0 PROPOSER INFORMATION

TYPE OF ORGANIZATION: _____
(Corporation, Partnership, Individual, Joint Venture, etc.)

If a Corporation, the Corporation is organized under the laws of the State of:

_____
(State)

President of the Corporation:

_____
(Name)

Name of Secretary of the Corporation:

_____
(Name)

If a Partnership, names and titles of persons signing the bid on behalf of proposer and all general partners:

Persons signing the bid on behalf of Proposer:

_____
(Name & Title)

General Partners:

_____
(Name & Title)

_____
(Name & Title)

CALIFORNIA CONTRACTORS LICENSE(S):

_____
(Name of Licensee)

_____ _____ _____
(Classification) (License Number) (Expiration Date)

(For Joint Venture, list Joint Venture's license and licenses for all Joint Venture partners.)

10.0 REQUIRED COMPLETED ATTACHMENTS

The following documents are submitted with and made a condition of this Proposal:

1. Proposal security in the form of _____
(Bid Bond or Certified Check)

11.0 DECLARATION

I, _____ (printed name), hereby declare that I am the _____ (Title) of _____ (Name of Proposer) submitting this Price Proposal Form; that I am duly authorized to execute this Price Proposal Form on behalf of Proposer; and that all information set forth in this Price Proposal Form and all attachments hereto are, to the best of my knowledge, true, accurate, and complete as of its submission date.

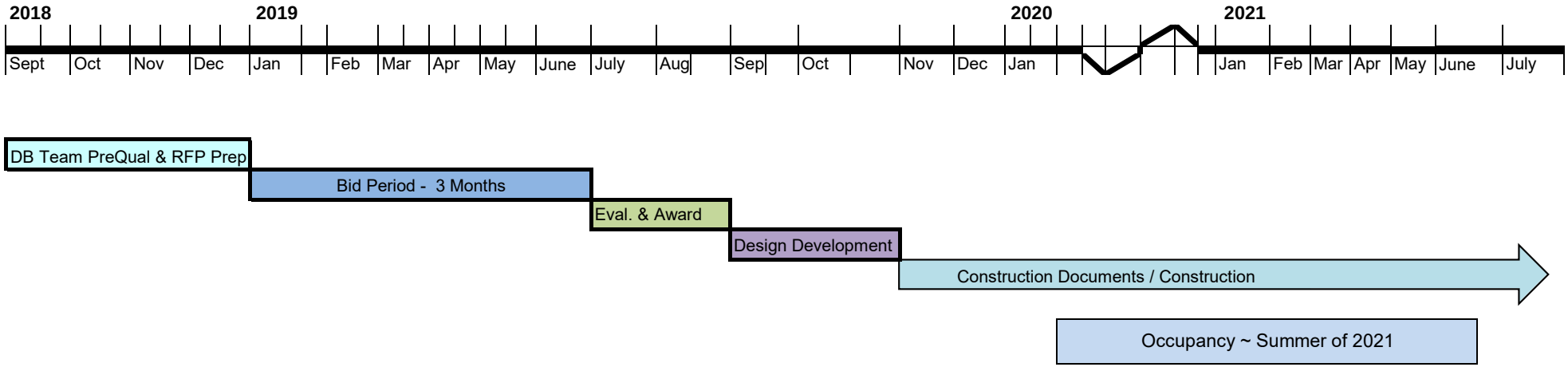
I further declare that this bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation; that the bid is genuine and not collusive or sham; that the bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid, and has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham bid, or that anyone shall refrain from bidding; that the bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the bidder or any other bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any other bidder, or to secure any advantage against the public body awarding the contract of anyone interested in the proposed contract; that all statements contained in the bid are true; and, further, that the bidder has not, directly or indirectly, submitted his or her bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, or paid, and will not pay, any fee to any corporation, partnership, company association, organization, bid depository, or to any member or agent thereof to effectuate a collusive or sham bid.

I declare, under penalty of perjury, that the foregoing is true and correct and that this declaration was subscribed at:_____ (Location and City), County of _____, State of _____, on _____ (Date).

_____
(Signature)

UCR Student Success Center

Project No. 950512



DESIGN BUILDER (CONTRACTOR) NAME:

REF NO.	TRADE DESCRIPTION		LUMP SUM BASE PRICE TOTAL ($)
00	**GENERAL CONDITIONS, OH & FEE**		
00.1	General Expenses	$	-
00.2	Supervision, Fringes, Taxes & Surcharges	$	-
00.3	Performance & Payment Bond	$	-
00.4	Insurance	$	-
00.5	Fee	$	-
00.6	Other:	$	-
	Subtotal:	$	-

01	**GENERAL REQUIREMENTS**		
01.1	Design Fee (Phase 1)	$	1,100,000.00
01.2	Testing and Inspection	$	-
01.3	Allowances	***$***	***1,620,000.00***
01.4	Commissioning	$	-
01.5	Storm Water Pollution Prevention Plan	$	-
01.6	Mobilization	$	-
01.7	Temporary Facilities/Fencing	$	-
01.8	Off Site Staging	$	-
01.9	Hoist Facilities	$	-
01.10	Temporary Utilities	$	-
01.11	Cleaning	$	-
01.12	Protection & Safety	$	-
01.13	Demobilization	$	-
01.14	Other:	$	-
	Subtotal:	$	2,720,000

02	EXISTING CONDITIONS		
02.1	Site Demolition	$	-
02.2	Other	$	-
	Subtotal:	$	-

03	CONCRETE		
03.1	Concrete Forming and Accessories	$	-
03.2	Site Cast-in-Place Concrete	$	-
03.3	Waterstops	$	-
03.4	Concrete Reinforcing	$	-
03.5	Cast-in-Place Concrete	$	-
03.6	Architecturally Exposed Cast-In-Place Concrete	$	-
03.7	Site Cast-in-Place Concrete	$	-
03.8	Concrete Finishing	$	-
03.9	Concrete Sealing	$	-
03.10	Polished Concrete Floor Finishing	$	-
03.11	Shotcrete	$	-
03.12	Post-Tensioned Concrete	$	-
03.13	Precast Structural Concrete	$	-
03.14	Precast Architectural Concrete	$	-
03.15	Lightweight Insulating Concrete	$	-
03.16	Cast Underlayment	$	-
03.17	Other:	$	-
	Subtotal:	$	-

04	MASONRY		
04.1	Mortar and Masonry Grout	$	-
04.2	Unit Masonry	$	-
04.3	Masonry Veneer	$	-
04.4	Thin Brick Masonry	$	-
04.5	Exterior Stone Cladding	$	-
04.6	Exterior Stone Masonry Veneer	$	-
04.7	Adhered Stone Masonry Veneer	$	-
04.8	Cast Stone Masonry	$	-
04.9	Other:	$	-
	Subtotal:	$	-

05	METALS		
5.1	Structural Steel Framing	$	-
5.2	Steel Joist Framing	$	-
5.3	Steel Decking	$	-
5.4	Acoustical Steel Decking	$	-
5.5	Cold-Formed Metal Framing	$	-
5.6	Slotted Channel Framing	$	-
5.7	Cold-Formed Steel Trusses	$	-
5.8	Metal Fabrications	$	-
5.9	Metal Stairs	$	-
5.10	Aluminum Ladders	$	-
5.11	Pipe and Tube Railings	$	-
5.12	Decorative Metal Railings	$	-
5.13	Glazed Decorative Metal Railings	$	-
5.14	Decorative Formed Metal	$	-
5.15	Other: _____	$	-
	Subtotal:	$	-

06	WOOD, PLASTICS AND COMPOSITES		
6.1	Miscellaneous Rough Carpentry	$	-
6.2	Gypsum Sheathing	$	-
6.3	Exterior Finish Carpentry	$	-
6.4	Interior Finish Carpentry	$	-
6.5	Wood-Veneer-Faced Architectural Cabinets	$	-
6.6	Plastic-Laminate-Faced Architectural Cabinets	$	-
6.7	Wood Paneling	$	-
6.8	Fiberglass Reinforced Paneling	$	-
6.9	Other: _____	$	-
	Subtotal:	$	-

07	THERMAL AND MOISTURE PROTECTION		
7.1	Self-Adhering Sheet Waterproofing	$	-
7.2	Fluid-Applied Waterproofing	$	-
7.3	Hot Fluid-Applied Waterproofing	$	-
7.4	Bentonite Waterproofing	$	-
7.5	Traffic Coatings	$	-
7.6	Water Repellants	$	-
7.7	Thermal Insulation	$	-
7.8	Foamed-In-Place Insulation	$	-
7.9	Sprayed Insulation	$	-
7.10	Weather Barriers	$	-
7.11	Vapor Retarders	$	-
7.12	Asphalt Shingles	$	-
7.13	Clay Roof Tiles	$	-
7.14	Concrete Roof Tiles	$	-
7.15	Metal Roof Panels	$	-
7.16	Metal Wall Panels	$	-
7.17	Metal Plate Wall Panels	$	-
7.18	Metal Composite Material Wall Panels	$	-
7.19	Soffitt Panels	$	-
7.20	Fiber-Cement Siding	$	-
7.21	Thermoplastic Membrane Roofing	$	-
7.22	Sheet Metal Flashing and Trim	$	-
7.23	Roof Specialties	$	-
7.24	Manufactured Gutters and Downspouts	$	-
7.25	Manufactured Roof Expansion Joints	$	-
7.26	Roof Accessories	$	-
7.27	Fall Restraint System	$	-
7.28	Deck Paver Systems	$	-
7.29	Applied Fireproofing	$	-
7.30	Intumescent Fireproofing	$	-
7.31	Board and Blanket Fireprooing	$	-
7.32	Firestopping	$	-
7.33	Joint Sealants	$	-
7.34	Acoustical Joint Sealants	$	-
7.35	Expansion Joint Assemblies	$	-
7.36	Other: _____	$	-
	Subtotal:	$	-

08	OPENINGS		
08.1	Hollow Metal Doors and Frames	$	-
08.2	Aluminum Doors and Frames	$	-
08.3	Stainless-Steel Doors and Frames	$	-
08.4	Molded Hardboard and Medium Density Fiberboard Faced Wood Doors	$	-
08.5	Flush Wood Doors	$	-
08.6	Integrated Door Opening Assemblies	$	-
08.7	Access Doors and Panels	$	-
08.8	Overhead Coiling Doors	$	-
08.9	Elevator Door Smoke Containment System	$	-
08.10	Steel-Framed Entrances and Storefronts	$	-
08.11	All-Glass Entrances and Storefronts	$	-
08.12	Aluminum-Framed Storefronts	$	-
08.13	Glazed Aluminum Curtain Walls	$	-
08.14	Glazed Aluminum Window Walls	$	-
08.15	Aluminum Windows	$	-
08.16	Fire Rated Aluminum Windows	$	-
08.17	Steel Windows	$	-
08.18	Fiberglass Windows	$	-
08.19	Unit Skylights	$	-
08.20	Tubular Skylights	$	-
08.21	Metal-Framed Skylights	$	-
08.22	Door Hardware	$	-
08.23	Glazing	$	-
08.24	Mirrors	$	-
08.25	Louvers	$	-
08.26	Other: _____	$	-
	Subtotal:	$	-

09	FINISHES		
09.1	Common Work Results for Flooring Preparation	$	-
09.2	Gypsum Board Assemblies	$	-
09.3	Metal Lath	$	-
09.4	Gypsum Plastering	$	-
09.5	Cement Plastering	$	-
09.6	Tiling	$	-
09.7	Acoustical Ceilings	$	-
09.8	Acoustical Metal Pan Ceilings	$	-
09.9	Linear Metal Ceilings	$	-
09.10	Linear Wood Ceilings	$	-

09.11	Resilient Flooring	$	-
09.12	Resilient Base and Accessories	$	-
09.13	Resilient Plank Flooring	$	-
09.14	Resinous Matrix Terrazzo Flooring	$	-
09.15	Tile Carpeting	$	-
09.16	Wall Coverings	$	-
09.17	Acoustic Insulation	$	-
09.18	Sound Control Underlayment	$	-
09.19	Acoustic Stretched-Fabric Wall and Ceiling Systems	$	-
09.20	Sound-Absorbing Wall and Ceiling Units	$	-
09.21	Exterior Painting	$	-
09.22	Interior Painting	$	-
09.23	High-Performance Coatings	$	-
09.24	Graffiti-Resistant Coatings	$	-
09.25	Elastomeric Coatings	$	-
09.26	Dry Erase Coatings	$	-
09.27	Other: _____	$	-
	Subtotal:	$	-

10	**SPECIALTIES**		
10.1	Visual Display Boards	$	-
10.2	Tackable Wall Systems	$	-
10.3	Display Cases	$	-
10.4	Regulatory Signage	$	-
10.5	Dimensional Sign Characters	$	-
10.6	Metal Toilet Compartments	$	-
10.7	Plastic Laminate-Clad Toilet Compartments	$	-
10.8	Phenolic Core Toilet Compartments	$	-
10.9	Solid Surface Toilet Compartments	$	-
10.10	Solid Plastic Toilet Compartments	$	-
10.11	Folding Panel Partitions	$	-
10.12	Folding Glass-Panel Partitions	$	-
10.13	Glazed Interior Wall and Door Assemblies	$	-
10.14	Manufactured Wall and Corner Guards	$	-
10.15	Toilet, Bath, and Laundry Accessories	$	-
10.16	Bathtub and Shower Enclosures	$	-
10.17	Emergency Access Key Boxes	$	-
10.18	Fire Protection Specialties	$	-
10.19	Plastic Laminate-Clad Lockers	$	-
10.20	Metal Storage Shelving	$	-
10.21	Wall Mounted Standards and Shelving	$	-
10.22	Other: _____	$	-
	Subtotal:	$	-

11	**EQUIPMENT**		
11.1	Residential Appliances	$	-
11.2	Projection Screens	$	-
11.3	Facility Waste Compactors	$	-
11.4	Other: _____	$	-
	Subtotal:	$	-

12	**FURNISHINGS**		
12.1	Horizontal Louver Blinds	$	-
12.2	Window Shades	$	-
12.3	Countertops	$	-
12.4	Entrance Floor Mats and Frames	$	-
12.5	Other: _____	$	-
	Subtotal:	$	-

13	**SPECIAL CONSTRUCTION**		
13.1	General Requirements for Watershapes	$	-
13.2	Architectural Requirements for Watershapes Tile	$	-
13.3	Structural Requirements for Watershapes Concrete	$	-
13.4	Mechanical, Electrical, and Plumbing Requirements for Watershapes Automatic Fill Devices	$	-
13.5	Other: _____	$	-
	Subtotal:	$	-

14	**CONVEYING EQUIPMENT**		
14.1	Electric Traction Elevators	$	-
14.2	Hydraulic Elevators	$	-
14.3	Other: _____	$	-
	Subtotal:	$	-

21	FIRE SUPPRESSION		
21.1	Basic Fire Protection Materials and Methods	$	-
21.2	Fire Protection Piping, Heads and Specialties	$	-
21.3	Other: _____	$	-
	Subtotal:	$	-

22	PLUMBING		
22.1	Basic Plumbing Materials and Methods	$	-
22.2	Heat Trace Freeze Protection	$	-
22.3	Vibration Isolation for Plumbing Piping and Equipment	$	-
22.4	Seismic Restraint for Plumbing Piping and Equipment	$	-
22.5	Plumbing Testing Adjusting and Balancing	$	-
22.6	Plumbing Insulation	$	-
22.7	Plumbing Piping Valves and Specialties	$	-
22.8	Domestic Hot Water Recirculation	$	-
22.9	Domestic Hot Water Heating Equipment	$	-
22.10	Plumbing Fixtures	$	-
22.11	Other: _____	$	-
	Subtotal:	$	-

23	HEATING VENTILATING AND AIR CONDITIONING (HVAC)		
23.1	Basic HVAC Materials and Methods	$	-
23.2	Electric Heat Tracing	$	-
23.3	Vibration Isolation for Piping Ductwork and Equipment	$	-
23.4	Seismic Restraint for Piping Ductwork and Equipment	$	-
23.5	Testing Adjusting and Balancing	$	-
23.6	Duct Insulation	$	-
23.7	HVAC Piping Insulation	$	-
23.8	Building Automation System (BAS) Controls	$	-
23.9	Varible Frequency Drives (VFD)	$	-
23.10	HVAC Piping, Valves and Specialties	$	-
23.11	Underground Piping	$	-
23.12	Pumps and Hydronic Specialties	$	-
23.13	Refrigerant Piping Systems	$	-
23.14	HVAC Water Treatment	$	-
23.15	Water Filtration for Open-Loop Hydronic Systems	$	-
23.16	Air Distribution	$	-
23.17	Fans and Vents	$	-
23.18	Air Filtration	$	-
23.19	Breechings, Chimneys, and Stacks	$	-

23.20	Heat Generation	$	-
23.21	Cooling Towers	$	-
23.22	Custom Factory Air Handling Units	$	-
23.23	Dedicated Outside Air Handling Units	$	-
23.24	Packaged HVAC Units (1-1/2-25 Tons)	$	-
23.25	Large Semi-Custom Packaged HVAC Units (25-150 Tons)	$	-
23.26	Split Heat Pump Units	$	-
23.27	Water Source Heat Pump Units	$	-
23.28	Varible Refrigerant Flow Heat Pump Systems	$	-
23.29	Heat Transfer	$	-
23.30	Chilled Beams and Radiant Panels	$	-
23.31	Radiant Floor Systems	$	-
23.32	Other: _____	$	-
	Subtotal:	$	-

26	**ELECTRICAL**		
26.1	Basic Electrical Requirements	$	-
26.2	Medium-Voltage Cables	$	-
26.3	Low-Voltage Electrical Power Conductors and Cables	$	-
26.4	Grounding and Bonding for Electrical Systems	$	-
26.5	Hangers and Supports for Electrical Systems	$	-
26.6	Raceways and Boxes for Electrical Systems	$	-
26.7	Underground Ducts and Raceways for Electrical Systems	$	-
26.8	Lighting Control System	$	-
26.90	Low-Voltage Transformers	$	-
26.10	Panelboards	$	-
26.11	Wiring Devices	$	-
26.12	Unit Substation	$	-
26.13	Other: _____	$	-
	Subtotal:	$	-

27	**COMMUNICATIONS**		
27.1	Structured Communications Cabling	$	-
27.2	Loudspeakers	$	-
27.3	Audiovisual Systems Equipmentr	$	-
27.4	Assistive Listening Systems	$	-
27.5	Mounts	$	-
27.6	Other: _____	$	-
	Subtotal:	$	-

28	**ELECTRONIC SAFETY AND SECURITY**		
28.1	Security Detection, Alarm, and Monitoring	$	-
28.2	Other: _____	$	-
	Subtotal:	$	-

31	**EARTHWORK**		
31.1	Site Clearing	$	-
31.2	Excavation and Fill	$	-
31.3	Termite Control	$	-
31.4	Other: _____	$	-
	Subtotal:	$	-

32	**EXTERIOR IMPROVEMENTS**		
32.1	Unit Pavers	$	-
32.2	Parking Bumpers	$	-
32.3	Painted Pavement Markings	$	-
32.4	Tactile Warning Surfacing	$	-
32.5	Decorative Metal Fences and Gates	$	-
32.6	Site Furnishings	$	-
32.7	Site Bicycle Racks	$	-
32.8	Irrigation Systems	$	-
32.9	Tree Preservation and Protection	$	-
32.10	Lawns and Grasses	$	-
32.11	Exterior Planting	$	-
32.12	Other: _____	$	-
	Subtotal:	$	-

33	**UTILITIES**		
33.1	Site Water Utility Distribution Piping	$	-
33.2	Site Sanitary Utility Sewerage Piping	$	-
33.3	Storm Utility Drainage Piping	$	-
33.4	Other:	$	-
	Subtotal:	$	-

TOTAL	**$**	**2,720,000.00**

SCOPE OF WORK (Design Deliverables)

GENERAL INFORMATION

This exhibit supplements other Contract Documents in defining the scope of work of the Design Builder.

The Work shall include, unless specifically stated otherwise, all design work, labor, material, tools, equipment, excavation, shoring, testing, inspection, commissioning and all necessary general conditions, that may be reasonably inferred from the Contract Documents to provide all Design Work and Construction Work for this project.

PROJECT

Refer to the Detailed Project Program for specific project work scope and Section 01 1000 - Summary.

ALTERNATES

Alternates to the Project are proposed as described in the General Requirements Section 01 2300 – Alternates.

SCHEDULE

The Schedule for the Work as proposed is detailed in the Preliminary Schedule portion of this Request for Proposal.

UCR | Planning, Design & Construction

ARTICLE 1

GENERAL PROVISIONS

1.1 PLAN CHECK CONSULTANT

The term "Plan Check Consultant" shall mean entity hired by University that is licensed in California as an engineer or architect (as applicable) and is certified by the code(s) invoking their plan check review for code compliance of the Design Work.

1.2 UNIVERSITY'S BUILDING OFFICIAL

The term "University's Building Official" shall mean the individual the University has designated to act in the capacity as the "Building Official" as defined by the California Building Code; and shall be the final interpreter of any code issues that may arise in the course of the Work. The University's Building Official will be responsible for the Code Compliance Review ***and inspections*** of ***al l*** ~~the~~ Work.

1.3 UNIVERSITY REVIEW AND APPROVAL

1.3.1 Code Compliance Review – the review conducted by the University's Building Official to review the Design Work to determine that it meets all Applicable Code Requirements.

1.3.2 Scope Compliance Review – the review by the University's Representative of the Design Work to determine that the requirements of the Contract Documents, other than elements covered by the Code Compliance Review, are met.

1.3.3 In accordance with the Design Build Agreement, each Phase is subject to review and approval by University as outlined in this exhibit. Two separate types of reviews are intended: 1) Scope Compliance Review(s); and 2) Code Compliance Review(s). The University's Building Official may, at the University Building Official's sole discretion, utilize the services of Plan Check Consultant(s) to assist in the Code Compliance Review. Once the University has approved the Design Work, any item within such approved Design Work that the Design Builder desires to subsequently change must be identified by Design Builder in the form of a submittal identifying and requesting such change; and shall not be incorporated into the Design Work until written approval is received by University.

1.4 APPLICABLE CODES, RULES, REGULATIONS, REGULATORY AGENCY APPROVALS, & INDEPENDENT REVIEW(S)

1.4.1 It is the Design Builder's responsibility to design the Project in compliance with applicable requirements of federal and state laws, codes, rules, regulations, ordinances, and standards, including, but not limited to, those outlined below. Design Builder shall have copies available of applicable codes and regulations for ready reference.

.1 California Building Standards Code (2016), Title 24, California Code of Regulations (CCR), current adopted edition:

a) Part 1, Building Standards Administrative Code (2016)

b) Part 2, California Building Code (2016)

c) Part 3, California Electrical Code (2016)

d) Part 4, California Mechanical Code (2016)

e) Part 5, California Plumbing Code (2016)

f) Part 6, California Energy Code (2016)

g) Part 7, California Elevator Safety Construction Code (2016)

h) Part 9, California Fire Code (2016)

i) Part 11, California Green Building Standards Code (2016)

j) Part 12, California State Reference Standards (2016)

.2 South Coast Air Quality Management District regulations (SCAQMD).

.3 Americans with Disabilities Act (ADA), Title II, ADAAG.

.4 National Fire Protection Association, NFPA 101: Life Safety Code (2018)

.5 ***National Fire Protection Association, NFPA 1 through NFPA 8506 as mandated by the Lead Designated Campus Fire Marshal (Lead DCFM) at the University of California, Riverside (UCR)***

.6 American Society of Heating, Refrigerating and Air-Conditioning Engineers.

a) ASHRAE 2015 Handbook, HVAC Applications.

b) ASHRAE 2016 Handbook, HVAC Systems and Equipment

c) ASHRAE 2017 Handbook, Fundamentals

d) ASHRAE 2018 Handbook, Refrigeration

e) ASHRAE 55-2016 Thermal Environmental Conditions for Human Occupancy.

f) ASHRAE 62.1-2016 Ventilation for Acceptable Indoor Air Quality.

g) ASHRAE 90.1- 2010 Energy Standard for Buildings except Low-Rise Residential Buildings

.7 Local Building Codes. University is not subject to local jurisdictions' building codes, nor is it required to obtain building permits from local jurisdictions for construction on ***all/any facilities owned, leased, designed, constructed, altered, or renovated with intent or future intent to support the mission of the University. All of the aforementioned facilities are under the jurisdiction and responsibility of the University and delegated Facility administration.*** ~~real estate owned or controlled by University~~. However, the design and construction of utility connections and fire-protection systems may require liaison with local jurisdictions. ***Additionally, some projects, or portions of projects, may require the University to duplicate or share authority with local, state, or federal jurisdictions.***. This liaison shall be coordinated only through University's Building Official. Though the University is not required to

obtain building permits from local jurisdictions, the Code Compliance Reviews ***and inspections are*** coordinated and conducted by University's Building Official ***through the issuance of a UCR Campus Building Permit***, ~~and~~ ~~o~~***O***ther applicable agencies ***may be involved in this Code Compliance process***; ~~with f~~***F***inal written approval by the University's Building Official will be in effect ***with the issuance of*** ~~equivalent to~~ a ***UCR Campus*** ~~b~~***B***uilding ~~p~~***P***ermit***, progress inspections, final inspections and signed Certificate of Occupancy bearing the signatures of both the Campus Building Official (CBO) and the Lead Designated Campus Fire Marshal (Lead DCFM)*** . Construction or encroachment upon city- or county-owned property is subject to local codes and permit requirements.

.8 Several other titles of the California Code of Regulations (CCR) apply to different aspects of University projects. These titles may include operational or construction provisions. Use of these titles depends on the type of project. They include, but are not limited to, the following:

a) California Code of Regulations, Title 8, Industrial Safety.

b) California Code of Regulations, Title 13, Hazardous Materials Transportation.

c) California Code of Regulations, Title 17, Public Health and Radiation Safety.

d) California Code of Regulations, Title 19 Public Safety.

e) California Code of Regulations, Title 20, Public Utilities and Energy.

f) California Code of Regulations, Title 21, Public Works.

g) California Code of Regulations, Title 22, Environmental Health.

h) California Code of Regulations, Title 23, Underground Storage Tank Regulations.

i) California Code of Regulations, Title 25, Housing and Community Development.

j) California Code of Regulations, Title 26, Toxics.

.9 The Federal Occupational Safety and Health Act and all other Applicable Code Requirements relating to safety.

1.4.2 Regulatory Agencies. The following agencies must review and approve the Design Work:

.1 State Fire Marshal ***(Lead DCFM)***

1.4.3 .2 Division of the State Architect – Access Compliance Section ***(University projects funded in whole or in part with state funds, the Division of the State Architect (DSA-AC) has plan approval authority for disabled access code compliance).*** Internal and External Review(s). The following Independent Review(s) will be conducted on the Design Work at the discretion of the University:

.1 Architectural

.2 Civil

.3 Structural/Seismic

.4 Mechanical

.5 Plumbing

.6 Electrical

.7 Cost

.8 Fire/Code

.9 Landscape

.10 General Constructability

.11 Environmental Health and Safety (EH&S)

.12 Technology- AV/IT

1.5 CAMPUS STANDARDS AND PROJECT PLANNING GUIDELINES

1.5.1 The University has established certain Campus Standards and Project Planning Guidelines (Design Criteria) that shall be verified for applicability/ relevance with the University and then incorporated into the Work during the design and construction of all components of this project. A detailed description of these standards and criteria is contained in separate volumes accompanying this Request for Proposal. The University's Representative shall be the sole interpreters of the meaning and intent of these standards and criteria. Any and all questions regarding their meaning and intent shall be directed to:

Mihai Gavan
Project Manager
University of California, Riverside
Planning, Design and Construction
1223 University Avenue, Suite 240
Riverside, CA 92507
mihai.gavan@ucr.edu
Telephone: (951) 660-7453

1.5.2 Deviations from these standards shall not be allowed without prior written approval from UCR Planning, Design and Construction (PD&C). Any deviations proposed by the Design Builder shall be clearly identified in the matrix included with this RFP. The Contract's Base Bid Proposal shall include the cost to apply all standards and design criteria not otherwise deleted, notwithstanding any omission in the Construction Documents of details and/or specifications that directs Campus Standards and Project Planning Guidelines. After the Award of Contract product substitutions proposed by the Design Builder shall be made according to Specification Section 01 6000.

