Project Name: UNIVERSITY OF CALIFORNIA, MERCED STUDENT SERVICES BUILDING Project No.: 900120

ADDENDUM NO. 3

to the

CONTRACT DOCUMENTS

June 12, 2012

I. Bidder acknowledges that it is the Bidder's responsibility to ascertain whether any Addenda have been issued and if so, to obtain copies of such Addenda. Bidder therefore agrees to be bound by all Addenda that have been issued for this bid.

This Addendum forms a part of the Contract Documents and modifies the original Bidding Documents. The following changes, additions, or deletions shall be made to the following documents as indicated and all other Contract Documents shall remain the same.

II. <u>CLARIFICATIONS</u>

- A. PRE-BID QUESTIONS Questions received from bidders and responses are as follows:
 - 1. Q. Plan sheet A10.01, Finish Schedule identifies the ceiling finish in Student Services Suite 120 & 130 and General Assembly 160 & 170 to be C1A (Exposed)/C2 (Gypboard). The RCP on plan sheet A6.01 does not indicate any gypboard. Please clarify.
 - A. This item will be clarified in the tenant improvement documents issued in this Addenda.
 - 2. Q. Plan sheet A10.01, Finish Code List identities C3 as Suspended Acoustic al Ceilings with a reference to Spec Section 09 51 13. Two different sizes of panels are specified in that section (2.4.A 2X4; 2.4.B 4X4). Please provide the location of each panel size.
 - A. This item will be updated in the tenant improvement addendum that is currently scheduled to be released June 12th. Only 2' x 2' panels will be used for the project.
 - 3. Q. Deductive Alternate #5 deletes walls and doors at Office 221 226. Are we to assume that the price is to also include the deletion of the suspended acoustical ceiling (C3 on the Finish Schedule)? The adjacent Hall 2CB is shown as C1A Exposed Ceiling.
 - A. No, ceiling will not be deleted. Only walls, doors and wall outlets will be removed for deductive alternate. Adjacent hall will have acoustical ceiling. This will be updated in the tenant improvement addendum package.
 - 4. Q. Also note that the RCP on plan sheet A6.02, Hall 2C4 should be 2C5 and Hall 2C5 should be 2C8 to match the Floor Plan & Finish Schedule.

- A. This item will be clarified in the tenant improvement addendum that is currently scheduled to be released June 12th. Yes. RCP will be labeled as the floor plan and finish schedule.
- 5. Q. Add Alternates #5 & #6 add various finishes and amenities. The Carpet (F4) and the Acoustical Wall Panels (W3) should be out with the future addendum. Is this correct?
 - A. Yes.
- 6. Q. What size of acoustical panels are to be installed (see Item 2 above)?
 - A. Ceiling will be 2' x 2'.
- 7. Q. Are motorized shades to replace the manual shades shown on A6.01? If so, please provide whether they will be "solar" or "solar & blackout".
 - A. Yes. Motorized shades will be provided. They will be solar & blackout.
- 8. Q. Also provide electrical info for power to these shade locations; E4.11 only shows j-boxes for door access & video surveillance.
 - A. This item will be clarified in the tenant improvement addendum that is currently scheduled to be released June 12th.
- 9. Q. Marker Boards are to be added; please provide a size and specification.
 - A. This item will be clarified in the tenant improvement addendum that is currently scheduled to be released June 12th.
- 10. Q. AV/IT infrastructure are to be added; please provide further information.
 - A. This item will be clarified in the tenant improvement addendum that is currently scheduled to be released June 12th.
- 11. Q. Revised lighting fixtures are to be provided. Will this info also be in the addendum?
 - A. This item will be clarified in the tenant improvement addendum that is currently scheduled to be released June 12th.
- 12. Q. What type of countertop is edge there?
 - A. The Countertop edge is to be per 10/A4.42.
- 13. Q. For the kitchenette what type and color of the sink?
 - A. Kitchenette counter is P-lam with stainless steel sink. This will be shown in Tenant Improvement addendum package in detail.
- 14. Q. Is this a prevailing wage job?
 - A. Yes.

STUDENT SERVICES BUILDING UNIVERSITY OF CALIFORNIA, MERCED

- 15. Q. Specifications: Volume 1, Table of Contents references a Contractor Master Project Schedule. Please provide.
 - A. Section 01 31 42 will be modified to make the General Contractor responsible for developing a Preliminary Master Schedule.
- 16. Q. Did not see a window schedule with types & sizes on plans or in specifications, is there one? Or are we taking sizes from exterior elevation?
 - A. Yes, Contractor will be taking sizes from elevations. Types are indicated on the ceiling plan.
- 17. Q. A review of the fire alarm layout shows a lack of the required strobe notification devices in the overall design.
 - A. This item is addressed in Addendum 3 to show complete fire alarm layout design.
- 18. Q, Data Communication/Audio Visual is missing or not used for this project. Is the data cabling, backbone communications, and audio-visual being bid out separately as a separate bid package or in an addendum?
 - A. SSB project Division 27 and 28 specifications and the majority of the construction plans related to this part of the scope of work will be issued in an addendum scheduled to be released on June 12th so this can be included the total scope of work that is being bid by General Contractors.
- 19. Q. A review of the fire alarm layout shows manual pull stations located at the exterior of the building. This is not consistent with the campus design, which has pull stations located on the interior of buildings. In addition the pull stations specified are not rated for exterior locations.
 - A. The campus designated Fire Marshal has clarified that exterior pull stations are acceptable to be used on the Student Services Building project. Exterior pull stations need to be rated for exterior usage. Exterior pull station device specification and any exit device location changes will be clarified in the next addendum.
- 20. Q. A review of the Mass Notification layout shows a lack of sufficient audible and visible alert devices for the spaces.
 - A. This item is addressed in Addendum 3 to show complete layout design for all devices.
- 21. Q. Please accept this request to allow additional time to provide pricing for the 8 Add Alternates and the 9 Deductive Alternates on bid day. Bringing all of the pricing together for the Base Bid (sometimes at the last minutes/seconds) can be very hectic without the added strain of multiple alternates. One additional hour should be a reasonable amount of time to properly assemble the alternate pricing.
 - A. With a 6 week bid period for this project the general contractors need to advise their potential subcontractors the entire bid needs to submitted by the scheduled bid date and time, and no additional time will be allowed for the development of the bid alternates. This request is denied.

- 22. Q. Do you know if the Specs for Security/CCTV, Telecommunications and Data, and Audio Video Systems will be issued on 6/12 with the TI/Interior Finish/and Site documents?
 - A. The specifications for Security/CCTV, Telecommunications and Data, and Audio Video Systems will be issued on 6/12 with the TI/Interior Finish/and Site documents.
- 23. Q. Specification 05120 Section 1.6.B states that the Steel Fabricator must maintain AISC Certification at time of bid, however, there is no mention of any AISC requirement for the Steel Erector. Can you please confirm that the Steel Erectors are to also be AISC Certified at the time of bid?
 - A. Specification 05120 Section 1.6.B requirement for the Steel Fabricator to maintain AISC Certification at time of bid is to remain. This is a specification qualification requirement, and not a separate prequalification review process. It is Rutherford and Chekenes's opinion that it is not necessary for the steel erector to maintain AISC Certification as they are a second tier subcontractor to the steel fabricator subcontractor, and the fabricator is responsible for their erector.
- 24. Q. Detail 9/S5.03 is noted Typical W12 beam to hoist connection. There are other conditions where there are W16 and HSS 10x5x3/8 connecting to steel hist. Please provide details for these connections.
 - A. Use 9/S5.03 at W12 Typical as noted. Use 10/S5.03 at all other wide flange beam to truss connections typical as noted. A detail for HSS to Truss connection will be forthcoming in Addendum 3.
- 25. Q. Reference Detail 3A/A7.14 Should cap at bottom of post should be alum not steel?
 - A. The Detail 3A/A7.14: Yes. The detail will be revised accordingly.
- 26. Q. Reference Detail 3B/A7.14 It appears that a stud or rebar welds to the handrail post. This would not allow it to drop into cored hole. Please clarify.
 - A. Detail 3B/A7.14: If kept short, like 3/8" long, the assembly will fit into the hole.
- 27. Q. Reference Detail 3A/A7.15 Alum handrail construction have no thicknesses, welding symbols or grinding requirements. Also the attachment of the alum post to the steel stair stringer cannot be welded connection. Please provide additional information.
 - A. Detail 3A/A7.15: Section 05 52 13 covers thickness and fabrication. for handrail attachment, the detail will be revised to show the handrail screwed to a steel bracket.
- 28. Q. Reference Detail 1, 5, 9, 13, 17, and 18/S5.11 HSS storefront framing is not sized. Detail 19/S5.11 states HSS5x5 but no thickness is provided. Please clarify.
 - A. All HSS Storefront framing at 3 story bldg 5x5x1/2 U.O.N.

- 29. Q. Reference Detail S2.04 Please clarify splice details for MC 18x42.7 at walkway roof. Do we use a mechanical splice or welded splice?
 - A. Use detail 11/S5.10 for splice. This is the same mechanical splice used at the Pavillion Canopy. Detail shows edge splices and corner splices.
 Make edge splices as follows: At Line 6, make splices 2'-0" south of Lines B, D, F, H. Make splice 2'-0" north of Line K. No edge splices at Line 5.2. Make corner splice at corners.
- 30. Q. Reference Detail 8/S4.05 Weld criteria is not shown for the connection plate and 3/8" stiff plate. Please clarify.
 - A. Use typical shear plate detail 1-S5.01 for welds.
- 31. Q. T.01-T5.11 It is our understanding that the University ois desirous of installing an Area of Refuge System into each building over two stories in height (this is not code required). Please confirm if a system will be required by the University and if so please provide bidding information. Recommendation: The existing campus Area of Refuge system is manufactured by Commend, see attached specification.
 - A. Area of Refuge...not required and we are not requiring it.
- 32. Q. Power plans, I didn't see notes pertaining to motorized shade Type 2 & 3. Are any tieing into an A/V system?
 - A. Yes. Power will need to be provided for all motorized shade and these will also be connected to A/V and lighting control system.
- 33. Q. Spec Section 01 43 39 Mock-Ups, 1.1A1.b identifies a laboratory casework mock-up. There is no lab areas shown. Does this mock-up apply to this project?
 - A. This item will be deleted in a later addendum.
- 34. Q. Spec Section 01 43 39 Mock-Ups, 1.1A.1c describes a polished concrete topping mockup. Concrete Topping spec'd in Section 03 53 00 is an "abrasive-blast finish". Does this mock-up apply to this project?
 - A. This item will be deleted in a later Addendum.
- 35. Q. Spec Sections 01 31 42 Contractor Schedules and 01 31 45 Contract Schedules describe two different approaches to the scheduling requirements. Will both sections be utilized on this project?
 - A. Yes, Section 01 31 42 is revised in Addendum 3 to make the General Contractor responsible for developing a Preliminary Master Schedule and updates. Section 01 31 45 addresses the schedule form, content, milestones, reports, distribution, updating and other detailed scheduling requirements.

