ADDENDUM NO. 11

March 20, 2019

REQUEST FOR PROPOSALS
(BID DOCUMENTS)

FOR

STUDENT SUCCESS CENTER
PROJECT NO. 950512

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

1. REQUEST FOR PROPOSALS

A. General Requirements (Division 01)

1. Section 01 8113 – Sustainable Design Requirements

Delete "Section 01 8113 – Sustainable Design Requirements", and **replace** with the one issued in this Addendum.

2. DESIGN BUILDER QUESTIONS & ANSWERS

Q54	Please provide confirmation of which LEED credits the University will be responsible for providing as part of the overall project certification (i.e. baseline scorecard).
A54	**Section 01 8113, Sustainable Design Requirements has been updated to include the Baseline Score card and is being issued in Addendum No. 11.**
Q55	How often is the drop-off near Hinderaker Building used? What are the future plans for this space?
A55	**The Hinderaker drop off is closed during peak hours. Currently the University does not have long term plans for this drop-off; however, with the development of the Mobility Hub it is highly possible that the main entry point to the core campus would shift to the north, and the use of this drop off would reduce.**
Q56	Is there existing photovoltaic capacity on the campus which can be dedicated to the Student Success Center? This would mean that, in accounting for LEED points, this capacity has not, and will not, be counted toward any other buildings. LEED requires that solar capacity only be counted once, so that there is not, for example, a 100 kW array being counted toward LEED points for 10 buildings, each needing 20 kW (200 kW total) for the points they've received.
A56	**Per the RFP (Design Criteria 4.4, Sustainable Design), "Priority and preference shall be given to reduction strategies." UCR will provide data and documentation to earn points associated with Onsite Renewable Energy credit only after the design build team has demonstrated 73-points are attainable without renewables and if the generated energy has not been allocated to previously LEED certified projects.**

END OF ADDENDUM

SECTION 01 8113 – SUSTAINABLE DESIGN REQUIREMENTS

PART 1 - GENERAL

1.1 SUMMARY

A. Section includes requirements, procedures, and application of sustainable principles including USGBC LEED BD+C v4 or current Building Design and Construction (BD+C) rating system for project certification from GBCI, Cal-Green Code.

1. Project shall achieve LEED Gold rating as awarded by GBCI as part of Base Bid.
2. ~~Alternate Rating: Refer to Division 01 Section Alternates.~~
3. Comply with California Green Building Standards.

    a. Submit CALGreen Cal-Green Checklists (refer to Attachment #1) within 30 days of ~~NPT~~ NTP with description of proposed method of compliance, based upon code analysis and code study.
    b. Note: Design Builder must review Project Specifications, Campus Standards ~~& Project Planning Guidelines,~~ LEED Requirements, Basis of Design and all other RFP and code requirements, and meet or exceed the most stringent requirements, including the Cal-Green requirements.

B. The Design Builder's responsibilities shall include, but not be limited to the following:

1. Design Builder must design, construct, document, and execute project for compliance with USGBC LEED BD+C v4 or current Building Design and Construction (BD+C) rating system prerequisites and credits as necessary for LEED Gold certification.
2. Comply with all prerequisite and credit requirements necessary to achieve LEED Gold certification from GBCI. Provide reports, calculations, drawings, exhibits and other documentation required.
3. Design Builder must comply with USGBC and GBCI policies and rules.
4. Design Builder must manage, coordinate, plan, and meet with University Representative, design professionals and specialty contractors to develop action plans and select credits as necessary to implement and achieve GBCI approval, in order to meet project goals.
5. Achieve specific mandatory credits required by the University – Refer Part 3.
6. Selection of LEED credits necessary to obtain certification of LEED rating and GBCI award are the Design Builder's choice. The Design Builder shall select credits and edit Drawings, and Divisions 02 through 33 to incorporate the LEED requirements as applicable. Incorporate all requirements into design and construction.
7. University will register the project on LEED Online.
    a. University will provide Design Builder access to LEED Online for administration purposes
    b. Manage LEED On-line electronic documenting system per the requirements of GBCI. Coordinate work with design professionals, and specialty contractors.
    c. Provide all documentation required for LEED Online.

1) The University will participate in review of the project.
2) The University may add or pursue additional credits, and may provide documentation for GBCI review and approval.
3) Design Builder responsible for responding to all review clarifications for prerequisites and credits submitted by them for LEED certification until all prerequisites are awarded and credit(s) are rewarded or denied.

8. Design Builder shall provide all work and services associated with implementation, procedures, material, design, engineering, labor documentation, related to acquiring LEED certification. Any costs associated with appeals of prerequisite and/or credits submitted by Design Builder, deemed necessary by UCR, will be sole responsibility of Design Builder.

C. University Required Credits

1. Design Builder shall achieve GBCI approval of University required LEED credits as indicated on the LEED Project Checklist in Part 3.

D. University Sustainability

1. All new building projects, other than acute care facilities, shall be designed, constructed, and commissioned to outperform the CBC energy-efficiency standards 2016 by at least 20% by energy cost and/or meet Whole Building Energy Targets set by UCOP. A copy is included in the project RFP ~~exhibits.~~ University Furnished Information.
2. All new building projects will achieve at least two points within the available credits in LEED-New Construction's Water Efficiency category.
3. Waste reduction and recycling shall be prioritized. Design Builder must achieve 95% diversion.

E. Southern California Gas (SoCal Gas) Savings by Design Program (SBD)

1. Project participation in this energy savings and rebate program for the SoCal Gas portion is a mandatory requirement. Design Builder must engage SoCal Gas Representative within 3 weeks of Notice to Proceed.
2. Title-24 performance for a stand-alone building modeled without the UCR central plant must be 20% by energy cost, better than code minimum performance.
3. Savings by Design: an energy efficiency program offered by California's four investor-owned utility companies and the Sacramento Municipal Utility District. Savings by Design provides design assistance, energy analysis, life-cycle costing, and financial incentives for new construction and major renovation projects. The Savings by Design program is also known as the Non-Residential New Construction Program which is applicable to high-rise residential as defined in the Energy Efficiency Standards.
4. All equipment provided as part of this project shall meet the SBD energy performance requirements, which exceed code minimum requirements.

F. Related Sections:

1. Divisions 01 through 33 Sections for LEED requirements specific to the work of each of these Sections. Requirements may or may not include reference to LEED.

1.2 DEFINITIONS

A. CBC: California Building Code (2016), Title 24 portion of the California Code of Regulations

B. GBCI: Green Building Certification Institute. Refer to GBCI website (http://www.gbci.org).

C. LEED: Leadership in Energy and Environmental Design. LEED is a registered trademark of the U.S. Green Building Council (USGBC). This trademark applies to all occurrences of LEED in this document. LEED is a green building rating system developed and administered by the non-profit U.S. Green Building Council. The four levels of LEED certification, from lowest to highest, are Certified, Silver, Gold, and Platinum.