1.6 ENERGY ANALYSIS REQUIREMENTS

1.6.1 Design Builder shall design in accordance with Energy Analysis Requirements and shall prepare an energy analysis of the Project. Design Builder shall submit specific certification to

University as required by California Code of Regulations, Title 24, Part 6, California Energy Code. In addition, the Design Builder shall comply with the following Facility requirements:

.1 The project's building(s), as a stand alone building(s), shall outperform the required provisions of the current California Energy Code standard building usage by at least 20 percent.

.2 Provide a single complete building envelope, mechanical and lighting compliance as a single analysis for each building as part of the Design Analysis. The Design Builder shall provide a performance computer program, such as Energy Pro, to show compliance. Include the Southern California Edison (SCE) utilities form. Compliance sheets do not need to be shown on the drawings.

1.6.2 In addition, if the project's building(s) uses chilled water from the Central Plant, Design Builder shall prepare a separate complete building energy analysis report using a performance computer program, such as Energy Pro, to submit to the US Green Building Council's "Leadership in Energy and Environmental Design" (LEED) for LEED-NC certification to meet ~~Gold~~ ***Silver*** Standards for NC. This report will include utility parameters from the Central Plant.

1.7 REGULATORY APPROVALS REVIEWS

1.7.1 Design Builder shall be responsible for obtaining review and approval by applicable regulatory agencies as stipulated in this exhibit. Design Builder will coordinate with the University's Representative prior to commencing review and approval with regulatory agencies. The University's Representative will direct the Design Builder on how each regulatory agency review and approval will be coordinated with the University. Meetings may also be required of the Design Builder with agencies from which University is responsible to obtain permits or approvals.

1.7.2 Design Builder shall be responsible for incorporating revisions requested by Review(ers). Design Builder will coordinate with the University's Representative prior to incorporating such revisions. The University's Representative will direct the Design Builder on how to coordinate with each Review(er). Meetings may also be required of the Design Builder with Review(ers). Costs associated with time and materials to participate with these meetings shall be included in the base bid.

1.7.3 The Design Builder shall respond in writing to reviewer's comments. Response shall give specific details of how the comments was corrected or complied with or the reason why not. Answers such as "complied with" without a description of how comment was complied with are not acceptable.

1.8 EXAMINATION OF SITE

1.8.1 Prior to submitting Proposal for the Work, Design Builder shall:

.1 Visit the Project site to become familiar with the site and its existing conditions. This includes the site location and size; access to the site during construction and connection options to external utilities. If connection is different from RFP then the Design Builder shall verify utility capacity is adequate.

.2 Visit all relevant areas of the existing buildings, site to be altered, connected or used by this project.

1.9 SPECIFICATION FORMAT

1.9.1 A complete set of Division 02 through 33 technical specifications based upon the 2004 Construction Specifications Institute (CSI) format are required. Included as a part of the bid documents are UC Riverside campus Project Planning Guidelines which shall become part of the Construction Documents. Design Builder shall review the Basis of Design documentation and modify divisions 02 through 33 as appropriate to reflect the products and materials to be ultimately included in the construction that comply with those requirements. All modifications are subject to technical review by the University for approval and for consistency with the Campus Standards and Project Planning Guidelines.

1.9.2 University's Project Planning Guidelines (PPG) establish minimum quality and design criteria when designing new campus buildings. PPG shall be used when RFP, Basis of Design, University Campus Standards and/or Master Specification documents are silent on a subject. Design Builder shall review the PPG to determine the extent to which the various sections and paragraphs are applicable. The sole intent of the PPG is to provide campus-wide consistency in quality and application. Requirements specifically outlined in the project RFP and Basis of Design documents shall overrule information identified in the PPG.

1.9.3 University's Campus Standards establish minimum quality and design criteria to be maintained. Design Builder shall review the specifications to determine the extent to which the various sections and paragraphs are applicable. Where, in the opinion of Design Builder, modifications in either format or terminology are required, Design Builder shall mark the modifications for University attention, review, and approval. The Campus Standards are not intended to limit Design Builder's discretion to specify products, materials, or construction methods and procedures. The provisions of the Campus Standards established by the University shall not diminish from Design Builder's responsibility to prepare the Construction Documents required for a successful built outcome.

1.10 PARTNERING

The University and Design Builder will cooperate and participate fully in partnering at all levels and among all the parties involved in this project, and at their own expense. Partnering shall mean both formal and informal interaction between and among all the parties involved in the project including, but not limited to, University Representatives, the Design Builder, design professional's, sub-Design Builders and outside entities as designated by the University to promote the desired goal of a successful, non-adversarial completion of the project within the contract time and contract sum. The requirement for partnering shall not be construed as a change in the terms or conditions of the Design Build Agreement. The Design Builder shall be responsible for partnering activities during the construction documents phase and the construction phase. The Design Builder shall include representation of the professional entities preparing the construction documents and the construction sub-Design Builders, as appropriate. The Design Builder shall bear the cost of the partnering activities such as meeting rooms and facilitator(s). The Design Builder shall plan for a series of partnering sessions during the construction documents phase and during the construction phase at 6-month intervals or as agreed to. Partnering sessions are professionally facilitated off-site meetings involving the representatives of the project team for the purposes of team building and problem solving. The Design Builder and the University shall agree on the selection of the partnering facilitator and attendees.

1.11 SHOULDER-TO-SHOULDER REVIEW PROCESS

The Shoulder-to-Shoulder review process shall be implemented in an effort to enhance and accelerate the review and approval process of submittal documents required during the Design Development, Construction Documents, and Construction phases.

The Shoulder-to-Shoulder review process consists of multiple (more frequent) live and active workshops involving all decision makers (Design Builder, Architect, Engineers of Record, Specialty Design Builders, Specialty Consultants, PD&C, CFM, University-employed consultants, and user group) where real-time decisions and approvals are accomplished. The Design Builder shall be responsible for staffing Shoulder-to-Shoulder review sessions with key personnel from the appropriate design disciplines to accommodate timely approvals.

Throughout the process, trust, respect, and guidelines for open communication and agreement are established. This allows for a productive integrated team, positive performance outcomes, cost savings, reduction in overall design and construction schedule, and shifts in risk with the potential to reduce or even eliminate claims.

1.11.1 Goals and Objectives

.1 Integrate the entire project team:

a) Establish clear lines of communication and points of contact for the entire project team

b) Schedule Shoulder-to-Shoulder workshops through the duration of the project (Reviews may be scheduled at milestones tied to the baseline schedule – more frequent reviews may occur with larger complex packages)

c) Co-locate key personnel at appropriate facilities

.2 Establish and agree on goals and objectives of a successful design:

a) Promote an environment of cooperation, teamwork, and discussion to develop the best solution of the project within the limits of the project scope and budget

.3 Confirm and approve project requirements post award:

a) Resolve outstanding issues concerning the Design Builder's technical proposal

b) Gain insight from the user(s) into what works and what doesn't (user(s) shall give meaningful feedback and not delay decisions)

.4 Scope and Code Compliance Review Tasks:

a) Confirm or reject building systems or assemblies

b) Mark up drawings, specs and/or cut sheets:

i. Place review comments directly on the documents (comments should be made in red and be legible)
ii. Scan and upload documents onto web-based project management system to be accessed by all parties

c) Identify submittals in the submittal schedule not anticipated to be addressed in the specifications

1.12 CALIFORNIA ENVIRONMENT QUALITY ACT (CEQA) DOCUMENT REQUIREMENTS

The following mitigation measures from the UCR LRDP Environmental Impact Report (EIR) and the project-specific CEQA analysis document are part of the scope of the Design Builder:

1.12.1 2005 LRDP Mitigation Measures:

.1 MM4.3-1(a): For each construction project on the campus, the project Design Builder will implement Programs and Practices 4.3-2(a) and 4.3-2(b). In addition, the following PM10 and PM2.5 control measure shall be implemented for each construction project:

a) Post a publicly visible sign with the telephone number and person to contact at the lead agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The phone number of the District shall also be visible to ensure compliance.

.2 MM4.3-1(b): For each construction project on the campus, the University shall require that the project include a construction emissions control plan that includes a comprehensive inventory of all off-road construction equipment, equal to or greater than 50 horsepower, that will be used for an aggregate of 40 or more hours during any portion of the construction project. During construction activity, the Design Builder shall utilize CARB certified equipment or better for all on-site construction equipment according to the following schedule:

a) All off-road diesel-powered construction equipment greater than 50 hp shall meet the Tier 4 emission standards, where available. In addition, all construction equipment shall be outfitted with BACT devices certified by CARB. Any emissions control device used by the Design Builder shall achieve emissions reductions that are no less than what could be achieved by a Level 3 diesel emissions control strategy for a similarly sized engine as defined by CARB regulations.

b) A copy of each unit's certified specification, BACT documentation and CARB or SCAQMD operating permit shall be provided at the time of mobilization of each applicable unit or equipment.

c) Encourage construction Design Builders to apply for AQMD 'SOON" funds. Incentives could be provided for those construction Design Builders who apply for AQMD "SOON" funds. The "SOON" program provides funds to accelerate clean-up of off-road diesel vehicles, such as heavy-duty construction equipment. More information on this program can be found at the following website: http://www.aqmd.gov/tao/implementation/soonprogram.htm

The Design Builder shall also implement the following measures during construction:

d) Prohibit vehicle and engine idling in excess of 5 minutes and ensure that all off-road equipment is compliant with the California Air Resources Board's (CARB) in-use off-road diesel vehicle regulation and SCAQMD Rule 2449.

e) Configure construction parking to minimize traffic interference. Provide temporary traffic controls such as a flag person, during all phases of construction to maintain smooth traffic flow.

f) Provide dedicated turn lanes for movement of construction trucks and equipment on- and off site.

g) Schedule construction activities that affect traffic flow on the arterial system to off-peak hour to the extent practicable.

h) Improve traffic flow by signal synchronization, and ensure that all vehicles and equipment will be properly tuned and maintained according to manufacturers' specifications.

i) Use diesel-powered construction vehicles and equipment that operate on low-NOx fuel where possible.

j) Reroute construction trucks away from congested streets or sensitive receptor areas.

k) Maintain and tune all vehicles and equipment according to manufacturers' specifications.

.3 PP 4.3-2(b); PP 4.6-2(a); PP 4.8-3(c) The campus shall continue to implement dust control measures consistent with South Coast Air Quality Management District (SCAQMD) Rule 403—Fugitive Dust during the construction phases of new project development. The following actions are currently recommended to implement Rule 403 and have been quantified by the SCAQMD as being able to reduce dust generation between 30 and 85 percent depending on the source of the dust generation. The Campus shall implement these measures as necessary to reduce fugitive dust. Individual measures shall be specified in construction documents and require implementation by construction Design Builder:

a) Apply water and/or approved non-toxic chemical soil stabilizers according to manufacturer's specification to all inactive construction areas (previously graded areas that have been inactive for 10 or more days)

b) Replace ground cover in disturbed areas as quickly as possible

c) Enclose, cover, water twice daily, or apply approved chemical soil binders to exposed piles with 5 percent or greater silt content

d) Water active grading sites at least twice daily

e) Suspend all excavating and grading operations when wind speeds (as instantaneous gusts) exceed 25 miles per hour over a 30-minute period

f) All trucks hauling dirt, sand, soil, or other loose materials are to be covered or should maintain at least two feet of freeboard (i.e., minimum (vertical distance between top of the load and the top of the trailer), in accordance with Section 23114 of the California Vehicle Code

g) Sweep streets at the end of the day if visible soil material is carried over to adjacent roads

h) Install wheel washers where vehicles enter and exit unpaved roads onto paved roads, or wash off trucks and any equipment leaving the site each trip

i) Apply water three times daily or chemical soil stabilizers according to manufacturers' specifications to all unpaved parking or staging areas or unpaved road surfaces

j) Post and enforce traffic speed limits of 15 miles per hour or less on all unpaved roads

.4 MM4.4-4(a) Prior to the onset of construction activities that would result in the removal of mature trees that would occur between March and mid-August, surveys for nesting special status avian species and raptors shall be conducted on the affected portion of the campus following USFWS and/or CDFG guidelines. If no active avian nests are identified on or within 250 feet of the construction site, no further mitigation is necessary.

.5 MM4.4-4(b) If active nests for avian species of concern or raptor nests are found within the construction footprint or a 250-foot buffer zone, exterior construction activities shall be delayed within the construction footprint and buffer zone until the young have fledged or appropriate mitigation measures responding to the specific situation have been developed and implemented in consultation with USFWS and CDFG.

.6 PP4.5-4 Construction specifications shall require that if a paleontological resource is uncovered during construction activities:

a) A qualified paleontologist shall determine the significance of the find.

b) The campus shall make an effort to preserve the find intact through feasible project design measures.

c) If it cannot be preserved intact, then the University shall retain a qualified non-University paleontologist to design and implement a treatment plan to document and evaluate the data and/or preserve appropriate scientific samples.

d) The paleontologist shall prepare a report of the results of the study, following accepted professional practice.

e) Copies of the report shall be submitted to the University and the Riverside County Museum.

.7 PP 4.5-5 In the event of the discovery of a burial, human bone, or suspected human bone, all excavation or grading in the vicinity of the find shall halt immediately and the area of the find shall be protected and the University immediately shall notify the Riverside County Coroner of the find and comply with the provisions of P.R.C. Section 5097 with respect to Native American involvement, burial treatment, and re-burial, if necessary.

.8 PP 4.7-7(a) To the extent feasible, the campus shall maintain at least one unobstructed lane in both directions on campus roadways. At any time if only a single lane is

available, the campus shall provide a temporary traffic signal, signal carriers (i.e., flag-persons), or other appropriate traffic controls to allow travel in both directions. If construction activities require the complete closure of a roadway segment, the campus shall provide appropriate signage indicating alternative routes.

.9 PP4.7-7(b) To maintain adequate access for emergency vehicles when construction projects would result in roadway closures, the Office of ***Planning,*** Design and Construction shall consult with the UCPD, EH&S, and the RFD to disclose roadway closures and identify alternative travel routes.

.10 PP4.10-2 The UCR campus shall limit the hours of exterior construction activities from 7:00 a.m. to 9:00 p.m. Monday through Friday and 8:00 a.m. to 6:00 p.m. on Saturday when necessary. Construction traffic shall follow transportation routes prescribed for all construction traffic to minimize the impact of this traffic (including noise impacts) on the surrounding community.

.11 PP4.10-6 The Campus shall continue to shield all new stationary sources of noise that would be located in close proximity to noise-sensitive buildings and uses.

.12 4.10-7(a) To the extent feasible, construction activities shall be limited to 7:00 AM to 9:00 PM, Monday through Friday, 8:00am to 6:00 PM on Saturday, and no construction on Sundays and national holidays, as appropriate, in order to minimize disruption to area residences surrounding the campus and to on-campus uses that are sensitive to noise.

.13 4.10-7(b) The campus shall continue to require by contract specifications that construction equipment be required to be muffled or otherwise shielded. Contracts shall specify that engine driven equipment be fitted with appropriate noise mufflers.

.14 4.10-7(c) The campus shall continue to require that stationary construction equipment material and vehicle staging be placed to direct noise away from sensitive receptors.

.15 4.10-7(d) The campus shall continue to conduct regular meetings, as needed, with on-campus constituents to provide advance notice of construction activities in order to coordinate these activities with the academic calendar, scheduled events, and other situations, as needed.

.16 PP4.10-8 The campus shall continue to conduct meetings, as needed, with off-campus constituents that are affected by campus construction to provide advance notice of construction activities and ensure that the mutual needs of the particular construction project and of those impacted by construction noise are met, to the extent feasible.

.17 PP4.14-6 For any construction-related closure of pedestrian routes, the campus shall provide alternate routes and appropriate signage and provide curb cuts and street crossings to assure alternate routes are accessible.

.18 PP4.14-8 To maintain adequate access for emergency vehicles when construction projects would result in roadway closures, the Office of Planning, Design and Construction shall consult with the UCPD, EH&S, and the RFD to disclose roadway closures and identify alternative travel routes.

1.12.2 Project-Specific Mitigation Measures

.1 Findings as required per BonTerra/Psomas documentation, University's CEQA Consultant, to be provided when completed.

ARTICLE 2

PHASE 1 – SCHEMATIC & DESIGN DEVELOPMENT PHASE

2.1 GENERAL

2.1.1 Upon receipt from the University of the Notice to Proceed (NTP) the Design Builder shall review the RFP and advise the University of any items requiring further clarification or direction from the University.

2.1.2 Within seven (7) calendar days after contract award, prior to commencing work, and at a specific time and place to be determined by the University's Representative, meet with the University's Representatives for a Post Award kickoff meeting(s). The goals of the kickoff meeting are:

.1 To integrate the Design Builder and the University's Representative's into the project team.

.2 To achieve consensus from the project team on any issues and concerns remaining following the completion of the Award of the Contract.

.3 To confirm requirements of the Basis of Design (detailed project program requirements) are understood and any requirements incorporated into the Division 02 through 33 of the Specifications.

.4 To mark and obtain approval of the conformed documents and specification, including addenda and questions and answers issued during the bidding process.

.5 To establish and explain policies and procedures for completion of a successful design.

.6 To establish clear lines of communication and points of contact for University and Design Builder team members.

.7 To review impact and issues that may arise from the acceptance of alternates.

.8 To review the Design Builder's technical proposal and any outstanding questions or comments resulting from the University's technical review.

2.1.3 The following Design Builder key personnel shall attend the kickoff meeting: Project Manager, Architect/Engineer Designer of Record (Design Professional), Superintendent and QC Manager. Optional attendees include: Design Builder Principal-in-Charge, Assistant Project Manager, major sub-Design Builders and specialized supplemental QC personnel.

2.1.4 At the kickoff meeting the Design Builder shall present and submit for acceptance a Preliminary Contract (Bar-Chart) Schedule as described in Section 01 3200 – Construction Progress Documents to allow attendees to prepare for key future milestone events. The Design Builder, assisted by the Design Professional, shall lead discussions to develop an understanding of the accepted technical proposal and conduct a working session to develop any site and floor plans changes.

2.1.5 Design Builder shall prepare documents including, but not limited to, redline mark-ups of a set of Bid Documents and an itemized list of those items requiring clarification or further direction.

Based upon the results of this meeting Design Builder shall complete Schematic Design drawings illustrating the clarifications and agreed upon direction for the design.

2.1.6 Kickoff meeting shall review the design of those Alternates accepted by the University and Design Builder's Proposed Options Proposal. Review will involve discussion of any refinements and modifications desired by the University.

2.2 SCHEMATIC AND DESIGN DEVELOPMENT DOCUMENTS

2.2.1 The Design documents shall consist of drawings, Division 02 through 33 specifications, calculations, cut sheets and narratives to establish and describe the size and character of the entire Project, and allow the University to complete Scope Compliance and Technical Compliance reviews. Design Builder shall incorporate into the Design documents civil, landscape architectural, architectural, structural, mechanical, plumbing and electrical systems, or other specialty trades, materials, products, equipment and such other elements and other systems consistent with and as described in the RFP Documents. Throughout the development of the Design Development Documents, Design Builder shall make "in-progress" submittals to the University's Representative for review and comment as described in the subsections following.

2.2.2 Design Builder shall furnish a completed building code analysis that delineates the design criteria (e.g., exit paths, travel distances, required exits, rated walls, and rated corridors, rated ceilings and/or roofs, building occupancy, construction type, fire extinguishers locations, panic hardware locations, security systems and fire zones). This deliverable shall be used for Code Compliance Review by the University's Building Official and Campus Fire Marshal. Separate drawings shall show complete Building Code and Life Safety requirements for the project.

2.2.3 Design Builder shall submit documentation supporting any changes to the RFP's design criteria for the structural (including structural loading), HVAC, plumbing, electrical, lighting and communication systems; and other specialized building systems.

2.2.4 Program. Prior to completing Schematic and Design Development phase submittals, Design Builder shall evaluate the requirements and call to the attention of University's Representative any discrepancy contained therein and request direction regarding any discrepancies.

2.2.5 Design Builder to maintain a Design Decision/ Design Action Log at each phase of design development which references instances of change in design- including but not limited to the date when a design change was instigated, the body requesting the change in design, the areas of the design that are to be impacted by the change, the impact on cost/ schedule.

2.2.6 The Work of this phase is subject to independent reviews, both internal and external, and value engineering.

2.2.7 Design Builder shall submit schematic and design development documents to the University Representative for Scope Compliance and Code Compliance Review upon completion. Design Builder shall submit at each phase for University's review and comment 10 copies each of the Documents unless otherwise approved, a summary of the calculations, and detailed calculations, for the structural, HVAC, electrical, plumbing, communications, and other specialized building system calculations and specifications. This shall include computer printouts to show compliance with the California Energy Code.

2.2.8 Schematic and Design Development drawings that are to be developed into working drawings shall be prepared using a CAD/BIM program as described in the provided BIM standards. The

Design Builder shall review the sheet numbers shown on the drawings and confirm University's acceptance. Submit the proposed sheet numbers to the University's Representative for approval.

2.2.9 Reference drawings and existing site plan and utilities are provided for information only. Actual conditions of the existing conditions may vary from those depicted on the reference documentation. The Design Builder shall field verify reference documentation and data prior to use in the design. Reference drawings are provided as attachments to the Request for Proposals (RFP).

2.2.10 Field verification of information and data provided by the University is the responsibility of the Design Builder. The University will provide coordination of access, but all tests, observations, examinations, recording of data, equipment, supplies, materials and associated labor needed by the Design Builder in order to field verify University furnished data must be provided by the Design Builder. The University will not provide resources needed by the Design Builder to accomplish field verification of data and/or information provided by the University.

2.2.11 Schematic and Design Development Meetings: University's Representative will schedule Design Progress Meetings (potentially a whole day) after each submittal to determine the progress of the Design Development portion of the project.

.1 Attendees: The University's Representative and University's Consultants; the Design Builder's Design Professionals, the Design Builder's Senior Officer, Project Manager, and others as directed by the University's Representative.

.2 Agenda: Design Builder shall prepare to discuss items of significance that could affect the completion of the Design Development Drawings and Specifications and have a major impact of the quality, cost, compliance and overall schedule for the Work. Go over comments made by University's Representative. Review and correct or approve minutes of previous progress meeting. Review other items of significance that could affect progress. Include topics for discussion as appropriate in relation to status of Project.

.3 Minutes: Record and distribute meeting minutes.

.4 Location: UCR Planning, Design and Construction office or as directed.

2.3 DESIGN SUBMITTALS

2.3.1 There are two categories of design submittal packages

.1 Early Start Design Submittal Packages for construction activities that will begin prior to the acceptance of the Final Design, and

.2 Required Design Submittal Packages that are comprehensive, fully coordinated, multi-discipline packages.

2.3.2 Early Start Design Submittal Packages.

.1 Early Start Design Submittal Packages should be limited to project elements that can be shown to impact the critical path of the Contract Schedule per Section 01 3200 – Construction Progress Documents, requiring construction to begin prior to the University acceptance of the Final Design. An Early Start Design Submittal Package shall include

all Design Analyses, Calculations, Drawings, Specifications and Product Data required to fully describe the project element for University review. Early Start Design Submittal Packages may be proposed by the Design Builder as part of the Preliminary Contract Schedule that is presented and discussed during the Post Award Kickoff Meeting. Examples of project elements that may be submitted as Early Start Design Submittal Packages are: demolition, site work, exterior utilities, foundations, structural frame, or any other construction activity or project element that can be organized into a submittal package that can be reviewed and accepted by the University without being contingent upon subsequent design submittals. Advanced purchase of "long lead" equipment, such as mechanical, electrical, or conveyance systems may be considered as justifiable and legitimate early start design packages, subject to agreement of the University's Representative.

2.3.3 Required Design Submittal Packages.

.1 The establishment of requirements for Design Submittal Packages shall not be construed as a description of the minimum level of contact among the parties involved in the execution of the Contract. More frequent meetings may be required for additional oversight, coordination, problem solving and decision-making to comply with the University's process for continuous review. These submittal packages shall be consolidated, fully coordinated, multi-discipline design submittals that include all project elements and Early Start Design Submittal Packages.

.2 Progress Set Drawings and Specifications: It is the University's intent to align with the Design Builder and to provide continuous review to avoid the "21-day review process" used in the past. Drawings shall be prepared by skilled and experienced personnel under the direction of registered professionals, for all phases of the project. Drawings of all disciplines shall be coordinated between one another in a Quality Control process and using a common layering matrix on the CADD/BIM system. All floor plans are to be in registry with one another including common enlarged plans, which are common to more than one discipline.

.3 Hand-drawn, marked up documents, preliminary sizing, detail references are acceptable.

.4 Architectural Visualization: Develop (minimum four) photo-realistic three-dimensional renderings using the 3D/BIM model and enhance with rendering programs to clearly illustrate the architectural (aesthetic) design.

a) Exterior view from the Carillon Mall looking North- West toward the Student Success Center at the adjacency between the Student Success center and the Student Services Building.

b) Exterior view from the intersection between the Carillon Mall and the Arts mall looking North East/ Exterior view displaying vital building adjacencies and relationship to the site.

c) Interior view from entry doorway looking into Main Lobby space.

d) Interior view of large Lecture theatre

e) Design Builder's optional fifth - showcase specific architectural feature / design aesthetic.

.5 The submittal shall be of such quality and clarity that the University can determine that the Design Builder is adhering to the scope, design intent and means of construction outlined in the RFP Documents. Following submittal, the Design Builder will make a presentation of the material to the University and respond to questions. The University may request further material for clarification purposes, which the Design Builder shall provide.

.6 It is the intent of the University that the Design-Build procurement process should be streamlined by encouraging the Design Builder to prepare necessary project specific drawings during the design phase of the Contract in lieu of traditional (more complete) generic procurement level drawings. For example, a portion of the design documents may be more like shop drawing submittals so that after final design acceptance, submittals are minimized. The goals of this strategy are:

a) To avoid duplication of information and design effort,

b) To improve coordination through early collaboration of designers and sub-Design Builders, and

c) To speed construction by eliminating the need for submittal and acceptance of shop drawings after construction has begun.

.7 Therefore, the Design Builder is encouraged to prepare and submit (with the design documents) appropriate composite, coordination, connection, fabrication, layout, and other project specific drawings.

2.4 SUSTAINABLE DESIGN

2.4.1 This facility shall be designed and constructed in an environmentally responsible manner, utilizing sustainable design concepts, systems and materials to the maximum extent practical, in order to provide a facility that meets the following goals:

.1 enhanced energy efficiency;

.2 reduction or elimination of toxic and harmful substances;

.3 high indoor air quality (IAQ) conditions;

.4 efficiency in resource and materials utilization;

.5 use of building materials that can be recycled;

.6 use of recycled content materials, including EPA designated products;

.7 minimization of waste products during both the construction and operation of the facility;

.8 promotion of O&M practices that reduce or eliminate harmful effects on people and the natural environment;

.9 ease of future modification as occupant needs change and ease of adaptation or conversion to other uses.

2.4.2 USGBC LEED ~~2009~~ ***v4*** Building Design and Construction (BD+C) certification: Ensure LEED new construction design and construction practices that significantly reduce or eliminate the

negative impact of building on the environment and occupants. Project design and LEED points shall comply with requirements for LEED "~~Gold~~ ***Silver***" certification. The Design Build Team shall bear all cost for USGBC registration, LEED design, and obtaining LEED certification.

2.4.3 Provide an analysis of the US Green Building Council's "Leadership in Energy and Environmental Design" (LEED) criteria as it applies to the design of this project and include that analysis with each design submittal. When estimating energy usage savings, the California Energy Code shall be used as the baseline. This analysis is a contractual requirement to design to LEED criteria and to obtain a "~~Gold~~ ***Silver***" LEED rating. The analysis report shall include the following:

.1 An explanation of each LEED point obtained by the project

.2 Total LEED score for the project

.3 Version of LEED being used for the analysis

.4 Statement signed by a registered professional engineer or architect that in their opinion the above three items provide an estimate of the LEED rating will be assigned to the project design.

2.4.4 For information on the LEED rating system, see Section 01 8113, "Sustainable Design Requirements" and the USGBC website.

2.5 POST CONSTRUCTION STORM WATER MANAGEMENT

2.5.1 It is the University's goal to develop, implement and monitor a program to address discharges of post-construction storm water runoff from new development and redevelopment areas. Post-construction storm water management controls include permanent structural and non-structural best management practices (BMPs) that remain in place after the project is completed and continue to prevent pollution from the new development. If the site does not accommodate treatment controls, or the University determines that they are too costly, the equivalent volume of water may be treated at an alternative site.