- 36. Q. The Table of Contents in Spec Volume 1 lists "Section 01 43 40 Exterior Enclosure Performance Requirements". Does this section exist? It is not included in the Specifications.
 - A. Spec Section 01 43 40 will be included in Addendum 3
- 37. Q. Spec Section 01 45 00 defines the "University Testing Laboratory" and "General Contractor's Testing Laboratory". Please clarify what testing is to be paid for by the Contractor.
 - A. The Contractor needs to review the testing requirements listed in the various sections of the specifications. The University will be responsible for the building foundation and pad soil compaction, structural concrete, structural steel welding tests along with other tests as determined by the University's Representative. All other testing requirements are to be the General Contractor's responsibility.
- Q. Plan Sheet M5.03 has a Misc. Equipment Schedule... "to be completed in 90% CD's (Bid Package 3)" ... Please Clarify.
 - A. This schedule is deleted from the project. Updated Sheet M5.03 will be issued in the upcoming addendum.
- 39. Q. Spec Section 05 12 00 includes requirements for an AISC steel fabricator. Can this requirement be deleted? (Note that the previously prequalified list of steel contractors issued in Addendum NO. 2 includes non-AISC subs, that are very qualified to complete the proposed work scope.).
 - A. Specification 05120 Section 1.6B requirement for the Steel Fabricator to maintain AISC Certification at time of bid is to remain. The University's previous prime trade prequalification process was generally limited to trade contractors' licensing, experience and claims history, and it did not address the specification requirements which were not fully established at the time of that prequalification process.
- Q. The table of Contents in Spec Volume 1 lists "Section 01 43 40 Exterior Enclosure Performance Requirements". Does this section exist? It is not included in the specifications.
 - A. This section is being issued as part of Addendum 3.
- Q. Spec Section 01 45 00 defines the "University Testing Laboratory" and "General Contractor's Testing Laboratory". Please clarify what testing is to be paid for by the Contractor.
 - A. The Contractor needs to review the testing requirements listed in the various sections of the specifications. The University will be responsible for the building foundation and pad soils compaction, structural concrete, structural steel welding tests along with other test as determined by the University's Representative. All other testing requirements are to be the General Contractor's responsibility.

STUDENT SERVICES BUILDING UNIVERSITY OF CALIFORNIA, MERCED

III. BIDDING/CONTRACT DOCUMENTS AND DIVISION 1 SPECIFICATIONS – VOLUME 1 OF 2

- 1. Table of Contents
- 2. Supplementary Instructions to Bidders: REVISE Number four to include "Physical Planning Design & Construction and Suite C to the location of the bid delivery.
- 3. Specification Section 01 12 00.01 Bid Form: DELETE Bid Form and replace with Bid Form attached to this Addenda.
- 4. Specification Section 01 22 00 Unit Prices: REVISE Estimated Units 3-to 4 Door Openings.
- 5. Specification Section 01 31 42 General Contractor Schedule: DELETE entire section and REPLACE with new section attached to this Addendum.
- 6. Specification Section 01 43 40 Exterior Enclosure Performance Requirements: ADD new specification section attached to this Addendum.

IV. <u>DIVISION 2 – 33 SPECIFICATIONS – VOLUME 2 OF 2</u>

- 1. Specification Section 05 51 00 Metal Stairs: REVISE paragraph 2.11. A, and B. ADD paragraph 2.11 C and D.
- 2. Specification Section 05 52 13 Pipe and Tube Railings: DELETE entire section and REPLACE with new section attached to this Addendum.
- 3. Specification Section 05 70 00 Decorative Metal: DELETE entire section and REPLACE with new section attached to this Addendum.
- 4. Specification Section 06 10 53 Miscellaneous Rough Carpentry: REVISE 1.1 A .3 to ADD Subflooring.
- 5. Specification Section 06 10 53 Miscellaneous Rough Carpentry: ADD paragraph 2.06. 1 and 2 Subflooring.
- 6. Specification Section 06 10 53 Miscellaneous Rough Carpentry: ADD paragraph 3.4, A, B and C Subflooring Installation.
- 7. Specification Section 06 40 23: ADD new specification section attached to this Addendum.
- 8. Specification Section 07 13 26 Self-Adhering Sheet Waterproofing: DELETE entire section and REPLACE with new section attached to this Addendum.
- 9. Specification Section 07 92 00 Joint Sealants: REVISE paragraph 2.9 D.
- 10. Specification Section 08 41 13 Aluminum-Framed Entrances and Storefronts: ADD paragraph 1.3 B.4.a.
- 11. Specification Section 08 41 13 Aluminum-Framed Entrances and Storefronts: REVISE paragraph 1.3 .F.
- 12. Specification Section 08 80 00 Glazing: REVISE paragraph 2.7 A.1.
- 13. Specification Section 09 24 00 Insulated Plaster System: REVISE paragraph 2.11 A.1. DELETE paragraph 2.11 A.2.

- 14. Specification Section 09 29 00 Gypsum Board: DELETE 2.3D, renumber 2 following paragraphs and REVISE paragraph 2.3 E.
- 15. Specification Section 09 29 00 Gypsum Board: REVISE paragraph 3.2.J.
- 16. Specification Section 09 51 13 Acoustical Panel Ceilings: REVISE paragraph 2.4.A. DELETE paragraph 2.4.B.

17.

- 18. Specification Section 09 51 13 Acoustical Panel Ceilings: REVISE paragraph 2.5 C.
- 19. Specification Section 09 51 13 Acoustical Panel Ceilings: REVISE paragraph 2.6 C.
- 20. Specification Section 09 65 00 Resilient Flooring: ADD new specification section attached to this Addendum.
- 21. Specification Section 09 65 13 Resilient Base and Accessories: REVISE 2.2 C, ADD new paragraph 2.3. REVISE paragraph 2.3 to 2.4.
- 22. Specification Section 09 68 00 Carpeting: ADD new specification section attached to this Addendum.
- 23. Specification Section 09 77 23 Fabric-Wrapped Panels: ADD new specification section attached to this Addendum.
- 24. Specification Section 09 91 13 Exterior Painting: REVISE paragraph 1.1 B.
- 25. Specification Section 09 91 13 Exterior Painting: ADD paragraph 2.3 B.
- 26. Specification Section 09 91 23 Interior Painting: REVISE paragraph 1.1 B.

27.

- 28. Specification Section 09 91 23 Interior Painting: REVISE paragraph 3.6 A.
- 29. Specification Section 10 11 00 Visual Display Surfaces: ADD new specification section attached to this Addendum.
- 30. Specification Section 10 14 00 Signage: ADD new specification section attached to this Addendum.
- 31. Specification Section 12 24 00 Window Shades: REVISE paragraph 1.1 A.
- 32. Specification Section 12 93 00 Site Furnishings: ADD new specification section attached to this Addendum.
- 33. Specification Section 14 24 00 Hydraulic Elevator: REVISE paragraph 1.4 A and 1.8 A.1.
- 34. Specification Section 14 24 00 Hydraulic Elevator: REVISE paragraph 1.8 B..
- 35. Specification Section 21 12 00 Standpipes and Hose Valves: REVISE paragraph 1.1 B.
- 35. Specification Section 21 13 00 Fire Sprinkler: REVISE paragraph 2.3 A.

- 36. Specification Section 22 11 16 Domestic and Recycled Water Piping: DELETE entire section and REPLACE with new section attached to this Addendum.
- 37. Specification Section 22 13 16 Sanitary Waste and Vent Piping: REVISE paragraph 1.1 B
- 38. Specification Section 22 14 16 Storm Drainage Piping: REVISE paragraph 1.1 B.
- 39. Specification Section 22 35 00 Domestic Water Heat Exchangers: REVISE paragraph 2.1 B.
- 40. Specification Section 22 40 00 Plumbing Fixtures: REVISE paragraph 2.2 A.
- 41. Specification Section 23 05 00 Basic Mechanical Materials and Methods: REVISE paragraph 1.1 A.

42.

- 43. Specification Section 26 05 19 Building Wire and Cable: DELETE paragraph 2.6.
- 44. Specification Section 26 22 00 Dry Type Transformers: RENUMBER paragraphs 2.2 G through M
- 45. Specification Section 26 33 23 Central Battery Inverter System: DELETE entire section and REPLACE with new section attached to this Addendum.
- 46. Specification Section 26 50 20 Automatic Lighting Control Equipment: DELETE entire section and REPLACE with new section attached to this Addendum.
- 47. Specification Section 27 00 00 Communications Basic Requirements: ADD new specification section attached to this Addendum.
- 48. Specification Section 27 05 26 Communication Grounding and Bonding: ADD new specification section attached to this Addendum.
- 49. Specification Section 27 05 28 Communication Pathways: ADD new specification section attached to this Addendum.
- 50. Specification Section 07 08 11 Communication Twisted Pair Testing: ADD new specification section attached to this Addendum.
- 51. Specification Section 27 80 21 Communication Optical Fiber Testing: ADD new specification section attached to this Addendum.
- 52. Specification Section 27 11 00 Communication Equipment Rooms: ADD new specification section attached to this Addendum.
- 53. Specification Section 27 13 13 Communication Backbone ISP Twisted Pair Cabling: ADD new specification section attached to this Addendum.
- 54. Specification Section 27 13 14 Communication Backbone OSP Twisted Pair Cabling : ADD new specification section attached to this Addendum.
- 55. Specification Section 27 13 23 Communication Backbone ISP Fiber Optic Cabling : ADD new specification section attached to this Addendum.
- 56. Specification Section 27 13 24 Communication Backbone OSP Fiber Optic Cabling : ADD new specification section attached to this Addendum.

- 57. Specification Section 27 15 13 Communication Horizontal Twisted Pair Cabling: ADD new specification section attached to this Addendum.
- 58. Specification Section 27 41 13 Architecturally Integrated Projection Screens: ADD new specification section attached to this Addendum.
- 59. Specification Section 27 41 16 Integrated Audiovisual Equipment: ADD new specification section attached to this Addendum.
- 60. Specification Section 28 00 00 Basic Security Requirements: ADD new specification section attached to this Addendum.
- 61. Specification Section 28 05 13 Security System Cabling: ADD new specification section attached to this Addendum.
- 62. Specification Section 28 05 53 Security System Labeling: ADD new specification section attached to this Addendum.
- 63. Specification Section 28 08 00 Security System Acceptance Testing: ADD new specification section attached to this Addendum.
- 64. Specification Section 28 13 00 Access Control and Alarm Monitoring System: ADD new specification section attached to this Addendum.
- 65. Specification Section 28 23 00 Video Surveillance System: ADD new specification section attached to this Addendum.
- 66. Specification Section 28 26 00 Security Communication System: ADD new specification section attached to this Addendum.
- 67. Specification Section 31 22 19 Finish Grading: ADD new specification section attached to this Addendum.
- 68. Specification Section 32 01 90 Landscape Maintenance: ADD new specification section attached to this Addendum.
- 69. Specification Section 32 13 13 Site Concrete: REVISED paragraph 3.5 E.
- 70. Specification Section 32 14 13 Precast Unit Paving: ADD new specification section attached to this Addendum.
- 71. Specification Section 32 18 00 Concrete Flatwork and Sitework: ADD new specification section attached to this Addendum.
- 72. Specification Section 32 84 00 Irrigation: ADD new specification section attached to this Addendum.
- 73. Specification Section 32 90 00 Planting: ADD new specification section attached to this Addendum.
- 74. Specification Section 32 91 13 Soil Preparation: ADD new specification section attached to this Addendum.
- 75. Specification Section 08 71 00 Door Hardware: REVISE paragraph 3.6.B. and Hardware Group 05 and 11
- 76. Specification Section 32 31 00 Barbed Wire Fences: ADD new specification section attached to this Addendum.

V. DRAWINGS

.

Revised Drawing List attached to this Addenda.