D. LEED BD+C v4 or current: LEED BD+C v4 or current for New Construction and Major Renovations rating system. Refer to The LEED Reference Guide for Green Building Design and Construction, 2016 Edition, available for purchase from USGBC website store. Include all addendums and updates to the latest edition, as applicable.

E. USGBC: US Green Building Council. Refer to USGBC website (http://www.usgbc.org). U.S. Green Building Council. The USGBC is a membership-based non-profit organization dedicated to sustainable building design and construction, and is the developer of the LEED building rating system.

1.3 SUBMITTALS

A. General: Submit additional LEED submittals required by other Specification Sections.

B. LEED Action Plans: Provide preliminary submittals within 30 days of date established for the Notice to proceed indicating how GBCI certification of project LEED rating will be achieved. Include description of how each project Credit and Prerequisite will be met, including the following:

1. ~~Credit EQc3.1~~ IEQ Credit: Construction indoor-air-quality management plan.
2. ~~Credit MRc2~~ MR Prerequisite and Credit: Waste management plan complying with Division 01 Section "Construction Waste Management."
3. ~~Credit MRc3~~ MR Credit Building Lifecycle Impact Reduction: (Selection~~s are~~ is optional) List of proposed salvaged and refurbished materials. Identify each material that will be salvaged or refurbished, including its source ~~and~~ cost and the surface area (option 3). Or, provide the proposed the Life Cycle Assessment (LCA) Software, list the Products to be included in the Assessment and the Life Cycle Impact Indicators. Global Warming must be included.
4. ~~Credit MRc4: (Selection is optional) List of proposed materials with recycled content. Indicate cost, post-consumer recycled content, and pre-consumer recycled content for~~

~~each product having recycled content.~~ MR Credit Building Product Disclosure Optimization: List of proposed products that meet the requirements of the Environmental Product Declarations and Materials Ingredients credits.

5. MR Credit Building Product Disclosure Optimization Sourcing Raw Materials~~MRc5~~: (Selection is optional): List of proposed products that meet the responsible extraction criteria found in the credit ~~regional materials. Identify each regional material,~~ including its source, cost, and the fraction by weight ~~that is considered regional.~~ that meet the criteria. Identify if any of these materials are regional (100 miles of project site.)
6. ~~Credit MRc7: (Selection is optional): List of proposed certified wood products. Indicate each product containing certified wood, including its source and cost of certified wood products.~~

C. LEED Online Project Registration: Design Builder to coordinate with University Representative to confirm receipt of LEED Online project registration from the ~~GBCI~~ USGBC no later than 30 days after the date of Notice To Proceed.

D. Final LEED Submission: All prerequisite and credit document materials to complete the final LEED application to LEED On-line shall be completed and uploaded no later than 15 days after the completion of the building's final commissioning. Submit verification of submittal to University Representative for review.

E. LEED Certification Award: All prerequisites and credits, if questioned by GBCI, must be coordinated and clarified until awarded and LEED certification is achieved. Submit clarification documentation to University Representative for review and record. University Representative will distribute copies of LEED certification award, upon request.

F. CalGreen Checklists: (For Checklists see Attachments #1 at the end of this Section) Submit completed Checklists with the following information:

1. Describe method of compliance with the California Green Building Standards Code on the Checklists,
2. Indicate location where code compliance is shown within the final construction design package; Sheet No.'s, Detail No.'s, Specification Section/Paragraph No.'s. Indicate location of design information which displays code compliance on the Checklists.
3. Submit Completed Checklists with design packages for review/approval.

G. Southern California Gas (SoCal Gas) Savings by Design Program (SBD) registration: Provide SBD Design Team application no later than 30 days after the date of Notice to Proceed.

1.4 QUALITY ASSURANCE

A. LEED Coordinator: Engage an experienced LEED-Accredited Professional to coordinate LEED requirements with University Representative. Design Builder's LEED coordinator may also serve as waste management coordinator.

PART 2 - PRODUCTS

2.1 Provide materials as determined during project design as necessary to accomplish approval of LEED prerequisites and credits.

PART 3 - EXECUTION

3.1 INTEGRATIVE PROCESS

A. IP Credit Integrative Process: Hold Shoulder to Shoulder reviews ~~Design Charrette~~ with design team ~~during schematic design~~ within 30 days of NTP to discuss synergies across disciplines and building systems. Use the analyses to inform OPR, BOD, design documents and construction documents.

3.2 LOCATION AND TRANSPORTATION

A. LT Credit Sensitive Land Protection: Provide documentation of site selection to achieve this credit.

B. LT Credit: Surrounding Density and Diverse Uses: Provide documentation showing commercial density (FAR) and residential density (du/acre) within ¼ mi of the project site. Provide documentation of at least 8 diverse uses as described in the LEED v4 Reference Guide.

C. LT Credit: Access to Quality Transit: Provide documentation showing all public transportation stops (bus, rail, etc.) within ¼ mi walking distance of site.

D. LT Credit Bicycle Facilities: Provide documentation of bike racks and showers, and proximity to local bicycle network to achieve this credit.

~~E. LT Credit Reduced Parking Footprint: Provide documentation of parking available for occupants in direct proximity to project site.~~

~~F. LT Credit Green Vehicles: Provide documentation of electric vehicle charging stations available for occupants.~~

3.3 SUSTAINABLE SITES

~~A. Prerequisite SSp1: Verify compliance of site selection credit early in the design phase.~~

~~B. Credit SSc1: Provide documentation of site selection to achieve this credit.~~

~~C. Credit SSc4.2: Provide documentation of bike racks and showers to achieve this credit.~~

~~D. Credit SSc4.4: Provide documentation of no new parking to achieve this credit.~~

E. ~~Credit SSc5.1~~SS Credit Site Development, Protect or Restore Habitat: Provide documentation of Site Development – Protection or restoration of habitat to achieve this credit.

F. SS Credit Open Space: ~~Credit SSc5.2: Provide~~ documentation of ~~Site Development – Maximization of open~~Open Space ~~spaces~~ that promote biodiversity and recreation to earn this credit.

G. University of California Riverside ~~Credit SSc6.1~~: Project requirement is to ensure that post construction storm runoff does not exceed the preconstruction storm runoff – see Scope of Work and UCR Long Range Development Plan.