2.5.2 It is the responsibility of the Design Builder to prepare a drainage study that computes rainfall runoff characteristics from the project area, including, at a minimum, peak flow rate, flow velocity, runoff volume, time of concentration, and volume of water losses. These characteristics shall be developed for a two-year and 10-year frequency, Type I storm, of six-hour or 24-hour duration (whichever is the closer approximation of the site's time of concentration), during critical hydrologic conditions for soil and vegetative cover. The drainage study shall establish that pre-project hydrologic conditions affecting downstream conditions would be maintained by the proposed project by incorporating site design, source control or treatment control BMPs or by demonstrating that there would be no significant impact to the downstream receiving waters.

2.5.3 It is the University's desire that projects control post-development peak storm water runoff discharge rates and velocities and control runoff discharge volumes and durations to the maximum extent practicable.

2.5.4 Included in the drainage study should be a site map which includes:

.1 Entire property included on one map

.2 Drainage areas and direction of flow (including adjacent run-on)

.3 Project specific storm drain system

.4 Location of storm conveyance systems

.5 Location of existing and proposed storm water controls and BMPs

.6 Location of “impervious” areas

.7 Locations where materials would be directly exposed to storm water

.8 Location of building and activity areas: (waste container areas, hazardous material storage areas, etc.)

.9 Areas of potential soil erosion (including areas downstream of project).

2.5.5 The study shall also address proposed Best Management Practices including, but not limited to:

.1 Description of the BMP

.2 Location of the BMP

.3 Purpose of the BMP and Expected Benefits

.4 If the BMP is a treatment control BMP, consistency with Numeric Sizing Design Standards

2.6 DESIGN ANALYSES

2.6.1 Prepare design analyses (consisting of a basis of design and calculations) for each architectural and engineering design discipline. The design analyses shall include a presentation of facts to demonstrate that the concept of the project is fully understood and that the design is based on sound engineering principles. A design analysis for each discipline shall be provided with each design package and shall include:

.1 A basis of design consisting of:

a) An introductory description of the project concept that addresses the salient points of the design;

b) A Code and Criteria search, identifying governing codes and regulations, and providing calculations reflecting sizing of exit ways and means of egress demonstrating compliance with the results of the Code and Criteria search.

c) An analysis of scope included in the Project design, including square footage areas provided in response to the Project RFP requirements;

d) An orderly and comprehensive documentation of criteria and rationale for building and infrastructure systems selections; and

e) The identification of any necessary licenses and permits that are anticipated to be required as a part of the design and/or construction process.

.2 Calculations as needed to support the design. However, calculations supporting the structural, mechanical and electrical systems incorporated into the design and

construction of the facility shall be completed to the level appropriate with the submittal and updated with each additional submission.

.3 Also include a Section titled "Sustainable Design" that documents the sustainable features of the project. The sustainable design section shall include the following:

a) LEED Rating Analysis Report

b) Other information necessary to describe the sustainable features of the project and their benefits.

2.6.2 Format

.1 A Basis of Design shall be submitted to the University's Representative. The Basis of Design is for information only, but will be utilized by the University's Representative to verify compliance with the requirements of the Contract. The Basis of Design for each design discipline shall include a cover page indicating the project title and location, project number, table of contents, and tabbed separations for quick reference. Each part of the design analysis shall be prepared on 8.5 x 11 inch or 11 x 17 inch with a tri-fold white paper and shall be bound in separate volumes for each design discipline. Multiple volumes for individual disciplines, appropriately numbered, may be provided when needed. Organize as follows:

a) Civil

b) Landscape Architecture

c) Architectural; Interior Design and Furnishings

d) Structural

e) Fire Protection

f) Mechanical – Plumbing

g) Mechanical – HVAC

h) Electrical and

i) Sustainable Design.

j) Technology

2.6.3 Calculations

.1 Calculations shall be submitted to the University's Representative. Calculation submittals are for information only, but will be utilized by the University's Representative to verify compliance with the requirements of the Contract and will be commented on if not in compliance. Calculations for each design discipline shall include a cover page, a table of contents, a summary of criteria, the project title and location, and project number. Calculation pages shall be legible and photo-ready. Cite criteria from which calculations, rationale, and formulas are extracted by publication number, title, edition and page

number. The cover page of calculations shall also include the names of the persons originating and checking the calculations. The person checking the calculations shall be a registered professional engineer (or other appropriate design discipline) other than the originator. In addition, the signature and seal of the designer responsible for the work shall be placed on the cover page of the calculations for each of the respective design disciplines.

.2 Computer printouts, if used, shall be identified similarly to the calculations and may be referenced as an appendix or attachment to the design analyses. Identify the computer program name, source, and version.

.3 All calculations shall be checked and stamped by an engineer registered in the applicable discipline. The calculations shall clearly list all design criteria, assumptions, and references used. The calculations shall be arranged in a clear manner including schematic diagrams and spread sheets where necessary. All calculations shall reference systems and be indexed. Submit calculations as completed or appropriate for a streamlined review.

2.6.4 Submitted calculations shall include all systems, but not be limited to the following:

.1 Structural Calculations

a) Structural analysis and modeling shall be developed in ETABS 2015 or software program approved by UCR.

b) Early Submittal Calculations shall occur during design meetings and schedule review sessions between the Structural Engineer and University's peer reviewer.

c) 100% Submittal Calculations to include the following:

i. Seismic Design: Provide complete calculations addressing any prior review comments related to the analysis and design of all seismic resisting elements.
ii. Gravity Loading Design: Provide complete calculations addressing any prior review comments related to the analysis and design of all gravity load resisting elements.

.2 Mechanical Calculations

a) Plumbing systems

b) Heating and cooling load calculations

c) Coil selection data

d) Psychometric charts

e) Fan selection data, fan pressure loss and fan curves

f) Pump selection data, pump head loss, and pump curves

g) Miscellaneous selection data for mechanical equipment.

h) Tabulations of required flow rates.

i) Tabulations of design heating/cooling loads and required air volumes for all rooms.

j) Test and balance air summary

k) Structural and seismic calculations for equipment supports (may be submitted with structural calculations)

l) Duct sizing.

m) Title 24 Energy Code calculations.

.3 Electrical Calculations

a) General:

i. Short Circuit, Protection Device Evaluation and Protective Device Coordination Studies shall be performed by the switchboard/switchgear manufacturer. Submit studies to University prior to receiving final acceptance of distribution equipment Shop Drawings or prior to release of equipment for manufacture. If formal completion of studies may cause delay in equipment manufacture, acceptance from University's Representative may be obtained for preliminary submittal of sufficient study data to ensure that selection of device ratings and characteristics will be satisfactory. Provide for both normal and emergency systems.

ii. Studies shall include all portions of electrical distribution system from primary of service transformers down to and including 480 V and 208V distribution system. Normal system connections and those which result in maximum fault condition shall be adequately covered in the study.

b) Short Circuit Study

i. Perform study with aid of digital computer program in accordance with ANSI C37.5, IEEE Standard 320 and IEEE Standard 141.

ii. Include data on power source's short circuit contribution, resistance and reactance components of branch impedances, X/R rations, base quantities selected and other source impedances.

iii. Calculation short circuit momentary duty values and interrupting duty values on the basis of assumed three-phase bolted short circuits at each switchgear bus, switchboard, low voltage motor control center, distribution panelboard, pertinent branch circuit panel and other significant locations through the system. The short circuit tabulations shall include symmetrical fault currents and X/R rations. For each fault location, list the total duty on the bus, as well as the individual contribution from each connection branch, with its respective X/R ratio.

iv. Perform protective device evaluation study to determine adequacy of circuit breakers, molded case switches, automatic transfer switches and fuses by tabulating and comparing short circuit ratings of these devices with calculated fault currents. Apply appropriate multiplying factors based on system X/R ratios and protective device rating standards.

.4 Coordination Study:

a) Perform study with the aid of digital computer program, SKM's Captor or equal (no known equal).

b) Include all system protective devices from utility company devices feeding the building down to distribution panelboard branch breakers.

c) Plot device curves on log-log paper, grouping appropriate devices together.

d) Study shall show selective coordination so that the device closest to the fault will trip before any other device trips. Recommend settings of devices to achieve this coordination.

.5 Ground Fault Study: Provide short circuit study which shall result in recommended settings for system ground fault device. The settings shall allow coordinated settings to that the feeder devices will trip before the main device.

.6 Title 24 Energy Code calculations and Savings by Design form included as a single package with Mechanical.

.7 Panel schedules.

.8 Study Report:

a) Summarize results of system study in a final report. Submit five bound copies of final report.

b) Include the following sections in the report:

i. Description, purpose, basis and scope of study and single line diagram of that portion of power system which is included within scope of study.
ii. Tabulations of circuit breaker, fuse and other protective device ratings versus calculated short circuit duties and commentary regarding the same.
iii. Protective device time versus current coordination curves, tabulations or relay and circuit breaker trip settings, fuse selection and commentary regarding the same.
iv. Fault current calculations including a definition of terms and guide for interpretation of computer printout.

Protective Device Testing, Calibration and Adjustment: Equipment manufacturer shall provide the services of a qualified field engineer and necessary and adjust the protective relays and circuit breaker trip devices as recommended in the power system study.

2.7 SPECIFICATION

2.7.1 Design Builder shall review the technical specifications for the project, CSI Divisions 03 through 33 based upon the materials, products and equipment as well as any modifications in installation procedures forming the basis of the bid proposal. Changes and additions to the specifications shall be made with the Microsoft Word "Track" changes feature to show additions in "Bold" and deletions with crossed out text. Any changes made without this type of indication to the University's reviewers shall be considered not acceptable. Therefore, the University will furnish the Word files as a protected document to restrict editing and allow for a quicker review. All edits will be tracked.

2.7.2 Campus master specifications contain requirements describing functional requirements for the project, and describing materials, products, and systems for the project, along with criteria for verifying compliance. References quoted in Campus master specifications shall be understood to be the published and dated version of the reference in effect as of the Contract Bid Date.

2.7.3 The design professional is responsible for preparing the final edited specifications that are coordinated with the drawings, in compliance with the RFP and UCR Campus Standards and Project Planning Guidelines. The specifications and standards given in the RFP establish the minimum requirements acceptable to the University. Edits that reduce the quality, materials or workmanship will not be acceptable.

2.7.4 Not every type of material or product specification section may be included. Add sections as needed for the work and design features that the Design Build Team has selected.

2.7.5 MasterSpec by Arcom, Inc. is the basis of the University's Master Specification sections. You may use the Masterworks program to edit the documents if your firm has purchased the system.

2.7.6 Do not change the specification footers, section number or title. Do not delete or change the style features. This will retain the automatic paragraph numbering and formatting of the document.

2.7.7 When editing these sections, set the Microsoft Word "Track Changes" feature as shown below. Under the Tools menu, select "Options", then click on the "Track Changes" tab. Edit the options for formatting as follows:

2.7.8 Structural Calculations

.1 Structural analysis and modeling shall be developed in ETABS 2015 or software program approved by UCR.

.2 Early Submittal Calculations shall occur during design meetings and schedule review sessions between the Structural Engineer and University's peer reviewer.

.3 100% Submittal Calculations to include the following:

a) Seismic Design: Provide complete calculations addressing any prior review comments related to the analysis and design of all seismic resisting elements.

b) Gravity Loading Design: Provide complete calculations addressing any prior review comments related to the analysis and design of all gravity load resisting elements.

2.8 When specifications are submitted to the University, they shall be printed showing Track Changes. Where text in the document is in brackets and bold, this indicates an option has to be selected by the editor. Delete the options not required and delete the brackets and remove bold formatting of the text that remains.

2.8.1 For example, [**Text1**] [**Text2**] [**Text3**] could be edited to become ~~[~~**~~Text1~~**~~] [~~**~~Text2~~**~~] [~~Text3~~]~~ (with the "Display for Review" set to "Final Showing Markup."

2.8.2 Do not use the "strikeout" mode in Fonts to delete text. Use cut, delete, or backspace to delete text and with track changes setting the text will be shown with a strikeout.

2.8.3 Use the “Increase Indent” and “Decrease Indent” on the “Formatting” toolbar to revise paragraph subordinate level.

The following are the styles used for the University's master specification sections:

Style Name	Description
PRT = Level 1	A paragraph in hidden text that corresponds to the Part titles.
ART = Level 2	The style used for the Article titles.
DST = Level 3	An outline level used only in sections that contain Data Sheets and is used for the Data Sheet title.
PR1 = Level 4	Paragraph level 1 follows Article titles and Data Sheet titles. Number style is an uppercase letter. *Example:* A.
PR2 = Level 5	Subparagraph level 2 follows a paragraph level 1 and is a number followed by a period. *Example:* 1.
PR3 = Level 6	Subparagraph level 3 follows a Subparagraph level 2 and is a lowercase letter followed by a period. *Example:* a.
PR4 = Level 7	Subparagraph level 4 follows a subparagraph level 3 and is a number followed by a parenthesis. *Example:* 1)
PR5 = Level 8	Subparagraph level 5 follows a subparagraph level 4 and is a lower-case letter followed by a parenthesis *Example:* a)

2.8.4 For those alternates accepted by the University the Design Builder shall coordinate any materials defined as part of the alternate and provide modified or new specification section(s) for those items not identified in the Contract Documents. The specification sections shall include the following:

.1 An index showing all divisions and with any sections intended to be added.

.2 Section(s) of equipment, products or materials not included in the RFP.

2.8.5 It is the University's intent that the procurement process shall be streamlined by encouraging final product and material selections during the design phase in lieu of the use of prescriptive construction specifications and submittals following the completion of the design phase. Submit manufacturer's data sheets for materials, equipment, fixtures, devices, and systems that will be provided, clearly marked to indicate the exact item(s) to be included in the construction. Prepare prescriptive construction specifications only for those materials, products, or installation instructions that cannot be adequately described with manufacturer's data sheets.

2.8.6 For each design submittal, consolidate specifications and manufacturer's data sheets into one comprehensive Product Data and Specifications manual organized by the 2004 CSI format. Upon acceptance of Specifications and Manufacturer's Data Sheets by the University's Representative, all materials, equipment, fixtures, devices and systems, which are provided and installed in the Project, shall be as described in the combined Specifications and Manufacturer's Data Sheets manual, which has been submitted by the Design Builder and accepted by the University's Representative.

2.8.7 Changes to specifications and/or manufacturer's product data previously accepted by the University may be requested by the Design Builder, but such requests shall be supported by written documentation from the Design Builder certifying that the change provides materials, equipment, fixtures, devices and systems which are of the same or better quality as the materials, equipment, fixtures, devices and systems previously accepted by the University. No

changes or substitutions will be accepted without the prior express written approval of the University's Representative.

2.8.8 The Division 01 and 02 specification sections included in this RFP shall remain part of this contract without change unless a contract modification is issued by the University's Representative.

2.9 AREA TABULATION

2.9.1 The Design Professional shall tabulate assignable square footage (ASF) and gross square footage (GSF) as the work progresses to confirm the project program is being furnished. Provide a space-by-space comparison of design development phase ASF and programmed ASF. The Design Professional shall tabulate by floor and program component, and include a recapitulation showing the totals for the building as a whole. Upon final completion of the Construction Documents, Design Builder shall provide a complete listing of all rooms and spaces.

2.10 TESTING and INSPECTION

2.10.1 The Design Professional shall make initial recommendations for Construction Phase ***Testing, Inspections and Observations (TIO) which include*** testing and special inspections such as soils and materials testing, welding inspections, and dewatering requirements that are proposed to be handled in the Quality Control Plan.

2.10.2 University will provide for all testing and inspections, except certain classes of materials testing and inspection to be provided by the Design Builder:

.1 such cases are limited to quality control testing in manufacturing plants (including reinforcing and structural steel, concrete, and manufactured items),

.2 certain field testing such as performance testing of mechanical and electrical systems, and testing specifically required by the specifications (such as window testing, roofing testing, duct pressure testing).

2.10.3 Testing provided by the Design Builder shall be performed by manufacturers, testing agencies, or the Design Builder's field forces as appropriate. The Quality Control Plan and Specifications must clearly indicate tests and inspections to be provided by the Design Builder and University.

2.10.4 Means, methods, results and report contents for testing and inspection must be specified in the Quality Control Plan. The University's Representative will judge the acceptability of all testing and inspection performed on behalf of the Design Builder.

ARTICLE 3

PHASE 2 – CONSTRUCTION DOCUMENTS PHASE

3.1 GENERAL

3.1.1 The construction documents phase submittal shall include, at minimum, all items that are required for the Design Development Phase and those that are enumerated in Phase 1 submittal review Comments prepared by University's Representative. Working drawings shall show all elements previously shown on the Design Development documents with greater detail and specificity.

3.1.2 Upon University's written Notice to Proceed for Phase 2, and based on Design Development Phase documents approved in writing by University, the Design Builder shall prepare for approval by University, Construction Documents consisting of Drawings and Specifications setting forth in detail the requirements for the construction of the project. The Construction Documents shall describe the quality, configuration, size and relationships of all components to be incorporated into the project. The Construction Documents shall be consistent with the Contract Documents.

3.1.3 The Work of this phase is subject to independent reviews, both internal and external, and value engineering.

3.1.4 Design Builder to maintain a Design Decision/ Design Action Log at each phase of Construction Documents phase which references instances of change in design- including but not limited to the date when a design change was instigated, the body requesting the change in design, the areas of the design that are to be impacted by the change, the impact on cost/ schedule

3.1.5 Design Builder shall submit construction documents to the University Representative for Scope Compliance and Code Compliance Review. Design Builder shall re-submit the documents for back check by the University Representative and other applicable agencies after corrections are made to the 100% submittal for Scope Compliance and Code Compliance Review or at the University's option, the drawings will be edited with corrections required by contract. The Design Builder shall comply with these comments without exception or continue to re-submit the documents until written approval from the University's Representative is obtained for Scope Compliance and Code Compliance.

3.1.6 Upon completion of the Construction Documents, Design Builder shall submit at each phase for University's review and comment 10 copies each of the Construction Documents, a summary of the calculations, and detailed calculations, for the structural, HVAC, electrical, plumbing, communications, and other specialized building system calculations and specifications. This shall include details of compliance with the California Energy Code.

3.1.7 The Construction Documents submittals shall either incorporate any changes or corrections required by University's Representative or the applicable review agencies as a result of their review of the Documents or be accompanied by a written statement as to why such changes were not incorporated. University's Representative may reject Design Builder's explanation and require Design Builder to make the changes or corrections to the Construction Documents as previously requested by University's Representative related to its reviews. The University's Representative ***and University's Chief Building Official*** will be final interpreter of all code

requirements, and all such decisions will be final. Design Builder to maintain a change log that documents each change and its impact.

3.1.8 Unless directed otherwise in writing by University's Representative the Construction Documents Phase shall not be considered 100% complete until all required agency and University approvals have been received by Design Builder. Design Builder shall prepare and submit required agency applications as required by University's Representative.

3.1.9 Engineering calculations shall be sufficient to prove compliance with all applicable codes and design standards. Final calculations shall be submitted prior to the 100% submittal set in a 3-ring binder with an index per system and tabbed dividers.

3.1.10 Final Construction Drawings and the Certification page of the specifications submitted to University shall be signed and stamped by the appropriate Architect or Engineer of Record.

3.1.11 Design Builder shall update the technical specifications for the project, CSI Divisions 02 through 33 based upon the materials, products and equipment to be installed as well as any modifications in installation procedures.

3.1.12 When Scope Compliance Review by the University; and Code Compliance Review by the University's Building Official, and review agency required changes or corrections have been incorporated by Design Builder, the 100%-completed Construction Documents will be deemed to be final. ***The 100%-completed Construction Documents will be stamped "approved" by the Campus Building Official and Lead Designated Campus Fire Marshal, and a permit will be issued for the construction.*** Design Builder shall provide to University 2 sets of drawings and the complete set of the Specifications, of the final (100% backchecked and corrected) set of Construction Documents. The drawings and specifications shall be submitted in both hard copy form and on USB Drive as required by the CAD/BIM standards.

3.1.13 Design Certification

.1 Provide certification signed by an officer of the Design Builder's company attesting the Design meets the requirements of the Contract. The certification shall accompany the final submittal package as a part of the letter transmitting the submittal to the University's Representative. Do not use the University's standard "Submittal Transmittal" form.

.2 Attest in the certification letter that the entire submittal package has been reviewed and coordinated for compliance with the Contract.

.3 Electronic data provided by the Design Builder must be virus free. All compact disks, memory sticks, and transmissions of data must be scanned with computer virus detection software prior to being forwarded. With each compact disk, or modem transmission of data, provide a certification of the anti-virus software used and a statement that it is free of detectable viruses.

3.1.14 Original Design Documents

After University's Representative acceptance of the Final design, provide the following original documents: one set of CAD/BIM on a USB Drive and one set of drawings on bond paper with original Professional seals and signatures; design certifications; Title 24 Energy Code calculations; originals of specifications and any manufacturer's data sheets; original design analyses, complete in all respects and with accepted changes incorporated as a result of oversight comments, to the University's Representative. Include along with this submission

written responses to each University oversight comment. In addition, provide ten copies of specifications and manufacturer's data sheets and half-size copies of the accepted drawings.

3.1.15 Final Design

The Final design, when accepted by the University, shall become an accepted deliverable under the contract. Changes to accepted design submittal packages including the final design, require prior written approval by the University's Representative. University's Representative oversight and acceptance of design submittal packages, including the final design, shall not be construed as a waiver of requirements where those requirements may have been erroneously expressed or omitted from the Design Builder prepared design documents, unless such variations have been specifically noted by the Design Builder and accepted in writing by the University's Representative.

3.1.15 Construction Submittal Register

Prepare a submittal register that lists (in table format) submittals requiring University acceptance. Include submittal description, applicable RFP Section and paragraph number, specification section and paragraph number, and planned submission date. Coordinate planned submission dates with Contract schedule required by Section 01 3200 of the RFP.

3.2 COORDINATION DRAWINGS

Coordination and Detailing Activity can be started during of the Construction Document Phase and incorporated in the final submission. Refer to Specification Section 01 3150 – Coordination and Detailing Activity.

3.3 INTERIOR AND EXTERIOR FINISHES REVIEW MEETINGS

Prior to finishing of interior spaces or ordering of materials, systems, or equipment for interior spaces, the Design Builder will prepare for University's review and approval an Interior and Exterior Finishes review meetings, at which samples and colors of all finishes exposed and semi-exposed to view for review with the University. After review and approval by the University, the following shall be submitted:

3.3.1 Finish boards shall be broken down into 3 basic categories:

.1 Category 1. Exterior Site

.2 Category 2. Exterior Building

.3 Category 3. Interior Building

3.3.2 The above finish board categories shall require multiple boards. The finish boards shall indicate the following finishes:

.1 Exterior site all finishes, concrete samples, benches, site electrical, site civil, landscape item, irrigation items, site and lighting.

.2 Exterior building components: Architectural finishes (metal panel, concrete, etc.), glass types, aluminum, louvers, overhead coiling doors, personal doors, aluminum screen wall and all assembly components, precast, sealants, elevator, roof mounted mechanical and electrical equipment, exposed piping, cement plaster color, other miscellaneous metals and exposed features.

.3 Interior building components: Shall contain all finish materials including but not limited to wall, floor and ceilings with all mechanical, electrical, security, fire alarm and fire suppression elements. Casework and all devices associated with the complete installations. The interior shall have a minimum of 4 boards with the following areas as themes:

a) Lobby Information Desk

b) Multipurpose Rooms

c) Group Meeting Rooms /Group Study Rooms

d) Student Lounge

e) Open Study Spaces

f) Classrooms

g) Testing Center

h) Lecture Halls

i) Dining “Food Lab”

.4 Collaborative Spaces for faculty and students (Scholarly Activity Spaces) Floor plans of all levels (1/8” min) and interior elevations (1/4” min) keyed to Finishes Boards showing location and general color of the finishes. Plans and elevations of the lobby, each level, typical office, conference rooms, toilet rooms, and stairs.

.5 For the purpose of selecting the final interior paint colors, prior to painting and the installation of finish materials the Design Builder shall provide sample boards of three (3) variations for each base color and up to three (3) variations for each accent color. The minimum dimensions of each sample board will be 24” x 36”.

.6 Design Builder to provide design services and a procurement assistance package for all ‘Not in Contract’ (NIC) Group 2 & 3 equipment. The procurement assistance package to include design services (inclusive of specifications, design layouts, finish selection, quantities, and recommendations) for all Group 2 &3 equipment. The procurement assistance package to ensure that furniture and coordination for selection of furniture not within the Design-Builders purview to be in cohesion with other building/ Interior components. Design Builder to meet with the university to facilitate and coordinate design discussions, for preparation of NIC procurement assistance package.

3.4 100% COMPLETED SUBMITTAL REQUIREMENTS

All drawings, specifications, and other documents enumerated in Article 5 for inclusion in the prior submittals shall be further developed by Design Builder in sufficient detail as to be deemed 100% complete and constructible. Prior to submitting the 100% construction documents, Design Builder shall have thoroughly checked, coordinated, and revised all documents to bring them to 100% completed level. General Conditions shall not be included on Drawings or Schedules. Notes must coordinate with, and conform to the written Contract Documents. Products and materials specified on the drawings must be identical to the products and materials required in the written Contract

Documents Specifications. In addition to the documents in prior submittals, Design Builder shall submit the items listed below for the 100% completed submittal:

3.4.1 Materials Board. A 100% final updated materials board shall be submitted.

3.4.2 Calculation of Areas. Design Builder shall include, with the 100% completed submittal, calculations of the gross square footage (GSF) and the assignable square footage (ASF) and shall make a direct comparison of these areas with the original Project program areas in the Design Compliance Matrix.

3.4.3 Specifications. All Division 02 through 33 specification systems shall be 100% complete. When the final specifications have been reviewed and approved by the University, Design Builder shall submit to the University final printed copies in "final" format without Tracked Changes showing.

3.4.4 Quality Control Plan. – As specified in the General Requirements. No Construction Notice to Proceed will be issued until the Quality Control Plan has been reviewed and approved by the University. The Design Builder shall prepare the Quality Control Plan to provide reasonable time for University to review and accommodate for subsequent revisions required of the Design Builder, as not to impact the Contract Time. Revisions required by the University may include, but not limited to, additional testing by either University or Design Builder.

3.4.5 Refer to paragraph 3.1.12.

ARTICLE 4

PHASE 3 – CONSTRUCTION PHASE

4.1 CONSTRUCTION - GENERAL

The Design Builder shall provide all materials, equipment, labor, and services required by the Contract Documents to construct the Work for the Contract Sum and within the Contract Time during the Construction Phase.

Construction prior to Final Design Acceptance

Construction work cannot be started on any definable feature of work until University acceptance of design and a written authorization to commence (Notice to Proceed) the specific construction is received from the University's Representative.

4.2 COORDINATION AND DETAILING ACTIVITY

Prior to beginning any construction activity for the project Design builder shall coordinate, prepare and submit to the University coordination drawings consistent with the requirements of Division One Specification Section 01 3150 – Coordination and Detailing Activity.

4.3 TESTING AND INSPECTION

Testing and inspection shall follow the approved Quality Control Plan and the Specifications.

The Design Builder shall:

.1 Participate in punch list inspections for beneficial occupancy, substantial completion and final completion.

.2 Assist University's Representative in reviewing test and inspection results.

.3 Not authorize deviations from the Contract Documents.

.4 Provide for Commissioning of systems and Equipment.

.5 Assure the Construction Work is in compliance with the requirements of Division 01 Section 01 4000 – Quality Requirements and Specifications.

4.4 MATERIALS/COLOR SCHEDULE AND MATERIALS BOARDS

Design Builder shall revise and update the materials/color schedule and materials boards, which were prepared during the Design Development Phase and updated during the Construction Documents Phase, as necessary to reflect the actual manufacturers' products that have been submitted by Design Builder and approved for use on the Project.

4.5 RECORD DOCUMENTS

4.5.1 Any revisions or changes that have been made during construction shall be incorporated in the Record Documents. Refer to Division 01.

ARTICLE 5

DRAWING REQUIREMENTS

All design drawings shall be done in 3D/BIM by all disciplines including Architectural, Structural, Plumbing, Mechanical, Electrical and Fire Sprinkler.

