



LEED Certification Review Report

This report contains the results of the technical review of an application for LEED® certification submitted for the specified project. LEED certification is an official recognition that a project complies with the requirements prescribed within the LEED rating systems as created and maintained by the U.S. Green Building Council® (USGBC®). The LEED certification program is administered by the Green Building Certification Institute (GBCI®).

Projecto CENTRO Constituyentes

Project ID: 1000033758
Rating system & version: LEED-NC v2009
Project registration date: 06/28/2013



Certified (Platinum)

CERTIFIED: 40-49, SILVER: 50-59, GOLD: 60-79, PLATINUM: 80+

LEED FOR NEW CONSTRUCTION & MAJOR RENOVATIONS (V2009)

ATTEMPTED: 83, DENIED: 3, PENDING: 0, AWARDED: 81 OF 110 POINTS

lead-nc

SUSTAINABLE SITES 24 OF 26

SSp1 Construction Activity Pollution Prevention	Y
SSc1 Site Selection	1 / 1
SSc2 Development Density and Community Connectivity	5 / 5
SSc3 Brownfield Redevelopment	0 / 1
SSc4.1Alternative Transportation-Public Transportation Access	6 / 6
SSc4.2Alternative Transportation-Bicycle Storage and Changing Room	1 / 1
SSc4.3Alternative Transportation-Low-Emitting and Fuel-Efficient V	3 / 3
SSc4.4Alternative Transportation-Parking Capacity	2 / 2
SSc5.1Site Development-Protect or Restore Habitat	0 / 1
SSc5.2Site Development-Maximize Open Space	1 / 1
SSc6.1Stormwater Design-Quantity Control	1 / 1
SSc6.2Stormwater Design-Quality Control	1 / 1
SSc7.1Heat Island Effect, Non-Roof	1 / 1
SSc7.2Heat Island Effect-Roof	1 / 1
SSc8 Light Pollution Reduction	1 / 1

WATER EFFICIENCY 10 OF 10

WEp1 Water Use Reduction-20% Reduction	Y
WEc1 Water Efficient Landscaping	4 / 4
WEc2 Innovative Wastewater Technologies	2 / 2
WEc3 Water Use Reduction	4 / 4

ENERGY AND ATMOSPHERE 22 OF 35

EAp1 Fundamental Commissioning of the Building Energy Systems	Y
EAp2 Minimum Energy Performance	Y
EAp3 Fundamental Refrigerant Mgmt	Y
EAc1 Optimize Energy Performance	7 / 19
EAc2 On-Site Renewable Energy	6 / 7
EAc3 Enhanced Commissioning	2 / 2
EAc4 Enhanced Refrigerant Mgmt	2 / 2
EAc5 Measurement and Verification	3 / 3
EAc6 Green Power	2 / 2

MATERIALS AND RESOURCES 7 OF 14

MRp1 Storage and Collection of Recyclables	Y
MRc1.1Building Reuse-Maintain Existing Walls, Floors and Roof	0 / 3
MRc1.2Building Reuse, Maintain 50% of Interior	0 / 1
MRc2 Construction Waste Mgmt	2 / 2
MRc3 Materials Reuse	0 / 2
MRc4 Recycled Content	2 / 2

MATERIALS AND RESOURCES CONTINUED

MRc5 Regional Materials	2 / 2
MRc6 Rapidly Renewable Materials	0 / 1
MRc7 Certified Wood	1 / 1

INDOOR ENVIRONMENTAL QUALITY 8 OF 15

IEQp1 Minimum IAQ Performance	Y
IEQp2 Environmental Tobacco Smoke (ETS) Control	Y
IEQc1 Outdoor Air Delivery Monitoring	1 / 1
IEQc2 Increased Ventilation	0 / 1
IEQc3.1Construction IAQ Mgmt Plan-During Construction	1 / 1
IEQc3.2Construction IAQ Mgmt Plan-Before Occupancy	0 / 1
IEQc4.1Low-Emitting Materials-Adhesives and Sealants	1 / 1
IEQc4.2Low-Emitting Materials-Paints and Coatings	1 / 1
IEQc4.3Low-Emitting Materials-Flooring Systems	1 / 1
IEQc4.4Low-Emitting Materials-Composite Wood and Agrifiber Products	0 / 1
IEQc5 Indoor Chemical and Pollutant Source Control	0 / 1
IEQc6.1Controllability of Systems-Lighting	1 / 1
IEQc6.2Controllability of Systems-Thermal Comfort	0 / 1
IEQc7.1Thermal Comfort-Design	0 / 1
IEQc7.2Thermal Comfort-Verification	0 / 1
IEQc8.1Daylight and Views-Daylight	1 / 1
IEQc8.2Daylight and Views-Views	1 / 1