~~1. The Project drainage study shall establish that pre-project hydrologic conditions affecting downstream conditions would be maintained by the proposed project by incorporating site design, source control or treatment control BMPs or by demonstrating that there would be no significant impact to the downstream receiving waters.~~

2. All land disturbance of 1 acre or greater, shall meet the following (Reference: November 2005 UCR Long Range Development Plan Final EIR, LRDP Amendment 2- 2011, and Amendment 3- 2013):

   a. Site design that controls runoff discharge volumes and durations shall be utilized, where applicable and feasible, to maintain or reduce the peak runoff for the 10-year, 6-hour storm event in the post-development condition compared to the pre-development condition, or as defined by current water quality regulatory requirements.
   b. Measures that control runoff discharge volumes and durations shall be utilized, where applicable and feasible, on manufactured slopes and newly-graded drainage channels, such as energy dissipaters, revegetation (e.g., hydroseeding and/or plantings), and slope/channel stabilizers.

H. ~~Credit SSc6.2: Provide documentation of Stormwater Design – Quality Control to achieve this credit.~~SS Credit Rainwater Management: Project requirement is to manage onsite runoff from developed site for the 95th percentile of regional or local rainfall events using Low Impact Development (LID) and Green Infrastructure.

~~I. Credit SSc7.1~~SS Credit Heat Island Reduction: Provide documentation of Heat Island ~~Effect – Non-roof to achieve this credit.~~

J. ~~Credit SSc7.2: Design roofing for compliance to achieve this credit.~~Reduction using roof and non-roof to achieve credit.

K. SS Credit Light Pollution Reduction: Provide documentation of backlight-uplight-glare (BUG) for outdoor lighting on site.

3.4 WATER EFFICIENCY

A. **University of California, Riverside mandates that all new construction project will achieve at least two points within the available credits in Water Efficiency.**

B. ~~Credit WEc1~~WE ~~Prerequisite and~~ Credit Outdoor Water Use Reduction: Use no potable water for irrigation, and reduce irrigation to earn 4 points.

C. ~~Credit WEc3~~WE ~~Prerequisite and~~ Credit Indoor Water Use Reduction: Reduce Water Use by 35%. ~~Reduce by 40% to earn Regional Credit.~~

D. WE Prerequisite Building Level Water Metering: Show location of permanently installed building level meter and provide letter from owner committing to sharing water use data for 5-year period.

~~E. WE Credit Water Metering (Selection is optional): Show location of permanently installed water meters for two or more water subsystems as outlined in the LEED v4 reference guide.~~

3.5 ENERGY AND ATMOSPHERE

A. University of California, Riverside mandates that all new construction projects achieve 20% (by energy cost) or better than Title 24 -2016 code requirements.

B. EA Credit Optimize Energy Performance~~EAc1~~: Design a building that achieves 20% (by energy cost) or better than Title 24 – ~~2013~~2013~~3~~6 code requirements.

1. Title-24 energy modeling and calculation – Central plant modeling within the building model is required for LEED projects. The University has documentation on central plant chillers, cooling towers, pumps, thermal energy tank, operating sequences, and other information available for energy modeling performed by the Design Builder.

    a. Note: energy models for SoCal Gas ‘Savings by Design’ must be performed without the input of the central plant equipment, as code requires building Title-24 calculations as a stand-alone building.

C. ~~Credit EAc2~~EA Credit Renewable Energy Production: This credit for on-site solar power will be eligible for attempting only after the Design Builder has attempted 73 points or higher without it. At that point, the University will provide data and documentation to earn the points associated with this additional credit.

D. ~~Credit EAc3~~EA Credit Enhanced and Monitoring based Commissioning: Provide enhanced and Monitoring based commissioning to earn this credit. Provide Envelope Commissioning.

E. ~~Credit EAc4~~EA Credit Enhanced Refrigerant Management: If refrigerants are provided on the project, comply with the requirements of this credit. Provide design and documentation to earn this credit in any case.

1. The University has existing documentation on the existing central plant chiller refrigerants available for use by the Design Builder to perform LEED ~~Template~~ Form documentation of this credit.

F. EA Prerequisite Building Level Energy Metering: Show location of permanently installed building level meter and provide letter from owner committing to sharing energy use data for 5-year period.

~~G. Credit EAc5 (Selection is optional): Implement measurement and verification plan consistent with Option B: Energy Conservation Measure Isolation in the EVO's "International Performance Measurement and Verification Protocol (IPMVP) Volume III: Concepts and Options for Determining Energy Savings in New Construction."~~

~~1. If not already in place, install metering equipment to measure energy usage. Monitor, record, and trend log measurements. Additional sub-metering of lighting may be required to achieve this credit.~~
~~2. Evaluate energy performance and efficiency by comparing actual to predicted performance. Provide calibrated model.~~
~~3. Measurement and verification period shall cover at least one year of post-construction occupancy.~~

H. ~~Credit EAc~~EA Credit Green Power: This credit for green power will be eligible for attempting only after the Design Builder has attempted 73 points or higher without it. At that point, the University will provide data and documentation to earn the points associated with this additional credit.

3.6 MATERIAL RESOURCES

A. University of California, Riverside mandates that all new construction projects achieve 95% construction waste diversion.

B. ~~Credit MRc2~~MR Prerequisite and Credit Construction and Demolition Waste Management: Comply with requirements to attain at least 95% recycled or salvaged construction materials.

1. Comply with Division 01 Section 017419 "Construction Waste Management."

C. MR Credit ~~MRc4~~BPDO Environmental Product Declarations and Materials Ingredients: ~~Comply with the requirements for recycled content to achieve this credit.~~ Provide a minimum of 20 materials from 5 different manufacturers with EPDs, and a minimum of 20 materials from 5 different manufacturers Material Ingredient reporting to achieve these credits.

~~D.~~ MR Credit ~~MRc5~~Sourcing Raw Materials: Comply with the requirements for recycled content, FSC wood, Bio-based materials and Extended Producer Responsibility to achieve this credit.~~Comply with the requirements for regional materials to achieve this credit.~~

3.7 INDOOR ENVIRONMENTAL QUALITY

A. IEQ Credit ~~EQc1~~Enhanced IAQ Strategies: Comply with ~~outdoor air monitoring~~IAQ strategies (option 1 and 2) requirements necessary to achieve this credit.

B. IEQ Credit Construction ~~EQc3.1~~IAQ Management Plan: Comply with requirements necessary to achieve this credit.

1. Comply with SMACNA's "SMACNA IAQ Guideline for Occupied Buildings under Construction."

2. If University's Representative authorizes use of permanent heating, cooling, and ventilating systems during construction period as specified in Division 01 Section "Temporary Facilities and Controls," install temporary filter media having a MERV 8 according to ASHRAE 52.2 at each return-air inlet for the air-handling system used during construction.
3. Replace all temporary air filters with new filters immediately prior to occupancy.