It is not the University's intent for this list to be all inclusive but to give guidelines to establish an expected drawing requirement. These requirements shall be modified to suit the project. Discuss with the University's Representative.

5.1 GENERAL DRAWINGS

5.1.1 Cover sheet to include:

.1 Project title.

.2 Name, address, and phone number of all professionals.

.3 Name, address, and phone numbers of the Design Builder.

.4 Date and package submittal (50%, 90% and final).

5.1.2 Sheet index list in numerical order for all disciplines.

5.1.3 General information sheet.

.1 Project vicinity map.

.2 Project location map.

.3 General project notes.

.4 Square footages

.5 Construction type and occupancy groups

5.2 SITE, CIVIL, AND LANDSCAPE DRAWINGS

5.2.1 The Design drawings shall include:

.1 Depict the overall dimensions of any proposed new building. Indicate all references to a benchmark and baseline. Indicate the distances from each proposed new building to (1) existing buildings, (2) property lines (setbacks), ~~and~~ (3) roadways ***(4) provide all assumed property lines between new and existing/new buildings***.

.2 Depict all existing structures within a radius of at least 300 feet of the Project. Identify all structures and streets by name.

.3 Depict all new exterior elements and all existing exterior elements that will remain in place after an alteration or addition. These elements include, but are not limited to

streets, service drives, easements, loading docks, parking areas, paved areas, walks, stairs, ramps, ***hand and guardrails, posts and signs,*** retaining walls, fences, fire hydrants ***and emergency fire lanes***, ***bicycle ramps, emergency phones*** and equipment.

.4 Depict the elevations of building entrances and major exterior elements.

.5 Provide a site plan indicating existing and proposed contours at one-foot intervals. Indicate the method of general site drainage as it is affected by the location of each proposed building.

.6 Provide sections through the site as needed to explain changes in levels within the proposed building as related to the site.

.7 Depict the placement of ramps and other provisions for disabled access to the site and building. Depict the parking area and drop-off location nearest the building and the routes and travel distances to all building entrances.

.8 Depict Emergency Access Routes.

.9 Provide a***n accurate*** site utilities plan that depicts existing utilities, including underground lines, located within the Project site and that depicts any proposed new utility services. Indicate the points of connection between new work and the existing utility systems.

.10 Provide a site demolition plan indicating existing structures and utilities that are to be removed. Existing demolished items shall not be shown on any new work plans.

.11 Site Utilities Plan shall include:

a) Routing of proposed new external utilities from each new building to each point of connection to the Facility's utility systems. Indicate all utility lines that are to be abandoned, removed, or rerouted.

b) Existing utilities within the Project site based on both the information provided by University and on Design Builder's field investigation.

5.2.2 Site Design

.1 Site Plan overall at 1” = 20’ showing sheet cross references and structures and elements.

.2 Civil Drawings at 1” = 10’ showing:

a) Site plan showing all paving, sidewalks, curbs, fences, parking, retainage walls, and other site improvements.

b) Prepare a site boundary and topography plan.

c) Prepare a complete demolition plan.

d) Prepare a complete site utilities plan.

e) Prepare a complete storm drainage plan.

f) Prepare a complete storm drainage profile plan.

g) Prepare a complete sewer plan.

h) Prepare a complete sewer profile plan.

i) Prepare a complete fire and domestic water plan.

j) Prepare a complete fire and domestic water profile plan.

k) Prepare a complete reclaimed water plan.

l) Prepare a complete reclaimed water profile plan.

m) Prepare a complete erosion control plan.

n) Prepare a complete site horizontal control plan.

o) Prepare a complete site mechanical piping plan (natural gas).

p) Prepare a complete site electrical plan primary power***(including data lines)***.

q) Prepare complete plans showing all associated detailing as required.

.3 Profile drawings are to be drawn at horizontal scale of not less than 1" = 50' and vertical scale of not less than 1" = 5'. Show types, sizes, materials, and elevations of others utilities crossing the piping system. Show manholes, clean-outs and piping.

5.2.3 Hardscape Drawings

.1 Symbols list and abbreviations.

.2 Hardscape site plan at 1" = 20' showing sheet cross-references and all structures.

.3 Hardscape plans at 1" = 10' showing:

a) Dimensions, alignments, finishes appropriate sections, elevations of entry locations, site stairs etc.

b) Coordination of civil below and above grade systems.

c) Existing (site to remain) and transitions.

.4 Hardscape drainage above grade plans at 1" = 10' showing:

a) Building spot elevations at grade changes showing stepped footings/grade intersections.

b) Drainage patterns showing slopes and percentages to all drainage locations and post construction BMPs if required.

c) Site parking and road system drainage.

d) Existing structures and paving drainage.

e) Existing transitions.

.5 Site lighting plan at 1" = 10' showing:

a) All light fixture types
b) Cut sheets of types of light fixtures
c) Submit photometric of existing and proposed light fixtures for review
d) Light fixture schedule
e) Elevations and dimensions to all light fixtures

.6 Detail sheets at 3/4" = 1'-0" minimum showing:

a) Site wall sections

b) Plan enlargements

c) Details

d) Plaza and hardscape joint patterns

e) Concrete finish schedule

f) Site guardrails and details

g) Planter drain clean out and details

h) Typical pavement sections

5.2.4 Landscape Drawings.

.1 Site planting plan at 1" = 10' showing:

a) Legend showing plants types and symbols.

b) Specific call outs of plants

c) Scientific names, generic names, and quantities.

.2 Landscape details at 1½" = 1'-0":

a) Use Campus Standard details without changes

b) Show details not included with Campus Standards

5.2.5 Irrigation Drawings (1" = 20').

.1 All zones showing:

a) Main lines and distribution

b) Head counts and spacing

c) Irrigation legend

d) General and specific notations

e) Existing lines and connection points

f) Detail references

g) Outline of buildings or adjacent structures

.2 Irrigation details (1 1/2" = 1'-0")

a) Campus Standard irrigation details.

b) Show details not included with Campus Standards

c) Special on-site reclaimed water requirements

5.3 ARCHITECTURAL REQUIREMENTS

5.3.1 General information sheets including:

.1 Architectural symbols and legends

a) Architectural abbreviations

b) ***All*** Applicable codes

.2 Fire and accessibility site access drawing

.3 Fire code occupancy diagrams

.4 Fire code travel distance and existing diagrams

.5 Wall, structural and penetrations with UL assemblies noted

.6 Wall types and all pertinent information.

a) Assemblies and configuration

b) Dimensions

c) STC ratings

d) Stud sizes and types

e) Block walls

5.3.2 Floor Plans (Scale: Not less than 1/8 inch = 1 foot 0 inches). The Design Drawings shall include:

.1 Indicate the locations, room names, sizes (in assignable square feet), and space numbers for all programmed spaces and required gross areas including entrances, lobbies, corridors (with widths), stairs, elevators, toilet rooms, janitors' closets, and mechanical/electrical equipment rooms. Floor plans for additions or alterations to existing buildings shall show the existing floor plan and indicate the existing space usages and any proposed changes.

.2 Indicate the locations of all doors (showing door swings) and windows.

.3 Indicate the overall dimensions of the major elements of each building.

.4 Indicate the locations and fire ratings of all fire separations, exit enclosures, fire doors, and similar elements, as required by applicable codes.

.5 Indicate the provisions for making facilities accessible to and usable by the disabled to meet ADA guidelines.

.6 Indicate the provisions for making Gender Inclusive facilities accessible to and usable to meet UC Gender Inclusive Facilities (GIF) Policy.

.7 Indicate the location of all plumbing fixtures such as lavatories, floor drains, water closets, urinals, service sinks, drinking fountains, eyewash and/or safety showers, and fire-hose cabinets.

.8 Indicate all principal built-in features such as fixed auditorium seats, kitchen equipment, display cases, counters, shelves, lockers, case work, and similar items.

.9 Indicate the locations of movable furniture—if not in scope of Contract Documents, indicate “not in contract” (NIC)—including “interior landscape” partitions and equipment. Differentiate between movable furniture and equipment and built-in furniture and equipment.

.10 Provide Furniture design package for (NIC) furniture that is in cohesion with Building Design that can be used for furniture procurement.

.11 Provide a demolition plan whenever a Project requires the demolition of any building or portions thereof. The demolition plan shall differentiate between new work (walls, doors, finishes, and so on), existing work to be removed, and existing work to remain in place.

.12 Provide a roof plan showing associated equipment, slopes, ridges, drains, and other items.

.13 Floor plans shall contain but not limited to:

a) Wall types

b) Dimensions

c) Detail references

d) Elevation references (interior and exterior)

e) Building section marks

f) Wall section marks

g) Enlarged plan areas

h) Room names and numbers (Numbering protocol to be coordinated with University)

i) Identification of both Centralized and Distributed Core spaces

j) Dimensioned distance of Centralized Core spaces from elevators and vehicle traffic

k) Door numbers commensurate with room being accessed

l) Casework and equipment (screened)

m) Wall fire codes (screened)

n) Equipment clearance requirements incorporated into flooring finishes (screened)

o) Key plan

p) Cross reference information

q) Match line

r) Equipment pads dimensioned and located

s) Other information specific and generic as applicable

.14 Opening schedule, for each level and will include all openings. The basic information shall be:

a) Door number

b) Room number

c) Opening size

d) Fire rating

e) Glazing type

f) Frame material and finish

g) Door material and finish

h) Elevation reference

i) Head, jamb, sill reference

j) Hardware Group

k) Special remarks/conditions

.15 Window, door, frames, louvers elevations sheets at 1/4" = 1' - 0".

.16 Reflected ceiling plan at 1/8" = 1'-0" illustrating:

a) Ceiling types

b) Changes in elevation and the elevation

c) Detail references

d) Cut tile locations and starting points of lay-in ceiling layouts

e) Dimensions to fixtures

f) All ceiling mounted fixtures and devices identified and coordinated

g) Ceiling symbols legend.

5.3.3 Elevations and Sections (Scale: Not less than 1/8 inch = 1 foot 0 inches). The Design Drawings shall include:

.1 Depict in building elevations, all building elements including entrances, windows, doors, stairs, platforms, louvers, vents, exhaust stacks, retaining walls, and similar items. Indicate proposed finished grades.

.2 Indicate the overall building and floor-to-floor heights.

.3 Include longitudinal and transverse sections for each major area, indicating floor elevations, existing and proposed exterior grades, ceiling heights, pipe tunnels, non-excavated areas, basement areas, roof lines, and parapets. Where appropriate, show connections to adjoining buildings.

.4 Reference all sections and elevations on the floor plans.

.5 Indicate in the sections, provisions for HVAC distribution and hood venting.

.6 Building elevations and sections shall contain:

a) Appropriate fenestration and building element dimensions.

b) Building section marks.

c) Wall section marks.

d) Building expansion and contraction joints (horizontal and vertical).

e) Panel joints and dimensions.

f) Details references.

g) Material identification.

h) Column markings and dimensions, floor and parapet elevations

i) Enlarged elevation markings.

j) Dashed footing locations.

k) Dimensioning and floor elevations.

l) General and specific notations.

.7 Wall sections and selected building elevations at 1/4" = 1'-0" minimum and shall contain:

a) Material identification

b) Detail references (head, jamb, sill at each opening)

c) Roof detail markings

d) Deflection detail references

e) Perimeter drainage and waterproofing limits

5.3.4 Details (Scale: Not less than 1/4 inch = 1 foot 0 inches). The Design Drawings shall include detail plans, sections, and elevations for the following types of space:

.1 Lobby Information Desk

.2 Classrooms

.3 Multipurpose Rooms

.4 Group Meeting Rooms

.5 Open Study Spaces

.6 Student Lounge

.7 Lecture Halls Testing Center

.8 Centralized and Distributed Core spaces.

.9 Dining Spaces

.10 Restrooms and support areas.

.11 Interaction spaces (Scholarly Activity,

.12 Details of the exterior skin systems at 1 1/2" = 1'-0" minimum showing all dissimilar material intersections and system connections.

.13 Details of the interior systems at 1 1/2" = 1'-0" minimum showing all conditions that cannot be accurately portrayed on plan.

.14 Reflected ceiling details at 1 1/2" = 1'-0" minimum.

5.4 STRUCTURAL REQUIREMENTS

5.4.1 The Design Drawings shall include a structural plan for each level of the structure at the same scale as that used for the architectural plans. Indicate the grid system (dimensioned), columns, load-bearing walls, shear walls, footings, and related items. Detail the anchorage of all fixed equipment in accordance with the California Building Standards Code, Title 24, CCR, all applicable parts

5.4.2 Structural Design

.1 General sheet(s) showing and calling out:

a) Abbreviations

b) Symbols and legends

c) Materials and strengths

d) Design criteria

e) Wind criteria

f) Seismic criteria

g) Earthwork assumptions

h) General notations on systems and methodology of attachment.

i) Wall and structural frame ratings as required by code.

j) Statement of compliance with UC Seismic Safety Policy

.2 Foundation Plans and Zone Cross References (same scale as architectural or 1/8" = 1'-0"):

a) Grids

b) All dimensions

c) All keying (details and elevations)

d) General and specific notations

e) Top of footing elevations

f) Pit locations, slopes and clearances

g) Other pertinent information for coordination purposes and construction.

.3 Floor plans and zone cross references (same scale as architectural or 1/8" = 1'-0"):

a) Grids

b) All dimensions

c) All keying (details and elevations)

d) General and specific notations

e) Other pertinent information

f) Mechanical/Electrical and other equipment pads.

g) Pit locations

h) Enlarged plans at 1/4" = 1'-0

.4 Roof framing and zone cross references (same scale as architectural or 1/8" = 1'-0"):

a) Grids

b) All dimensions

c) All keying (details and elevations)

d) General and specific notations

e) All equipment pads and curbs

f) Elevations for sloping concrete coordinated with architectural substrate

g) Structure and embedment locations for all structural systems attached to the roof.

h) All dimensions including penetrations, opening, locations of embedments and other pertinent information

i) Other pertinent information for coordination purposes

.5 Shear wall elevations at 1/4" = 1'-0" minimum showing all shear walls and all penetrations and embedments.

.6 Stairwell and stair sections at 1/4" = 1'-0" minimum showing rebar placement, dimensions, thickness of materials, coordination of embedments, hand rails, etc.

.7 Foundation and wall sections at 3/4" = 1'- 0" minimum:

.8 Details at ¾" = 1'-0" minimum.

.9 Foundation substrate and perimeter drainage systems.

.10 Footing schedule

.11 Beam schedule

.12 Miscellaneous metals detailing including but not limited to:

a) Toilet partitions.

b) Embedments.

c) Curtain wall/windows wall attachments.

d) Special hanging devices.

e) Bracing of interior and exterior wall.

f) Structural tube system for the exterior system connections.

g) Mechanical screen wall details and connections.

.13 Concrete masonry unit walls and associated sections and detailing.

.14 Miscellaneous structural detailing (1/2" = 1'-0") minimum.

5.5 PLUMBING REQUIREMENTS

5.5.1 Drawings shall indicate proposed points of connection to existing Facility utility systems. Refer to Civil Drawings requirements for site plans.

5.5.2 General Sheets:

.1 Showing abbreviations, symbols and general notes.

.2 All Plumbing equipment schedules including:

a) Plumbing fixture pipe connection schedule

b) Plumbing fixture schedule

c) Equipment vibration isolation schedule

d) Water heater schedule

e) General and specific notation as required.

f) Other schedules, references and notations as applicable.

5.5.3 Floor Plans (Scale: Not less than 1/8 inch = 1 foot 0 inches). The Design Drawings shall include:

.1 Indicate all piping on the floor-level plan in which it will be installed.

.2 Indicate the locations of main waste lines and stacks and vents as well as all service mains, including those for water, air, gas, and vacuum.

.3 Indicate all pieces of equipment—including pumps, tanks, generators, pressure-reducing valves, and so on—showing their locations and required piping connections.

.4 Plumbing plans showing: sizes of plumbing piping, cleanout locations and types, valves, ***sectional valves,*** floor drains and types, general notations, water hammer arrestors, equipment connections, vents, sub soil drainage and cleanouts, outside building extensions, all associated elevations and specific notations. Systems to be shown:

a) Storm sewer system

b) Sanitary waste and venting system

c) Natural gas system

d) Domestic and Industrial hot water distribution systems

e) Domestic and Industrial cold-water distribution systems

f) Process chilled water loop

g) Reverse Osmosis water distribution system

h) Compressed air system

i) Other special gas systems as required

5.5.4 Roof plan ***fully dimensioned***, at 1/8 = 1'-0" showing; plumbing vents and types, equipment drains, roof drains and square footage of drain area, overflow drains, cold water faucets

5.5.5 Enlarged plans at 1/4" = 1'-0" for all head and equipment, congested areas and associated sections (2 per room minimum) to be on the same sheet as the head end equipment or room.

5.5.6 System diagrams

.1 Sanitary waste and vent piping diagrams.

.2 Domestic water system diagrams.

.3 Natural gas system diagrams.

.4 Other system diagrams and appropriate.

5.5.7 Plumbing details at 1 1/2" = 1'-0" shall include but not limited to:

.1 Typical pipe support details

.2 Condensate drain details

.3 Wall and floor penetrations with associated U.L. numbers.

.4 Trap primer details.

.5 Roof leader detailing.

.6 Miscellaneous detailing.

5.5.8 Plumbing drawings shall indicate the complete plumbing system in detail and shall include methods for fastening equipment to the structure to resist seismic forces.

5.6 HVAC REQUIREMENTS

5.6.1 Drawings shall indicate proposed points of connection to existing Facility utility systems. Refer to Civil Drawings requirements for site plans.

5.6.2 General Sheets:

.1 Showing abbreviations, symbols and general notes.
.2 All HVAC equipment schedules including but not limited to:

a) Terminal unit

b) Return air diffuser/register

c) Filters

5.6.3 Floor Plans (Scale: Not less than 1/8 inch = 1 foot 0 inches). The Design Drawings shall include:

.1 Piping plans for each type of system on the project showing; sizing, general notes, expansion loops, continuation cross references to large plans, equipment connections, loading criteria (GPM.).

.2 HVAC ductwork and distribution plan for each type of system on the project showing; sizing, materials, fire and/or smoke dampers, specific equipment connections, valves and their associated sizes with cfm, dampers, enlarged plan referencing systems.

5.6.4 Enlarged plans at 1/4” = 1’-0” for all head end equipment shall include a layout of all equipment rooms to ensure that the proposed equipment will fit in the allotted space with at least 2 sections per room and congested areas with associated sections. The following specific areas will be required:

.1 Congested areas

.2 Two sections at all air handlers

.3 Exhaust/duct enclosures showing transitions, duct supports, access doors, plenums, dampers, etc.

.4 Boiler room

.5 Typical Building cross sections

.6 Roof equipment layout

5.6.5 HVAC and piping details shall include but not limited to (1½" = 1'0"):

.1 Fire/smoke damper details

.2 Damper (Fire) and register detail

.3 Duct transition details

.4 Terminal air box and duct arrangements and assemblies

.5 Duct connection details

.6 Typical diffuser connection details

.7 Pipe support details

.8 Pipe penetration through rated walls and floors with UL number or appropriate testing labs.

.9 Roof mounting details for equipment, supports, duct penetrations, etc.

.10 Vibration isolation details

.11 Typical and specific seismic bracing and support details

5.6.6 System Diagrams

.1 Heating system

a) Heating system diagrams

b) Heating hot water system controls, including sequence of operation.

c) High temperature water system controls, including sequence of operation

.2 Cooling system

a) Cooling system diagrams

b) Chilled water tertiary pump control including sequence of operation.

.3 Steam piping

a) Steam piping flow diagram

b) Steam generator control diagram, including sequence of operation.

c) Water heater steam diagram including sequence of operation.

d) Drip elbow at safety and relief valves details

.4 HVAC control

a) HVAC control diagrams

b) System architecture and sequence of operation.

c) All air handling units and sequence of operation.

.5 Office area ventilation diagram and sequence of operation.

.6 Fan coil control diagram and control panel wiring diagram.

.7 Combination smoke/fire and smoke damper wiring diagram.

.8 Variable air volume box (cooling only) - control diagram and sequence of operation.

.9 Variable air volume box with reheat - control diagram and sequence of operation.

.10 Constant volume (cooling only) control diagram and sequence of operation.

.11 Constant volume (with reheat) control diagram and sequence of operation.

5.6.7 All HVAC drawings shall indicate the complete heating, ventilating, and air-conditioning systems in detail and shall include methods for fastening equipment to the structure to resist seismic forces.

5.7 ELECTRICAL DRAWINGS

5.7.1 Electrical drawings shall indicate all components of the electrical system in place and connected to the sources of services. A sufficient level of detail shall be provided to illustrate connections, routings, and other items in complex areas. All wiring shall be final-sized. Detailed methods for fastening equipment to the structure to resist seismic forces shall be indicated.

5.7.2 The power, signal, and communications layouts shall be shown on one set of drawings, and the lighting layouts shall be shown on a different set of drawings. Use standard symbol conventions.

5.7.3 General sheets: showing abbreviations, symbols (signal, security, single line, lighting, raceway types, power), and general notes.

.1 All Electrical equipment schedules including but not limited to:

a) Outlet schedule.

b) Lighting fixture schedule.

c) Lighting control schedule.

5.7.4 Floor Plans (Scale: Not less than 1/8 inch = 1 foot 0 inches). The Design Drawings shall include:

.1 Underground conduit layout at 1/8” = 1’-0” showing all underground connections and conduit sizes ***and types***.

.2 All floor plans at 1/8" = 1'-0" showing but not limited to: symbols, equipment, connections, motors, circuiting, 'J' boxes, equipment call outs, outlet types, enlarged plan references, typical and specific detail references, isoduct (outlets, devices, references), panel boards, and other appropriate information.

.3 Locations of light fixtures, receptacles, switches, power outlets, ***data outlets,*** and all circuits.

.4 Provide specific floor plan requirements to meet campus needs.

.5 Task lighting all floor plans at 1/8" = 1'-0" showing but not limited to:

.6 Telecommunication devices on floor plans at 1/8" = 1'-0" and shall include, but not limited to: all devices, dimensions of devices, cable tray layouts.

.7 Roof plan at 1/8" = 1'-0" showing but not limited to: all equipment and the connections, motor control center, lights, conduit runs, convenience outlets, general and specific notations.

5.7.5 Large-Scale Drawings (Scale: Not less than 1/4 inch = 1 foot 0 inches) showing but not limited to: all electrical rooms, all telecommunication closets, generator/pump areas. The Drawings shall include a layout of all equipment rooms to ensure that the proposed equipment will fit in the allotted space.

5.7.6 Electrical details at 1 1/2" = 1'-0" including but not limited to: telecommunications conduit details, service grounding details.

5.7.7 System Diagrams

.1 Provide a single-line electrical distribution diagram showing primary service to substations and secondary service to distribution switchboards, motor control centers, and panel boards for power and lighting. This diagram shall include and show the permanent as well as temporary points of connection to external utilities such as high-voltage, telephone, and all signal systems.

.2 Indicate each load center unit substation, motor control center, distribution switchboard, telephone equipment room, and closet. Indicate the types and locations of lighting fixtures in typical offices, corridors, and similar spaces, and use a schedule for detail.

.3 Feeder and conduit sizes and a schedule of feeder breakers or switches.

.4 Electrical single line diagram showing all elements from the existing high voltage connection through individual panel boards.

.5 Fire alarm diagrams; showing all elements from the main fire alarm panel to devices.

.6 Telecommunication system diagram; showing all conduits, devices, and provisions for a complete communications system including telephone system.

5.7.8 Panel board schedules (maximum of 6 per sheet) as large as possible showing but not limited to: general panel information (mounting type, device type, device family, bus amps, enclosure type, voltage LL, voltage LG, fault duty) specific information (circ #, description location

including room number, load type, unit load, load quantity, demand load, total VA load, phase, device amps, device phase, special remarks.)

5.8 FIRE SUPPRESSION DRAWINGS.

5.8.1 Fire protection sprinkler drawings shall indicate all components of the system in place and connect to the sources of services. Include seismic restraint details and connections to structural support system. Include as a minimum:

.1 General sheets showing abbreviations, symbols, general notations and specific notations regarding calculations, head types, stand pipes, and general details.

.2 Suppression floor plans at 1/8" = 1'-0" showing; all piping runs, sprinkler head locations, reflected ceiling and roof plans, and types, ***interior walls,*** stand pipe locations and valve locations.

.3 Riser diagram of the suppression system from the water connection outside the building, and the distribution throughout the building including fire pump (if required), floors identified and all system and fire alarm interface accessories and valves.

.4 Equipment schedules and material specifications.

.5 Water flow test results.

.6 Sprinklers zoning and water flow switches.

.7 Building water supply and backflow protection location.

.8 Miscellaneous details (1 1/2" = 1'-0").

.9 Calculations.

5.9 FIRE ALARM DRAWINGS.

5.9.1 General sheets: showing abbreviations, symbols, and general notes

.1 Fire alarm equipment schedules, including but not limited to: Device schedule.

5.9.2 Fire alarm floor plans at 1/8" = 1'-0" showing; Fire alarm zones, interface locations with other systems, wall mounted devices, ceiling mounted devices, reflected ceiling plans, Fire alarm panel location and remote annunciator panel location, monitoring locations, smoke detection systems, Duct smoke detector locations, Smoke damper locations, elevator control coordination, other miscellaneous items and control interfaces.

5.9.3 The following diagrams:

.1 Building fire alarm riser diagram.

.2 Typical fire alarm device wiring.

5.9.4 The following details:

.1 Sequence of operation of the fire alarm systems.

.2 Voltage drop calculations.

.3 Miscellaneous details of the fire alarm system.

END OF SCOPE OF WORK

AGREEMENT

THIS AGREEMENT is made as of the _____ day of _____, 20__, between THE REGENTS OF THE UNIVERSITY OF CALIFORNIA (the "University"),

whose facility is:	University of California, Riverside
whose address for notices is:	University of California, Riverside Planning, Design & Construction ***900 University Avenue*** ***Riverside, CA 92521*** ~~1223 University Avenue, Suite 240~~ ~~Riverside, CA 92507~~
and Design Builder:	Firm Name
whose address for notices is: (Include Name, Title, Phone No.)	Name Street Address City, State & Zip Phone
for the Project:	Student Success Center Project No. 950512 University of California, Riverside Riverside County Riverside, CA 92507
University's Responsible Administrator and Representative is:	Mihai Gavan Project Manager
whose address for notices is:	University of California, Riverside Planning, Design & Construction ***900 University Avenue*** ***Riverside, CA 92521*** ~~1223 University Avenue, Suite 240~~ ~~Riverside, CA 92507~~

University and Design Builder hereby agree as follows:

ARTICLE 1 WORK

Design Builder shall provide all work required by the Contract Documents (the "Work"). Design Builder agrees to do additional Work arising from changes ordered by the University pursuant to Article 7 of the General Conditions. The Work will be performed in Phases identified as follows:

PHASE 1	DESIGN DEVELOPMENT DOCUMENTS
PHASE 2	CONSTRUCTION DOCUMENTS
PHASE 3	CONSTRUCTION

ARTICLE 2 OPTIONS

The University may require the performance of the Work under Phases 2 and 3 by directing the Design Builder in writing to proceed with performance under both of the Phases. The Option for Phases 2 and 3 may be exercised at any time after the acceptance by the University of the Design Development Documents under Phase 1.

The University's "OPTIONS" rights under this Article 2 are independent of the "Termination by University for Convenience" rights as set forth in Article 13, section 13.4 of the General Conditions. As such, if the University opts to not proceed with Phases 2 and 3 after the completion of Phase 1, Design Builder's right of recovery is limited to the Contract Sum for Phase 1.

The University retains the right to terminate this Contract for convenience at any time in accordance with Article 13 of the General Conditions.

ARTICLE 3 CONTRACT DOCUMENTS

"Contract Documents" means the Proposal Schedule, Request for Proposal, Technical Proposal, Lump Sum Base Price Proposal, Price Proposal Form, Proposal Evaluation Process, Project Directory, Preliminary Schedule, Bid Bond, Lump Sum Base Price Proposal Spreadsheet, Scope of Work, Design Professional Rate Schedule for Additional Services, Design Builder's Proposal, Notice of Selection as Apparent Best Value Proposal, this Agreement, General Conditions, Supplementary Conditions, Basis of Design Compliance Matrix, Standard Contract Forms (Exhibits), General Requirements (Division 01), Specifications (Divisions 02 – 33), University Furnished Information, Addenda, Notice to Proceed, Change Orders, Notice of Completion, and all other documents identified in this Agreement of which together form the contract between University and Design Builder for the Work (the "Contract"). *The Standard Contract Forms (Exhibits), Project Program & Design Criteria (January 11, 2019), and University Furnished Information are provided in electronic (DVD) format and are attached hereto.*

The Contract constitutes the complete agreement between University and Design Builder and supersedes any previous agreements or understandings.

