I. GENERAL

The following changes, additions, or deletions shall be made to the listed documents as indicated, and all other conditions shall remain the same. Acknowledgement of receipt and incorporation of all directions contained herein is a condition of a responsive proposal.

II. REVISIONS TO THE REQUEST FOR PROPOSAL (BID DOCUMENTS)

A. 03 – Proposal Schedule

DELETE original Proposal Schedule.

REPLACE with the attached updated Proposal Schedule document. Modifications to this document are isolated to a confirmation of a 5th 90 minute confidential One-on-One meeting. (Added highlighted in RED).

B. 12 – Agreement

DELETE original Agreement.

REPLACE with updated Agreement document. Modifications to this document are isolated to a clarification to contract time of phases 2 & 3. “The Notice To Proceed for Phases 2 and 3 is contingent upon funding approval from The Regents of the University of California.” (Added comment is highlighted in BOLD).

C. 15 – Basis of Design

1. Section 3.2 Laboratory Design Criteria

DELETE original 3.2 Laboratory Design Criteria

REPLACE with revised 3.2 Laboratory Design Criteria

2. Section 3.9 Laboratory Equipment, Utility and Exhaust Schedule

DELETE original 3.9 Laboratory Equipment, Utility and Exhaust Schedule

REPLACE with revised 3.9 Laboratory Equipment, Utility and Exhaust Schedule

3. Section 7.0 Systems Design and Performance Criteria

DELETE original 7.6 Building Technology Systems table

REPLACE with revised 7.6 Table. (Reduction of security camera quantity requirement).
4. Addendum 9: Narrative Summary

SEE Design narrative for a detailed summary.

D. 19 – Scope of Work

REPLACE original Scope of Work with updated Scope of Work document. Modifications to this document are isolated to section 1.12.2.1.a (iii) of the 1.12 CEQA Document Requirements with incorporation of an additional project specific CEQA mandatory measures. (Added subsection highlighted in BOLD).

E. 25 - University Furnished Information

Add the following to the University Furnished Information Table of Contents sheet:

29. UCR FURNISHED EQUIPMENT CUT SHEETS

<table>
<thead>
<tr>
<th>No.</th>
<th>Title:</th>
<th>Prepared By:</th>
<th>Date:</th>
</tr>
</thead>
<tbody>
<tr>
<td>P</td>
<td>Camera Cut Sheets</td>
<td>Sony Electronics, Inc.</td>
<td>03/10/2016</td>
</tr>
</tbody>
</table>

III. DESIGN BUILDER QUESTIONS & ANSWERS **

** Refer to previously distributed addenda for earlier Q&A not listed below.

Q164 Reference BOD, Section 7.3 Electrical Systems, Page 7.3-14/Lighting levels: This paragraph states that lighting levels are to “conform to Illuminating Engineering Society’s (IES) recommendations”, then gives targeted lighting levels that exceed IES standards. Furthermore, in Section 8 “Detailed Space Requirements” there are conflicts in the required lighting levels compared to what is listed in Section 7.3. For Example: IES Standard for a typical office space is 30-50 foot candles (FC). In Section 7.3, Page 7.3-14 the Target Lighting Levels states 50-70 FC for an Admin/Office/Workstation and in Section 8, Index Number O1.3, Office space states 75 FC at bench/desk.

PROPOSED SOLUTION:
Please confirm the following IES recommended average foot candle ratings where the age range of the users are between 25-65 (younger than 25 require less light) are acceptable to use as the design standard.

a. Private and open office areas: 40 f.c
b. Lab Spaces General Illumination and Circulation: 40 f.c.
c. Lab Spaces-Work Bench: 70 f.c.
d. Lab Support Rooms: 40-50 f.c.

A164 This is acceptable.

Q165 Reference Detailed Space Requirements O1.2, O1.3, O3.2, O3.3 for Owner Furnished / Owner Installed Furnishings. Please confirm that the furniture will come prewired and only
require a single point connection.

<table>
<thead>
<tr>
<th>A165</th>
<th>Workstations &amp; wiring are OFOI. Office systems wiring pulled by PPlant. Assume (2) points of power (duplexes) per workstation.</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Q166</th>
<th>Reference BOD, 3.9 Laboratory Equipment, Utility and Exhaust Schedule (LUE) electrical section. Please clarify if Emergency Power, 208/220v, 480V and Equipment Grounds are the same receptacles called out in Section 8 “Detailed Space Requirements” (DSR). If they are, clarify what takes precedence. For example DSR L1.1 calls for 208, 30A 1Phase receptacle. The LUE L1.1 does not have 208/220V power on any levels.</th>
</tr>
</thead>
</table>

| A166 | 1) Emergency power outlets and equipment grounds are two separate devices. Equipment grounds are copper buss bars.  
2) 208V power is shown on Table 3.9 – Provide 208V receptacles on emergency (standby) power. |
|------|----------------------------------------------------------------------------------------------------------------------------------|