C. IEQ Credit ~~EQc3.2~~IAQ Assessment: Comply with requirements of this credit to ensure air quality prior to occupancy.

D. IEQ Credit ~~EQc4.1~~Low Emitting Materials - Adhesives & Sealants: Provide low emitting adhesives and sealants as required to achieve this credit. Provide VOC content and General Emission's Evaluations.

E. IEQ Credit ~~EQc4.2~~Low Emitting Materials – Paints & Coatings: Provide low emitting paints and coatings as required to achieve this credit. Provide VOC content and General Emission's Evaluations.

F. IEQ Credit ~~EQc4.3~~Low Emitting Materials – Flooring Systems: Provide low emitting flooring systems as required to achieve this credit. Provide General Emission's Evaluations (FloorScore, CRI Green Label Plus, GreenGuard, etc.)

G. IEQ Credit EQc4.4Low Emitting Materials – Composite Wood: Provide low emitting composite wood and agrifiber products as required to achieve this credit. This credit applies to the manufacturing of all composite materials and laminating adhesives used on the project. Provide proof of CARB ULEF (Ultra Low Emitting Formaldehyde), NAUF (No Added Urea Formaldehyde) or NAF (No Added Formaldehyde) compliance.

H. IEQ Credit Low Emitting Materials – Wall & Ceiling Systems: Provide low emitting wall and ceilings systems as required to achieve the credit. Provide General Emission's Evaluations (SCS Indoor, Berkeley Analytical, GreenGuard, etc.)

~~I. IEQ Credit EQc5: Provide necessary design and construction to achieve indoor chemical and pollutant source control as required to achieve this credit.~~

J. IEQ Credit Interior ~~EQc6.1~~Lighting: Provide necessary system design of high-performance lighting systems through increased controllability for building occupants as required to achieve this credit.

K. IEQ Credit ~~EQc6.2~~Thermal Comfort: Provide necessary system design of multi-occupant spaces through increased controllability of thermal comfort for building occupants as required to achieve this credit.

3.8 INNOVATION AND DESIGN

A. Credit IDc1.1 Provide ~~innovation~~ exemplary performance of base credit to achieve this credit.

B. Credit IDc1.2 Provide ~~innovation~~ exemplary performance of base credit to achieve this credit.

C. Credit IDc1.3: Provide ~~innovation exemplary performance~~ pilot credit compliance to achieve this credit.

D. Credit IDc1.4: Provide innovation strategy to achieve this credit.

E. Credit IDc1.5: Provide innovation strategy to achieve this credit.

F. Credit IDc2: UCR will document credit with UCR LEED AP.

3.9 Regional Priority Credits

A. Credit RPc1.1: Attempt regional priority credits based on project zip code 92521

B. Credit RPc1.2: Attempt regional priority credits based on project zip code 92521

C. Credit RPc1.3: Attempt regional priority credits based on project zip code 92521

D. Credit RPc1.4: Attempt regional priority credits based on project zip code 92521

3.10 PROJECT CREDIT CHECKLIST

A. Design Builder must ***demonstrate compliance and*** achieve ***all*** Prerequisites, as required by GBCI.

B. Legend – The table below identifies the abbreviations used on the Project Checklist and establishes minimum project requirements.

Abbreviation	Descriptor	Description:
~~P~~***C***	"~~Pre-fer~~***Code Mandated"***	Indicates credits that the ~~University would prefer Design Builder obtain for meeting accreditation goal as determined by the project RFP.~~***California Building code requires that the Design-Builder would be required to provide to meet accreditation.***
~~DB~~***M***	"~~Design Builder~~ ***Mandatory***"	Indicates credits that the Design Builder should consider achieving for meeting accreditation goal as determined by the project RFP.
D	***"Discretionary"***	***Indicates credits that are discretionary or optional- that the Design-Builder may elect to obtain towards achieving the requirements of the RFP***
X	***"Not Applicable"***	***Indicates credits that are not feasible for the current UCR project.***

DB	"Design Builder"	Design Builder to indicate the credits that would be pursued as part of its proposal to achieve the requirements of the RFP.

C. Checklist starts on the next page:

LEED v4 for New Construction and Major Renovations

Project Name: UCR Student Success Center
Date: March 20, 2019
Certification Level: **Gold Required (60 points)**

C	M	D	X	DB					
IP - Integrative Process							**Possible Points:**		**1**
	M				d	1	Integrative Process		1
LT - Location and Transportation							**Possible Points:**		**16**
			X		d	1	**LEED** for Neighborhood Development Location		16
		D			d	2	Sensitive Land Protection		1
			X		d	3	High Priority Site		1 to 2
	M				d	4	Surrounding Density and Diverse Uses (Based on existing site)		1 to 5
	M				d	5	Access to Quality Transit (Based on existing site)		1 to 5
	M				d	6	Bicycle Facilities		1
	M				d	7	Reduced Parking Footprint		1
			X		d	8	Green Vehicles		1
SS - Sustainable Sites							**Possible Points:**		**10**
C	M				c	Prereq 1	Construction Activity Pollution Prevention		
	M				d	1	Site Assessment		1
	1	D			d	2	Site Development - Protect or Restore Habitat (Option 1 required)		1 to 2
	M				d	3	Open Space		1
	2	D			d	4	Rainwater Management (95th percentile required)		2 to 3
	M				d	5	Heat Island Reduction		1 to 2
C	M				d	6	Light Pollution Reduction		1
WE - Water Efficiency							**Possible Points:**		**11**
C	M				d	Prereq 1	Outdoor Water Use Reduction		
C	M				d	Prereq 2	Indoor Water Use Reduction		
C	M				d	Prereq 3	Building-Level Water Metering		
	2	D			d	1	Outdoor Water Use Reduction (No potable water use required)		1 to 2
	3	D			d	2	Indoor Water Use Reduction (35% reduction required)		3 to 6
			X		d	3	Cooling Tower Water Use		1 to 2
		D			d	4	Water Metering		1
EA - Energy and Atmosphere							**Possible Points:**		**33**
	M				c	Prereq 1	Fundamental Commissioning and Verification		
	M				d	Prereq 2	Minimum Energy Performance		
C	M				d	Prereq 3	Building-Level Energy Metering		
C	M				d	Prereq 4	Fundamental Refrigerant Management		
	6				c	1	Enhanced Commissioning (Monitoring and Envelope Cx required)		6
	8	D			d	2	Optimize Energy Performance (20% or better than Title 24 2016)		8 to 18
		D			d	3	Advanced Energy Metering		1