UNIVERSITY OF CALIFORNIA, MERCED

By: University of California, Merced University's Representative

H Walls,

Leon Waller Sr. Project Director

Enclosure: Information to Bidders

End of Addendum No. 3

LF/MPT May 22, 2012

CONSTRUCTION DOCUMENTS TABLE OF CONTENTS

Volume 1

Cover Page Certification **Construction Documents Table of Contents** Advertisement for Bids **Project Directory** Instructions to Bidders Supplementary Instructions to Bidders – ADD3 Information Available to Bidders Geotechnical Report **Bid Form** - ADD3 Bid Bond **Contractor Master Project Schedule ADD3** Agreement General Conditions Supplementary Conditions Exhibits **Division 1 Specifications** Division 2 Technical Specifications (Under Separate Cover) Drawings (Under Separate Cover)

Division 1 Specifications

Section	01 11 00	Summary of Work
	01 21 00	Allowances – NOT USED
	01 22 00	Unit Prices – ADD3
	01 23 00	Alternates
	01 25 00	Product Options and Substitutions
	01 26 13	Requests For Information
	01 31 00	Project Coordination
	01 31 19	Project Meetings
	01 31 42	Contractor Schedules ADD3
	01 31 45	Contract Schedules
	01 33 23	Shop Drawings, Product Data and Samples
	01 35 00	Special Requirements
	01 35 40	Environmental Mitigation
	01 35 43	Hazardous Materials Procedures
	01 41 00	Regulatory Requirements
	01 42 13	Abbreviation, Symbols, & Definitions
	01 43 39	Mockups
	01 43 40	Exterior Enclosure Performance Requirements ADD3
	01 45 00	Quality Control
	01 51 00	Temporary Utilities
	01 56 00	Temporary Barriers and Enclosures
	01 56 39	Tree and Plant Protection
	01 57 23	Storm Water Pollution Prevention

- 01 60 00 Product Requirements
- 01 71 23 Field Engineering
- 01 73 23 Supporting from Building Structure
- 01 73 29 Cutting, Patching, and Matching
- 01 73 35 Selective Demolition
- 01 74 19 Site Waste Management Program
- 01 77 00 Closeout Procedures, Final Cleaning, and Extra Materials
- 01 78 36 Guarantees, Warranties, Bonds, Service & Maintenance Contracts
- 01 78 39 Project As-Built Documents
- 01 79 00 Training
- 01 81 13 LEEDTM Requirements
- 01 81 13.1 LEED Requirements Score Card
- 01 91 00 Commissioning
- 01 92 00 Operating and Maintenance

List of Drawings ADD3

TABLE OF CONTENTS

Division 2 Existing Conditions - Not Used

Division 3 Concrete

- 03 10 00 Concrete Formwork
- 03 20 00 Concrete Reinforcement
- 03 30 00 Cast-in-Place Concrete
- 03 53 00 Concrete Topping Slab
- 03 61 00 Grouted Dowels in Concrete

Division 4 Masonry - Not Used

Division 5 Metals

- 05 12 00 Structural Steel Framing
- 05 12 30 Architecturally Exposed Structural Steel Framing (AESS)
- 05 12 50 Buckling-Restrained Braces
- 05 20 00 Steel Joists
- 05 31 00 Steel Decking
- 05 40 00 Cold-Formed Metal Framing
- 05 50 00 Metal Fabrications
- 05 51 00 Metal Stairs (Revision No. 1)
- 05 52 13 Pipe and Tube Railings (Revision No. 1)
- 05 70 00 Decorative Metal (Revision No. 1)
- Division 6 Wood, Plastics and Composites
- 06 10 53 Miscellaneous Rough Carpentry (Revision No. 1)
- 06 40 23 Interior Architectural Woodwork
- 06 64 00 Plastic Paneling
- Division 7 Thermal and Moisture Protection
- 07 13 26 Self-Adhering Sheet Waterproofing (Revision No. 1)
- 07 14 00 Hot Fluid-Applied Rubberized Asphalt Waterproofing
- 07 19 00 Water Repellents
- 07 21 00 Thermal Insulation
- 07 26 16 Under-Slab Vapor Retarder
- 07 27 13 Modified Bituminous Sheet Air Barriers
- 07 42 13 Metal Wall Panels
- 07 54 19 PVC Roofing
- 07 62 00 Sheet Metal Flashing and Trim
- 07 72 00 Roof Accessories
- 07 84 00 Penetration Firestopping
- 07 84 46 Fire-Resistive Joint Systems
- 07 92 00 Joint Sealants (Revision No. 1)

Division 8	Openings
08 11 13 08 12 16 08 14 16 08 31 13 08 41 13 08 44 13 08 62 00 08 71 00 08 80 00	Hollow Metal Doors and Frames Aluminum Frames Flush Wood Doors Access Doors and Frames <i>Aluminum-Framed Entrances and Storefronts (Revision No. 1)</i> Glazed Aluminum Curtain Walls Unit Skylights <i>Door Hardware (Revision No. 1)</i> <i>Glazing (Revision No. 1)</i>
Division 9	Finishes
09 21 16 09 22 16 09 24 00 09 29 00 09 30 00 09 51 13 09 65 00 09 65 13 09 68 00 09 77 23 09 91 13 09 91 23	Gypsum Board Shaft Wall Assemblies Non-Structural Metal Framing Insulated Plaster System (Revision No. 1) Gypsum Board (Revision No. 1) Tiling Acoustical Panel Ceilings (Revision No. 1) Resilient Flooring Resilient Base and Accessories (Revision No. 1) Carpeting Fabric-Wrapped Panels Exterior Painting (Revision No. 1) Interior Painting (Revision No. 1)
Division 10	Specialties
10 11 00 10 14 00 10 21 13 10 28 13 10 41 16 10 44 00	Visual Display Surfaces Signage Toilet Compartments Toilet Accessories Emergency Key Cabinets Fire Protection Specialties
Division 11	Equipment - Not Used
Division 12	Furnishings

- 12 24 00
 Window Shades (Revision No. 1)

 12 36 00
 Countertops

 12 93 00
 Site Furnishings
- Division 13 Special Construction Not Used
- Division 14 Conveying Systems
- 14 24 00 Hydraulic Elevators (Revision No. 1)

Division 21 Fire Suppression

- 21 12 00 Standpipes and Hose Valves (Revision No. 1) Fire Sprinklers (Revision No. 1) 21 13 00
- **Division 22** Plumbing
- 22 11 16 Domestic and Recycled Water Piping (Revision No. 1)
- 22 13 16 Sanitary Waste and Vent Piping (Revision No. 1)
- 22 14 16 Storm Drainage Piping (Revision No. 1)
- **Plumbing Specialties** 22 16 00
- Domestic Water Heat Exchangers (Revision No. 1) 22 35 00
- Appendix A Domestic Water Heat Exchangers 22 35 01
- Plumbing Fixtures (Revision No. 1) 22 40 00
- 22 47 00 **Drinking Fountains and Water Coolers**
- **Division 23** Heating, Ventilating, and Air-Conditioning (HVAC)

23 05 00	Basic Mechanical Materials and Methods (Revision No. 1)
23 05 13	Motors and Controllers
23 05 16	Piping Specialties
23 05 23	Valves
23 05 29	Hangers and Supports
23 05 48	Mechanical Sound, Vibration and Seismic Control
23 05 53	Mechanical Identification
23 05 93	Testing, Adjusting and Balancing
23 07 00	Mechanical Insulation
23 21 12	Heating and Cooling Piping
23 21 13	Exposed Hydronic Piping, Valves and Accessories (Utilities)
23 21 14	Underground Chilled Water Piping (Utilities)
23 21 15	Underground Heating Hot Water Piping (Utilities)
23 21 23	Pumps
23 31 13	Ducts
23 33 00	Duct Accessories
23 34 00	Fans
23 36 00	Air Terminal Units
23 37 00	Air Outlets and Inlets
23 40 00	Air Cleaning Devices
23 73 23	Air Handling Units and Coils
23 90 00	Energy Management and Control System - General
23 90 13	EMCS Basic Materials and Devices
23 90 16	EMCS Operator Interfaces
23 90 19	EMCS Field Panels
23 90 23	EMCS Communication Devices
23 90 26	EMCS Software and Programming
23 90 29	EMCS Points and Sequence of Operation
23 90 33	EMCS System Commissioning
23 97 00	Mechanical Commissioning

23 97 00 Mechanical Commissioning

Division 26	Electrical
26 05 00	Common Work Results for Electrical (Utilities)
26 05 01	Basic Electrical Requirements
26 05 13	Medium Voltage Cables (Utilities)
26 05 19	Building Wire and Cables (Revision No. 1)
26 05 26	Grounding and Bonding for Electrical Systems (Utilities)
26 05 27	Grounding and Bonding
26 05 29	Hangers and Supports for Electrical Systems (Utilities)
26 05 30	Electrical Hangers and Supports
26 05 33	Raceways and Boxes for Electrical Systems (Utilities) Conduit
26 05 34 26 05 35	Boxes
26 05 43	Underground Ducts and Structures
26 05 44	Precast Concrete Electric and Communication Manholes (Utilities)
26 05 48	Vibration Isolation and Seismic Restraints
26 05 53	Identification for Electrical Systems (Utilities)
26 05 54	Electrical Identification
26 05 73	Power System Study
26 08 00	Commissioning of Electrical Systems (Utilities)
26 09 13	Power Monitoring System
26 12 16	Pad-Mounted Transformer
26 18 11	Medium Voltage Vacuum Interrupter Switches (Utilities)
26 22 00	Dry Type Transformers (Revision No. 1)
26 24 16	Panelboards
26 24 18	Switchboards
26 27 26	Wiring Devices
26 28 17	Overcurrent Protective Devices
26 29 00	Motor Controls
26 33 23 26 50 00	Central Battery Inverter System (Revision No. 1) Lighting Fixtures
26 50 00	Architectural Dimming System
26 50 10 26 50 20	Automatic Lighting Control Equipment (Revision No. 1)
26 61 13	Fire Alarm / Mass Notification System
26 97 00	Electrical System Commissioning
Division 27	Communications
27 00 00	Communications Basic Requirements
27 05 26	Communication Grounding and Bonding
27 05 28	Communication Pathways
27 08 11	Communication Twisted Pair Testing
27 08 21	Communication Optical Fiber Testing
27 11 00	Communication Equipment Rooms
27 13 13	Communication Backbone ISP Twisted Pair Cabling
27 13 14	Communication Backbone OSP Twisted Pair Cabling

- 27 13 23Communication Backbone ISP Fiber Optic Cabling27 13 24Communication Backbone OSP Fiber Optic Cabling
- 27 15 13 Communication Backbone OSP Fiber Optic Cabling
- 27 41 13 Architecturally Integrated Projection Screens
- 27 41 16 Integrated Audiovisual Equipment

Division 28 Electronic Safety and Security

28 00 00 Basic Security Requirements

- 28 03 00 Fire Alarm System
- 28 05 13 Security System Cabling
- 28 05 53 Security System Labeling
- 28 08 00 Security System Acceptance Testing
- 28 13 00 Access Control and Alarm Monitoring System
- 28 23 00 Video Surveillance System
- 28 26 00 Security Communication System

Division 31 Earthwork

- 31 10 00 Site Clearing
- 31 20 00 Earth Moving
- 31 22 19 Finish Grading
- 31 23 00 Structural Excavation

Division 32 Exterior Improvements

- 32 01 90 Landscape Maintenance
- 32 12 16 Asphalt Paving
- 32 13 13 Site Concrete (Revision No. 1)
- 32 14 13 Precast Concrete Unit Paving
- 32 18 00 Concrete Flatwork and Sitework
- 32 31 00 Barbed Wire Fences
- 32 84 00 Irrigation
- 32 90 00 Planting
- 32 91 13 Soil Preparation
- Division 33 Utilities
- 33 11 16 Site Water Utility Distribution Piping
- 33 31 00 Sanitary Utility Sewerage Piping
- 33 41 00 Storm Utility Drainage Piping

END OF TABLE OF CONTENTS

Student Services Building University of California, Merced Merced, CA CO Architects Project No.: 20104.150

SUPPLEMENTARY INSTRUCTIONS TO BIDDERS

- 1. Only those General Contractors who Prequalified shall submit bids for University's consideration. See the list of Prequalified General Contractors included in the bidding documents.
- 2. Requests for clarification or interpretation of the Bidding Documents must be in **writing** and received by Monday, **June 18, 2012** at **4:00 P.M.** Questions received after the above-noted deadline may be answered at the discretion of the University's Representative. **Questions may be mailed, E-Mailed or faxed to:**

Fran Telechea – University of California, Merced email: ftelechea@ucmerced.edu FAX: 209-228-4468

Revisions, additions or deletions will be made by written addenda issued by Physical Planning Design & Construction only.