<table>
<thead>
<tr>
<th>Q167</th>
<th>Reference BOD, DSR O1.1, O3.1 Offices. Each diagram shows (2) duplex receptacles per office. This conflicts with Section 7.3, Page 7.3-5 Branch circuitry where it calls for Work Stations and Offices to be designed with (3) duplex and (1) four plex receptacle. Please clarify which is correct.</th>
</tr>
</thead>
</table>

| A167 | Per the Communications Infrastructure Planning Guidelines 2015, please provide the following:  
Open/Modular: 1 Voice, 2 Data per 60 Square Feet  
Offices: (3) duplex and (1) four-plex receptacle as indicated on 7.3-5 branch circuitry.  
Research lab computer intensive: 1 voice, 23 data per 100 square feet, 1 wireless, and 1 fiber port per lab  
Office systems wiring pulled by PPlant, assume 2 points of power per workstation. |
|------|----------------------------------------------------------------------------------------------------------------------------------|

<table>
<thead>
<tr>
<th>Q168</th>
<th>Please provide Security Camera Specifications as reference in the BOD, Design Performance Criteria 7.6-14. Video Surveillance. These specification were not issued with the balance of the Division 28 specifications.</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>A168</th>
<th>Please see camera cut sheets attached to this Addendum. Sony products listed are CFCI and are Campus standard (No Substitutions).</th>
</tr>
</thead>
</table>

| Q169 | Please confirm the use of Metal Clad (MC) Cable can be used under the following Conditions  
A. Concealed locations only.  
B. Lighting and general purpose power only (not within lab benches).  
C. Circuit voltages not exceeding 277V.  
D. Single vertical runs within walls (drop from a ceiling junction box to a box within the wall)  
E. Not for horizontal “daisy chains” within walls.  
F. Not for “home runs”. |
|------|----------------------------------------------------------------------------------------------------------------------------------|
This is acceptable.

Reference Section 7.6, Page 7.6-4: This section indicates the “Horizontal distribution of station cabling on each floor shall be primarily through cable tray, conduit would be used as necessary to get into specific areas, through open ceiling and through hard lid areas. Suspended supports (e.g. J-hook) may be limited per the design as branch-offs within accessible dropped ceiling areas into the outlet locations only.” In an effort to reduce congestion and allow future flexibility for cable routing paths, please confirm the following use of cable tray, conduit stubs and j-hooks is acceptable.

A. Cable tray will be limited to use in open ceiling spaces such as the Linear Equipment Rooms (LER).
B. Cable tray will not be used in concealed ceiling spaces unless the DBT determines it will add value to the project.
C. Outlets located within walls will have conduit stubbed to an accessible ceiling. For the purposes of this description, an accessible ceiling will be limited to rooms with ceiling tile.
D. J-hooks shall be used to extend horizontal station cable from a conduit stub to a cable tray or directly to an IDF.

A) Cable Tray shall serve as the primary pathway(s) and shall be limited to open ceiling space except where conditions of short (pass thru) sections exist as defined below in response to B.
B) Cable Tray can be used for “short” (pass thru) sections (10-15 feet or less) of hard lid/concealed ceiling spaces but, Maintenance personnel shall have access to the Cable Tray on both sides, e.g. via Step Ladders.
C) Acceptable.
D) J-hooks (branch-off) pathways shall be limited in use to extend horizontal communications station cables from conduit stubs to cable tray or directly to telecom rooms (IDF and/or BDF) when pathways are determined to be shorter and/or improved routing is achieved, e.g. program spaces adjacent or within 50-70 feet of telecom room.

Please refer to 18 Campus Communications within the University Furnished Information folder for additional requirements.

Reference Section 7.3, Page 7.3-5 Electrical Systems: The second bullet point under the Branch Circuitry heading indicates the following - “Typical convenience receptacles shall be arranged for six (6) duplex or quad outlets per 20A, 1 pole circuit, 120V”. The NEC / CEC allows for a calculated load of 180w per general purpose receptacle. This calculation allows for eleven (11) receptacles, per 20A/120V circuit. Given the fact that all equipment has dedicate circuits, please confirm that it is acceptable to allow eight (8) receptacles per 20A/120V circuit?

This is acceptable.

The BOD for the MRB1 project has required HVAC System diversities. In section 7.2.7.5 it indicated that a system diversity is to be 100% for Lab, Office and Vivarium systems (see attached highlighted area of the BOD.) These Watts per square foot requirements are well beyond code in some instances and jeopardize the project meeting Title 24. This will also
cause excessive and unnecessary oversizing of the HVAC system and will likely increase inefficiencies of the system at low loads which is where these systems will operate a majority of the time. Note that UC Irvine has a 75% diversity in their campus BOD for laboratory buildings. Currently, with the diversity and safety factors attached for the UCI Engineering Unit 3 Laboratory Project, this building is currently running at 40 hertz or roughly 67% of the Design Load. This building does have Air Acuity. These values can be confirmed by Jim Walhmeir at UCI Design and Construction Services. firm it is acceptable to revise the System Diversity Requirement to match the marked up BOD attachment? Attachments Proposed BOD per UCI and Proposed Load Criteria.