C = Building Code M = Mandatory or # D = Discretionary X = Not Applicable to Project
DB: Credits that will be pursued by the design-builder for LEED Gold or higher certification

EA - Energy and Atmosphere (cont.)									
		D			c	5	Demand Response		1 to 2
		D			d	6	Renewable Energy Production (Eligible after 73 points attempted)		1 to 3
		D			d	7	Enhanced Refrigerant Management		1
		D			c	8	Green Power and Carbon Offsets (Eligible after 73 points attempted)		1 to 2
MR - Materials and Resources								**Possible Points:**	**13**
C	M				d	Prereq 1	Storage and Collection of Recyclables		
C	M				c	Prereq 2	Construction and Demolition Waste Management		
		D			c	1	Building Life-Cycle Impact Reduction		2 to 5
	1	D			c	2	BPDO - Environmental Product Declarations (Option 1 required)		1 to 2
	1	D			c	3	BPDO - Sourcing Raw Materials (Option 2 required)		1 to 2
	1	D			c	4	BPDO - Material Ingredients (Option 1 required)		1 to 2
	M				c	5	Construction and Demolition Waste Management (95% Diversion Required)		1 to 2
EQ - Indoor Environmental Quality								**Possible Points:**	**16**
	M				d	Prereq 1	Minimum Indoor Air Quality Performance		
C	M				d	Prereq 2	ETS Control		
	M				d	1	Enhanced Indoor Air Quality Strategies		1 to 2
C	M				c	2	Low-Emitting Materials (Some categories covered under CA Code)		1 to 3
C	M				c	3	Construction IAQ Management Plan		1
	M				c	4	Indoor Air Quality Assessment		1 to 2
	M				d	5	Thermal Comfort		1
	M				d	6	Interior Lighting		1 to 2
		D			d	7	Daylight		1 to 3
		D			d	8	Quality Views		1
		D			d	9	Acoustic Performance		1
Innovation and Design Process								**Possible Points:**	**6**
		D				1.1	Innovation in Design: Green Education		1
		D				1.2	Innovation in Design: TBD		1
		D				1.3	Pilot Credit: TBD		1
		D				1.4	Innovation in Design: TBD		1
		D				1.5	Exemplary Performance: TBD		1
	M					1.6	LEED Accredited Professional		1
Regional Priority Credits								**Possible Points:**	**4**
		D				1.1	Indoor Water Use Reduction (2 points)		1
	M					1.2	Optimize Energy Performance (4 points)		1
		D				1.3	Surrounding Density and Diverse Uses (2 points)		1
	M					1.4	Outdoor Water Use Reduction (1 point)		1

UCR | Planning, Design & Construction

Project Name: Student Success Center
Project Number: 950512
Addendum No. 10, March 18, 2019
Addendum No. 11, March 20, 2019

LIST OF ATTACHMENTS:

1. ATTACHMENT #1 - Cal-Green Non-Residential Checklist

Attachment #1 – Cal-Green Non-Residential Checklist

Feature or Measure	Design-Build Method of Compliance Dwg/Spec/Detail No.	UCR Use	
		Design Review	Field Inspection
Requirements			
Project meets all of the requirements of Divisions 5.1 through 5.5.			
Planning & Design			
Site Development			
5.106.1 Storm water pollution prevention. Newly constructed projects which disturb less than one acre of land shall prevent the pollution of storm water runoff from the construction activities through local ordinance in Section 5.106.1.1 or Best management practices (BMP) in Section 5.106.1.2.			
5.106.4 Bicycle parking and changing rooms. Comply with Sections 5.106.4.1 and 5.106.4.2; or UC Policy.			
5.106.4.1 Short-Term bicycle Parking. If the project is anticipated to generate visitor traffic, provide permanently anchored bicycle racks within 200 feet of the visitors' entrance, readily visible to passer-by, for 5 percent of visitor motorized vehicle parking capacity, with a minimum of one two-bike capacity rack.			
5.106.4.2 Long-Term Bicycle parking. For buildings with over 10 tenant-occupants, provide secure bicycle parking for 5 percent of tenant- occupied motorized vehicle parking capacity, with a minimum of space one space.			
5.106.5.2 Designated parking. Provide designated parking for any combination of low-emitting, fuel-efficient and carpool / van pool vehicles as shown in Table 5.106.5.2.			
5.106.5.3 Electric vehicle (EV) charging. Construction shall comply with Section 5.106.5.3.1 or Section 5.106.5.3.2 to facilitate future installation of electric vehicles supply equipment (EVSE). Use table 5.106.5.3.3 to determine charging space requirements.			
5.106.8 Light pollution reduction. Outdoor lighting systems shall be designed and installed to comply with the following: 1. The minimum requirements in the *California Energy Code* for Lighting Zones 1-4 as defined in Chapter 10 of the *California Administrative Code;* and 2. Backlight, Uplight and Glare (BUG) ratings as defined in IESNA TM-15-11; and I:RI 3. Allowable BUG ratings not exceeding those shown in Table 5.106.8, or Comply with a local ordinance lawfully enacted pursuant to Section 101.7, whichever is more stringent.			
5.106.10 Grading and paving. Construction plans shall indicate how site grading or a drainage system will manage all surface water flows to keep water from entering buildings. Examples of methods to manage surface water include those shown in Items 1-5. See exception for additions or alterations.			
Energy Efficiency			
Performance Requirements			
5.201.1 Scope. Building meets or exceeds the requirements of the California Building Energy Efficiency Standards.			