ARTICLE 4 CONTRACT SUM

Subject to the provisions of the Contract Documents University shall pay to Design Builder, for the performance of the Work, the following amounts:

PHASE 1	**$1,100,000**
PHASES 2 AND 3	**$**
Total Contract Sum for PHASES 1, 2 AND 3	**$**

The Contract Sum includes the following Allowances:

Allowance No. 1: Partnering, **$20,000** for project partnering expenses, including meals, rentals, etc.
Allowance No. 2: Signage (Exterior, Interior & Other Interior Signage), **$100,000** for Building Signage.

Allowance No. 3: Design Refinements, ~~**$200,000**~~ ***$300,000*** for University directed design refinements/clarifications.

Allowance No. 4: Audio-Visual Equipment- Allow $1,200,000 for Audio-Visual Equipment

The Contract Sum includes the following Alternates, if any accepted by the University:

Unit prices, if any, are as follows:

The Contract Sum will be increased by an amount equal to the Unit Price multiplied by the actual number of units of each Unit Price item incorporated in the Work.

ARTICLE 5 CONTRACT TIME

By signing this agreement, Design Builder represents to University that i) the Phase 1 Time, Phase 2 Time, and Phase 3 Time are reasonable for completion of the Work of the respective Phase; ii) the Contract Time is reasonable for completion of the Work of all the Phases; and iii) Design Builder will complete the Work within the Contract Time.

The Contract Time is as follows:

PHASE	CONTRACT TIME
1	Design Builder shall commence the Work for Phase 1 on the date specified in the Notice to Proceed for Phase 1 and fully complete the work within **66** days, the "Phase 1 Time." The Contract Time at contract award is the Phase 1 Time.
2 and 3	The Design Builder shall commence the Work for Phases 2 and 3 on the date specified in the Notice to Proceed and fully complete the Work within **637** calendar days. If the University exercises its option for Phases 2 and 3, the days specified for their performance, plus any days between the completion of Phase 1 and the exercise of the option, will be added to the Contract Time to establish a revised Contract Time for completion of Phases 1, 2 and 3.
TOTAL CONTRACT TIME: 703 Calendar Days *Total Contract Time includes **35** days for rain delays, refer to the Supplementary Conditions*	

ARTICLE 6 LIQUIDATED DAMAGES

If University has exercised its option for Phases 2 and 3 and Design Builder fails to complete the Work for Phases 2 and 3 within the Contract Time, Design Builder shall pay to University, as liquidated damages and not as a penalty, the applicable amount(s) indicated below as "Liquidated damage daily rate for Phase 3" for each day after the expiration of the Contract Time that the Work remains incomplete. After Substantial Completion, the liquidated damages daily rate for Phase 3 shall be reduced to the sum indicated below. University and Design Builder agree that if the Work is not completed within the Contract Time, University's damages would be extremely difficult or impracticable to determine and that said amounts indicated below are reasonable estimates of and reasonable sums for such damages. University may deduct any liquidated damages due from Design Builder from any amounts otherwise due to Design Builder under the Contract Documents. This provision shall not limit any right or remedy of University in the event of any other default of Design Builder other than failing to complete the Work within the Contract Time. This Article 6 will only apply if the University exercises its Option for Phases 2 and 3.

Liquidated damages daily rate for Phase 3: **$2,000.00** per calendar day, on or before substantial completion.

Liquidated damages daily rate for Phase 3: **$0** per calendar day, after substantial completion.

ARTICLE 7 COMPENSABLE DELAY

If Design Builder is entitled to an increase in the Contract Sum as a result of a Compensable Delay, determined pursuant to Articles 7 and 8 of the General Conditions, the Contract Sum will be increased by the sum indicated below per day for each day for which such compensation is payable. This Article 7 will apply

only if the University exercises its Option for the applicable Phase and only to the extent that Design Builder fulfills requisites proving entitlement to Compensable Delay.

Compensable delay daily rate for Phase 3, Construction: $ _____

ARTICLE 8 ASSIGNMENT

If this Agreement is terminated prior to the exercise of the University's Option for Phases 2 and 3, the Design Builder shall execute an assignment to the University of all contracts with Design Professionals for work to be performed on Phase 1.

ARTICLE 9 DUE AUTHORIZATION

The person or persons signing this Agreement on behalf of Design Builder hereby represent and warrant to University that this Agreement is duly authorized, signed, and delivered by Design Builder.

ARTICLE 10 DESIGN BUILDER'S COVENANTS AND REPRESENTATIONS

Without superseding, limiting, or restricting any other representation or warranty set forth elsewhere in the Contract Documents, or implied by operation of law, the Design Builder makes the following covenants and representations to University:

10.1 Design Builder and all of its Design Professionals and subcontractors are properly certificated, licensed and qualified to perform the Work required by the Contract Documents.

10.2 Design Builder accepts the relationship of trust and confidence with the University established by the Contract Documents. Design Builder will cooperate with University.

10.3 Design Builder and its Design Professionals have carefully examined the site of the Project and the adjacent areas, have suitably investigated the nature and location of the Construction Work and have satisfied themselves as to the general and local conditions which will be applicable, including but not limited to: (1) conditions related to site access and to the transportation, disposal, handling and storage of materials; (2) the availability of labor, water, power and roads; (3) normal weather conditions; (4) observable physical conditions at the site and existing site conditions including: size, utility capacities and connection options of external utilities; (5) the surface conditions of the ground and (6) the character and availability of the equipment and facilities which will be needed prior to and during the performance of Construction Work.

10.4 Design Builder and its Design Professionals have suitably reviewed the site survey, record documents, seismic data, preliminary geotechnical and other test reports, environmental documents and any other documentation furnished by University in the University Furnished Information.

10.5 Design Builder and its Design Professionals have carefully reviewed the following exhibits to the Design Build Contract: (1) Scope of Work (including Applicable Codes, Rules and Regulations, Energy Requirements, etc.) and (2) the Specifications. Design Builder acknowledges that these Exhibits establish the scope, level of quality, design intent and the procedures for the development of the design to a state of 100% completion.

Design Builder agrees that (1) the Exhibits depict and describe the Project (2) it will manage, coordinate and fully complete the design; (3) Design Builder will cause its Design Professionals to describe and depict the final design for the Project, as approved by the University, in Construction Documents which will include all information required by the building trades to complete the construction (other than such details customarily developed by others during construction) and (4) it will manage and timely construct the Project in consideration for the University's payment of the Contract Sum.

10.6 Design Builder and its Design Professionals have reviewed the Preliminary Schedule in the Proposal Documents and agree that the design and construction tasks and milestones are reasonable and feasible, except as modified by Design Builder's Proposed Contract Schedule, approved by University. Design Builder also agrees that time is of the essence for the performance of the Work.

10.7 Design Builder agrees that all Construction Documents will be complete, coordinated, and accurate.

10.8 Design Builder agrees that all materials, equipment and furnishings incorporated into or used in the Construction Work will be of good quality, new (unless otherwise required or permitted by the Contract Documents) and free of liens, claims and security interests of third parties. If required by the University, Design Builder will furnish satisfactory evidence as to the kind and quality of the materials, equipment and furnishings.

10.9 Design Builder agrees that the Work will be of good quality, free of defects and will conform to the requirements of the Contract Documents. Work not conforming to the requirements of the Contract Documents, including substitutions in design or construction not specifically approved or authorized by the University in advance, may be considered defective.

10.10 Design Builder agrees to correct any error(s), omission(s), or deficiencies in the Contract Documents or Construction Documents at no additional cost to University; however, this provision in no way limits the liability of Design Builder.

THIS AGREEMENT is entered into by University and Design Builder as of the date set forth above.

DESIGN BUILDER

_____
(Name of Company)

Design Builder's California Contractor's License(s):

a _____
(Type of Organization)

_____
(Name of Licensee)

By: _____
(Signature)

_____
(Classification and License Number)

_____
(Print Name)

_____
(Expiration Date)

_____
(Title)

_____
(Design Builder's Employer Identification Number)

_____
(Design Builder's Identification No.)

UNIVERSITY

Recommended:
By University's Representative:

_____
(Signature & Date)

Mihai Gavan
Project Manager
Planning, Design & Construction
(Print Name & Title)

Funds Sufficient:
By Financial Administrative Officer:

_____
(Signature & Date)

Susan McFadden
Financial Analyst
Planning, Design & Construction
(Print Name & Title)

UNIVERSITY:
By The Regents of the University of California:

_____
(Signature & Date)

Gerry Bomotti
Vice Chancellor
Planning & Budget Office
(Print Name & Title)

Attach notary acknowledgment for all signatures of Design Builder. If signed by other than the sole proprietor, a general partner, or corporate officer attach original notarized Power of Attorney or Corporate Resolution.

UCR | Planning, Design & Construction

STUDENT SUCCESS CENTER

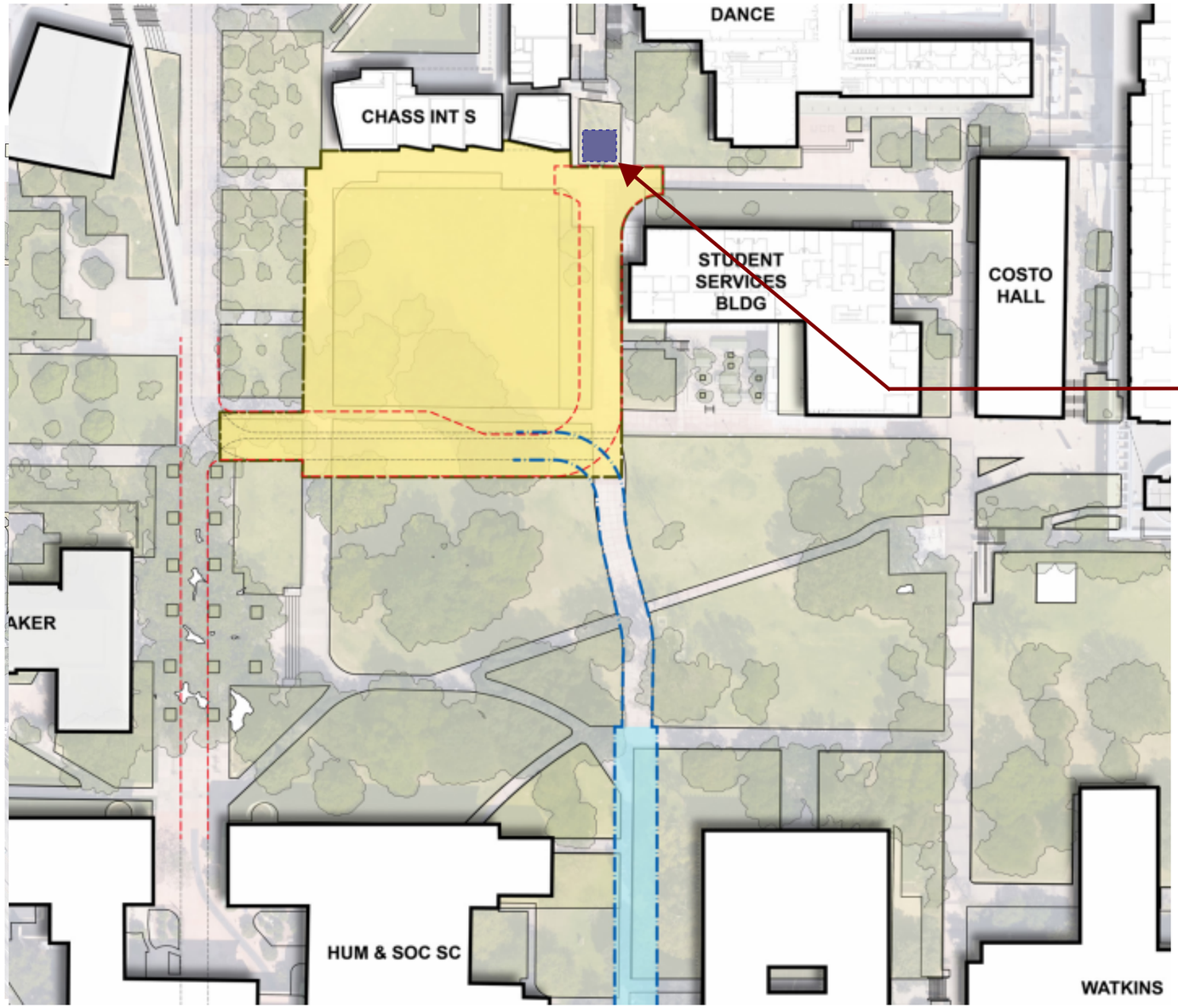
PROJECT NUMBER: 950512

DATE: 4/29/2019

SUMMARY MATRIX OF CHANGES IN ADDENDUM #17 TO BASIS OF DESIGN, SCOPE AND SPECIFICATIONS	DESCRIPTION
Lecture Halls- Reduction in height of clearances to screen to meet ADA Minimum	The University will allow a design that varies the floor to screen height to meet ADA minimum requirements for floor to screen clearances. The Design-Build Team will need to demonstrate that they are maintaining sightline performance criteria in the BOD.
Heights of Operable partitions- Multipurpose Room - Reduce to 10’	The University will allow a design that reduces the height of the operable partitions to 10 feet from that required in the BOD. All other performance and dimensional requirements of the room are to remain the same.
Window Washing Equipment with tie-backs	The University will allow a design that reduces the window washing equipment requirements on the roof to code required minimum requirements.
Electrical Outlets Lecture Halls - Reduce outlet qty- 50% to 20%	The University will allow a reduction in the number of electrical outlets at the fixed seating in the lecture halls from 50% of the seats to 20% of the seats.
ADDITIONAL ALTERNATES	
LEED Rating - LEED Gold to LEED Silver	The LEED rating goal for the project is LEED Silver. An Alternate will be added to provide LEED Gold.
Replace motorized shades with Manual Roller shades - Classrooms, and Group Meeting Rooms	Manual Roller Shades will be allowed in the Classrooms and Group Meeting Rooms. An Alternate will be added to provide motorized shades in those spaces.
ADDITIONAL ALLOWANCE	
Audio Visual Equipment - Allowance of 1.2M	An Allowance of $1,200,000 has been added to the MAC to be used for the purchase of competitively priced Audio-Visual Equipment, control devices, cabling, controls and mounts. The Design-Builder will work with the University in selecting A/V equipment that meets the design and performance criteria.

EXTERIOR TRANSFORMER LOCATION EXHIBIT

The University has identified the following preferred location for an exterior transformer.



Addendum No. 3, February 5,2019
Addendum No. 17, April 29, 2019

INTRODUCTION

OVERVIEW

The University of California Riverside (UCR) proposes to develop a Student Success Center (Project), a new facility of 39,820 assignable square feet (ASF). The purpose of the Project is to address UCR's growing student population and its shortfall in classroom capacity. UCR envisions the Project to increase utilization of instructional and student space, and uphold UCR's academic mission through its explicit focus on "student success". The Project consists of three primary program elements:

- General assignment classrooms designed for modern pedagogies and technology;
- Multipurpose student life spaces for use by student organizations, and areas for scholarly activity such as tutoring, mentoring, and study;
- Dining Services space (shelled) for the development and dining services venue on campus.

The Student Success Center's architectural character shall be an expression of the academic vision and programs within the building, while also responding to the external site and climate conditions in a manner that integrates the building into the surrounding campus landscape.

The Project site occupies the last prime spot of the campus' Academic Core, located at the intersection of two prominent pedestrian malls; The Arts Mall and the Carillon Mall. It is in close proximity to other classrooms, the Highlander Union Building, and the Student Services Building. The site offers an optimum opportunity for the Student Success Center to be a campus gateway, utilize the surrounding outdoor space, and complete an existing corridor of student centered facilities.

UCR has a long-term commitment of supporting the environment and helping to cultivate a sustainable future. Sustainability goals for this Project are in alignment with both UCR's Sustainability Policy and the UC Sustainable Practices; The Project shall be LEED ~~Gold~~. Silver

SUSTAINABLE

Create an environmentally friendly and sustainable facility.

The Student Success Center shall incorporate sustainable solutions as a reflection of the University's Commitment to Carbon Neutrality and positive stewardship of the environment through reduction of non-renewable resource use and provisions for human health and comfort. Sustainable strategies employed shall have an attractive aesthetic. The building shall be LEED ~~Gold~~. *Silver*

IDENTITY

Enhance campus edges and serve as a gateway to the campus.

A design that reflects the vision and context of the University and becomes a gateway to the campus and Academic Core. The building shall emphasize strong connections and ease of access within campus and with the surrounding community.

WELLNESS-ORIENTED

Create a facility that supports the health and wellness for all students, faculty, visitors, and staff.

The building shall incorporate design solutions that create environments that promote the well-being and positive mental-health of the students, staff, and faculty; such as natural daylight, spaces for socializing, and connections to the outdoor environment. Physical wellness shall also consider comfortable circulation throughout the building including promoting the use of stairs.

1.06 GROUP MEETING ROOMS

CHARACTERISTICS

Floor Finish:	Carpet tile
Wall Finish:	Painted gypsum board, glass
Wall Protection:	None
Ceiling Treatment:	Acoustic ceiling tile
Ceiling Height:	9'-0" minimum
Natural Light:	Required
Window Treatment:	~~Motorized~~ blackout shades at (1) room with video conferencing Sunshades at all rooms
Door:	Sidelight or vision panel in door
Security	Card Access
Casework:	None
Accessories:	Full-height writable surface
Other:	None

TECHNOLOGY

Audio/Visual:	Integrated AV presentation system including: Single 75"-90" large flat panel display, table AV, power and data connections, wireless presentation capability, table microphones for web & audio conferencing (at (1) room), ceiling speakers for presentation and conferencing (at (1) room), video cameras for web conferencing (at one room), wall control panel (at (1) room), AV equipment rack, and room scheduling device.
Network & Communications:	Wireless access points, wired data ports at AV station floor box, AV rack, wall phone outlet. (connections shown in diagram are minimum required)
Additional Information:	Refer to technology narrative for expanded program information. System equipment to follow UCR AV technology standards. Integrated card access and room scheduling system.

MECHANICAL, ELECTRICAL & PLUMBING

Ventilation:	Heating/Cooling
Electrical	Floor/wall power (connections show in diagram are minimum required)
Artificial Lighting:	LED Lighting
Plumbing:	None

EQUIPMENT & FURNISHINGS

See Room Diagram
Mobile tables
Mobile chairs

REMARKS

Accommodate accessible wheelchair stations as required.
The difference between writable and non-writable surfaces shall be clearly distinguishable to students.

2.01 LARGE CLASSROOM

CHARACTERISTICS

Floor Finish:	Carpet tile
Wall Finish:	Painted gypsum board, glass
Wall Protection:	Chair rail at back and side walls
Ceiling Treatment:	Acoustic ceiling tile
Ceiling Height:	10'-6" minimum and as required to meet project screen size and placement requirements.
Natural Light:	Required
Window Treatment:	~~Motorized~~ sunshades and blackout shades at windows
Door:	Sidelight or vision panel in door
Security	Card Access
Casework:	Full-height cabinet with pin-code locks
Accessories:	Writable surfaces / whiteboard
Other:	None

TECHNOLOGY

Audio/Visual:	Integrated AV presentation system including: front instructor station, one dual content projection display (2 screens total) and ability to receive independent signal drivers, motorized projection screens, high-lumen, high resolution laser projectors, wireless presentation capability, digital annotation capability, wireless microphones (lapel & handheld), document camera, wall speakers for presentation audio support , ceiling speakers for voice amplification, infrastructure for future video cameras and recording capability, AV equipment rack at instructor station. Room scheduling device shall support scheduling software and load room data from the campus' webservices.
Network & Communications:	Wireless access points within room to accommodate capacity. Wired data Ports at Instructor station, AV rack, projectors Wall phone outlet (connections shown in diagram are minimum required)
Additional Information:	Refer to technology narrative for expanded program information. Projection screens to include solid black (light prevention) backing and shall be sized for the room viewing distance but no smaller than 85" tall. Screens to be 16:10 aspect with material to accommodate wide viewing and ambient light rejection from overhead lighting. System equipment to follow UCR AV technology standards.

MECHANICAL, ELECTRICAL & PLUMBING

Ventilation:	Heating/Cooling
Electrical	Minimum (12) flush-mounted floor power boxes; provide portable power distribution stands.
Artificial Lighting:	LED Lighting, Dimmable with front/back switching, integrated with AV equipment.
Plumbing:	None

EQUIPMENT & FURNISHINGS

See Room Diagram
Mobile un-upholstered chairs, stacking
Nesting tables with locking casters
Mobile demonstration table with locking casters, Mobile lectern

REMARKS

Accommodate accessible wheelchair stations as required.

2.02 SMALL LECTURE HALL

CHARACTERISTICS

Floor Finish:	Carpet tile
Wall Finish:	Painted gypsum board, acoustic paneling as required
Wall Protection:	None
Ceiling Treatment:	Premium acoustic ceiling tile, soffits
Ceiling Height:	See section diagram
Natural Light:	Required
Window Treatment:	Motorized blackout shades and sun shades
Door:	Double doors, minimum 6'-0"
Security	Card Access
Casework:	18" deep fixed table with modesty panel 30" deep fixed table (no modesty panel)
Accessories:	Writable surface / whiteboard
Other:	None

TECHNOLOGY

Audio/Visual:	Integrated AV presentation system including: Front instructor station, three dual-projection displays for proper viewing angles (6 screens total) and ability to receive independent signal drivers, motorized projection screens, high-lumen, high resolution laser projectors, wireless presentation capability, digital annotation capability, wireless microphones (lapel & handheld), document camera, wall speakers for presentation audio support, ceiling speakers for voice amplification, infrastructure for future video cameras and recording capability, front row presenter confidence monitors (2), AV equipment rack at lecture prep room, and room scheduling device.
Network & Communications:	Wireless access points within room to accommodate capacity. Wired data Ports at Instructor station floor box, AV rack, projectors Wall phone outlet (connections shown in diagram are minimum required)
Additional Information:	Refer to technology narrative for expanded program information. Projection screens to include solid black (light prevention) backing and shall be sized for the room viewing distance, but no smaller than 85" tall at primary screen. Screens to be 16:10 aspect with material to accommodate wide viewing and ambient light rejection from overhead lighting. Integrated card access and room scheduling system. System equipment to follow UCR AV technology standards.

MECHANICAL, ELECTRICAL & PLUMBING

Ventilation:	Heating/Cooling
Electrical	Power outlets at fixed tables, one outlet for every ~~two~~ **five** seats; minimum (1) flush-mounted floor box.
Artificial Lighting:	Dimmable LED lighting zoned for "front" and "seating" areas, integrated with AV equipment, lighting control system.
Plumbing:	None

EQUIPMENT & FURNISHINGS

See Room Diagram
Instructor's station (per UCR Standards)
Mobile instructor's demonstration table, Mobile chairs
Mobile chairs, mobile tables with locking casters (for material distribution/collection)

REMARKS

Accommodate accessible wheelchair stations as required.

2.03 MEDIUM LECTURE HALL

CHARACTERISTICS

Floor Finish:	Carpet tile
Wall Finish:	Painted gypsum board, acoustic paneling as required
Wall Protection:	None
Ceiling Treatment:	Premium acoustic ceiling tile, soffits
Ceiling Height:	See section diagram
Natural Light:	Required
Window Treatment:	Motorized blackout shades and sun shades
Door:	Double doors, minimum 6'-0"
Security	Card Access
Casework:	18" deep fixed table with modesty panel 30" deep fixed table (no modesty panel)
Accessories:	Writable surface / Whiteboard
Other:	None

TECHNOLOGY

Audio/Visual:	Integrated AV presentation system including: Front instructor station, three dual-projection displays for proper viewing angles (6 screens total) and ability to receive independent signal drivers, motorized projection screens, high-lumen, high resolution laser projectors, wireless presentation capability, digital annotation capability, wireless microphones (lapel & handheld), document camera, wall speakers for presentation audio support, ceiling speakers for voice amplification, infrastructure for future video cameras and recording capability, front row presenter confidence monitors (2), AV equipment rack at lecture prep room, and room scheduling device.
Network & Communications:	Wireless access points within room to accommodate capacity. Wired data Ports at Instructor station floor box, AV rack, projectors Wall phone outlet (connections shown in diagram are minimum required)
Additional Information:	Refer to technology narrative for expanded program information. Projection screens to include solid black (light prevention) backing and shall be sized for the room viewing distance but no smaller than 85" tall. Screens to be 16:10 aspect with material to accommodate wide viewing and ambient light rejection from overhead lighting. Integrated card access and room scheduling system. System equipment to follow UCR AV technology standards.

MECHANICAL, ELECTRICAL & PLUMBING

Ventilation:	Heating/Cooling
Electrical	Power outlets at fixed tables, one outlet for every ~~two~~ five seats; minimum (1) flush-mounted floor box.
Artificial Lighting:	Dimmable LED lighting zoned for "front" and "seating" areas, integrated with AV equipment, lighting control system.
Plumbing:	None

EQUIPMENT & FURNISHINGS

See Room Diagram
Instructor's station (per UCR Standards)
Mobile instructor's demonstration table
Mobile chairs, mobile tables with locking casters (for material distribution/collection)

REMARKS

Accommodate accessible wheelchair stations as required.

2.04 LARGE LECTURE HALL

DESIGN INTENT & USE

An 'in-the-round' lecture space to accommodate 400 seats for general instruction. The room is projected to be used for general instruction 95% of the time. While sized to accommodate the University's high-capacity lecture courses, class sizes ranging from 250 to 400 students will likely occur within this space. The circular, 'in-the-round,' configuration shall support active learning pedagogies, including faculty-student interaction, small group activities, and large group discussions. Room layout and configuration shall allow the instructor(s) to move around the room to facilitate classroom activities. On occasion, the room is expected be used for special guest speakers and events, including use by Student Affairs to supplement the Multipurpose rooms and activities located in the Student Success Center. For these events, the room shall provide the flexibility and systems, such as power, data, A/V and lighting, to support higher-end recording and presentation production.

KEY COMPONENTS

The 400-seat layout shall be a tiered environment with two rows of seat per tier. Each tier shall have a front row of single pedestal swivel seats with a tablet arm, and a back row of fixed seats with a tablet arm. This configuration allows students in the front row to turn around and participate in small group discussion or activities with students in the second row. Seating layout and spacing shall accommodate such activities. The tier height and seating layout shall provide a clear line-of-sight from each seat to the central speaker area as well as to students throughout the space. A power outlet shall be provided at a minimum of **20%** ~~50%~~ of the seats. Space for mobile tables at entries/exits shall be provided; tables shall be used to collect and distribute materials as needed for class activities. A minimum of 4 dual content projection displays (8 screens total) shall be provided for proper viewing angles. Placement of large screens must consider the various view angles that come with the lecture in the round layout and ensure that every seat can view dual content. The bottom of any screens shall be no lower than 8'-0" to the top tier. If projection screens are used, they shall be motorized and recessed into a soffit or ceiling.

ACCESS & CIRCULATION

Primary access to the space shall be through a light and sound lock. Each light and sound lock shall have, at a minimum, double doors to provide access and egress to and from this room, as well as to facilitate easier movement of people. High-volume of student circulation during class turn-over shall be considered when locating and sizing doors, aisles, and passageways. Additional room entries/exits at lecture halls above and beyond code required minimum are preferred to provide improved functionality and to facilitate class turn-over student circulation. Direct access to the Large Lecture Hall Prep Room shall be provided; access shall be at the same finish floor level as the speaker area.

CHARACTER

This lecture hall will host class instruction and special guest speakers. The lecture hall shall have an aesthetic character that is appropriate for special events. The space shall also reflect and showcase UC Riverside's commitment to progressive teaching and learning. Lecture hall level of interior finishes and aesthetics shall be a showcase piece that exemplifies a professional environment.