3. A **NON-MANDATORY** Pre-Bid Conference and **NON-MANDATORY** Project Site Visit will be conducted on Thursday, May 24, 2012 beginning promptly at 11:00 am. Participants shall meet at 5200 N. Lake Rd, Merced, CA 95343, UC Merced Campus, Science & Engineering Parking Lot. Parking permits are required throughout campus and are available at the yellow dispenser at the entrance to the Parking Lot off Ansel Adams and Mineral King Road.

If you need accommodations related to disabilities, please call Fran Telechea at (209) 228-4479 at least 3 working days prior to Pre-Bid Conference/Project Site Visit or Bid Opening.

4. Bids will be received on or before the Bid Deadline and only at:

Hand or Overnight Delivery Only	University of California, Merced Physical Planning Design & Construction 767 E. Yosemite Ave., Suite C Merced California 95340
Bids will be opened at:	2:00 PM Tuesdayy, June 28, 2012 767 E. Yosemite Ave. Merced California 95340

- 6. If Contractor fails to meet Substantial Completion milestones as described in the summary of work 011110 part 1 (subject to time extensions duly granted in the manner and for the causes specified in the General Conditions), Contractor shall be assessed liquidated damages in the amount of \$2,500.00 per day for each calendar day following the specified date of Substantial Completion for that phase where the Work remains incomplete (Saturdays, Sundays, and holidays included). After Substantial Completion has been achieved on all phases of work Contractor shall be assessed Liquidated Damages in the amount of \$250.00 per day for each calendar day the project remains incomplete following the expiration of the contract time written in Article 4 of the Agreement.
- 7. Contract Time: 620 Calendar days.
- 8. Addenda will be issued only by University and only in writing. Addenda will be identified as such

5.

and will be mailed or delivered to all Planholders. At its sole discretion, the University may elect to deliver Addenda via facsimile or email to Planholders who have provided a facsimile number or an email address for receipt of Addenda.

PROJECT NO.: 900120

STUDENT SERVICES BUILDING UNIVERSITY OF CALIFORNIA, MERCED MERCED, CALIFORNIA

BID FORM

FOR:	PROJECT NO. 900120 STUDENT SERVICES BUILDING			
	MERCED CAM	ΓΥ OF CALIFORNIΛ PUS, MERCED COU ED CALIFORNIA		
BID TO:	TO: PHYSICAL PLANNING, DESIGN & CONSTRUCTION UNIVERSITY OF CALIFORNIA, MERCED 767 E. YOSEMITE AVE., SUITE C MERCED CALIFORNIA 95340 TELEPHONE: (209) 228-0402			
FOR THE FOLLOWING WORK:	Students Services Building Construction			
BID FROM:	(Name of Firm Submitting Bid)			
_	(Address)			
	(City)	(State)	(Zip Code)	
	(Telephone Number)		(Fax Number)	

(Date Bid Submitted)

Note: All portions of this Bid Form must be completed and the Bid Form must be signed before the Bid is submitted. Failure to do so will result in the Bid being rejected as non-responsive.

1.0 BIDDER'S REPRESENTATIONS

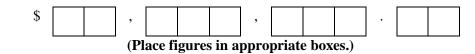
Bidder, represents that a) Bidder and all Subcontractors, regardless of tier, has the appropriate current and active Contractor's license required by the State of California and the Bidding Documents; b) it has carefully read and examined the Bidding Documents for the proposed Work on this Project; c) it has examined the site of the proposed Work and all Information Available to Bidders; d) it has become familiar with all the conditions related to the proposed Work, including the availability of labor, materials, and equipment. Bidder 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. Bidder further agrees that it will not withdraw its Bid within 60 days after the Bid Deadline, and that, if it is selected as the apparent lowest responsive and responsible Bidder, 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 Bidding Documents. If awarded the Contract, Bidder agrees to schedule and execute the Work within the Contract Time.

2.0 ADDENDA

Bidder acknowledges that it is Bidder'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 the Advertisement for Bids. Bidder therefore agrees to be bound by all Addenda that have been issued for this Bid.

3.0 (NOT USED)

4.0 LUMP SUM BASE BID



5.0 SELECTION OF APPARENT LOW BIDDER

Refer to the Instructions to Bidders for selection of apparent low bidder.

6.0 UNIT PRICES

Unite Price No. 1 - Provide and prepare ground floor door opening for power door operators.



7.0 DAILY RATE OF COMPENSATION FOR COMPENSABLE DELAYS

Bidder 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:

(MINIMUM AMOUNT ALLOWED IS \$1.00)



Failure to fill in a dollar figure for the daily rate for Compensable Delay shall render the bid non-responsive. University will perform the extension of the daily rate times the multiplier.

The daily rate shown above will be the total amount of Contractor entitlement for each day of Compensable Delay caused by University at any time during the performance of the Work and shall constitute payment in full for all delay costs, direct or indirect (including, without limitation, compensation for all extended home office overhead and extended general conditions), of the Contractor and all subcontractors, suppliers, persons, and entities under or claiming through Contractor on the Project. 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 and the General Conditions; the actual number of days of Compensable Delay may be greater or lesser than the "multiplier" shown above.

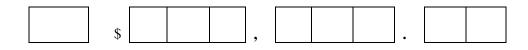
8.0 ALTERNATES

In order for a Bid to be responsive, Bidder must submit bid for Alternates listed below. The failure to do so shall result in the Bid being rejected as non-responsive.

ADD ALTERNATE #1

DESCRIPTION: 5-year Hydraulic Elevator maintenance agreement

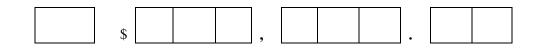
Add



ADD ALTERNATE #2

DESCRIPTION: NOT USED

Add



ADD ALTERNATE #3 DESCRIPTION: Add Casework in Conference Room 238

Add	
	\$
	ADD ALTERNATE #4 DESCRIPTION: Add Casework in Work Room 220
Add	\$
	ADD ALTERNATE #5 DESCRIPTION: Add Finishes in Active Storage Room 110
Add	\$,
Add	ADD ALTERNATE #6 DESCRIPTION: Add Finishes in Active Storage Room 150
Add	\$
4 1 1	ADD ALTERNATE #7 DESCRIPTION: Add Benches
Add	\$

ADD ALTERNATE #8 DESCRIPTION: Add Acoustical Panels to all Private Offices.

Add
\$
ADD ALTERNATE #9 DESCRIPTION: Remove & Replace Concrete Paving
Add
\$,
DEDUCTIVE ALTERNATE #1 DESCRIPTION: Delete Pavilion Canopy Aluminum Grating
Deduct
\$,
DEDUCTIVE ALTERNATE #2 DESCRIPTION: Delete Reclaimed Water Provisions
Deduct
\$
DEDUCTIVE ALTERNATE #3 DESCRIPTION: Delete 5 Skylights and Curbs at 3 Story Building
Deduct
\$

DEDUCTIVE ALTERNATE #4

DESCRIPTION: Reduce Glazing @ North & South Elevations of Pavilion Building

Deduct
\$,
DEDUCTIVE ALTERNATE #5 DESCRIPTION: Delete Wall Partitions & Doors for Offices 221-226
Deduct
\$, .
DEDUCTIVE ALTERNATE #6 DESCRIPTION: Delete Pavers & provide Textured Concrete
Deduct
\$,
DEDUCTIVE ALTERNATE #7 DESCRIPTION: Delete Exterior Operable Window & provide Fixed Windows Deduct
\$,
DEDUCTIVE ALTERNATE #8 DESCRIPTION: Delete 12 Skylights & Curbs at Pavilion Building
Deduct
\$,

9.0 LIST OF SUBCONTRACTORS

Bidder will use Subcontractors for the Work: (Yes or No)

If yes, provide in the spaces below (a) the name and the location of the place of business of each subcontractor who will perform work or labor or render service to the Contractor in or about the construction of the work or improvement, or a subcontractor licensed by the state of California who, under subcontract to the Contractor, specifically fabricates and installs a portion of the work or improvement according to detailed drawings contained in the plans and specifications, in an amount in excess of 1/2 of 1 percent of the Contractor's total bid, (b) the portion of the work which will be done by each subcontractor. The Contractor shall list only one subcontractor for each such portion as is defined by the Contractor in its bid.

	Subcontractor		
Work Activity	Name	Location (City)	

(Note: Add additional pages if required.)

10. LIST OF CHANGES IN SUBCONTRACTORS DUE TO ALTERNATES

The information below must be provided for all changes in first-tier Subcontractors if University selects Alternates. List changes in Subcontractors only for those portions of the Work valued in excess of 1/2 of 1% of Bidder's Total Bid.

		Subcontractor		
Alternate No.	Work Activity	Name	Location (City)	

(Note: Add additional pages if required.)

11.0 BIDDER INFORMATION

TYPE OF ORGANIZATION:

(Corporation, Partnership, Individual, Joint Venture, etc.)

If a corporation, corporation is organized under the laws of: the State of._____

NAME OF PRESIDENT OF THE CORPORATION:

NAME OF SECRETARY OF THE CORPORATION:

IF A PARTNERSHIP, NAMES OF ALL GENERAL PARTNERS:

CALIFORNIA CONTRACTORS LICENSE(S):

(Name of Licensee)

(Classification)

(Expiration Date)

(License Number)

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

12.0 REQUIRED COMPLETED ATTACHMENTS

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

1.	Bid Security	in the form of	Bid Bond or	· Certified	Check
1 •	Dia Security	in the form of	Dia Dona oi	Continuou	Check

2. 13.0 DECLARATION

I, _	(Printed name), hereby declare that I am
the	(Title) of

(Name of bidder) submitting this Bid Form; that I am duly authorized to execute this Bid Form on behalf of Bidder; and that all information set forth in this Bid 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 bidders 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 an 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 for 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: ______ (Name of City if within a City, otherwise Name of County), in the State of ______, on _____ (Date).