Water Efficiency and Conservation			
Indoor Use			
5.303.1 Meters. Separate meters shall be installed for the uses described in Sections 5.303.1.1 and 5.303.1.2.			
5.303.1.1 New buildings or additions in excess of 50,000 square feet separate submeters shall be installed as follows: 1. For each individual leased, rented or other tenant space within the wilding projected to consume more than 100 gal/day. 2. Where separate submeters for individual building tenants are unfeasible, for water supplied to the following subsystems: a. Makeup water for cooling towers where flow through is greater than 500 gpm (30 Lis). b. Makeup water for evaporative coolers greater than 6 gpm (0.04 Lis). c. Steam and hot-water boilers with energy input more than 500,000 Btulh (147 kW).			
5.303.1.2 Excess consumption. Any tenant within a new building or an addition that is projected to consume more than 1,000 gal/day (3800 L/day).			
5.303.3 Water conserving plumbing fixtures and fittings. Plumbing fixtures (water closets and urinals) and fittings (faucets and showerheads) shall comply with the following:			
5.303.3.1 Water closets. The effective flush volume of all water closets shall not exceed 1.28 gallons per flush. Tank-type water closets shall be certified to the performance criteria of the U.S. EPA WaterSense Specification for Tank-Type Toilets. Note: The effective flush volume of dual flush toilets is defined as the composite, average flush volume of two reduced flushes and one full flush.			
5.303.3.2 Urinals. ~~The effective flush volume of urinals shall not exceed 0.5 gallons per flush.~~			
5.303.3.2.1 Wall-mounted urinals. The effective flush volume of urinals shall not exceed 0.125 gallons per flush.			
5.303.3.2.2 Floor-mounted urinals. The effective flush volume of urinals shall not exceed 0.5 gallons per flush.			
5.303.3.3 Showerheads.			
5.303.3.3.1 Single showerhead. Showerheads shall have a maximum flow rate of not more than 2.0 gallons per minute at 80 psi. Showerheads shall be certified to the performance criteria of the U.S. EPA WaterSense Specification for Showerheads.			
5.303.3.3.2 Multiple showerheads serving one shower. When a shower is served by more than one showerhead, the combined flow rate of all showerheads and/or other shower outlets controlled by a single valve shall not exceed 2.0 gallons per minute at 80 psi, or the shower shall be designed to allow only one shower outlet to be in operation at a time. Note: A hand-held shower shall be considered a showerhead.			
5.303.3.4 Faucets and fountain.			
5.303.3.4.1 Nonresidential lavatory faucets. Lavatory faucets shall have a maximum flow rate if not more than 0.5 gallons per minute at 60 psi.			

5.303.3.4.2 Kitchen faucets. Kitchen faucets shall have a maximum flow rate of not more that 1.8 gallons per minute at 60 psi.			
5.303.3.4.3 Wash fountains. Wash fountains shall have a maximum flow rate of not more than 1.8 gallons per minute at 60 psi.			
5.303.3.4.4 Metering faucets. Metering faucets shall not deliver more than 0.20 gallons per cycle.			
5.303.3.4.5 Metering faucets for wash fountains. Metering faucets for wash fountains shall have a maximum flow rate or not more than 0.20 gallons per cycle.			
~~5.303.4 Wastewater reduction. Each building shall reduce the generation of wastewater by one of the following methods: As applicable 1. The installation of water- conserving fixtures or 2. Utilizing nonpotab1e water systems.~~*5.303.4 Commercial kitchen equipment.*			
5.303.4.1 Food waste disposers. Disposers shall either modulate the use of water to no more than 1 gpm when the disposer is not in use or shall automatically shut off after 10 minutes or inactivity			
5.303.6 Standards for fixtures and fittings. Plumbing fixtures and fittings shall be installed in accordance with the *California Plumbing Code,* and shall meet the applicable standards As applicable referenced in Table 1401.1 of the *California Plumbing Code* and in Chapter 6 of this code.			
Outdoor Water Use			
5.304.1 Water budget. A water budget shall be developed for landscape irrigation use. Applies to additions or alterations.			
5.304.2 Outdoor ~~potable~~water use *(500 square feet).* ~~For new water service, separate meters or submeters shall be installed for indoor and outdoor potable water use for landscaped areas of at least 1,000 square feet but not more than 5,000 square feet, separate submeters shall be installed for outdoor potable water use. Applies to additions or alter- at~~*When water is used for outdoor irrigation for new construction projects with an aggregate landscape area equal to or greater than 500 square feet requiring a building or landscape permit, plan check or design review, one of the following shall apply:* *1. A local water efficient landscape ordinance that is, nased on evidence in the record, at least as effect in conserving water as the updated model ordinance adopted by the Department of Water Resources (DWR) per Government Code Section 65595.* *2. The California Department of Water Resoruces Model Water Efficient Landscape Ordinance (MWELO) commencing with Section 490 of Chapter 2.7, Dividion 2, Title 23 California Code of Regulations*			
5.304.4 Outdoor ~~potable~~ water use *(2,500 square feet).* ~~For new water service not subject to the provisions of Water Code Section 535, separate meters or submeters shall be installed for outdoor potable water use for landscaped areas of at least 500 square feet but not more than 1,000 square feet (the level at which Section 5.304.2 applies).~~*Any project with an aggregate landscape are of 2,500 square feet of less map comply with performance requirements of MWELO or conform to the prescriptive compliance measures contained in MWELO's Appendix D.*			

5.304.~~3 Irrigation design.~~ ~~In new nonresidential projects with at least 1,000 square feet but not more than 2,500 square feet of landscaped area (the level at which the MLO applies), install irrigation controllers and sensors which include the following criteria and meet manufacturer's recommendations. Applies to additions or alterations~~*5 Graywater or rainwater use in landscape areas. For projects using treated graywater or rainwater captured on site, any lot or parcel within the project that has less than 2,500 sf of landscape and meets the lot or parcel's landscape water requirement (Estimated Total Water Use) entirely with treated or untreated graywater or through stored rainwater captured on site is subject to Appendix D Section (5).*			
5.304.~~3.1 Irrigation controllers.~~ ~~Automatic irrigation system controllers installed at the time of final inspection shall comply with the following:~~ ~~I. Controllers shall be weather- or soil moisture-based controllers that automatically As applicable adjust irrigation in response to changes in plants' needs as weather conditions change.~~ ~~2. Weather-based controllers without integral rain sensors or communication systems that account for local rainfall shall have a separate wired or wireless rain sensor which connects or communicates with the controller(s). Soil moisture-based controllers are not required to have rain sensor input~~*6 Outdoor potable water use in landscape areas. For public schools and community colleges, landscape project as described in Sections 5.304.6.1 and 5.304.6.2 shall comply with the MWELO commencing with Section 490 of Chapter 2.7 Division 2, Title 23 California Code of Regulations.*			
Material Conservation and Resource Efficiency			
Weather Resistance and Moisture Management			
5.407.1 Weather protection. Provide a weather-resistant exterior wall and foundation envelope as required by California Building Code Section 1403.2 and California Energy Code Section 150, manufacturer's installation instructions or UCR Standards, whichever is more stringent.			
5.507.2 Moisture control. Employ moisture control measures by the following methods:			
5.407.2.1 Sprinklers. Prevent irrigation spray on structures.			
5.407.2.0 Entries and openings. Design exterior entries and openings to prevent water intrusion into buildings.			
Construction Waste Reduction, Disposal and Recycling			
5.408.1 Construction waste management. Recycle and/or salvage for reuse a minimum of ~~50~~*65*% of the non- hazardous construction waste in accordance with Section S.408.1.1, .408.1.2 or 5.408.1.3; or meet a local construction and demolition waste management ordinance, whichever is more stringent.			
5.408.1.1 Construction waste management plan. Where a local jurisdiction does not have a construction and demolition waste management ordinance that is more stringent, submit a construction waste management plan that complies with Items 1 through 4 of this section.			
5.408.1.2 Waste management company. Utilize a waste management company that can provide verifiable documentation that the percentage of construction waste material diverted from the landfill complies with this section. Exceptions to Sections 5.408.1.1 and 5.408.1.2:			