A172
• 100% diversity of Vivarium AHU and Exhaust systems shall remain.
• No exception to 75% diversity for the Central Lab AHU and Central Lab Exhaust System.
• No exception to proposed equipment, people, and lighting loads.
• Use ASHRAE Region X data for Riverside, CA. Outdoor 0.1% summer condition of 106°F/71°F dB/wB and “Median of Extremes” winter condition of 29°F.
• DBT shall conform to the room environmental criteria specified in Section 7.2.13.3.

Q173
Specification Section 12 35 53 for Fixed Laboratory Casework states in section 2.7.1.2 "Provide [locks] on all drawers and doors." Please confirm if locks are required on all doors and drawers. Please confirm if locks are required at any non-lab casework elevations.

A173
Please provide locks on all casework doors and drawers that are not behind a locked door. In other words, casework in open labs and collaborative space should have locks. For offices with lockable doors, casework do not need locks.

Q174
There is a conflict in number of fume hoods required in LS3.1 Chemical Storage (H-Occupancy) shown in table 3.9 Laboratory Equipment, Utility and Exhaust Schedule, issued in Addendum 5, and the room data sheets and room diagram shown for LS3.1 Research Support for Chemical Storage (H Occupancy). Table 3.9 lists (1) 4’ fume hood in LS 3.1. Room data sheet LS3.1 Research Support Chemical Storage (H Occupancy) does not list a fume hood in this room, nor does the diagram show a fume hood. Please confirm no fume hood is required in LS3.1 Chemical Storage (H-Occupancy).

A174
Please refer to revised Table 3.9 for fume hood requirements included with this addendum.

Q175
Reference: MRB1 Basis of Design Section 7.6.2 Page 7.6-9 and Page 7.6-11

A. The BOD Security requirements for this project appear to be significantly in excess of other similar projects and at other UC campuses. When using the general guidelines for Field Devise Location Matrix (7.6-11) the resultant quantities of security devices are excessive – as the Detailed Space Requirements data sheets don’t indicate requirements per guidelines. Our interpretation of the field device location is follow the language on page 7.6-10 item IIB ……refer to room data sheet to identify security field devices required within individual rooms and building Areas. Please confirm if this is correct interpretation.

B. Per the general guidelines for field device location matrix (7.6-11) there are cameras
required at “Down Each Lab Bench” and in “Vivarium Holding Rooms”? Once again the room data sheet doesn’t indicate any camera requirements. Please confirm if our interpretation is correct that no cameras are required “Down at each Lab Bench “location.

A175

7.6-11 has been revised. Please see new quantities.

Q176

When is the last day to submit an RFI?

A176

Tuesday, April 19th, 2016 @ 5pm. Final Addendum to be distributed Monday, April 25th 2016.

Q177

Reference:  MRB1 Basis of Design Section 7.6.1 Page 7.6-4

Horizontal distribution of station cabling on each floor shall be primarily through cable tray...

Will the university allow the elimination of cable tray and accept the use of J-Hooks and conduit stubs into the ceiling for horizontal pathways in open and accessible ceiling spaces?

A177

Please refer to response to similar RFI Q170 for clarification.

Q178

Reference:  MRB1 Basis of Design Section 7.3.5 Page 7.3-2
MRB1 Basis of Design Section 7.3.5 Page 7.3-12
MRB1 Specifications 26 1.14D

Two separate electrical circuits shall be brought to a four-way air insulated vault-mounted PME10 style switch....

Transformers shall have dual primary feed selector switches and primary fusing.

A new 4-way switch is not required for the operation of this building or the future building. The Pad Mount Transformer comes with dual circuit integral switching and can serve MRLB1 and T-tap splicing can be provided in the vault to feed the future MRLB2 building. Will the university allow the elimination of the four-way PME10 style switch and accept the dual primary feed selector switches and primary fusing in the transformer only?

A178

No. Please provide the four-way switch as directed.

IV. ATTACHMENTS

A. 03 Proposal Schedule_ADDEN9
B. 12 Agreement_ADDEN9.pdf
C. 19 Scope of work_ADDEN9.pdf
D. Camera Cutsheets.pdf
E. ADD_9_BOD_3.2_Lab Design Criteria
F. ADD_9_BOD_3.9_Lab Systems Tab
G. ADD_9_BOD_7.6_Technology
H. ADD_9_BOD_Narrative_160405

End of Addendum