(Signature)

June 6, 2011 Revision 4 LF:BF

ADDENDUM 3

Bid Form 01 1200.01 Page 10 of 10

SECTION 01 22 00 UNIT PRICES

PART 1 - GENERAL

1.1 DESCRIPTION

- A. Unit Price quotations shall be inserted in the appropriate spaces in the Bid Form for each Unit Price item of Work described herein.
- B. Unit Prices stated in the Agreement shall be used to compute adjustments of the Contract Sum for approved Unit Price items of Work. Such adjustments shall be made by Change Order (Exhibit 9).
- C. Unit Prices shall include all labor, materials, tools, and equipment; all other direct and indirect costs necessary to complete the item of Work and to coordinate the Unit Price Work with adjacent Work; and shall include all overhead and profit. General Contractor shall accept compensation computed in accordance with the Unit Prices for work installed in place as full compensation for furnishing such Work.
- D. Compensation will be paid for those items of Work described in below, Unit Prices.

1.2 SPECIFIED WORK

A. Applicable Sections of the Specifications describe the materials and methods required under the various Unit Price items of Work.

1.3 UNIT PRICES

A. List of Unit Price Items and Descriptions

Unit Price No.	Description	Estimated Units
1	Provide and prepare ground floor door opening for power door operators.	3 4 Door Openings

B See Architectural and Electrical drawings for location and scope of work.

1.4 ADVANCED COORDINATION

- A. Immediately notify University's Representative when conditions require the use of Unit Price items of Work.
- B. The applicability of, measurement methods for, documentation of, and the final adjustment of the Contract Sum for Unit Price items of Work shall be determined by the University's Representative.

November 1, 2004 Revision: 1 LF/SF:01 22 00 UNIT PRICES 01 22 00 - Page 1 ADDENDUM 3

C. After performing Unit Price items of Work as directed by University's Representative, General Contractor shall take necessary measurements in the presence of University's Representative and shall submit calculations of quantities to University's Representative for approval. General Contractor shall notify University's Representative 1 day in advance of taking measurements.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION 01 22 00

November 1, 2004 Revision: 1 LF/SF:01 22 00 UNIT PRICES 01 22 00 - Page 2 ADDENDUM 3

SECTION 01 31 42 GENERAL CONTRACTOR SCHEDULES

PART 1 - GENERAL

1. GENERAL CONTRACTOR SCHEDULE

The *General Contractor is to utilize* the "Last Planner System" to develop and implement a phased schedule that supplements and supports *their* Preliminary Master Project Schedule *as defined in this Section*. This will require time commitment from officers and supervisors of the General Contractor and all Subcontractors. The General Contractor and all Subcontractors will be required to provide their input and commitment to the final schedule.

- A. Pull Planning Sessions
 - 1. There will be a workshop held prior to the start of construction where the process will be explained in detail and the *General Contractor's* Preliminary Master Project Schedule reviewed.
 - 2. Periodically "pull planning" sessions will be held to refine and expand on the detail in the Preliminary Master Project Schedule.
 - 3. These sessions will require the General Contractor and Subcontractor's superintendents and foreman to brainstorm and create detailed activities and resource requirements that support the Preliminary Master Project Schedule.
 - 4. After the General Contractor and all Subcontractors agree to each other's input, all parties will commit to this updated schedule.
- B. Submit
 - 1. Six week look-ahead schedules will be reviewed and updated each week and will be the basis of a Weekly Work Plan (WWP).
 - 2. The General Contractor will be required to submit their WWP on a weekly basis prior to that week.
- C. Form
 - 1. The WWP will consist of a production plan in which quantity goals as well as weekly manpower requirements established consistent with meeting the overall project schedule.
 - 2. Prepare the WWP in sufficient detail to demonstrate preliminary planning for the Work and to represent a practical plan to complete the Work within the Contract Time and in accordance with the Preliminary Master Project Schedule.
- D. Activities
 - 1. The WWP will consist of a production plan in which quantity goals as well as weekly manpower requirements established consistent with meeting the overall project schedule.
 - 2. Identify all holidays, including University holidays, and non-working days on the WWP.

- 3. During the Pull Planning Sessions the General Contractor and each Subcontractor will identify all Work activities in correct sequence for the completion of the Work. Work activities will include the following:
 - a. Major Contractor-furnished equipment, materials, and building elements, and scheduled activities requiring submittals or University's prior approval.
 - b. System test dates.
 - c. Scheduled overtime Work if required by Contract Documents.
 - d. Dates designated for working spaces, storage areas, access, and other facilities to be provided by University.
 - e. Dates orders and decisions from University on designated items are due.
 - f. Dates for delivery of University-furnished equipment.
 - g. Dates for University-furnished utilities.
 - h. Connection and relocation of existing utilities.
 - i. Connection to or penetrating existing structures.
 - j. Scheduled inspections as required by Codes, or as otherwise specified.
- 4. During the Pull Planning Sessions the General Contractor and each Subcontractor will identify all Work activities that constitute the critical path.
 - a. Critical Work activities are defined as Work activities which, if delayed or extended, will delay the scheduled completion of one or more of the milestones specified in this Section or the scheduled completion of the Work, or both. All other Work activities are defined as non-critical Work activities and are considered to have float.

1.2 PRELIMINARY MASTER PROJECT SCHEDULE

- A. The Preliminary Master Project Schedule shall be utilized for monitoring progress of the Work and represent a practical plan to complete the Work within the Contract Time.
- B. The Preliminary Master Project Schedule will identify the milestone *activities listed in Section 01 31 45 Contract Schedules.*
- C. The Preliminary Master Project Schedule will identify all holidays and non- working days.
- D. Updating.
 - 1. The Preliminary Master Project Schedule and WWP will be monitored and updated each week during the construction phase by the whole project team.
 - 2. Monitoring and evaluation will cover not only future activities; but completed activities will be evaluated from a "lesson learned" perspective in order to improve on future planning activities.
 - 3. Project team members will be held accountable for meeting these goals.
 - 4. No Applications For Payment will be processed nor shall any progress payments become due until updated information is accepted by University's Representative.

1.3 TIME CONTROL

A. Set up control procedures so that approved schedules are adhered to. General Contractor's responsibility is to properly notify University's Representative of anticipated and actual time delays (refer to General Conditions).

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION 01 31 42

SECTION 01 43 40 EXTERIOR ENCLOSURE PERFORMANCE REQUIREMENTS

PART 1 - GENERAL

1.1 SUMMARY

- A. This section includes exterior enclosure performance requirements which consists of components specified in the following sections:
 - 1. Division 01 Section "Mockups"
 - 2. Division 05 Section "Cold-Formed Metal Framing."
 - 3. Division 05 Section "Decorative Metal."
 - 4. Division 07 Section "Modified Bituminous Sheet Air Barriers."
 - 5. Division 07 Section "Self-Adhering Sheet Waterproofing."
 - 6. Division 07 Section "Metal Wall Panels."
 - 7. Division 07 Section "Hot Fluid-Applied Rubberized Asphalt Waterproofing."
 - 8. Division 07 Section "Water Repellents."
 - 9. Division 07 Section "PVC Roofing."
 - 10. Division 07 Section "Roof Accessories."
 - 11. Division 07 Section "Sheet Metal Flashing and Trim."
 - 12. Division 07 Section "Joint Sealants."
 - 13. Division 08 Section "Aluminum-Framed Entrances and Storefronts."
 - 14. Division 08 Section "Unit Skylights."
 - 15. Division 08 Section "Glazing."
 - 16. Division 08 Section "Glazed Aluminum Curtain Walls."
 - 17. Division 09 Section "Insulated Plaster System."

1.2 REFERENCES

- A. Published specifications, standards, tests, or recommended methods of trade, industry, or governmental organizations apply to work of this Section where cited by abbreviations noted below.
 - 1. ASTM International (ASTM).
 - 2. American Architectural Manufacturers Association's "Field Check of Metal Curtain Walls for Water Leakage" (AAMA 501.2).
 - 3. American Society of Civil Engineer's "Minimum Design Loads for Buildings and Other Structures" (ASCE/SEI 7-05).
 - 4. California Building Code, 2007 Edition (CBC).

1.3 ENGINEERING DESIGN RESPONSIBILITY

- A. The Exterior Enclosure requirements shown by the details are intended to establish basic dimensions of units or modules, profiles and sight lines of members. Within these limitations, the General Contractor is responsible for the engineering design of their work , and to make modifications of, and additions to the details as may be required to fulfill the performance requirements. The General Contractor shall maintain the visual design concept as shown, including member sizes, profiles and alignment of components, provided they meet performance requirements. To ensure coordination, the General Contractor shall provide their exterior framing system shop drawings combined with the information from the curtain wall and aluminum-framed entrances and storefronts shop drawings.
- B. Exterior Enclosure, support framing, connections, and related hardware shall be designed under the direct supervision of a Professional Engineer experienced in the design of the work, registered and licensed in the State of California, using performance and design criteria and requirements specified in this Section.
- C. It is recognized that the design details do not cover some conditions or modifications, which may be required. It is, however, intended that conditions not detailed shall be developed through the General Contractor's Shop Drawings to the same level of aesthetics and in compliance with performance criteria as indicated for detailed areas and as stipulated in these specifications. The General Contractor, by accepting a contract for the work, acknowledges this and agrees that University's Representative shall have the final say as to all matters whether detailed or not in the design details.
- D. Review of calculations and shop drawings by University's Representative will not relieve General Contractor of any responsibilities for providing a system with the required performance requirements. If the structural calculations indicate any deficiencies, General Contractor shall, at its expense, provide all items necessary to comply with the requirements of the Contract Documents.
- E. Structural calculations shall be prepared and stamped by a Professional Engineer licensed in the State of California and shall include, but not be limited to the following:
 - 1. A repetition of the design criteria contained in the specifications, also conform to requirements of the CBC, unless otherwise noted in the specifications.
 - 2. Calculations to determine dead, live, wind and seismic loads of cladding and cladding supports.
 - 3. Analysis of Exterior Enclosure System components and fasteners or anchorage to Exterior Enclosure System Support Framing.
 - 4. Analysis of Exterior Enclosure System Support Framing elements, fasteners, and anchorage components to main building structure.
 - 5. Cross reference structural calculations to the applicable production and erection shop drawing details.
 - 6. Clearly indicate loads applied to the main building structure in Shop Drawings or in drawings included in the calculations, with clear references to locations in the main

building structure. Include load magnitude and direction, load combination, and point of application to the main building structure.

- 7. Include list of load combinations.
- F. General Contractor is responsible for the strength and serviceability of Exterior Enclosure Systems, support framing, related hardware, and connections to the building.
- G. Incorporate changes resulting from review of Composite Exterior Enclosure Assembly Mock-Up specified in Division 01, Section "Mockups".
- H. Incorporate changes resulting from testing of Composite Exterior Enclosure Assembly Mock-Up specified in Division 01, Section "Mockups.".

1.4 SYSTEM DESCRIPTION

A. Refer to Exterior Enclosure System component sections for system descriptions specific to individual components.

1.5 PERFORMANCE REQUIREMENTS

- A. Regulatory Agencies: Design and execution of Exterior Enclosure System components shall comply with the requirements of all governing codes and regulatory agencies.
- B. Design, fabricate and erect Support Systems for Exterior Enclosures including component parts, connections and related hardware so that completed Exterior Enclosure System components meet or exceed following requirements.
 - 1. Wind Design: In accordance with Chapter 6 of ASCE 7-05, "Wind Loads".
 - a. Importance Factor $(I_W) = 1.15$.
 - b. Wind Exposure Category: C.
 - c. Basic Wind Speed: 85 miles per hour.
 - 2. Seismic Design: In accordance with Chapter 13 of ASCE 7-05, "Seismic Design Requirements for Nonstructural Components".
 - a. Seismic Design Category D
 - b. Importance Factor (Ip) = 1.25.
 - c. Short Period Spectral Design Parameter (SDS) = 0.472
 - d. Ap and Rp as appropriate for component or connection.
 - 3. Maximum allowable deflection between supports:
 - a. Metal Wall Panels, Aluminum-Framed Entrances and Storefronts, and Glazed Aluminum Curtain Walls: L/240.
 - 1) Perpendicular to the plane of the wall, net deflection of framing members shall not exceed L/360 times span, or 1/2 inch, whichever is less. Span is defined as the distance between anchor centerline. For cantilevers, span is defined as two times the distance between anchor centerline and end of cantilever.