1. Excavated soil and land-clearing debris 2. Alternate waste reduction methods developed by working with local agencies if diversion or recycle facilities capable of compliance with this item do not exist 3. Demolition waste meeting local ordinance or calculated in consideration of local recycling facilities and markets			
5.408.1.4 Documentation. Provide documentation of the waste management plan that meets the requirements listed in Sections 5.408.1.1 through 5.408.1.3, and the plan is accessible to the enforcement authority.			
5.408.3 Excavated soil and land clearing debris. 100 percent of trees, stumps, rocks and associated vegetation and soils resulting primarily from land clearing shall be reused or recycled. Exception: Reuse, either on-or off-site, of vegetation or soil contaminated by disease or pest infestation.			
Building Maintenance and Operation			
5.410.1 Recycling by occupants. Provide readily accessible areas that serve the entire building and are identified for the depositing, storage and collection of nonhazardous materials for recycling.			
5.410.2 Commissioning. For new buildings 10,000 square feet and over, building commissioning for all building systems covered by T24, Part 6, process systems and renewable energy systems shall be included in the design and construction processes of the building project. Commissioning requirements shall include items listed in Section 5.410.2.			
5.410.2.1 Owner's Project Requirements (OPR). Documented before the design phase of the project begins the OPR shall include items listed in Section 5.410.4.			
5.410.2.2 Basis of Design (BOD). A written explanation of how the design of the building systems meets the OPR shall be completed at the design phase of the building project and updated periodically to cover the systems listed in Section 5.4102.2.			
5.410.2.3 Commissioning plan. A commissioning plan describing how the project will be commissioned shall be started during the design phase of the building project and shall include items listed in Section 5.410.2.3			
5.410.2.4 *Functional performance testing.* Functional performance testing shall demonstrate the correct installation and operation of each component, system and system-to- system interface in accordance with the approved plans and specifications.			
5.410.2.5 Documentation and training. A systems manual and systems operations training are required.			
5.410.2.5.1 Systems manual. The systems manual shall be delivered to the building owner or representative and facilities operator and shall include the items listed in section 5.410.2.5.1.			
5.410.2.5.2 Systems operations training. The training of the appropriate maintenance staff for each equipment type and/or system shall include items listed in Section 5.410.2.5.2.			
5.410.2.6 Commissioning report. A complete report of commissioning process activities undertaken through the design, construction and reporting recommendations for post construction phases of the building project shall be completed and provided to the owner or representative.			

5.410.4 Testing and adjusting. Testing and adjusting of systems shall be required for buildings less than 10,000 square feet.			
5.410.4.2 Systems. Develop a written plan of procedures for testing and adjusting systems. Systems to be included for testing and adjusting shall include, as applicable to the project, the systems listed in Section 5.410.3.2.			
5.410.4.3 Procedures. Perform testing and adjusting procedures in accordance with industry best practices and applicable national standards on each system.			
5.410.4.3.1 HVAC balancing. Before a new space-conditioning system serving a building or space is operated for normal use, the system should be balanced in accordance with the procedures defined by national standards listed in Section 5.410.4.3.1			
5.410.4.4 Reporting. After completion of testing, adjusting and balancing, provide a final report of testing signed by the individual responsible for performing these services.			
5.410.4.5 Operation and maintenance manual. Provide the building owner with detailed operating and maintenance instructions and copies of guaranties/warranties for each system prior to final inspection.			
5.410.4.5.1 Inspections and reports. Include a copy of all inspection verifications and reports required by the enforcing agency.			
Environmental Quality			
Fireplaces			
5.503.*1 Fireplaces*. Install only a direct-vent sealed –combustion gas or sealed wood- burning fireplace or a sealed woodstove and refer to residential requirements in the California Energy Code, Title 24, Part 6, Subchapter 7, Section 150.			
5.503.1.1 Woodstoves. Woodstoves shall comply with US EPA Phase II emissions limits.			
Pollutant Control			
A5.504.1 Indoor air quality (IAQ) during construction. Maintain IAQ as provided in Sections AS.S04.1.1 and AS.S04.1.2.			
A5.504.1.1 Temporary ventilation. Provide temporary ventilation during construction in accordance with Section 121 of the California Energy Code, CCR, Title 24, Part 6 and Chapter 4 of CCR, Title 8 and as listed in Items 1 and 2 in Section AS.S04.1.2.			
A5.504.1.2 Additional IAQ measures. Employ additional measures as listed in Items 1 through S in Section AS.S04.1.3.			
5.504.1.3 Temporary ventilation. If the HVAC system is used during construction, use return air filters with a MERV of 8, based on ASHRAE S2.2-1999, or an average efficiency of 30% based on ASHRAE S2.1-1992. Replace all filters immediately prior to occupancy. Applies to additions or alterations.			
5.504.3 Covering of duct openings and protection of mechanical equipment during construction. At the time of rough installation and during storage on the construction site and until final startup of the heating, cooling and ventilating equipment, all duct and other related air distribution component openings shall be covered with tape, plastic, sheetmetal or other methods acceptable to the enforcing agency to reduce the amount of dust, water and debris which may enter the system.			
5.504.4 Finish material pollutant control. Finish materials shall comply with Section 5.504.4.1 through 5.504.4.4.			