OTHER CONSIDERATIONS

Daylighting and views shall be provided at this room. Window and views may be to interior and exterior spaces, utilizing borrowed light to provide daylight, if needed. As a "showcase" room, and for campus tours, the space design shall integrate transparency, allowing visitors and students to see the space without unduly disrupting class activities. Window treatments shall provide the ability to shade and darken the room. Provide a variety of lighting options to accommodate and enhance identified uses, including the ability to zone lighting by each seating area ("slice" of the circle). Acoustics or optimal sound perception is an important factor; provide proper wall partition and ceiling design to meet acoustic criteria.

Space design shall consider and accommodate maintenance access to AV equipment and screens, including by lift mechanisms or other machinery, where necessary.

SPACE ADJACENCIES

The Large Lecture Hall shall be located adjacent to the Large Lecture Hall Prep room and prefunction space.

2.04 LARGE LECTURE HALL

CHARACTERISTICS

Floor Finish:	Resilient flooring or finished concrete under all fixed seats, carpet at aisles, center and walkways
Wall Finish:	Painted gypsum board, acoustic paneling as required
Wall Protection:	None
Ceiling Treatment:	Decorative systems, soffit
Ceiling Height:	See section diagram
Natural Light:	Required
Window Treatment:	Motorized sun shades and blackout shades at all interior and exterior windows.
Door:	Double doors, minimum 6'-0"
Security	Card Access
Casework:	None
Accessories:	None
Other:	Fixed swivel seats with 360° rotation, oversized tablet arm, and upholstered seat with rubber back; fixed seats with oversized tablet arm and upholstered seat with rubber back.

TECHNOLOGY

Audio/Visual:	Integrated AV presentation system including: central portable lectern and instructor station, four dual-projection displays for proper viewing angles (8 screens total) and ability to receive independent signal drivers, motorized projection screens, high-lumen, high resolution laser projectors, wireless presentation capability, digital annotation capability, wireless microphones (lapel & handheld), document camera (overhead), presentation audio support and voice amplification, video cameras and recording/streaming capability, auxiliary wall inputs/outputs for technician, AV equipment rack at lecture prep room, room scheduling device.
Network & Communications:	Wireless access points within room to accommodate capacity. Two wired data ports/floor boxes for instructor station, projectors, mobile recording equipment stations, wall phone outlet. (connections shown in diagram are minimum)
Additional Information:	Refer to technology narrative for expanded program information. System equipment to follow UCR AV technology standards. Projection screens to include solid black (light prevention) backing and shall be sized for the room viewing distance but no smaller than 85" tall. Screens to be 16:10 aspect with material to accommodate wide viewing and ambient light rejection from overhead lighting. Integrated card access and room scheduling system.

MECHANICAL, ELECTRICAL & PLUMBING

Ventilation:	Heating/Cooling
Electrical	Power outlet at **20%** ~~50%~~ of seats. (2) flush-mounted floor boxes at AV stations, power for mobile recording stations/equipment.
Artificial Lighting:	Dimmable LED Lighting; zoned for center/audience and each "slice" of audience seating, lighting control system.
Plumbing:	None

EQUIPMENT & FURNISHINGS

See Room Diagram
Mobile tables for material distribution at room perimeter
Adjustable-height instructor's podium (disconnectable)

REMARKS

Accommodate accessible wheelchair stations as required.

activity and success, all levels shall be highly transparent and porous, creating visual connectivity at entries and throughout the interior and exterior spaces.

HEIGHT/SCALE/MASSING

The Student Success Center is anticipated to be, but not limited to, a three to four-story building. Although there is no height limit, a buildings which is significantly out of scale with pedestrians shall be avoided. Design features that allow a perception of a well-scaled building shall be sought, such as the manipulation of geometry and proportion, and the play of light and shadow on elements of the façade. The building shall support high density of student activity indoors and outdoors and the massing shall reflect and be responsive to this. Given its location on the Carillon Mall, it is also important to recognize that the site requires a certain formality as well. The Design Build Entity must unify these ideas.

During the RFP phase, the building shall be analyzed three-dimensionally for evaluation of scale and height in relationship to the surrounding context.

BUILDING ORIENTATION

The new building shall consider orientation and design to take advantage of sunlight, wind direction, micro climates, and views. The building shall also provide shade and protection from these elements. The building shall reflect a design that responds to all four elevations with a facade treatment addressing visual connections and wayfinding cues.

ENVIRONMENTAL COMFORT

Comfortable environments must be an important consideration in designing indoor and outdoor spaces. Natural systems such as daylighting and ventilation shall be given high priority in any design solution. Every effort must be made to increase occupant comfort.

NATURAL DAYLIGHTING

Natural daylighting has a positive effect on learning and is credited for contributing to higher test scores, increased daily attendance, and higher teacher satisfaction and retention. Properly designed and implemented daylighting strategies can save energy. Good daylight penetration into the building combined with shading and reflected light options shall facilitate user well-being. All instructional spaces shall provide natural daylighting and views.

FUTURE CONSIDERATIONS

The Project shall incorporate design solutions that are adaptable to changing occupancies, which, over time, may require adjustments in space needs. Consideration shall be given to how spaces may evolve.

SUSTAINABLE DESIGN

Sustainable design is required and the Design-Build Entity shall reference the University of California Sustainable Practices Policy and UCR's Sustainability Policy. This project shall be LEED ~~Gold~~. ***Silver***

As an example of environmentally sensitive living, connections shall be made to the rich regional natural history of the local climate. Strategies shall be developed early in the design process to implement sustainable design features and principles as a general course of good design practices.

UCR's primary goal with sustainable design is to reduce consumption and not contribute carbon emissions to the campus. Priority and preference shall be given to reduction strategies. The Design Build Entity is challenged to pursue sustainable designs and shall evaluate and propose project design solutions exploring the following measures, including, but not limited to:

PROJECT HOLISTIC PERFORMANCE REQUIREMENTS

The following goals are holistic project goals that involve multiple disciplines.

1. LEED
   a. Project shall be LEED ~~Gold Minimum~~. ***Silver Minimum.***
2. Energy / Carbon Neutrality
   a. The building shall exceed Title-24 by 20% in the Energy Compliance Performance Model as calculated with the CBEC-Compliance Software.
      i. Greater emphases for the technical criteria review of the Design Build proposal shall be placed on teams that are able to achieve this requirement without the use of excessive renewable energy sources. It is encouraged the design build teams reduce all loads prior to considering renewables. Ideally, this goal can be met without the use of renewable energy systems such as photovoltaics.
   b. The building shall perform for a year within 10% of the modeled energy performance. Provide necessary metering as required for monitoring.
   c. No natural gas is allowed for the project.
3. Thermal Comfort
   a. All regularly occupied spaces shall meet ASHRAE 55. ASHRAE 55 calculations shall be submitted at the end of Design Development.
4. Acoustics
   a. See Acoustical BOD for acoustical performance requirements of Mechanical, Electrical, and Plumbing systems. In general for HVAC, refer to Chapter 48: "Noise and Vibration Control" of the "ASHRAE Handbook – HVAC Applications," and "A Practical Guide to Noise and Vibration Control for HVAC Systems," published by ASHRAE, for acoustical basis of design.
5. Lighting
   a. Post construction testing of the ambient lighting systems in classrooms, study areas, student working areas, or testing center. The ambient lighting system shall be able to maintain an average light intensity of 20 foot candles or more, measures on the horizontal plane, 30 inches above finished floor. The lights shall be dimmed in the presence of daylighting, but they are able to independently achieve these levels. The lighting intensity at the work surface shall be 30 foot candles or greater. (Reference: International WELL Building Standard)
6. Accessibility and Maintenance
   a. The routing and location of MEP systems shall be made such that equipment is able to be replaced and that all valves, components, equipment, etc. that requires access has the appropriate code clearance and maintenance clearances. Equipment replacement paths shall be identified during the design phase such that demolition of other systems or walls is not required during replacement.
   b. The routing and location of MEP systems in the building, particularly in the ceiling plenum space, shall conform to this hierarchy (from closest to the floor slab to closest to the ceiling):
      i. Mechanical Systems
      ii. Electrical / Dry Utilities
      iii. Wet Utilities

FLOORBOX POKE-THROUGH

In areas that need communications outlets in the floor, the typical floor box and poke-though shall consist of eight Category 6 unshielded communications cables terminated on RJ45 connectors in the floor devices. All jacks utilized in floor boxes shall have dustcaps installed. Conduits to floor boxes shall be 1.25" min.

AUDIOVISUAL COMMUNICATIONS OUTLETS

At instruction or presentation locations, provide seven Category 6 unshielded communications cables terminated on RJ45 connectors in the floor box or wall outlet in temporary positions (disconnects) or extended into the free-standing equipment rack and/or instructor station equipment rack and terminated on a patch panel within for AV equipment distribution and connection. As the UCR campus has a one-port-to-one-device policy for AV equipment, there shall be no less than 8 RJ45 ports for AV equipment within the rack (note that a minimum of two spare ports for growth). Some ports are extended to the top surface of the instructor desk and terminated accordingly for top access. In conference spaces, data cabling shall be extended from the floor to the top table well and terminated for use of phones, etc. on the table surface.

At locations where a projector/ monitor shall be located, provide an additional two Category 6 shielded cables home run to the podium/ local AV equipment rack. Terminate each cable with RJ45 jacks or metallic shielded jacks.

CEILING MOUNTED OUTLET

At the video projection locations, ceiling mounted outlets shall consist of two Category 6 unshielded communications cables terminated on RJ45 connectors at the faceplate mounted in the accessible ceiling tile or mounted on the surface as applicable. Provide an additional two Category 6 shielded cables home run to the podium/ local AV equipment rack. Terminate each cable with yellow RJ45 jacks.

WIRELESS ACCESS POINT

Provide WAP outlets mounted flush with the accessible ceiling. The outlets supporting the wireless access points shall consist of two Category 6~~A~~ unshielded communications cables terminated on RJ45 connectors at the faceplate. Wireless access points shall be located (1) per every 1,100 SF and a minimum of 3 per classroom and shall be designed to accommodate the number of occupants per each space and area density.

OTHER

Connections for other services are to be included as needed by design including accommodations for phone/data in elevator machine room, BMS support in electrical and mechanical spaces, etc. Ports for these are to be accommodated as needed by system component requirements.

INTER-BUILDING BACKBONE CABLE

24-strands of SM (OS2) and a 50-pair Category 3 multi-pair copper cable shall be provided from the campus MDF located in the Data Center in the School of Medicine building to the new Student Success Center BDF Room. OSP cabling to be run through the campus tunnel system. Copper cables shall be terminated on protector blocks and extended to wall mounted 110 blocks. Optical fiber cable shall be terminated using SC connectors in rack-mounted patch panels. OSP Fiber Optic cabling to be home run with Air Blown Fiber (ABF). 12 strands single-mode conventional fiber optic cabling shall be home run from each IDF to BDF within the building.

SECTION 01 2100 - ALLOWANCES

PART 1 - GENERAL

1.1 SUMMARY

A. This Section includes administrative and procedural requirements governing allowances.

1. Certain items are specified in the Contract Documents by allowances. Allowances have been established in lieu of additional requirements and to defer selection of actual materials and equipment to a later date when additional information is available for evaluation. If necessary, additional requirements will be issued by Change Order.
2. Include in the Lump Sum Base proposal, all Allowances stated in the Contract Documents. Items covered by Allowances shall be supplied for such amounts and by such persons or firms as University's Representative may direct.

B. Types of allowances include the following:

1. Lump-sum allowances.

C. Related Sections include the following:

1. Division 01 Section "Contract Modification Procedures" for procedures for submitting and handling Change Orders for allowances.
2. Divisions 02 through 33 Sections for items of Work covered by allowances.

1.2 SELECTION AND PURCHASE

A. At the earliest practical date after award of the Contract, advise University’s Representative of the date when final selection and purchase of each product or system described by an allowance must be completed to avoid delaying the Work.

B. At University's request, obtain proposals for each allowance for use in making final selections. Include recommendations that are relevant to performing the Work.

C. Purchase products and systems selected by University’s Representative from the designated supplier.

1.3 SUBMITTALS

A. Submit proposals for purchase of products or systems included in allowances, in the form specified for Change Orders.

B. Submit invoices or delivery slips to show actual quantities and prices of materials delivered to the site for use in fulfillment of each allowance.

C. Coordinate and process submittals for allowance items in same manner as for other portions of the Work.

1.4 COORDINATION

A. Coordinate allowance items with other portions of the Work. Furnish templates as required to coordinate installation.

1.5 LUMP-SUM ALLOWANCES

A. Allowance shall include the cost to Design Builder of specific products and materials ordered by University under allowance and shall include taxes, freight, and delivery to Project site. Design Builder shall only be compensated for the actual cost incurred.

B. Design Builder's costs for receiving and handling at Project site, labor, installation, overhead and profit, and similar costs related to products and materials ordered by University under allowance shall be included as part of the Lump Sum Base proposal and not part of the allowance.

1.6 UNUSED MATERIALS

A. Return unused materials purchased under an allowance to manufacturer or supplier for credit to University, after installation has been completed and accepted.

1. If requested by University’s Representative, prepare unused material for storage by University when it is not economically practical to return the material for credit. If directed by University’s Representative, deliver unused material to University's storage space. Otherwise, disposal of unused material is Design Builder's responsibility.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine products covered by an allowance promptly on delivery for damage or defects. Return damaged or defective products to manufacturer for replacement.

3.2 PREPARATION

A. Coordinate materials and their installation for each allowance with related materials and installations to ensure that each allowance item is completely integrated and interfaced with related work.

3.3 SCHEDULE OF ALLOWANCES

A. Allowance No. 1: Partnering – Allow $20,000 for project partnering expenses, including meals, rentals, etc. during the project.

B. Allowance No. 2: Signage – Allow $100,000 for building signage.

1. Exterior Signage – Building identification and number. Allowance is for labor and materials.
2. Interior Signage – Code required signage shall be included in the base bid and is not part of this allowance.
3. Other interior signage will be provided and installed by others and is not part of this allowance.

C. Allowance No. 3: Design Refinements – Allow ~~$200,000~~ $300,000 for University directed design refinements/clarifications.

1. Allowance shall be used to refine the architectural design in material type, use, detailing and interface as directed by the University for the purpose of improving architectural character and quality of the building. Design Builder shall provide detailed cost breakdowns for cost per section 01 2100.1.3.A.

D. Allowance No. 4: Audio-Visual Equipment – Allow $1,200,000 for Audio-Visual Equipment.

1. Allowance shall be used for purchase of equipment and controls for Audio-Visual equipment, cabling, mounts, control devices, for the building. The Design-Builder will coordinate with the University for the selection of Equipment to meet the requirements of the final design.

2. Infrastructure, conduits and pathways to accommodate equipment and controls to be part of the design-builders base scope.

END OF SECTION 01 2100

SECTION 01 2300 - ALTERNATES

PART 1 - GENERAL

1.1 SUMMARY

A. This Section includes administrative and procedural requirements for alternates.

1.2 DEFINITIONS

A. Alternate: An amount proposed by Design Builder and stated on the Price Proposal Form for certain work defined in the Proposal Requirements that may be added to or deducted from the Lump Sum Base Proposal amount if the University decides to accept a corresponding change either in the amount of construction to be completed or in the products, materials, equipment, systems, or installation methods described in the Contract Documents.

1. The cost or credit for each alternate is the net addition to or deduction from the Contract Sum to incorporate alternate into the Work. No other adjustments are made to the Contract Sum.
2. Design, engineering, coordination, labor, materials, equipment, accessories, and Design Builder and subcontractor overhead, mark-up and profit required for the alternate work shall be included in the Alternate cost.

1.3 PROCEDURES

A. Coordination: Modify or adjust affected adjacent work as necessary to completely integrate work of the alternate into Project. Include as part of each alternate, miscellaneous devices, accessory objects, and similar items incidental to or required for a complete installation whether or not indicated as part of alternate.

B. Notification: Immediately following award of the Contract, notify each party involved, in writing, of the status of each alternate. Indicate if alternates have been accepted, rejected, or deferred for later consideration. Include a complete description of negotiated modifications to alternates.

C. Execute accepted alternates under the same conditions as other work of the Contract.

D. Schedule: A Schedule of Alternates is included at the end of this Section. Specification Sections referenced in schedule contain requirements for materials necessary to achieve the work described under each alternate.

E. Contract Time: Complete accepted Alternates with the time stipulated for the Work in the Agreement unless specifically provided by the University.

F. Hold the Alternates price for each Alternate for time indicated in the Alternate description beyond the date stated in the Notice to Proceed.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 SCHEDULE OF ALTERNATES

A. Alternate No. 1: Site Development Area: Student Services Court

i. Student Services court to be located Adjacent to the student services building.

ii. The Design of the Student Services Court to have the following design considerations as detailed in the Basis of Design:
   1) Site adjacencies
   2) Cohesive site/ Building transition
   3) Open area comfort
   4) Space that fosters interaction
   5) Optimal site views

iii. Design builder to provide:
   1) Shade structures that are code compliant
   2) Site seating for 16 people at tables and chairs with a shaded structure to support each table.
   3) Site Amenities: (1) Bicycle rack that meets university standards, (2) fixed site benches, and (2) trash receptacles.
   4) Data, power and lighting.
   5) Site Hardscape paving.

2. Provide all labor, material, equipment, design costs, subcontractor and Design Builder mark-up, overhead and profit for to enhance the ‘base bid ‘student services courtyard as defined in the Basis of Design.
3. See Basis of design and Technical Proposal for details.
4. Award will be made concurrent with the Notice to Proceed for Phase I.

Alternate No. 2: Site Development Area: Athletics/Dance Court

i. Athletics/ Dance court to be located on the north east corner of the project site- Adjacent to the Athletics and Dance building.

ii. The Design of the Athletics/ Dance court to have the following design considerations as detailed in the Basis of Design:
   1) Site adjacencies
   2) Cohesive site/ Building transition
   3) Open area comfort
   4) Space that fosters attraction of gathering of people
   5) Site views and Site acoustics.

iii. Design builder to provide:
   1) Shade structures that are code compliant
   2) Terraced Site seating for 20 people.
   3) Site Amenities: (1) Bicycle rack that meets university standards and (2) trash receptacles.

4) Data, power and lighting.
5) Site Hardscape that meets the performance requirements for dance/ athletic activity.
6) Audio-Visual Infrastructure

5. Provide all labor, material, equipment, design costs, subcontractor and Design Builder mark-up, overhead and profit for to enhance the 'base bid' dance/ athletic courtyard as defined in the Basis of Design.
6. See Basis of design and Technical Proposal for details.
7. Award will be made concurrent with the Notice to Proceed for Phase I.

B. Alternate No. 3: LEED Gold Certification

1. Provide the design and construction required to obtain a LEED "Gold" certification from the U.S. Green Building Council for this project.
2. The base bid package for the project establishes the minimum requirements (as described in Section 01 8113) to achieve LEED "Silver" certification from the U.S. Green Building Council. As part of this alternate, the Design Builder shall be required to take the necessary steps for improving the project design, operation and construction procedures and documentation procedures to receive the "Gold" certification from the U.S. Green Building Council. The Design Builder shall bear all cost for LEED Gold certification
3. Award will be made concurrent with the Notice to Proceed for Phase I.

C. Alternate No. 4: Motorized Blackout shades in the Group Meeting Rooms and Large Classrooms

1. ***Provide the design and construction of Motorized Blackout shades in the Group Meeting Rooms and the Large Classrooms.***
2. Provide all labor, material, equipment, design costs, subcontractor and Design Builder mark-up, overhead and profit for to enhance the 'base bid' as defined in the Basis of Design.
3. See Basis of design and Technical Proposal for details.
4. Award will be made concurrent with the Notice to Proceed for Phase I

END OF SECTION 01 2300

SECTION 01 3100 - PROJECT MANAGEMENT AND COORDINATION

PART 1 - GENERAL

1.1 SUMMARY

A. This Section includes administrative provisions for coordinating construction operations on Project including, but not limited to, the following:

1. Administrative and supervisory personnel.
2. Project meetings.

a. ***<u>Design Review Board</u>***
b. Preconstruction
c. Design Progress
d. Preinstallation
e. Weekly Progress
f. Shoulder to Shoulder Review Process
g. Billing
h. Guarantees, Bonds and Service and Maintenance Review

3. Request for Information (RFI).
4. Partnering

B. Related Sections include the following:

1. Division 01 Section “Execution” for Utility Shutdown Requirements and necessary Request Forms.
2. Division 01 Section "Construction Progress Documentation" for preparing and submitting Design Builder's Contract Schedule.
3. Division 01 Section “Coordination and Detailing Activity” for preparing CDA drawings.
4. Division 01 Section "Execution Requirements" for procedures for coordinating general installation and field-engineering services, including establishment of benchmarks and control points.
5. Division 01 Section "Closeout Procedures" for coordinating Contract closeout.

1.2 DEFINITIONS

A. RFI: Request from Design Builder seeking information, interpretation or clarification of the Contract Documents.

B. Contingency Plan: Based upon the findings identified in the Impact Analysis, a Contingency Plan may be required by the university. This plan will identify those actions necessary to mitigate and/or minimize disruptions in utility service and to maintain operational readiness during a utility shutdown. The General Contractor shall provide all necessary management, personnel and material resources needed to execute

the plan at the time of the utility shutdown event, and such shall be included in this Contingency plan.

C. Contractor: As used herein, the Contractor is the Design Builder with overall responsibility for executing the scope of work necessitating the utility shutdown.

D. Impact Analysis: The Impact Analysis identifies all systems, operations, and parties that will be affected by the proposed shutdown of the utility and specifically what that impact is. It shall include sufficient field forensic investigations to verify as-built conditions and that all systems and parties affected by the shutdown have been identified. Drawings and work plans shall be developed to convey actual field conditions and affected physical areas and infrastructure of the facility. This research shall also identify the affected stakeholders and the resulting impacts to their operations. This Impact Analysis will be used by UCR to determine the need for development of a contingency plan.

E. UCR Planning, Design and Construction (PD&C): is the authority requiring, and who is responsible for the review and approval process for all Capital Program project Utility Shutdown Requests and all construction documents provided to UCR.

F. UCR Planning, Design and Construction (PD&C): Construction Inspector of Record (CIOR): Is the UCR field representative directly responsible for all construction inspections, general oversight and enforcement of all code requirements and approved construction documents, including all USR's, for the construction project. He/she will be instrumental in oversight of the Utility Shutdown event and will be present during the event.

G. UCR Planning, Design and Construction (PD&C): Project Manager (PM): Is the UCR representative directly responsible for the preparation and general oversight and coordination of the construction project, and who is involved with the overall review, scheduling and approval of the Utility Shutdown Request (USR).

H. Utility Shutdown: A utility shutdown is any disruption or disconnects of continuity (including abandonment) of any and all utility systems for any length of time. This includes, but is not limited to: electrical, water, natural gas, fuel, fire alarm, security/automatic security cameras, sewer, communications, HVAC, automatic fire sprinkler system, etc.

I. Utility Shutdown Plan (USP): The overall plan, which includes Utility Shutdown Request Form, Impact Analysis, Shutdown Calendar, and all other details relating to the shutdown of any utilities on a specific Capital Programs, Construction and Design Project. This (USP) shall be submitted and included in the Construction Documents and Project Specifications Manual for each specific project.

J. Utility Shutdown Request (USR): The USR form identifies the time and date of the proposed shutdown, the type of shutdown, specific location, work area, affected buildings/systems, point of contact for the contractor, etc. It also includes a required Impact Analysis. A check list is attached to the form to assist the contractor in addressing the impact analysis.

1.3 COORDINATION

A. Coordination: Coordinate design and construction operations included in different Sections of the Specifications to ensure efficient and orderly development and installation of each part of the Work. Coordinate construction operations, included in different Sections that depend on each other for proper installation, connection, and operation.

1. Schedule construction operations in sequence required to obtain the best results where installation of one part of the Work depends on installation of other components, before or after its own installation.
2. Coordinate installation of different components with other contractors to ensure maximum accessibility for required maintenance, service, and repair.
3. Make adequate provisions to accommodate items scheduled for later installation.
4. Where availability of space is limited, coordinate installation of different components to ensure maximum performance and accessibility for required maintenance, service, and repair of all components, including mechanical and electrical.
5. Do not delegate responsibility for coordination to any Subcontractor.
6. Resolve differences or disputes between Subcontractors concerning coordination, interference.
7. Ensure that anchorage, blocking, joining, and other detailing are provided.

B. Prepare memoranda for distribution to each party involved, outlining special procedures required for coordination. Include such items as required notices, reports, and list of attendees at meetings.

1. Prepare similar memoranda for University and separate contractors if coordination of their Work is required.

C. Administrative Procedures: Coordinate scheduling and timing of required administrative procedures with the development of the construction documents and other construction activities and activities of other contractors to avoid conflicts and to ensure orderly progress of the Work. Such administrative activities include, but are not limited to, the following:

1. Preparation of Design Builder's Contract Schedule.
2. Preparation of the Cost Breakdown.
3. Installation and removal of temporary facilities and controls.
4. Development of the construction documents.
5. Development of the CDA Drawings.
6. Construction of mockups.
7. Delivery and processing of submittals.
8. Progress meetings.
9. Preinstallation conferences.
10. Project closeout activities.
11. Startup and adjustment of systems.
12. Commissioning plan and commissioning schedule.

D. Coordination with the University:

1. Design Builder shall notify University's Representative in writing a minimum of 72 hours (except utility shutdowns or connections. See utility shutdown requirements in section 01 7300 - Execution.) in advance of any activity that will be outside the contract limits or that would interfere with the University's daily operation.
2. Observation of Work by University's Representative shall not be interpreted as relieving the Design Builder from responsibility for coordination of all Work, superintendents of the Work, or scheduling and direction of the Work.
3. Coordinate with University's Representative to assure that Work on the project site, access to and from the project site, and the general conduct of operations is maintained in a safe and efficient manner, and that disruption and inconvenience to existing streets and property is minimized.

E. Conservation: Coordinate construction activities to ensure that operations are carried out with consideration given to conservation of energy, water, and materials.

1. Salvage materials and equipment involved in performance of, but not actually incorporated into, the Work. Refer to other Sections for disposition of salvaged materials that are designated as University's property.

1.4 SUBMITTALS

A. Key Personnel Names: At Notice to Proceed, submit a list of key personnel assignments, including superintendent and other personnel in attendance at Project site unless submitted as part of Request for Proposal (RFP). Any changes from RFP require University's approval. Identify individuals and their duties and responsibilities; list addresses, emails and telephone numbers, including home, cellphone and office telephone numbers. Provide names, addresses, emails and telephone numbers of individuals assigned as standbys in the absence of individuals assigned to Project.

1. Post copies of list in Project meeting room, in temporary field office, and by each temporary telephone. Keep list current at all times.

1.5 ADMINISTRATIVE AND SUPERVISORY PERSONNEL

A. General: In addition to Project Manager, Field Engineers and superintendent, provide other administrative and supervisory personnel as required for proper performance of the Work.

B. Superintendent or assistant superintendent shall be present at any time work is being performed, including weekends and overtime hours.

1.6 PROJECT MEETINGS

A. The person designated to make decisions binding to and on behalf of the Design Builder, defined as Design Builder's Project Manager, will attend meetings described

below. Additional meetings may be required for special consideration as determined by the University's Representative.

B. ***Design Review Board Presentation: Once the best value technical proposal is selected, the proposal will be reviewed by the UCR Design Review Board. The Board is advisory to the Chancellor and chaired by the Campus Architect.***

1. ***The Design Builder will coordinate with the University's Representative to provide the necessary information and proposal material for the Design Review Board review. The Design Builder is required to present their proposal to the Design Review Board.***

2. ***The Design Review Board may choose to recommend refinements to be incorporated in to the design during the design-development phase. The Design-Builder will coordinate with the University's representative to identify the appropriateness of recommendations- and determine which refinements, if any, are to be implemented in the design proposal.***

C. Preconstruction Conference: University's Representative will schedule a preconstruction conference and organizational meeting, before start of construction, at Project site or another convenient location.