- 2) Perpendicular to the plane of a soffit, net deflection of framing members shall not exceed L/600 times span, or 1/4 inch, whichever is less, using the dead load combined with wind load forces. Span is defined as the distance between anchor centerline.
- 3) In the plane of the wall, deflection of horizontal framing members shall not exceed 1/16 inch. This includes sag due to dead load.
- 4) At connection points of framing members to anchors, combined movement of anchor relative to building structure, and framing member relative to anchor, shall not exceed 1/16 inch in any direction.
- 4. Structural Performance Criteria for ASTM E330:
 - a. Test Load: 31 psf, positive or negative.
 - b. Proof Load: 46.5 psf, positive or negative.
 - c. Load duration: 10 seconds.
 - d. Deflections shall be measured between supports and shall not exceed the most restrictive criterion for cladding type or support framing type listed in the appropriate specification for that type.
 - e. No permanent deformation exceeding L/100 or failure to structural support framing members will be allowed.
- 5. Seismic Racking Requirements:
 - a. There shall be no failure or deterioration of the system when the unit is laterally racked to the Service Seismic Drift level, defined as 0.0025 times the distance between supports or 3/4 inch, whichever is greater, in both directions and repeated for three cycles. System must pass the static water infiltration requirements as described in the appropriate section following the Seismic Racking Test.
 - b. There shall be no falling hazard created when the unit is laterally racked to the Maximum Seismic Drift level, defined as 0.0075 times the distance between supports or 3/4 inch, whichever is greater, in both directions and repeated for three cycles. Permanent damage is permitted to occur to the system.
- 6. Thermal Movement: Construct Exterior Enclosure Systems as to provide for expansion and contraction of component materials as will be caused by ambient temperature ranging from 10 to 120 degrees Fahrenheit without causing buckling, opening of joints, glass breakage, undue stress of fasteners, or other detrimental effects.
- 7. Additional requirements are specified in individual Exterior Enclosure System component sections.
- C. Glass Statistical Factor (Safety Factor):
 - 1. Glass thicknesses, when shown, are for convenience of detailing only and are to be confirmed by General Contractor and glass manufacturer.
 - 2. All glass for the size opening shown shall be provided in thicknesses such that the probability of breakage at the "Design Wind Pressure", per CBC Section 1620, will not exceed 8 lights per 1000 lights (Safety Factor 2.5). The glass manufacturer shall provide, on request, substantiating glass breakage data if such data is not otherwise available as manufacturer's published data.

- D. Building Movement: Design, fabricate and install Exterior Enclosure System components to withstand building movements including thermal movements, loading deflections, shrinkage, creep and similar deflections, shrinkage, creep and similar movements.
- E. Exterior Enclosure System components, support framing, connections, and related hardware shall be designed for its own dead load plus the critical of either wind or earthquake loading in accordance with the requirements of CBC.
- F. Exterior Enclosure System components including support framing to accommodate tolerances of building structure framing.
- G. Exterior Enclosure System work as erected shall meet specified minimum structural and weather resistance requirements, as demonstrated by engineering calculations.

1.6 SUBMITTALS

- A. Certifications: Submit the following certifications indicating:
 - 1. Aluminum-Framed Entrances and Storefronts and Glazed Aluminum Curtain Walls Subcontractors' qualifications.
 - 2. Each Exterior Enclosure System component manufacturer's qualifications.
 - 3. Manufacturer of each Exterior Enclosure System component has reviewed Contract Documents.
 - 4. Glass manufacturer has reviewed Shop Drawings and provided verifications required by Quality Assurance Article.
 - 5. Organic Coating Applicator's qualifications specified.
 - 6. That aluminum has been given specified thickness of organic coating.
- B. List of Exterior Enclosure System Work Suppliers: Before submission of Shop Drawings or Samples, submit a complete listing of products, manufacturers, and fabricators for the principal Exterior Enclosure System work components. Approval of listed firms and products by University's Representative will be tentative, subject to review of subsequent submittals.
- C. Schedule:
 - 1. Prepare a proposed schedule covering the complete Exterior Enclosure System work from initial submittal to erection of last Exterior Enclosure System element including mock-ups.
 - 2. Consider the nature and complexity of each submittal item and allow ample time for review, revision, correction, resubmittal, and approval sufficiently in advance of the construction requirements.
 - 3. Commence preparation of proposed schedule immediately upon receipt of the Notice to Proceed.
 - 4. Base proposed schedule upon the specific anticipated direction and sequence of construction operations.
 - 5. Coordinate proposed schedule with all involved and interfacing trades and operations .

- 6. Coordinate the submittal process to help insure an orderly and timely review of submittals in the proposed construction sequence.
- 7. Designate work progress areas and sequence for the information of all involved trades and University's Representative. Determine size of work progress areas to optimize preparation, submittals and review of shop drawings.
- 8. Submit final production Shop Drawings after approval of architectural mock-up and completion of mock-up testing.
- 9. Submit final erection Shop Drawings after approval production Shop Drawings.
- D. Product Data for each Exterior Enclosure System component.
- E. Integrated Shop Drawings:
 - 1. Prepare one set of Integrated Shop Drawings for all Exterior Enclosure System components. Separate Shop Drawings for each Exterior Enclosure System components will not be acceptable.
 - 2. Include additional information as specified in Exterior Enclosure System component sections.
 - 3. Shop drawings consists of both production and erection drawings.
 - 4. Make submittals as soon as practical. Shop Drawings for mating of adjacent work pieces or elements shall be submitted together to allow concurrent review. Where submittals are not so coordinated, review time may be extended pending receipt of shop drawings for mating of interrelated pieces.
 - 5. Production Drawings:
 - a. Prior to fabrication, submit complete production drawings for the fabrication of Exterior Enclosure System components.
 - b. Show complete elevations, layouts, dimensions, sections, details and finishes of each Exterior Enclosure System component and element and identified with a number that will be marked on an unexposed surface for identification during erection.
 - c. Show that each Exterior Enclosure System component has received prior approval of Exterior Enclosure System erector, and the manufacturer or fabricator of each Exterior Enclosure System components.
 - d. Production Shop Drawings to be stamped by the Professional Structural Engineer responsible of the design of Exterior Enclosure System components.
 - e. Drawings to indicate in detail all parts of each Exterior Enclosure System component including elevations, full-size sections, jointing, interfaces, periphery conditions, types and thickness of metal, flashing and details, field connection, weep and drainage system, finishes, sealing methods, glazing and glass sizes and details.
 - f. Show relation to adjoining work, joint treatment, and items to be installed in the work of other trades.
 - 6. Erection Drawings

- a. Show building plans and elevations locating elements. Identify each Exterior Enclosure System component and element with same identification number used in production drawings.
- b. Include sections and details showing support framing connections to structural clips, cast-in items and their relation to the structure.
- c. Include field installed anchor location drawings.
- d. Description of all loose, cast-in and field hardware.
- e. Erection sequence, installation procedures and handling requirements.
- F. Samples: Provide as specified in Exterior Enclosure System component sections.
- G. Design Calculations: Calculations shall be prepared and stamped by Professional Engineer licensed in the State of California and shall include, but not be limited to, following.
 - 1. Analysis of all Exterior Enclosure System components elements, fasteners, and anchorage components for compliance to the criteria established is this Section.
 - 2. Include computations for the justification of all Exterior Enclosure System components and anchorage assemblies.
 - 3. Include calculations for determining dead, live, wind, and seismic loads.
 - 4. Magnitude of allowable structural deflections at all principle Window Wall and Glazed Aluminum Curtain Wall Systems framing elements and the structural analysis of all connections.
 - 5. Stress and deflection calculation for wind load.
 - 6. Calculations for connection detail between mullion and horizontal member.
 - 7. Calculations for end support detail of main support members.
 - 8. Calculations to show adequacy of fasteners.
 - 9. Include loads to be imposed on structural brackets, number, and location of brackets, and tolerances for installation of brackets.
 - 10. Cross reference structural calculations to the applicable production and erection shop drawing details.
- H. Manufacturer's Test Reports: Provide as specified in Exterior Enclosure System component sections.
- I. Maintenance Manual: Submit three copies of an assembled and bound maintenance manual, describing the materials, devices, and procedure to be followed in cleaning and maintaining Exterior Enclosure System component work. Include manufacturer's data describing the actual components used in Exterior Enclosure System component work including descriptive literature, detail specifications, available performance test data, instructions for installation, metal alloys, sealants, gaskets, and all other major components.

1.7 QUALITY ASSURANCE

- A. The General Contractor shall engage qualified Subcontractor to provide Exterior Enclosure System which consists of the following components:
 - 1. Glazed aluminum curtain wall systems and windows specified in Division 08 Section "Glazed Aluminum Curtain Walls."
 - 2. Entrances and storefronts specified in Division 08 Section "Aluminum-Framed Entrances and Storefronts."
 - 3. Decorative metal specified in Division 05 Section "Decorative Metal", and metal wall panels specified in Division 07 Section "Metal Wall Panels."
 - 4. Hot fluid-applied rubberized asphalt waterproofing specified in Division 07 Section "Hot Fluid-Applied Rubberized Asphalt Waterproofing."
 - 5. Water repellents specified in Division 07 Section "Water Repellents."
 - 6. Insulated Plaster System specified in Division 09, Section "Insulated Plaster System."
 - 7. Exterior wall system as specified in Division 05, Section "Cold-Formed Metal Framing", Division 07, Section "Self-Adhering Sheet Waterproofing", Division 07 "Modified Bituminous Sheet Air Barriers", and Division 07 Section "Sheet Metal Flashing and Trim."
 - 8. PVC roofing specified in Division 07 Section "PVC Roofing", roof accessories specified in Division 07 Section "Roof Accessories" and unit skylights specified in Division 08 Section "Unit Skylights."
 - 9. Sealant systems as required for exterior enclosure system components as specified with each system and in Division 07, Section "Joint Sealants.
 - 10. Glass and glazing as required for exterior enclosure system components as specified in Division 08, Section "Glazing."
 - 11. Composite exterior enclosure assembly mockups as specified in Division 01, Section "Mockups."
 - 12. On site performance testing of composite mockups as specified in Division 01, Section "Mockups."
- B. Contractor's Qualifications: Approval by University's Representative is required of proposed manufacturers and will be based upon submission by General Contractor of certification that:
 - 1. General Contractor shall have responsibility for coordination of the Exterior Enclosure System with the work of Subcontractors including Aluminum Curtainwall, Aluminum Storefronts, Metal Stud Framing, Plaster, Decorative Metal and Metal Wall Panels..
- C. Exterior Enclosure System Component Manufacturer's Qualifications:
 - 1. Approval by University's Representative is required of proposed manufacturers and will be based upon submission by General Contractor of certification that:
 - a. Manufacturers shall have a minimum of 10 years experience in the manufacturing of Exterior Enclosure System components similar to those specified, for use as an exterior architectural cladding.