5.504.4.1 Adhesives, sealants, caulks. Adhesives and sealants used on the project shall meet the requirements of the following standards. 1. Adhesives, adhesive bonding primers, adhesive primers, sealants, sealant primers and caulks shall comply with local or regional air pollution control or air quality management district rules where applicable or SCAQMD Rule 1168 VOC limits, as shown in Tables 5.504.4.1 and 5.504.4.2. 2. Aerosol adhesives and smaller unit sizes of adhesives and sealant or caulking compounds (in units of product, less packaging, which do not weigh more than one pound and do not consist of more than 16 fluid ounces) shall comply with statewide VOC standards and other requirements, including prohibitions on use of certain toxic compounds, of California Code of Regulations, Title 17, commencing with Section 94507.			
5.504.4.3 Paints and coatings. Architectural paints and coatings shall comply with Table 5.504.4.3 unless more stringent local limits apply.			
5.504.4.3.1 Aerosol paints and coatings. Aerosol paints and coatings shall meet the Product-Weighted MIR Limits for ROC in Section 94522 (a) (3) and other requirements, including prohibitions on use of certain toxic compounds and ozone depleting substances (CCR, Title 17, Section 94520 et seq).			
5.504.4.3.2 Verification. Verification of compliance with this section shall be provided at the request of the enforcing agency.			
5.504.4.4 Carpet systems. All carpet installed in the building interior shall meet the testing and product requirements of one of the standards listed in Section 5.504.4.4.			
5.504.4.4.1 Carpet cushion. All carpet cushion installed in the building interior shall meet the requirements of the Carpet and Rug Institute Green Label program.			
5.504.4.4.2 Carpet adhesive. All carpet adhesive shall meet the requirements of Table 5.504.4.1.			
5.504.4.5 Composite wood products. Hardwood plywood, particleboard and medium density fiberboard composite wood products used on the interior or exterior of the building shall meet the requirements for formaldehyde as specified in Table 5.504.4.			
5.504.4.5.2 Documentation. Verification of compliance with this section shall be provided as requested by the enforcing agency. Documentation shall include at least one of the following. 1. Product certifications and specifications. 2. Chain of custody certifications. 3. Product labeled and invoiced as meeting the Composite Wood Products regulation (see CCR, Title 17, Section 93120, et seq.). 4. Exterior grade products marked as meeting the PS-l or PS-2 standards of the Engineered Wood Association, the Australian ASINZS 2269 or European 636 35 standards. 5. Other methods acceptable to the enforcing agency.			
5.504.4.6 Resilient flooring systems. Comply with the VOC-emission limits defined in the 2012 CHPS criteria and listed on its High Performance Products Database; products compliant with CHPS criteria certified under the Greenguard Children & Schools program; certified under the F1oorScore program of the Resilient Floor Covering Institute; or meet California Department of Public Health 2010 Specification.			

A5.504.4.6.1 Verification of compliance. Documentation shall be provided verifying that resilient flooring materials meet the pollutant emission limits.			
5.504.5;3 Filters. In mechanically ventilated buildings, provide regularly occupied areas of the building with air filtration media for outside and return air that provides at least a MERV of 8. MERV 8 filters shall be installed prior to occupancy, and recommendations for maintenance with filters of the same value shall be included in the operation and maintenance manual. Exceptions: I. An ASHRAE 10-percent to 15-percent efficiency filter shall be permitted for an HVAC unit meeting the 2013 California Energy Code having 60,000 Btulh or less capacity per fan coil, if the energy use of the air delivery system is 0.4 W tcfm or less at design air flow. 2.Existing mechanical equipment. S.S04.S.3.1 Labeling. Installed filters shall be clearly la-beled by the manufacturer indicating the MERV rating.			
5.504.7 Environmental tobacco smoke (ETS) control. Where outdoor areas are provided for smoking, prohibit smoking within 25 feet of building entries, outdoor air intakes and operable windows and within the building as already prohibited by other laws or regulations; or as enforced by ordinances, regulations, or policies of any city, county, California Community College, campus of the California State University, or campus of University of California, whichever is more stringent.			
Interior Moisture and Radon Control			
5.505.1 Indoor moisture control. Buildings shall meet or exceed the provisions of California Building Code, CCR, Title 24, Part 2, Sections 1203 and Chapter 14.1.1.			
Air Quality and Exhaust			
5.506.1 Outside air delivery. For mechanically or naturally ventilated spaces in buildings, meet the minimum requirements of Section 121 of the California Energy Code and Chapter 4 of CCR, Title 8 or the applicable local code, whichever is more stringent.			
5.506.2 Carbon dioxide (CO2) monitoring. For buildings or additions equipped with demand control ventilation, CO2 sensors and ventilation controls shall be specified and installed in accordance with the requirements of the California Energy Code, CCR. Section 120(c)(4).			
Environmental Comfort			
5.507.4 Acoustical control. Employ building assemblies and components with STC values determined in accordance with ASTM E90 and ASTM E 413 or OITC determined in accordance with ASTM E 1332, using either the prescriptive or performance method in Section 5.507.4.1 or 5.507.4.2.			
5.507.4.1 Exterior noise transmission, prescriptive method. Wall and floor-ceiling assemblies exposed to the noise source making up the building envelope shall have exterior wall and roof ceiling assemblies meeting a composite STC rating of at least 50 or a composite OITC rating of no less than 40 with exterior windows of a minimum STC of 40 or OITC of 30 in the locations described in Items I and 2. Also applies to addition envelope or altered envelope.			
5.507.4.1.1 Noise exposure where noise contours are not readily available. Buildings exposed to a noise level of 65 dB Leq-IHr during any hour of operation shall have exterior wall and roof-ceiling assemblies exposed to the noise source meeting a composite STC or rating of at least 45 (or OITC 35), with exterior windows of a minimum STC of 40 (or OITC 30). Also applies to addition or alteration exterior wall.			

5.507.4.2 Performance method. For buildings located as defined in Sections A5.S07.4.I or AS.S07.4.1.1, wall and roof-ceiling assemblies making up the building envelope shall be constructed to provide an interior noise environment attributable to exterior sources that does not exceed an hourly equivalent noise level (Leq-IHr) of 50 dBA in occupied areas during any hour of operation. Also applies to addition envelope or altered envelope.			
5.507.4.2.1 Site features. Exterior features such as sound walls or earth berms may be utilized as appropriate to the project to mitigate sound migration to the interior. Also applies to addition envelope or altered envelope.			
5.507.4.2.1 Documentation of compliance. An acoustical analysis documenting complying interior sound levels shall be prepared by personnel approved by the architect or engineer of record.			
5.507.4.3 Interior sound transmission. Wall and floor-ceiling assemblies separating tenant spaces and tenant spaces and public places shall have an STC of at least 40.			
Outdoor Air Quality			
5.508.1 Ozone depletion and global warming reductions. Installations of HVAC, refrigeration II and fire suppression equipment shall comply with Sections 5.508 .1.1 and 5.508.1.2. as applicable.			
5.508.1.1 CFCs. Install HVAC and refrigeration equipment that do~~es~~ not contain CFCs.			
5.508.1.2 Halons. Install tire suppression equipment that do~~es~~ not contain Halons.			
A5.508.1.3 Hydrochlorofluorocarbons (HCFCs). Install HVAC and refrigeration equipment that does not contain HCFCs.			
A5.508.1.4 Hydrofluorocarbons (HFCs). Install HVAC complying with either of the following: 1. Install HVAC, refrigeration and fire suppression equipment that do not contain HFCs or that do not contain HFCs with a global warming potential greater than 150. 2. Install HVAC and refrigeration equipment that 1irrrit the use of HFC refrigerant through the use of a secondary heat transfer fluid with a global warming potential no greater than 1.			

END OF ATTACHMENT #1