1. Attendees: University's Representatives, Design Builder's Senior Officer, Design Builder's Project Manager, Field Engineers and superintendent; major subcontractors; suppliers; and other concerned parties shall attend the conference. All participants at the conference shall be familiar with the Project. Others may attend as invited by the University's Representative.
2. Agenda: Discuss items of significance that could affect progress, including the following:

    a. Procedures to be followed during performance of the Work.
    b. Tentative contract schedule.
    c. Phasing.
    d. Critical work sequencing and long-lead items.
    e. Designation of key personnel and their duties.
    f. Procedures for processing field decisions and Change Orders.
    g. Procedures for request for information (RFI).
    h. Procedures for testing and inspecting.
    i. Procedures for processing Applications for Payment.
    j. Distribution of the Contract Documents.
    k. Submittal procedures.
    l. LEED requirements (Sustainable design).
    m. Preparation of Record Documents.
    n. Use of the premises and if applicable, existing building(s).
    o. Work restrictions.
    p. University's occupancy requirements.
    q. Responsibility for temporary facilities and controls.
    r. Construction waste management.
    s. Parking availability.
    t. Office, work, and storage areas.

u. Equipment deliveries and priorities.
v. First aid.
w. Security.
x. Progress cleaning.
y. Working hours.

3. Minutes: Design Builder will record and distribute meeting minutes.

D. Design Progress Meetings: University's Representative will schedule regular weekly Design Progress Meetings to determine the progress of the development of the Design portion of the Work prior to allowing construction to commence.

1. Attendees: The University's Representative and University's Consultants; the Design Builder's Design Professional, the Design Builder's Senior Officer, Project Manager, Superintendent, Field Engineers, major subcontractors and others as directed by the University's Representative.
2. Agenda: Design Builder shall be responsible for developing the meeting agendas. Discuss items of significance that could affect the completion of the Construction Drawings and Specifications and have a major impact of the quality, cost and overall schedule for the Work. Agenda shall be submitted for approval to the University's Representative a minimum of 48 hours prior to meeting.
3. Minutes: Design Builder to Record and distribute meeting minutes.

E. Preinstallation Conferences: Conduct a preinstallation conference at Project site before each construction activity that requires coordination with other construction.

1. Attendees: Installer and representatives of manufacturers and fabricators involved in or affected by the installation and its coordination or integration with other materials and installations that have preceded or will follow, shall attend the meeting. Advise the University's Representative of scheduled meeting date a minimum of 7 days prior to meeting. Others may be invited as directed by the University's Representative.
2. Agenda: Review progress of other construction activities and preparations for the particular activity under consideration, including requirements for the following:

a. The Contract Documents.
b. Options.
c. Related request for information (RFI).
d. Related Change Orders.
e. Purchases.
f. Deliveries.
g. Submittals.
h. Review of mockups.
i. Possible conflicts.
j. Compatibility problems.
k. Time schedules.
l. Weather limitations.

m. Manufacturer's written recommendations.
n. Warranty requirements.
o. Compatibility of materials.
p. Acceptability of substrates.
q. Temporary facilities and controls.
r. Space and access limitations.
s. Regulations of authorities having jurisdiction.
t. Testing and inspecting requirements.
u. Installation procedures.
v. Coordination with other work.
w. Required performance results.
x. Protection of adjacent work.
y. Protection of construction and personnel.

3. Record significant conference discussions, agreements, and disagreements, including required corrective measures and actions.
4. Reporting: Distribute minutes of the meeting to each party present and to parties who should have been present.
5. Do not proceed with installation if the conference cannot be successfully concluded. Initiate whatever actions are necessary to resolve impediments to performance of the Work and reconvene the conference at earliest feasible date.

F. Construction Progress Meetings: Attend progress meetings at weekly intervals. Coordinate dates and location of meetings with the University's Representative.

1. Attendees: In addition to University's Representatives, Design Builder's Project Manager and Superintendent, Design Professional and each subcontractor, supplier, and other entity concerned with current progress or involved in planning, coordination, or performance of future activities shall be represented at these meetings. All participants at the conference shall be familiar with the Project and authorized to conclude matters relating to the Work. Others may be invited as directed by the University's Representative.
2. Agenda: Review and correct or approve minutes of previous progress meeting. Review other items of significance that could affect progress. Include topics for discussion as appropriate to status of Project.

a. Design Builder's Contract schedule: Review progress since the last meeting. Determine whether each activity is on time, ahead of schedule, or behind schedule, in relation to Design Builder's Contract Schedule. Determine how construction behind schedule will be expedited; secure commitments from parties involved to do so. Discuss whether schedule revisions are required to ensure that current and subsequent activities will be completed within the Contract Time.

1) Review look ahead schedule for next period.

b. Review present and future needs of each entity present, including the following:

1) Interface requirements.
2) Sequence of operations.
3) Status of submittals.
4) Deliveries.
5) Off-site fabrication.
6) Access.
7) Site utilization.
8) Temporary facilities and controls.
9) Work hours.
10) Hazards and risks.
11) Progress cleaning.
12) Quality and work standards.
13) Status of correction of deficient items.
14) Field observations.
15) Request for information (RFI).
16) Status of Bulletins
17) Status of cost proposal requests.
18) Pending changes.
19) Status of Change Orders.
20) Pending claims and disputes.
21) Documentation of information for payment requests.
22) Closeout procedures.

3. Minutes: Design Builder will record and distribute to the University Representative the meeting minutes.
4. Reporting: Design Builder shall distribute minutes of the meeting to each party recorded as present and to parties who should have been present.

    a. Schedule Updating: Revise Design Builder's Contract schedule after each progress meeting where revisions to the schedule have been made or recognized. Issue revised schedule concurrently with the report of each meeting.

G. Shoulder-to-Shoulder Review Process:

1. Shall be implemented in an effort to enhance and accelerate the review and approval process of submittal documents required during the Drawing Development, Construction, and Commissioning. University's Representative will schedule regular Design Progress Meetings to determine the progress of the development of the Design portion of the Work. These meetings will start within two weeks of the first Notice to Proceed date. This NTP date is contingent upon project award to the Design Builder and will occur as noted below:

    a. Design to Budget Period (NTP through Basis of Design): Once a week minimum and as required to accomplish this Design to Budget effort.
    b. Design Development Period (Basis of Design to 60% baseline Documents: Weekly Meetings.

c. Design Completion by Subcontractors and Construction Period: Biweekly meetings until submittal completion then as needed and as determined by UCR.

2. Consists of multiple (more frequent) live and active workshops involving all decision makers (Design Builder, Design Professionals; Architect and Engineers of Record, Subcontractors, Specialty Contractors, Specialty Consultants, UCR employees, consultants and peer reviewers) where real-time decisions and approvals are accomplished. The Design Builder shall be responsible for staffing Shoulder-to-Shoulder review sessions with key personnel from the appropriate design disciplines to accommodate timely approvals.
3. Throughout the process, trust, respect, and guidelines for open communication and agreement are established and maintained. This allows for a productive integrated team, positive performance outcomes, cost savings, reduction in overall design and construction schedule.
4. Goals and Objectives:

a. Integrate the entire project team:

1) Establish clear lines of communication and points of contact. Project team shall consist of, but is not limited to, Design Builder, Design Professionals, Architect and Engineers of Record, Subcontractors, Specialty Contractors, Specialty Consultants, UCR representatives, and agency-employed consultants.
2) Schedule Shoulder-to-Shoulder workshops through the duration of the project (reviews may be scheduled at milestones tied to the baseline schedule – more frequent reviews may occur with larger complex packages).

a) Meetings: To discuss significant items that could affect the completion of the Construction Drawings and Specifications or have a major impact of the quality, cost and schedule for the Work. The agenda shall be submitted to the University's Representative a minimum of 48 hours prior to the scheduled meeting date.
b) Agendas: The Design Builder shall be responsible for developing and distributing the meeting agendas.
c) Minutes: The Design Builder will record and distribute the meeting minutes.

3) Co-locate key personnel at appropriate facilities.

b. Establish and agree on goals and objectives for a successful design:

1) Promote an environment of cooperation, teamwork, and collaboration to develop the best solutions within the limits of the project scope and budget.

c. Confirm and approve Project requirements post NTP:

1) Resolve outstanding issues concerning the Design Builder's Work.
2) Gain insight from the user(s) into what works and what doesn't (user(s), in turn, shall give meaningful feedback in a timely manner and not delay decisions).

d. Scope and Code Compliance Review:

1) University's Representative and agency-employed consultants shall confirm or reject building systems or assemblies in a timely manner.
2) Mark up drawings, specs and/or cut sheets:

a) Place review comments directly on the documents (comments should be made in red, legible, and understandable).
b) Scan and upload documents onto web-based project management system to be accessed by all parties involved.

3) Identify all submittals in the submittal schedule not anticipated to be addressed in the specifications.
4) UCR reserves the right to withhold action on any submittal that requires coordination with other submittals until all subsequent related submittals are received by the University. UCR's review period will not begin until all interrelated submittals are received and available for review by the University.

H. Billing Meetings: Attend a monthly meeting prior to submittal of the Application for Payment, at a location acceptable to University's Representative.

1. Attendees:

a. University's Representative
b. Design Builder's Project Manager
c. Superintendent
d. Subcontractors, as appropriate
e. Others as directed by University's Representative

2. Agenda:

a. Determination of current schedule progress.
b. Review of Work completed based on the cost loaded schedule to be billed in the Application for Payment.

3. Schedule Updating: Revise the Contract Schedule prior to the meeting based on information determined at prior progress meetings. Review schedule revisions and prepare a final revised schedule for submission with the application for payment following the meeting.

I. Guarantee to Repair Review Meetings: In accordance with the General Conditions, Article 12 and as specified herein; attend a meeting at the fourth, eighth and 11th month following the date of Substantial Completion.

1. Attendees:

    a. University's Representative
    b. User's Representative
    c. University's Consultants as appropriate
    d. Design Builder's Project Manager
    e. Design Professional, as appropriate
    f. Subcontractors, as appropriate
    g. Others as appropriate or as directed by University's Representative

2. Agenda:

    a. Review any issues with the project that might be defective work as noticed by the University's Representatives.
    b. Review of guarantees, bonds, service and maintenance contracts for materials and equipment that might be in effect.
    c. Walk the project site to review any defective work.

1.7 REQUEST FOR INFORMATION (RFI)

A. Procedure: Immediately on discovery of any apparent conflicts, omissions, or errors, interpretation of the Contract Documents, and if not possible to request interpretation at Project meeting, prepare and submit an RFI in the form provided in the exhibits.

1. RFIs shall be submitted only by the Design Builder. RFIs submitted by entities other than Design Builder will be returned with no response.
2. Coordinate and submit RFIs in a prompt manner so as to avoid delays in Design Builder's work or work of subcontractors.
3. Number RFIs sequentially. Follow RFI number with sequential numerical suffix as necessary for each resubmission. For example, the first RFI would be A001.0. The second RFI would be A002.0. The first resubmittal of RFIs A001 and A002 would be A001.1 and A002.1 respectively.
4. Limit each RFI to one subject.

B. Submit an RFI if one of the following conditions occur:

1. Design Builder discovers an unforeseen condition or circumstance that is not described in the Contract Documents.
2. Design Builder discovers an apparent conflict or discrepancy between portions of the Contract Documents that appears to be inconsistent or is not reasonably inferred from the intent of the Contract Documents.
3. Design Builder discovers what appears to be an omission from the Contract Documents that cannot be reasonably inferred from the intent of the Contract Documents.

C. Content of the RFI: Include a detailed, legible description of item needing interpretation and the following:

1. Project name.
2. Date.
3. Name of Design Builder.
4. RFI number, numbered sequentially.
5. Specification Section number and title and related paragraphs, as appropriate.
6. Drawing number and detail references, as appropriate.
7. Field dimensions and conditions, as appropriate.
8. Design Builder's suggested solution(s). If Design Builder's solution(s) impact the Contract Time or the Contract Sum, Design Builder shall state impact in the RFI.
9. Design Builder's signature.
10. Attachments: Include drawings, descriptions, measurements, photos, Product Data, Shop Drawings, and other information necessary to fully describe items needing interpretation.

    a. Supplementary drawings prepared by Design Builder shall include dimensions, thicknesses, structural grid references, and details of affected materials, assemblies, and attachments.

D. Hard-Copy RFIs: Form included with Exhibits.

1. Identify each page of attachments with the RFI number and sequential page number.

E. Software-Generated RFIs: If allowed by the University's Representative software-generated form with substantially the same content as indicated above.

1. Attachments shall be electronic files in Adobe Acrobat PDF compatible format.

F. The following RFIs will be returned without action:

1. Requests for approval of submittals.
2. Requests for approval of substitutions.
3. Requests for coordination information already indicated in the Contract Documents.
4. Requests for adjustments in the Contract Time or the Contract Sum.
5. Requests for interpretation of University's actions on submittals.
6. Incomplete RFIs or RFIs with numerous errors.
7. Submit an RFI in a manner that suggests that specific portions of the Contract Documents are assumed to be excluded or by taking an isolated portion of the Contract Documents in part rather than whole.
8. Submit an RFI in an untimely manner without proper coordination and scheduling of Work of related trades.

G. University's action may include a request for additional information, in which case University's time for response will start again.

H. University's action on RFIs that may result in a change to the Contract Time or the Contract Sum may be eligible for Design Builder to submit Change Proposal according to Division 01 Section "Contract Modification Procedures."

1. If Design Builder believes the RFI response warrants change in the Contract Time or the Contract Sum, notify University in writing within 5 days of receipt of the RFI response.

I. On receipt of University's action, update the RFI log and immediately distribute the RFI response to affected parties. Review response and notify University within 5 calendar days if Design Builder disagrees with response.

J. RFI Log: Prepare, maintain, and submit a tabular log of RFIs organized by the RFI number. Submit log weekly. Include the following:

1. Project name.
2. Name and address of Design Builder.
3. Name and address of Architect.
4. RFI number including RFIs that were dropped and not submitted.
5. RFI description.
6. Date the RFI was submitted.
7. Date University's response was received.
8. Identification of related Minor Change in the Work, Construction Change Directive, and Proposal Request, as appropriate.

K. If Design Builder submits an RFI contrary to the above, Design Builder shall pay the cost of any review, which cost shall be deducted from the Contract Sum.

L. Design Builder shall submit request for information or clarification immediately upon discovery. Design Builder shall submit RFIs within a time frame so as not to delay the Contract Schedule while allowing the full response time described below.

1.8 RESPONSE TIME

A. University's Representative, whose decision will be final and conclusive, shall resolve such questions and issue instructions to Design Builder within a reasonable time frame. In most cases, RFIs will receive a response within 14 days. In some cases this time may need to be lengthened for complex issues, or shortened for emergencies, as mutually agreed in writing.

B. Should Design Builder proceed with the Work affected before receipt of a response from University's Representative, within the response time described above, any portion of the Work which is not done in accordance with University's Representative's interpretations, clarifications, instructions, or decisions is subject to removal or replacement and Design Builder shall be responsible for all resultant losses.

C. Failure to Agree: In the event of failure to agree as to the scope of the Contract Requirements, Design Builder shall follow procedures set forth in Article 4 of the General Conditions.

1.9 PARTNERING

A. General:

1. Definition. "Partnering" is the process by which the parties to the Contract meet and agree to the manner in which business is to be conducted beyond the requirements of the Contract.
2. Legal Status. The Partnering process shall have no legal status and Change Orders shall be submitted for any change throughout the execution of the Work. The Partnering process shall in no way modify or void the Contract, nor shall it be legally binding on either party.

B. Process: Following the Notice to Proceed, the University and the Design Builder shall meet to agree upon the schedule and process for Partnering for this project.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 01 3100

DIVISION 27 - COMMUNICATIONS

SECTION 27 1000 – STRUCTURED COMMUNICATIONS CABLING

SPACE PLANNING

Typical outlet type “A” (standard outlet): Provide 4” square deep junction box with single gang plaster ring and 1-1/4” conduit inside wall stubbed up 6” above accessible ceiling. Outlet shall be mounted +18” AFF (U.N.O.). Electrical contractor shall provide outlet box, plaster ring, conduit pathway, cable tray, connectors on each end of conduit stub with plastic bushing and pull string. Communication contractor shall provide all cable support between the conduit stub and the nearest accessible cable tray (via J-hooks), cable and connectivity hardware, three (3) Cat-6 (faceplate to accommodate up to 6 keystone jacks), 4-pair UTP cables terminated with three ~~(3)~~ ***(1)*** Cat-6, modular RJ-45 jacks. All Category 6 cables shall be terminated to 48 port patch panel in an IDF Room (as appropriate).

Typical outlet type “B” (furniture feed): Provide 5” square junction box with single gang plaster ring and minimum two 1-1/4” conduit for every 10 cables, stubbed up conduits 6” above accessible ceiling. Electrical contractor shall provide outlet box, plaster ring, conduit pathway, cable tray, connectors on each end of conduit stub with plastic bushing and pull string. Communication contractor shall provide 2-port surface mount box, all necessary apparatus for tie-in with furniture. Communication contractor shall provide ~~two~~ ***(1)*** Cat-6, 4-pair UTP cables terminated with two Cat-6, modular RJ-45 jacks for every furniture seat. All Category 6 cables shall be terminated to 48 port patch panel in an IDF Room (as appropriate).

Typical outlet type “C” (floor box): Electrical contractor shall provide two 1-1/4” conduit and a single compartment floor box dedicated for data, and separate dedicated compartment and conduit for power and AV. Communication contractor shall provide and install a minimum of ~~(4)~~ ***(2)*** (but up to eight 8 for AV use) Category 6 cables terminated with RJ-45 connectors.

Typical outlet type “D” (projector outlet): provide 4” square deep junction box with single gang plaster, T-bar bridge and 1” conduit to accessible ceiling. Electrical contractor shall provide outlet box, plaster ring, conduit pathway, cable tray, connectors on each end of conduit stub with plastic bushing and pull string. Communication contractor shall provide all cable support between the conduit stub and the nearest accessible cable tray (via J-hooks), cable and connectivity hardware, two (2) Cat-6, 4-pair UTP cable terminated with two Cat-6, modular RJ-45 jack. All Category 6 cable shall be terminated to 48 port patch panel in an IDF Room (as appropriate).

Typical outlet type “E” (Audiovisual Rack/Podium): At the audiovisual equipment rack location or instructor podium location (where main equipment is located) provide (as required for cabling quantity and capacity) 5” square deep junction box(es) with 2-gang plaster ring (and white cable pass-through faceplate) and 1-1/4” conduit inside wall stubbed up 6” above accessible ceiling. Outlet shall be mounted +18” AFF (U.N.O.). Electrical contractor shall provide outlet box, faceplate, plaster ring, conduit pathway, cable tray, connectors on each end of conduit stub with plastic bushing and pull string. Communication contractor shall provide all cable support between the conduit stub and the nearest accessible cable tray (via J-hooks), cable and connectivity hardware, eight (8) Cat-6, 4-pair UTP cables terminated with a minimum of eight (8) Cat-6, modular RJ-45 jacks on a patch panel within the equipment rack or podium (with a 13’ service loop from wall plate bundled in black nylon mesh socking). All Category 6 cables shall be terminated to 48 port patch panel in an IDF Room (as appropriate).

Typical outlet type “F” (Wireless AP outlet): Provide 4” square deep junction box with single gang plaster, T-bar bridge and 1” conduit to accessible ceiling. Electrical contractor shall provide outlet

box, plaster ring, conduit pathway, cable tray, connectors on each end of conduit stub with plastic bushing and pull string. Communication contractor shall provide all cable support between the conduit stub and the nearest accessible cable tray (via J-hooks), cable and connectivity hardware, two (2) Cat-6, 4-pair UTP cable terminated with two Cat-6, modular RJ-45 jack. All Category 6 cable shall be terminated to 48 port patch panel in an IDF Room (as appropriate). Provide 20' service loop.

Wall Phone: Near each Classroom and Lecture Hall instructor station, provide 4" square deep junction box with single gang plaster ring and 1" conduit inside wall stubbed up 6" above accessible ceiling. Outlet shall be mounted +42" AFF (U.N.O.). Electrical contractor shall provide outlet box, plaster ring, conduit pathway, cable tray, connectors on each end of conduit stub with plastic bushing and pull string. Communication contractor shall provide all cable support between the conduit stub and the nearest accessible cable tray (via J-hooks), cable and connectivity hardware, one (1) Cat-6, 4-pair UTP cable terminated with one (1) Cat-6, modular RJ-45 jacks. All Category 6 cable shall be terminated to 48 port patch panel in an IDF Room (as appropriate).

Security Camera outlet: Provide 4" square deep junction box with single gang plaster ring and minimum 3/4" conduit stubbed into accessible ceiling space. Electrical contractor shall provide outlet box, wall plate, conduit pathway, cable tray, connectors on each end of conduit stub with plastic bushing and pull string. Communication contractor shall provide all cable support between the conduit stub and the nearest accessible cable tray (via J-hooks), cable and connectivity hardware, one Cat-6, 4-pair UTP cable terminated with one Cat-6, RJ-45 jack at the outlet (i.e., device end) and terminated to Cat-6, 48 port patch panel in an MDF/Server Room (as appropriate).

WARRANTY

Provide a "Registered SYSTIMAX® Network Infrastructure Solution" 20 year extended product warranty and application assurance on this installation and a minimum of one year from Notice of Completion on all materials and workmanship installed or supplied as part of the telephone and data systems.

PRODUCTS

CommScope Systimax® 2071E GigiSPEED, or equal, for Category 6 (voice and data) horizontal structured cabling system. All data cabling and related ports are to be black in color and all voice cabling and related ports are to be grey in color per campus standard.

Corning, or equal, for all Fiber Optic cables, connectors and associated hardware.

Chatsworth Products Inc. (CPI), or equal, (see note), for in Telecom Room(s); seven-foot by 19-inch data equipment racks, cable runway and support products to include vertical cabling (between racks) management.
Note; use one manufacturer for all racks, cable runway, vertical cable managers and associated hardware.

Panduit, or equal, for horizontal wire management products.

Faceplates shall be Systimax® M13C series triplex outlets, match color of electrical plates, or equal. Typical faceplates to accommodate up to 6 keystone ports for standard wall outlets.

All data cabling and related ports are to be black in color and all voice cabling and related ports are to be grey in color per campus standard. Black outlets to be Systemax® MGS400-003 and grey outlets to be Systemax® MGS400-270.

Erico® Caddy®, MonoSystems, or equal, for J-Hook Cable Support Systems and other non-continuous cable supports.

Superior Essex® ARMM 50-Pair Riser Cables #02-100-03, or equal, for twisted pair Copper riser distribution cable.

Carlon®, or equal, for Innerducts and associated fittings.

Leviton part number 49013-P48, or equal, for Voice Grade Patch Panels riser distribution in data equipment racks.

Ortronics 300 Pair Field Termination Kit with back panel and 110C5s, Part Number OR-30203461, or equal, in BDF. The wiring blocks shall be fully equipped with five pair 110C-5 connecting blocks, jumper troughs, label designations and rivets.

Copper B-Line Flex Tray, MonoSystemsTM Mono-Mesh or equal, for Wire Basket Cable Tray support system.

SECTION 27 4100 – LOUDSPEAKERS

PRODUCTS

Wall Mounted (Program): Extron #SM 28 with appropriate mounting accessories. Speakers to be white or painted as required to match architectural finishes of the wall. Include seismic cable lanyard as secondary securing to bracket.

Ceiling Mounted (Voice): Extron #SI 26CT with appropriate mounting accessories and 70V transformer. Speakers to be white or painted as required to match architectural finishes of the ceiling. Speakers to be anchored above with 1/8” diameter braided cable.

Cabling: 16 AWG Belden 5240U1 Water Resistant Multi Conductor Cable.

SECTION 27 4150 – AUDIOVISUAL SYSTEMS EQUIPMENT

SPACE PLANNING

Projection screens shall be dual-screen in all rooms unless otherwise noted and shall be based on proper viewing angles for all seated occupants. Where seating is in an arc or circular format, the standard double set of screens shall be placed angularly/perpendicular to the viewing occupants and shall be configured for disparate content to be displayed on the left and right screens in the set. Each set of two screens shall replicate the left and right displayed content for a consistent viewing experience for all seated occupants. The image size for the screens shall be based on industry standards for a 6.0 viewing ratio for image height in relation to the furthest viewer from that screen image. The screen image shall not be lower than 48” AFF. The screen image height shall be visually high as possible to clear lower structures or whiteboards.

Projectors shall be ceiling mounted and shall not be lower than 7’-6” to the lowest point of the assembly to clear ADA requirements.

Wall speakers, cameras and other protruding elements secured to the wall surface that extend beyond 4” shall be higher than 7’-6” to the lowest point of the assembly to clear ADA requirements.

Flat panel display sizes shall be sized appropriately for the viewing area and materials to be displayed and shall be no smaller than 50” diagonal on this project.

WARRANTY

Basic Warranty provided by the Audiovisual Integrator shall include repair or replacement for one year from Final Acceptance on all Audiovisual Equipment provided (including products having a manufacturer's warranty of less than one year) and all Audiovisual Integrator workmanship. Basic Warranty shall be provided at no additional cost, except in case of obvious abuse.

TRAINING

The Audiovisual Integrator shall provide sufficient training for the Owner's designated staff to become proficient in the general operation, routine maintenance, troubleshooting, and other basic system support functions. This training shall include one session of training of up to 2 hours by the Audiovisual Integrator or the equipment manufacturer. This training shall include a session or sessions that are focused on the Owner's designated technical staff and also a session or sessions that focus on the administrative and/or instructional staff. Training of end users will be provided by the Owner's technical staff.
Times of day for training must be coordinated with Client availability including evening hours if requested for least disruption to Client day time operations.
Training shall be recorded and provided to Client.

PRODUCTS

Large Lecture Hall:

3 Input Transmitter: Extron DTP T USW 233.
Cable Cubby: Extron Cable Cubby 300S with connection cables, Left/Right Cable Pass-Through and Blank AAPs as required.
Auxiliary Microphone Input Plate: 2-gang 3.5 deep box with white decorator faceplate. Include (2) XLR microphone connections.
Mersive Solstice Pod (non-enterprise model). Connect to data network and configure settings in conjunction with UCR IT Dept.
Wireless Microphone System: Shure QLXD124/85.
Document Camera: Wolfvision VZ8+.
Digital Matrix Switcher: Extron XTP II Crosspoint 1600 including spare audio channels as needed for audio breakout to recording and audio amplifiers. Switcher to be sized as required for number of I/O plus expansion capability for growth.
HDMI TP Receiver: Extron DTP HDMI 230Rx.
DSP: Extron DMP 128 Plus C AT with DSP Software and Dante support (units bussed together as required for number of I/O plus expansion capability for growth.
Amplifier: Extron XPA 4002-70V.
Amplifier: Extron XPA 4002.
Video Projector: Panasonic PT-RZ970U 9000 ANSI lumens laser WUXGA resolution projector (coordinate standard lensing with ceiling elements) with BMS LOC-IV security enclosure and Premier Mount PDS-Plus ceiling mount (or equivalent). Provide with wireless networking module for wireless presentation connection. Projector to be white model where available.
Desktop Monitor Mount: Ergotron #45-241-026 articulating monitor mount.
Coordinate projector throw with projection screen image for proper lensing.
Dell OptiPlex 7050 small form factor with Intel Corei5-7500 processor and 8GB 2x4GB 2400MHz DDR4 Memory. Include 3.5 inch 500GB 7200rpm Hard Disk Drive, dual digital (DisplayPort, HDMI, etc.) video output and Windows 10 Pro 64-bit operating software. Include Dell P2418HT 24" 1920 x 1080 LCD touch-enabled monitor. Include Dell 2-year warranty.
Wireless keyboard and Gyration gyro mouse shall be used within each classroom with proper USB extension hardware for the wireless receivers to reside at the instructor station for best signal reception and operation.

USB adapters for audio I/O shall be included as required for the multiple audio channels for Zoom integration.
Instructor Monitor: Dell 24" Interactive touch monitor # P2418HT.
Control System: Extron IPCP Pro 550.
Touch Panel: Extron TLP Pro 1025T Black. Provide with XTP PI 100 Power-over-Ethernet injector as required.
Control for projection screen to include up/down upon system startup & shut down. Control to include manual override for up/down during system on operation.
Control system to manage room combined/divided state.
Control to include separate microphone and program audio mute and level controls.
Control to include connection to fire alarm trigger to mute audio until signal is clear.
Extron MediaPort 200 connected to PC via USB and audio for interfacing to computer viewing and Zoom collaboration.
Mediasite 900 series lecture capture appliance with HDMI connections for camera and content.
Cameras: Sony PTZF HD BRC-H900 cameras with twisted-pair signal & control extension to equipment rack. Include RS-232 control for control system management. Include data LAN connection for secondary camera operation and management.
The instructor station shall be a circular 36" diameter height-adjustable custom design from DWI Enterprises with a weighted base to promote stability when raised. All data cabling from the floor (or wall as required) shall be run into the instructor station equipment rack and be terminated on RJ45 patch panels for proper connection of networked edge devices (PC, control processor, wireless presentation appliance, etc.). The AV, power and data cabling to the typical instructor station shall be bundled in black nylon mesh sock and will include an 8-10' service cable that permits flexibility in the desk position.
Middle Atlantic 44RU WR-44-32 pull-out rack with enclosure and seismic floor anchor brackets. Include front locking vented door. Include top cooling kit to accommodate proper active/forced cooling of internal equipment.
Middle Atlantic 2RU locking drawer #UD2 with #KYLK lock option.
Middle Atlantic 2RU clamping shelf for wireless mirroring devices.
Middle Atlantic 3RU clamping shelf for PCs.
Middle Atlantic power distribution unit (PDU) #PD-915R or approved equivalent.
Vertical 115VAC surge power strip mounted within rack for monitor & PC, etc.