- b. Manufacturers shall provide a list of 5 similar completed projects with addresses of location, architect, and owner.
- c. Manufacturers must have single source capability to perform in- house all drafting, fabricating, welding, and assembly.
- 2. Manufacturer's qualifications do not need to be submitted, as long as suppliers and product to be installed are exactly as specified.
- D. Glass Manufacturer's Review: Glass manufacturer shall review shop drawings and verify that proper glass usages and installations are being used.
- E. Organic Coating Applicator's Qualifications: Approval by University's Representative is required of proposed organic coating applicators for each Exterior Enclosure System component, and will be based upon submission by General Contractor of certification that:
 - 1. Applicator has had a minimum of five years successful experience in the coating of window wall components of scope and type similar to requirements of this project.
 - 2. Applicator has been approved by coating formulator.
 - 3. Applicator has in house quality control program.
- F. Composite Exterior Enclosure Assembly Mockup: Provide exterior enclosure system component elements as required for the construction and testing of composite exterior wall mockups specified in Division 01, Section "Mockups."
- G. Composite Exterior Enclosure Assembly Mockup Testing: Perform testing for composite exterior wall mockups as specified in Division 01, Section "Mockups."
- H. Required Conferences:
 - 1. Conferences: General Contractor to attend weekly meetings to be held at University's Representative's office.
 - 2. General Contractor-Manufacturer Review: General Contractor shall review the drawings and specifications with agent of sheet membrane underlayment materials manufacturer and obtain manufacture's agreement that selected systems are proper, compatible, and adequate for application shown and that conditions and details do not conflict with a manufacturer's warranty/guaranty.
 - 3. Pre-Erection Conference:
 - a. General Contractor shall arrange conference to review Exterior Enclosure System work prior to actual installation.
 - b. Conference to be attended by University's Representative, University's Inspection Agency, Exterior Enclosure System component Subcontractors, and manufacturer glass and glazing materials manufacturer, and others whose work may be affected by Exterior Enclosure System work.
 - c. General Contractor to provide at least one week's advance notice of conference date and time.
 - d. The conference shall be held at the job site.
 - e. The following major considerations shall be reviewed at the conference:

- 1) Review in detail the Contract specifications, details, and other related work.
- 2) Review in detail job conditions, schedule, construction sequence, erection requirements, and quality of completed installation.
- 3) Review methods for delivering, storing and handling glass.
- 4) Review methods for installing glass and glazing materials.
- 5) Review in detail the means of protecting completed work during remainder of construction period.
- 6) Chemical compatibility of all glazing materials and framing sealant with each other and with like materials used in glass fabrications shall be established.
- 7) Record discussions of conference and any conflict, incompatibility, or inadequacy, and furnish a copy of record to each participant.

1.8 DELIVERY, STORAGE, AND HANDLING

A. Deliver, storage, and handling requirements are specified in Exterior Enclosure System component sections.

1.9 PROJECT CONDITIONS

A. Project condition requirements are specified in Exterior Enclosure System component sections.

1.10 SEQUENCING

A. Coordinate installation with that of adjacent work to ensure watertightness, proper attachment, sealed joints, and clean junctions.

1.11 WARRANTIES

- A. Manufacturer Warranty: Provide manufacturer's 10 year warranty for design integrity, weatherability, and durability of their Exterior Enclosure System components. Warranty must cover all aspects of system including engineering, glass, and fittings.
- B. Installer Warranty: warrant installation for a period of five years for installation and repairs of failures. Provide written requirements for notification of installer and terms for maintaining warranty provisions. Do not contradict requirements of Contract Documents.
- C. Warranties submitted under this Section shall not deprive University of other rights or remedies that University may have under other provisions of Contract Documents and laws of governing jurisdictions and is in addition to and runs concurrently with other warranties made by General Contractor under requirements of Contract Documents.

PART 2 - PRODUCTS

2.1 PRODUCT OPTIONS AND SUBSTITUTIONS

A. Refer to Division 01 Section "Product Options and Substitutions."

2.2 EXTERIOR ENCLOSURE SYSTEM COMPONENTS

A. Refer to individual exterior enclosure system component technical specification sections.

2.3 MATERIALS

A. Refer to individual exterior enclosure system component technical specification sections.

2.4 FABRICATION

A. Refer to individual exterior enclosure system component technical specification sections.

2.5 FINISHES

A. Refer to individual exterior enclosure system component technical specification sections.

2.6 SOURCE QUALITY CONTROL

A. University's Representative may spot check Exterior Enclosure Systems components at any time during their fabrication. Inspection of Exterior Enclosure Systems components during fabrication does not imply University's Representative's approval and does not relieve General Contractor of providing Exterior Enclosure Systems components complying with specification requirements. Final approval will not be considered until after erection and cleaning of Exterior Enclosure Systems components.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. General Contractor must examine substrates, adjoining construction, and conditions under which work is to be installed. Examine openings to Exterior Enclosure System and verify that openings are plumb, level, clean, in full accord with Contract Documents and provide solid anchoring surface.
- B. Do not proceed with the Work until unsatisfactory conditions detrimental to the proper and timely completion of the Work have been corrected in a manner acceptable to General Contractor.

3.2 PREPARATION

- A. Make certain supporting structural work is secure and properly aligns and prepared to receive exterior enclosure system. Correct any deficiencies prior to installation panels.
- B. Verify dimensions of supporting structure by accurate field measurements so that Exterior Enclosure System work will be accurately designed, fabricated, and fitted to the structure. Tolerances for supporting structure are specified in other sections. Verify any dimensions found to be different than shown, including specified tolerances. Use benchmarks as basis of measurements.

- C. Coordinate exterior enclosure system work with the work of other trades and provide items to be placed during the installation of other work at the proper time to avoid delays in the work. Place such items, including inserts and anchor, accurately in relation to the final location of curtain wall components.
- D. Inspect each unit of glass immediately before installation. Glass which had significant impact damage at edges, scratches, or abrasion of faces, or any other evidences of damage shall not be installed.
- E. Provide templates for inserts and other devices to the work of other trades, in sufficient time to be built into adjoining construction.

3.3 INSTALLATION

A. Refer to individual exterior enclosure system component technical specification sections.

3.4 FIELD QUALITY CONTROL

- A. Water Penetration Tests:
 - 1. After completion of the installation and nominal curing of sealants and glazing compound, and before installation of interior trim members and heating unit covers, test for water leaks in accordance with AAMA 501.2.
 - 2. Conduct tests in the presence of University's Representative, who will determine the actual percentage of wall area to be tested based upon any indication of leakage (or lack thereof).
 - 3. Repair or replace any components, including joints and sealants, which leak or are observed to be defective in any way, and retest as directed.

3.5 PROTECTION AND CLEANING

- A. After completion of glazing and finish painting of surrounding surfaces clean exterior enclosure system as recommended by manufacturer and for aluminum work.
- B. In addition to specific protection and cleaning methods recommended by manufacturers of each component part, maintain the exterior enclosure system and components throughout the construction period in a clean and properly protected condition so that it will be without any indication of use or damage at the time of Substantial Completion.
- C. Cleaning and protective methods shall be carefully selected, applied and maintained so that finishes will not become uneven or otherwise impaired as a result of unequal exposure to light and weathering conditions.
- D. Provide board protection at ground level work and near construction chutes and lifts.
- E. Temporary coverings, provided at General Contractor's option to protect the work during erection and construction, shall avoid development of non-uniformity or other deleterious effects in the work.

- F. Remove protection when requested by University's Representative for inspection of finishes, and replace.
- G. Remove protection when no longer required.
- H. Remove mastic smears, mortar, plaster, fireproofing, and any other deleterious material from surfaces of aluminum immediately.
- 3.6 DEFECTIVE WORK
 - A. Remove exterior enclosure system work deemed defective by University's Representative and replace with new components.
 - B. Restore to original condition work of other sections damaged in repair or replacement of defective work.

3.7 INSTRUCTION

A. Instruct University's personnel who will be responsible for window washing after the time of final acceptance. Demonstrate and train University's personnel, for a period of not less than two working days, in the proper methods of cleaning and maintaining the entire glazed aluminum curtain wall.

END OF SECTION 01 43 40

Sheet Name

A0.00 COVER SHEET A0.01 SHEET INDEX A0.02 **PROJECT INFORMATION** A0.03 **PROJECT INFORMATION** A0.04 **UL LISTING REFERENCES** A0.05 **UL LISTING REFERENCES** A0.06 **UL LISTING REFERENCES**

LOGISTICS SITE PLAN

CIVII

A0.10

Drawing

CIVIL	
C0.1	TITLE SHEET
C0.2	EXISTING CONDITIONS (FOR REFERENCE
C1.1	DEMOLITION PLAN
C2.1	EROSION CONTROL PLAN
C3.1	HORIZONTAL CONTROL PLAN
C4.1	GRADING PLAN
C5.1	UTILITY PLAN NORTH
C5.2	UTILITY PLAN SOUTH
C6.2	DETAILS
C6.4	DETAILS

C6.5 DFTAILS

LANDSCAPE

- L0.0 LANDSCAPE NOTES
- L1.0 LANDSCAPE MATERIALS PLAN L1.1 LANDSCAPE LAYOUT PLAN
- L1.2 LANDSCAPE LAYOUT PLAN (ENLARGED)
- L2.0 **IRRIGATION PLAN**
- L2.1 **IRRIGATION DETAILS**
- L3.0 PLANTING PLAN
- L3.1 PLANTING DETAILS
- L4.0 LANDSCAPE DETAILS - PAVING AND DRAINAGE
- L4.1 LANDSCAPE DETAILS - FURNISHINGS
- L4.2 LANDSCAPE DETAILS - FURNISHINGS
- L4.3 LANDSCAPE DETAILS - FURNISHINGS
- L4.4 LANDSCAPE DETAILS - FENCE

SITE UTILITIES

UE1.01	ELECTRICAL SITE PLAN	R1-Addend
UE5.01	SINGLE LINE DIAGRAM	R1-Addend
UM1.02	MECHANICAL SITE PLAN STUDENT SERVICES BUILDING	R1-Addend

ONLY)

ARCHITECTURAL

A1.01	SITE PLAN
A2.11	FLOOR PLAN - GROUND FLOOR
A2.12	FLOOR PLAN - SECOND FLOOR
A2.13	FLOOR PLAN - THIRD FLOOR & ROOF

Revision

R1-Addendum 3 R1-Addendum 3 R1-Addendum 3 Addendum 3 Addendum 3 Addendum 3 R1-Addendum 3

R1-Addendum 3 R1-Addendum 3 R1-Addendum 3 R1-Addendum 3 R1-Addendum 3 R1-Addendum 3 R1-Addendum 3 Addendum 3 R1-Addendum 3 R1-Addendum 3 Addendum 3

Addendum 3 Addendum 3 Addendum 3 Addendum 3 Addendum 3 Addendum 3 Addendum 3 Addendum 3 Addendum 3 Addendum 3 Addendum 3 Addendum 3 Addendum 3

- ndum 3 ndum 3 ndum 3
- Addendum 3 R1-Addendum 3 R1-Addendum 3 R1-Addendum 3 R1-Addendum 3

Revision

R1-Addendum 3 R1-Addendum 3 R1-Addendum 3 Addendum 3 Addendum 3 R1-Addendum 3 R1-Addendum 3 R1-Addendum 3 R1-Addendum 3 Addendum 3 Addendum 3 Addendum 3 Addendum 3 Addendum 3 R1-Addendum 3 Addendum 3 Addendum 3 R1-Addendum 3 R1-Addendum 3 R1-Addendum 3 R1-Addendum 3 R1-Addendum 3 R1-Addendum 3 Addendum 3 R1-Addendum 3 Addendum 3 Addendum 3 Addendum 3 R1-Addendum 3