Medium Lecture Hall:

3 Input Transmitter: Extron DTP T USW 233.
Cable Cubby: Extron Cable Cubby 300S with connection cables, Left/Right Cable Pass-Through and Blank AAPs as required.
Auxiliary Microphone Input Plate: 2-gang 3.5 deep box with white decorator faceplate. Include (2) XLR microphone connections.
Mersive Solstice Pod (non-enterprise model). Connect to data network and configure settings in conjunction with UCR IT Dept.
Wireless Microphone System: Shure QLXD124/85.
Document Camera: Wolfvision VZ8+.
Digital Matrix Switcher: Extron XTP II Crosspoint 1600 including spare audio channels as needed for audio breakout to recording and audio amplifiers. Switcher to be sized as required for number of I/O plus expansion capability for growth.
HDMI TP Receiver: Extron DTP HDMI 230Rx.
DSP: Extron DMP 128 Plus C AT with DSP Software and Dante support (units bussed together as required for number of I/O plus expansion capability for growth.
Amplifier: Extron XPA 4002-70V.
Amplifier: Extron XPA 4002.
Video Projector: Panasonic PT-RZ970U 9000 ANSI lumens laser WUXGA resolution projector (coordinate standard lensing with ceiling elements) with BMS LOC-IV security enclosure and Premier Mount PDS-Plus ceiling mount (or equivalent). Provide with wireless

networking module for wireless presentation connection. Projector to be white model where available.
Desktop Monitor Mount: Ergotron #45-241-026 articulating monitor mount.
Coordinate projector throw with projection screen image for proper lensing.
Dell OptiPlex 7050 small form factor with Intel Corei5-7500 processor and 8GB 2x4GB 2400MHz DDR4 Memory. Include 3.5 inch 500GB 7200rpm Hard Disk Drive, dual digital (DisplayPort, HDMI, etc.) video output and Windows 10 Pro 64-bit operating software. Include Dell P2418HT 24" 1920 x 1080 LCD touch-enabled monitor. Include Dell 2-year warranty.
Wireless keyboard and Gyration gyro mouse shall be used within each classroom with proper USB extension hardware for the wireless receivers to reside at the instructor station for best signal reception and operation.
USB adapters for audio I/O shall be included as required for the multiple audio channels for Zoom integration.
Instructor Monitor: Dell 24" Interactive touch monitor # P2418HT.
Control System: Extron IPCP Pro 550.
Touch Panel: Extron TLP Pro 1025T Black. Provide with XTP PI 100 Power-over-Ethernet injector as required.
Control for projection screen to include up/down upon system startup & shut down. Control to include manual override for up/down during system on operation.
Control system to manage room combined/divided state.
Control to include separate microphone and program audio mute and level controls.
Control to include connection to fire alarm trigger to mute audio until signal is clear.
Extron MediaPort 200 connected to PC via USB and audio for interfacing to computer viewing and Zoom collaboration.
Mediasite 900 series lecture capture appliance with HDMI connections for camera and content.
Cameras: Sony PTZF HD BRC-H900 cameras with twisted-pair signal & control extension to equipment rack. Include RS-232 control for control system management. Include data LAN connection for secondary camera operation and management.
The instructor station shall be a 60" wide custom design from DWI Enterprises per the campus standard with provisions for a 14RU equipment rack with rear access for support. All data cabling from the floor (or wall as required) shall be run into the instructor station equipment rack and be terminated on RJ45 patch panels for proper connection of networked edge devices (PC, control processor, wireless presentation appliance, etc.). The AV, power and data cabling to the typical instructor station shall be bundled in black nylon mesh sock and will include an 8-10' service cable that permits flexibility in the desk position.
Middle Atlantic 44RU WR-44-32 pull-out rack with enclosure and seismic floor anchor brackets. Include front locking vented door. Include top cooling kit to accommodate proper active/forced cooling of internal equipment.
Middle Atlantic 2RU locking drawer #UD2 with #KYLK lock option.
Middle Atlantic 2RU clamping shelf for wireless mirroring devices.
Middle Atlantic 3RU clamping shelf for PCs.
Middle Atlantic power distribution unit (PDU) #PD-915R or approved equivalent.
Vertical 115VAC surge power strip mounted within rack for monitor & PC, etc.

Small Lecture Hall:

3 Input Transmitter: Extron DTP T USW 233.
Cable Cubby: Extron Cable Cubby 300S with connection cables, Left/Right Cable Pass-Through and Blank AAPs as required.
Auxiliary Microphone Input Plate: 2-gang 3.5 deep box with white decorator faceplate. Include (2) XLR microphone connections.
Mersive Solstice Pod (non-enterprise model). Connect to data network and configure settings in conjunction with UCR IT Dept.
Wireless Microphone System: Shure QLXD124/85.

Document Camera: Wolfvision VZ8+.
Digital Matrix Switcher: Extron XTP II Crosspoint 1600 including spare audio channels as needed for audio breakout to recording and audio amplifiers. Switcher to be sized as required for number of I/O plus expansion capability for growth.
HDMI TP Receiver: Extron DTP HDMI 230Rx.
DSP: Extron DMP 128 Plus C AT with DSP Software and Dante support (units bussed together as required for number of I/O plus expansion capability for growth.
Amplifier: Extron XPA 4002-70V.
Amplifier: Extron XPA 4002.
Video Projector: Panasonic PT-RZ970U 9000 ANSI lumens laser WUXGA resolution projector (coordinate standard lensing with ceiling elements) with BMS LOC-IV security enclosure and Premier Mount PDS-Plus ceiling mount (or equivalent). Provide with wireless networking module for wireless presentation connection. Include spare projector lamp. Projector to be white model where available.
Desktop Monitor Mount: Ergotron #45-241-026 articulating monitor mount.
Coordinate projector throw with projection screen image for proper lensing.
Dell OptiPlex 7050 small form factor with Intel Corei5-7500 processor and 8GB 2x4GB 2400MHz DDR4 Memory. Include 3.5 inch 500GB 7200rpm Hard Disk Drive, dual digital (DisplayPort, HDMI, etc.) video output and Windows 10 Pro 64-bit operating software. Include Dell P2418HT 24” 1920 x 1080 LCD touch-enabled monitor. Include Dell 2-year warranty.
Wireless keyboard and Gyration gyro mouse shall be used within each classroom with proper USB extension hardware for the wireless receivers to reside at the instructor station for best signal reception and operation.
USB adapters for audio I/O shall be included as required for the multiple audio channels for Zoom integration.
Instructor Monitor: Dell 24” Interactive touch monitor # P2418HT.
Control System: Extron IPCP Pro 550.
Touch Panel: Extron TLP Pro 1025T Black. Provide with XTP PI 100 Power-over-Ethernet injector as required.
Control for projection screen to include up/down upon system startup & shut down. Control to include manual override for up/down during system on operation.
Control system to manage room combined/divided state.
Control to include separate microphone and program audio mute and level controls.
Control to include connection to fire alarm trigger to mute audio until signal is clear.
Extron MediaPort 200 connected to PC via USB and audio for interfacing to computer viewing and Zoom collaboration.
Mediasite 900 series lecture capture appliance with HDMI connections for camera and content.
Cameras: Sony PTZF HD BRC-H900 cameras with twisted-pair signal & control extension to equipment rack. Include RS-232 control for control system management. Include data LAN connection for secondary camera operation and management.
The instructor station shall be a 60” wide custom design from DWI Enterprises per the campus standard with provisions for a 14RU equipment rack with rear access for support. All data cabling from the floor (or wall as required) shall be run into the instructor station equipment rack and be terminated on RJ45 patch panels for proper connection of networked edge devices (PC, control processor, wireless presentation appliance, etc.). The AV, power and data cabling to the typical instructor station shall be bundled in black nylon mesh sock and will include an 8-10’ service cable that permits flexibility in the desk position.
Middle Atlantic 44RU WR-44-32 pull-out rack with enclosure and seismic floor anchor brackets. Include front locking vented door. Include top cooling kit to accommodate proper active/forced cooling of internal equipment.
Middle Atlantic 2RU locking drawer #UD2 with #KYLK lock option.
Middle Atlantic 2RU clamping shelf for wireless mirroring devices.
Middle Atlantic 3RU clamping shelf for PCs.
Middle Atlantic power distribution unit (PDU) #PD-915R or approved equivalent.

Vertical 115VAC surge power strip mounted within rack for monitor & PC, etc.

Computer Lab / Testing Center:

3 Input Transmitter: Extron DTP T USW 233.
Cable Cubby: Extron Cable Cubby 300S with connection cables, Left/Right Cable Pass-Through and Blank AAPs as required.
Mersive Solstice Pod (non-enterprise model). Connect to data network and configure settings in conjunction with UCR IT Dept.
Wireless Microphone System: Shure QLXD124/85.
Document Camera: Wolfvision VZ8+.
Digital Presentation Switcher: Extron IN1608 IPCP.
HDMI TP Receiver: Extron DTP HDMI 230Rx.
Audio Amplifier (70V ceiling speakers): Extron XPA 1002-70 (or sized as required)
Audio Amplifier (8-ohm wall speakers): Extron XPA 1002 (or sized as required)
Video Projector: Panasonic PT-RZ660U 6000 ANSI lumens laser WUXGA resolution projector (coordinate standard lensing with ceiling elements) with BMS LOC-IV security enclosure and Premier Mount PDS-Plus ceiling mount (or equivalent). Provide with wireless networking module for wireless presentation connection. Projector to be white model where available.
Desktop Monitor Mount: Ergotron #45-241-026 articulating monitor mount.
Coordinate projector throw with projection screen image for proper lensing.
Dell OptiPlex 7050 small form factor with Intel Corei5-7500 processor and 8GB 2x4GB 2400MHz DDR4 Memory. Include 3.5 inch 500GB 7200rpm Hard Disk Drive, dual digital (DisplayPort, HDMI, etc.) video output and Windows 10 Pro 64-bit operating software. Include Dell P2418HT 24” 1920 x 1080 LCD touch-enabled monitor. Include Dell 2-year warranty.
Wireless keyboard and Gyration gyro mouse shall be used within each classroom with proper USB extension hardware for the wireless receivers to reside at the instructor station for best signal reception and operation.
USB adapters for audio I/O shall be included as required for the multiple audio channels for Zoom integration.
Instructor Monitor: Dell 24” Interactive touch monitor # P2418HT.
Control System: Extron IN1608 IPCP MA 70 (or pro-grade equivalent to accommodate controlled devices).
Touch Panel: Extron TLP Pro 1025T Black. Provide with XTP PI 100 Power-over-Ethernet injector as required.
Control for projection screen to include up/down upon system startup & shut down. Control to include manual override for up/down during system on operation.
Control to include separate microphone and program audio mute and level controls.
Control to include connection to fire alarm trigger to mute audio until signal is clear.
The instructor station shall be a 60” wide custom design from DWI Enterprises per the campus standard with provisions for a 14RU equipment rack with rear access for support.
All data cabling from the floor (or wall as required) shall be run into the instructor station equipment rack and be terminated on RJ45 patch panels for proper connection of networked edge devices (PC, control processor, wireless presentation appliance, etc.). The AV, power and data cabling to the typical instructor station shall be bundled in black nylon mesh sock and will include an 8-10’ service cable that permits flexibility in the desk position.
Middle Atlantic 14RU, RU as required to mount all equipment and must fit under height adjustable desk.
Middle Atlantic 2RU locking drawer #UD2 with #KYLK lock option.
Middle Atlantic 2RU clamping shelf for wireless mirroring device.
Middle Atlantic 3RU clamping shelf for PC.
Middle Atlantic power distribution unit (PDU) #PD-915R or approved equivalent.
Six-outlet 115VAC surge power strip mounted within rack for monitor & PC, etc.

Large Classroom:

3 Input Transmitter: Extron DTP T USW 233.
Cable Cubby: Extron Cable Cubby 300S with connection cables, Left/Right Cable Pass-Through and Blank AAPs as required.
Auxiliary Microphone Input Plate: 2-gang 3.5 deep box with white decorator faceplate. Include (2) XLR microphone connections.
Mersive Solstice Pod (non-enterprise model). Connect to data network and configure settings in conjunction with UCR IT Dept.
Wireless Microphone System: Shure QLXD124/85.
Document Camera: Wolfvision VZ8+.
Digital Presentation Switcher: Extron DTP CrossPoint 84 4K IPCP MA 70.
HDMI TP Receiver: Extron DTP HDMI 230Rx.
Audio Amplifier (70V ceiling speakers): Extron XPA 1002-70 (or sized as required)
Audio Amplifier (8-ohm wall speakers): Extron XPA 1002 (or sized as required)
Video Projector: Panasonic PT-RZ660U 6000 ANSI lumens laser WUXGA resolution projector (coordinate standard lensing with ceiling elements) with BMS LOC-IV security enclosure and Premier Mount PDS-Plus ceiling mount (or equivalent). Provide with wireless networking module for wireless presentation connection. Projector to be white model where available.
Desktop Monitor Mount: Ergotron #45-241-026 articulating monitor mount.
Coordinate projector throw with projection screen image for proper lensing.
Dell OptiPlex 7050 small form factor with Intel Corei5-7500 processor and 8GB 2x4GB 2400MHz DDR4 Memory. Include 3.5 inch 500GB 7200rpm Hard Disk Drive, dual digital (DisplayPort, HDMI, etc.) video output and Windows 10 Pro 64-bit operating software. Include Dell P2418HT 24” 1920 x 1080 LCD touch-enabled monitor. Include Dell 2-year warranty.
Wireless keyboard and Gyration gyro mouse shall be used within each classroom with proper USB extension hardware for the wireless receivers to reside at the instructor station for best signal reception and operation.
USB adapters for audio I/O shall be included as required for the multiple audio channels for Zoom integration.
Instructor Monitor: Dell 24” Interactive touch monitor # P2418HT.
Control System: Extron IN1608 IPCP MA 70 (or pro-grade equivalent to accommodate controlled devices).
Touch Panel: Extron TLP Pro 1025T Black. Provide with XTP PI 100 Power-over-Ethernet injector as required.
Control for projection screen to include up/down upon system startup & shut down. Control to include manual override for up/down during system on operation.
Control to include separate microphone and program audio mute and level controls.
Control to include connection to fire alarm trigger to mute audio until signal is clear.
The instructor station shall be a 60” wide custom design from DWI Enterprises per the campus standard with provisions for a 14RU equipment rack with rear access for support.
All data cabling from the floor (or wall as required) shall be run into the instructor station equipment rack and be terminated on RJ45 patch panels for proper connection of networked edge devices (PC, control processor, wireless presentation appliance, etc.). The AV, power and data cabling to the typical instructor station shall be bundled in black nylon mesh sock and will include an 8-10’ service cable that permits flexibility in the desk position.
Middle Atlantic 14RU, RU as required to mount all equipment and must fit under height adjustable desk.
Middle Atlantic 2RU locking drawer #UD2 with #KYLK lock option.
Middle Atlantic 2RU clamping shelf for wireless mirroring device.
Middle Atlantic 3RU clamping shelf for PC.
Middle Atlantic power distribution unit (PDU) #PD-915R or approved equivalent.
Six-outlet 115VAC surge power strip mounted within rack for monitor & PC, etc.

Multipurpose Room:

Wall Input Plates: 4-gang 3.5 deep box with white decorator faceplate. Include 2 Input Extron DTP T UWP 232D (white) wall transmitter. Include (2) XLR microphone connections.
Cable Cubby: Extron Cable Cubby 300S with connection cables, Left/Right Cable Pass-Through and Blank AAPs as required.
Mersive Solstice Pod (non-enterprise model). Connect to data network and configure settings in conjunction with UCR IT Dept.
Wireless Microphone System: (8) Shure QLXD124/85.
Wired Microphone: (2) Shure SM58 handheld wired microphone with 25' M-F XLR extension cable.
Digital Matrix Switcher: Extron XTP II Crosspoint 1600 including spare audio channels as needed for audio breakout to recording and audio amplifiers. Switcher to be sized as required for number of I/O plus expansion capability for growth.
HDMI TP Receiver: Extron DTP HDMI 230Rx.
DSP: Extron DMP 128 Plus C AT with DSP Software and Dante support (units bussed together as required for number of I/O plus expansion capability for growth.
Amplifier: Extron XPA 4002-70V.
Amplifier: Extron XPA 4002.
Video Projector: Panasonic PT-RZ970U 9000 ANSI lumens laser WUXGA resolution projector (coordinate standard lensing with ceiling elements) with BMS LOC-IV security enclosure and Premier Mount PDS-Plus ceiling mount (or equivalent). Provide with wireless networking module for wireless presentation connection. Projector to be white model where available.
Desktop Monitor Mount: Ergotron #45-241-026 articulating monitor mount.
Coordinate projector throw with projection screen image for proper lensing.
Two Dell OptiPlex 7050 small form factor with Intel Corei5-7500 processor and 8GB 2x4GB 2400MHz DDR4 Memory. Include 3.5 inch 500GB 7200rpm Hard Disk Drive, dual digital (DisplayPort, HDMI, etc.) video output and Windows 10 Pro 64-bit operating software. Include Dell 2-year warranty.
Two sets wireless keyboard and Gyration gyro mouse shall be used within each classroom with proper USB extension hardware for the wireless receivers to reside at the instructor station for best signal reception and operation.
USB adapters for audio I/O shall be included as required for the multiple audio channels for Zoom integration.
Control System: Extron IPCP Pro 550.
Touch Panel: Wall-mounted (one per room) Extron TLP Pro 1022M Black. Provide with XTP PI 100 Power-over-Ethernet injector as required.
Control for projection screen to include up/down upon system startup & shut down. Control to include manual override for up/down during system on operation.
Control system to manage room combined/divided state.
Control to include separate microphone and program audio mute and level controls.
Control to include connection to fire alarm trigger to mute audio until signal is clear.
Cameras: Infrastructure for future room cameras.
DWI Enterprises D10 podium (coordinate finish & veneer with Architect).
Middle Atlantic 44RU WR-44-32 pull-out rack with enclosure and seismic floor anchor brackets. Include front locking vented door. Include top cooling kit to accommodate proper active/forced cooling of internal equipment.
Middle Atlantic 2RU locking drawer #UD2 with #KYLK lock option.
Middle Atlantic 2RU clamping shelf for wireless mirroring devices.
Middle Atlantic 3RU clamping shelf for PCs.
Middle Atlantic power distribution unit (PDU) #PD-915R or approved equivalent.
Vertical 115VAC surge power strip mounted within rack for monitor & PC, etc.

Group Meeting Rooms:

3 Input Transmitter: Extron DTP T USW 233.

Cable Cubby: Extron Cable Cubby 300S with connection cables, Left/Right Cable Pass-Through and Blank AAPs as required.
Mersive Solstice Pod (non-enterprise model). Connect to data network and configure settings in conjunction with UCR IT Dept.
Digital Presentation Switcher: Extron IN1608 IPCP MA 70.
HDMI TP Receiver: Extron DTP HDMI 230Rx.
LG or Samsung LCD/LED display sized per condition but no less than 50" diagonal.
Include RS232 control capability, network port and a minimum of 2 HDMI ports.
Include tilt wall mount from Premier, Chief Manufacturing or Crimson AV – sized as required for display).
Dell OptiPlex 7050 small form factor with Intel Corei5-7500 processor and 8GB 2x4GB 2400MHz DDR4 Memory. Include 3.5 inch 500GB 7200rpm Hard Disk Drive, dual digital (DisplayPort, HDMI, etc.) video output and Windows 10 Pro 64-bit operating software. Include Dell 2-year warranty.
Wireless keyboard and Gyration gyro mouse shall be used within each classroom with proper USB extension hardware for the wireless receivers to reside at the instructor station for best signal reception and operation.
USB adapters for audio I/O shall be included as required for the multiple audio channels for Zoom integration.
Control System: Extron IN1608 IPCP MA 70 (or pro-grade equivalent to accommodate controlled devices).
Touch Panel: Extron TLP Pro 1022M Black. Provide with XTP PI 100 Power-over-Ethernet injector as required.
Control to include connection to fire alarm trigger to mute audio until signal is clear.
Middle Atlantic 12RU SRSR-2-12, RU as required to mount all equipment and must fit within room millwork. Include rear cooling kit to accommodate proper active/forced cooling of internal equipment. Include leveling feet to accommodate underside ventilation and cabling run into rack from bottom side. Coordinate prior to ordering with UCR for desk compatibility.
Middle Atlantic 2RU locking drawer #UD2 with #KYLK lock option.
Middle Atlantic 2RU clamping shelf for wireless mirroring device.
Middle Atlantic 3RU clamping shelf for PC.
Middle Atlantic power distribution unit (PDU) #PD-915R or approved equivalent.
Six-outlet 115VAC surge power strip mounted within rack for monitor & PC, etc.

Group Meeting Room (with Conferencing):

3 Input Transmitter: Extron DTP T USW 233.
Cable Cubby: Extron Cable Cubby 300S with connection cables, Left/Right Cable Pass-Through and Blank AAPs as required.
Mersive Solstice Pod (non-enterprise model). Connect to data network and configure settings in conjunction with UCR IT Dept.
Digital Presentation Switcher: Extron IN1608 IPCP MA 70.
HDMI TP Receiver: Extron DTP HDMI 230Rx.
LG or Samsung LCD/LED display sized per condition but no less than 50" diagonal.
Include RS232 control capability, network port and a minimum of 2 HDMI ports.
Include tilt wall mount from Premier, Chief Manufacturing or Crimson AV – sized as required for display).
Dell OptiPlex 7050 small form factor with Intel Corei5-7500 processor and 8GB 2x4GB 2400MHz DDR4 Memory. Include 3.5 inch 500GB 7200rpm Hard Disk Drive, dual digital (DisplayPort, HDMI, etc.) video output and Windows 10 Pro 64-bit operating software. Include Dell 2-year warranty.
Wireless keyboard and Gyration gyro mouse shall be used within each classroom with proper USB extension hardware for the wireless receivers to reside at the instructor station for best signal reception and operation.
USB adapters for audio I/O shall be included as required for the multiple audio channels for Zoom integration.

System: Logitech GROUP video collaboration package with USB camera, tabletop USB microphone/speaker/dial-pad and remote camera control unit.
Connect to computer for Zoom web conferencing and configure on PC software.
Mount camera below display with wall bracket for best eye-level capture.
Control System: Extron IN1608 IPCP MA 70 (or pro-grade equivalent to accommodate controlled devices).
Touch Panel: Extron TLP Pro 1022M Black. Provide with XTP PI 100 Power-over-Ethernet injector as required.
Control to include connection to fire alarm trigger to mute audio until signal is clear.
Middle Atlantic 12RU SRSR-2-12, RU as required to mount all equipment and must fit within room millwork. Include rear cooling kit to accommodate proper active/forced cooling of internal equipment. Include leveling feet to accommodate underside ventilation and cabling run into rack from bottom side. Coordinate prior to ordering with UCR for desk compatibility.
Middle Atlantic 2RU locking drawer #UD2 with #KYLK lock option.
Middle Atlantic 2RU clamping shelf for wireless mirroring device.
Middle Atlantic 3RU clamping shelf for PC.
Middle Atlantic power distribution unit (PDU) #PD-915R or approved equivalent.
Six-outlet 115VAC surge power strip mounted within rack for monitor & PC, etc.

Group Study Areas:

3 Input Transmitter: Extron DTP T USW 233.
Mersive Solstice Pod (non-enterprise model). Connect to data network and configure settings in conjunction with UCR IT Dept.
HDMI TP Receiver: Extron DTP HDMI 230Rx.
LG or Samsung LCD/LED display sized per condition but no less than 50” diagonal.
Include RS232 control capability, network port and a minimum of 2 HDMI ports.
Include tilt wall mount from Premier, Chief Manufacturing or Crimson AV – sized as required for display).
Control Processor: Extron IPL Pro S1 mounted behind display and connected to data network.
Touch Panel: Wall-mounted Extron TLP Pro 320M Black. Provide with XTP PI 100 Power-over-Ethernet injector as required.

Student Lounge:

Custom Extron AAP-104 wall plate with (1) HDMI, (1) VGA + 3.5mm audio, composite video RCA and stereo audio (L/R) RCA connections. White in color.
Mersive Solstice Pod (non-enterprise model). Connect to data network and configure settings in conjunction with UCR IT Dept.
LG or Samsung LCD/LED display sized per condition but no less than 50” diagonal.
Include RS232 control capability, network port and a minimum of 2 HDMI ports, VGA, composite video and two stereo channels of discrete audio inputs.
Include tilt wall mount from Premier, Chief Manufacturing or Crimson AV – sized as required for display).
Control Processor: Extron IPL Pro S1 mounted behind display and connected to data network.
Touch Panel: Wall-mounted Extron TLP Pro 320M Black. Provide with XTP PI 100 Power-over-Ethernet injector as required.

Room Scheduling:

Wall mounted touch-enabled scheduling panels shall be included outside the main entrance door to the lecture halls, classrooms, and multipurpose rooms as well as each study room and group meeting room. These panels shall be used for the reservation and notification of room use indicating whether the room is available and reservable (green indicator side lights and display) or occupied or books by reservation (red indicator side lights and display).

These shall be tied to the card access system for student and staff use during the reservation and room access process.
Control Processor: Extron IPL Pro S1 mounted behind display and connected to data network. Interface with Extron GlobalViewer room management server and software.
Touch Panel: Wall-mounted Extron 7" TouchLink TLS 725M (white). Include wall mount bracket. Power by Power-over-Ethernet from PoE enabled data switch from telcom room.
Software: Extron Room Agent™ scheduling software. Interface with UCR calendar system and MS Exchange as required in coordination with USC IT.

Room Management:

AV Remote Management System: Connect to existing Extron GlobalViewer™ Enterprise 2.0 server application for all new endpoints. Coordinate with UCR IT for server and network needs, as required to support the software. Provide all necessary program control hooks for all required transport controls and key operation parameters.
Software shall be used for room monitoring and remote control and operation of all audiovisual systems and for use in troubleshooting for user-requested remote assistance in operation.
Hooks for programming control use shall include (but not be limited to):

Projector state and input status including connectivity (LAN, Power). Projector run time for current state and total life run time. Projector temperature.
Peripheral device monitoring and connection, operating temperature and LAN/control connectivity.
Operational usage data for all system functions and peripheral devices for analytic purposes.
Remote web-based user interface for ease of parallel system operation for all individual systems.
Interfacing to Room Scheduling system.

SECTION 27 5100 – ASSISTIVE LISTENING SYSTEMS

PRODUCTS

Portable Systems: Provide a minimum of 6 complete portable systems.

Fixed/Permanent Systems: Provide one fixed system for each room with occupancy levels of 50 seats or greater as per ADA guidelines.

Portable Kit: Listen Technologies # LS-06-216 including charging case.

Fixed: Listen Technologies digital FM equipment kit #LS-55-216 for operation with the fixed voice reinforcement systems.

SECTION 27 5116 – MOUNTS

PRODUCTS

Ceiling Projector Mount: Premier Mounts model #PP-5A or approved equivalent.

Universal Projector Adapter: Premier Mounts model #PDS-PLUS-W or approved equivalent. White in color.

Projector Lock: BMS LOC IV. Keyed alike to campus master key. White in color.

Wall Monitor Mount, Medium: Premier AM-175.

Wall Monitor Mount, Large: Premier AM-300.

Accessories: Include white extension pole cut to length as needed with 45-degree bracing or Premier AST-series adjustable white extension kit. Include ceiling tile dress ring as required.