Drawing	Sheet Name
A2.21	
A2.22	SLAB PLAN - SECOND FLOOR
A2.23	SLAB PLAN - THIRD FLOOR & ROOF
A2.31	
A2.32	SIGNAGE LOCATION - SECOND & THIRD FLOOR
A3.03	BUILDING ELEVATIONS
A3.04	BUILDING ELEVATIONS
A3.05	BUILDING ELEVATIONS - PAVILION
A3.06	BUILDING SECTIONS
A4.11	INTERIOR ELEVATIONS - PAVILION
A4.12	INTERIOR ELEVATIONS - GROUND FLOOR
A4.21	INTERIOR ELEVATIONS - SECOND FLOOR
A4.22	INTERIOR ELEVATIONS - SECOND FLOOR
A4.31	INTERIOR ELEVATIONS - THIRD FLOOR
A4.41	RESTROOM ENLARGEMENTS - GROUND FLOOR
A4.42	RESTROOM ENLARGEMENTS - SECOND & THIRD FLOOR
A6.01	REFLECTED CEILING PLAN - GROUND FLOOR
A6.02	REFLECTED CEILING PLAN - SECOND & THIRD FLOOR
A7.11	STAIR 1 - PLANS AND SECTIONS
A7.12	STAIR 2 - PLANS AND SECTIONS
A7.14	STAIR DETAILS
A7.15	STAIR DETAILS
A7.21	ENLARGED ELEVATOR PLANS AND SECTIONS
A8.01	EXTERIOR DETAILS
A8.02	EXTERIOR DETAILS
A8.03	TRASH ENCLOSURE & TRANSFORMER PAD
A8.04	TRASH ENCLOSURE
A8.11	EXTERIOR CLADDING DETAILS
A8.12	EXTERIOR CLADDING DETAILS
A8.15	EXTEIROR DETAILS - EXTERIOR STUD FRAMING
A9.01	INTERIOR DETAILS - STANDARDS
A9.11	INTERIOR DETAILS - PARTITIONS
A9.12	INTERIOR DETAILS - PARTITION FRAMING
A9.13	INTERIOR DETAILS - PLATFORMS
A9.21	INTERIOR DETAILS - DOORS AND ELEVATOR
A9.31	INTERIOR DETAILS - CEILINGS
A9.41	INTERIOR DETAILS - CASEWORK
A9.61	SIGNAGE DETAILS
A10.01	DOOR & ROOM FINISH SCHEDULE

STRUCTURAL

S0.01	GENERAL NOTES	R1-Addendum 3
S2.01	MAIN BUILDING & CLASSROOM PAVILION LEVEL 1 FRAMING/FOUNDATION F	PLR1-Addendum 3
S2.02	MAIN BUILDING LEVEL 2 & CLASSROOM PAVILION ROOF FRAMING PLAN	R1-Addendum 3
S2.03	MAIN BUILDING LEVEL 3 FRAMING PLAN	R1-Addendum 3
S2.04	MAIN BUILDING ROOF FRAMING PLAN	R1-Addendum 3
S3.03	TYPICAL FOUNDATION DETAILS	R1-Addendum 3
S3.04	CONCRETE DETAILS	R1-Addendum 3

Drawing	Sheet Name	Revision
S4.01	BRACED FRAME ELEVATIONS - MAIN BUILDING	R1-Addendum 3
S4.05	L.F.R.S. FRAME DETAILS	R1-Addendum 3
S5.03	TYPICAL STEEL JOIST DETAILS	R1-Addendum 3
S5.04	TYPICAL STEEL DECK & CONCRETE DETAILS	R1-Addendum 3
\$5.05	TYPICAL STEEL DECK & CONCRETE DETAILS	R1-Addendum 3
S5.10	STEEL DETAILS	R1-Addendum 3
S5.11	STEEL DETAILS	R1-Addendum 3
S6.02	ROOF SCREEN ELEVATIONS - CLASSROOM PAVILION BUILDING	R1-Addendum 3
S6.03	ROOF MEP SCREEN DETAILS	R1-Addendum 3
S6.05	STAIR FRAMING - PARTIAL PLANS & DETAILS	R1-Addendum 3
MECHANI	CAL	
M0.01	LEGEND, SYMBOLS, GENERAL NOTES & DRAWING LIST	R1-Addendum 3
M0.02	TITLE 24 DOCUMENTATION	Addendum 3
M0.03	TITLE 24 DOCUMENTATION	Addendum 3
M0.04	TITLE 24 DOCUMENTATION	Addendum 3
M1.11	GROUND FLOOR PLAN - HVAC	R1-Addendum 3
M1.12	SECOND FLOOR PLAN - HVAC	R1-Addendum 3
M1.13	THIRD FLOOR PLAN - HVAC	R1-Addendum 3
M1.14	PENTHOUSE PLAN - HVAC	R1-Addendum 3
M2.11	GROUND FLOOR PLAN - PIPING	R1-Addendum 3
M2.12	SECOND FLOOR PLAN - PIPING	R1-Addendum 3
M2.13	THIRD FLOOR PLAN - PIPING	R1-Addendum 3
M2.14	PENTHOUSE PLAN - PIPING	R1-Addendum 3
M3.01	SECTIONS	R1-Addendum 3
M4.02	DETAILS	R1-Addendum 3
M4.03	DETAILS	R1-Addendum 3
M4.06	DETAILS	R1-Addendum 3
M4.07	DETAILS	R1-Addendum 3
M4.09	DETAILS	R1-Addendum 3
M5.01	SCHEDULES	R1-Addendum 3
M5.02	SCHEDULES	R1-Addendum 3
M5.03	SCHEDULES	R1-Addendum 3
M5.04	SCHEDULES	Addendum 3
M6.01	RISER FLOW DIAGRAMS	R1-Addendum 3
M6.02	RISER FLOW DIAGRAMS	R1-Addendum 3
M7.01	CONTROL DIAGRAMS	R1-Addendum 3
M7.02	CONTROL DIAGRAMS	R1-Addendum 3
M7.03	CONTROL DIAGRAMS	R1-Addendum 3
M7.05	CONTROL DIAGRAMS	R1-Addendum 3
M7.08	CONTROL DIAGRAMS	R1-Addendum 3
M7.09	CONTROL DIAGRAMS	Addendum 3

PLUMBING

LEGEND, SYMBOLS, GENERAL NOTES & DRAWING LIST
FOUNDATION PLAN - PLUMBING
GROUND FLOOR PLAN - PLUMBING
SECOND FLOOR PLAN - PLUMBING

R1-Addendum 3 R1-Addendum 3 R1-Addendum 3 R1-Addendum 3

R1-Addendum 3

R1-Addendum 3

R1-Addendum 3

R1-Addendum 3

R1-Addendum 3

R1-Addendum 3

R1-Addendum 3

R1-Addendum 3

R1-Addendum 3

R1-Addendum 3

R1-Addendum 3

R1-Addendum 3

Addendum 3

Drawing	Sheet Name	Revision	
P2.13	THIRD FLOOR PLAN - PLUMBING	R1-Addendum 3	
P2.14	ROOF PLAN - PLUMBING	R1-Addendum 3	
P4.01	DETAILS	R1-Addendum 3	
P5.01	SCHEDULES	R1	
P6.01	WATER RISER DIAGRAM	Addendum 3	
P6.02	WASTE AND VENT RISER DIAGRAM	Addendum 3	
ELECTRICAL			
E0.01	LEGEND, SYMBOLS, GENERAL NOTES AND DRAWING LIST	R1-Addendum 3	
E0.02	TITLE 24 COMPLIANCE DATA	Addendum 3	
E0.03	TITLE 24 COMPLIANCE DATA	Addendum 3	
E0.04	TITLE 24 COMPLIANCE DATA	R1-Addendum 3	
E0.05	LIGHT FIXTURE SCHEDULE & CONTROL DIAGRAMS	Addendum 3	
E1.01	SITE PLAN - ELECTRICAL	R1-Addendum 3	
E2.01	SINGLE LINE DIAGRAM - NORMAL POWER	R1-Addendum 3	

- E2.02 RISER DIAGRAM LIGHTING CONTROL SYSTEM
- E2.03 RISER DIAGRAM GROUNDING SYSTEM
- E3.11 GROUND FLOOR PLAN LIGHTING
- E3.12 SECOND FLOOR PLAN LIGHTING
- E3.13 THIRD FLOOR PLAN LIGHTING
- E4.11 GROUND FLOOR PLAN POWER
- E4.12 SECOND FLOOR PLAN POWER
- E4.13 THIRD FLOOR PLAN POWER
- E4.14 ROOF PLAN ELECTRICAL
- E5.01 ENLARGED PLAN
- E6.01 SCHEDULES EQUIPMENT
- E6.02 SCHEDULES PANELS
- E7.01 DETAILS POWER

FIRE ALARM

FA0.01	SYMBOLS, ABBREVIATIONS, GENERAL NOTES AND DRAWING LIST	R1-Addendum 3
FA3.11	GROUND FLOOR PLAN - FIRE ALARM	R1-Addendum 3
FA3.12	SECOND FLOOR PLAN - FIRE ALARM	R1-Addendum 3
FA3.13	THIRD FLOOR PLAN - FIRE ALARM	R1-Addendum 3
FA3.14	ROOF PLAN - FIRE ALARM	R1-Addendum 3
FA5.01	RISER DIAGRAM - FIRE ALARM SYSTEM	R1-Addendum 3
FA7.01	FA SYSTEM FUNCTION MATRIX AND MOUNTING DETAIL	R1-Addendum 3
FA7.04	FA SYSTEM DETAILS	R1-Addendum 3

TECHNOLOGY

T0.01	TECHNOLOGY TITLE SHEET	R1-Addendum 3
T0.02	TECHNOLOGY BACKBOX SCHEDULE	R1-Addendum 3
T0.03	SCHEDULE - DOOR	R1-Addendum 3
T0.10	PATHWAY RISER DIAGRAM	R1-Addendum 3
T0.11	CABLE RISER DIAGRAM	Addendum 3
T0.20	AUDIOVISUAL PATHWAY DIAGRAMS	Addendum 3
T0.21	AUDIOVISUAL FUNCTIONAL DIAGRAMS	Addendum 3
T0.22	AUDIOVISUAL FUNCTIONAL DIAGRAMS	Addendum 3

Drawing	Sheet Name
T0.23	AUDIOVISUAL FUNCTIONAL DIAGRAMS
T1.01	SITE PLAN
T2.11	GROUND FLOOR
T2.12	SECOND FLOOR
T2.13	THIRD FLOOR & ROOF
T3.11	REFLECTED CEILING PLAN - GROUND FLOOR
T3.12	REFLECTED CEILING PLAN - SECOND FLOOR
T3.13	REFLECTED CEILING PLAN - THIRD FLOOR
T4.11	BDF - 1U1 ROOM PLANS
T4.12	IDF - 2U2 ROOM PLANS
T4.13	IDF - 1U5 ROOM PLANS
T5.01	BONDING DETAILS
T5.02	TELECOM ROOM INSTALLATION DETAILS
T5.03	USER SPACE INSTALLATION DETAILS

Revision Addendum 3 R1-Addendum 3 R1-Addendum 3 R1-Addendum 3 Addendum 3