INNOVATION IN DESIGN 6 OF 6

IDc1.1 Green Building Education	1 / 1
IDc1.1 Innovation in Design	0 / 1
IDc1.2 Water Performance Measurement	1 / 1
IDc1.2 Innovation in Design	0 / 1
IDc1.3 Innovation in Design	0 / 1
IDc1.3 Heat Island Effect, Non-Roof	1 / 1
IDc1.4 Innovative Wastewater Technologies	1 / 1
IDc1.4 Innovation in Design	0 / 1
IDc1.5 Innovation in Design	0 / 1
IDc1.5 Water Use Reduction	1 / 1
IDc2 LEED® Accredited Professional	1 / 1

REGIONAL PRIORITY CREDITS 4 OF 4

SSc2 Development Density and Community Connectivity	1 / 1
SSc5.1Site Development-Protect or Restore Habitat	0 / 1
SSc7.1Heat Island Effect, Non-Roof	1 / 1
SSc8 Light Pollution Reduction	1 / 1
WEc2 Innovative Wastewater Technologies	1 / 1
EAc1 Optimize Energy Performance	0 / 1

TOTAL

81 OF 110

CREDIT DETAILS



Project Information Forms

P1f1: Minimum Program Requirements

Approved

07/22/2015 **DESIGN AND CONSTRUCTION PRELIMINARY REVIEW**

The LEED Form states that the project complies with all Minimum Program Requirements. The project will comply with MPR 6: Must Commit to Sharing Whole-Building Energy and Water Usage Data via Option 1: Third Party Data Source. The project is located in Mexico City, Mexico. Letter of Commitment, signed by the project Owner, indicating that the remaining incomplete spaces will satisfy the requirements of each prerequisite and credit achieved by this project if and when completed by the project Owner has been provided.

P1f2: Project Summary Details

Approved

07/22/2015 **DESIGN AND CONSTRUCTION PRELIMINARY REVIEW**

The LEED Form includes the required project summary details. There is one building in this LEED application with a total of 9 stories and 166,140.84 gross square feet.

P1f3: Occupant and Usage Data

Approved

07/22/2015 **DESIGN AND CONSTRUCTION PRELIMINARY REVIEW**

The LEED Form includes the required occupant and usage data. The project consists primarily of Core Learning Space: College/University spaces. The average user value is 12,212, the peak user value is 3,672, and the FTE value is 262.

P1f4: Schedule and Overview Documents

Approved

07/22/2015 **DESIGN AND CONSTRUCTION PRELIMINARY REVIEW**

The LEED Form includes the design and construction schedule. The date of substantial completion is April 24, 2015 and the date of occupancy is April 27 2015. The required documents have been uploaded.



Sustainable Sites

SSp1: Construction Activity Pollution Prevention

Awarded

07/22/2015 **DESIGN AND CONSTRUCTION PRELIMINARY REVIEW**

The LEED Form states that the project has implemented an erosion and sedimentation control (ESC) plan that conforms to the 2003 EPA Construction General Permit (CGP).

SSc1: Site Selection

Awarded: 1

POSSIBLE POINTS: 1

ATTEMPTED: 1, DENIED: 0, PENDING: 0, AWARDED: 1

07/22/2015 **DESIGN AND CONSTRUCTION PRELIMINARY REVIEW**

The LEED Form states that the project site does not meet any of the prohibited criteria. Local equivalents have been utilized.

SSc2: Development Density and Community Connectivity

Awarded: 5

POSSIBLE POINTS: 5

ATTEMPTED: 5, DENIED: 0, PENDING: 0, AWARDED: 5

07/22/2015 **DESIGN AND CONSTRUCTION PRELIMINARY REVIEW**

The LEED Form states that the project complies with Option 2: Community Connectivity.

SSc3: Brownfield Redevelopment

Not Attempted

POSSIBLE POINTS: 1

SSc4.1: Alternative Transportation-Public Transportation Access

Awarded: 6

POSSIBLE POINTS: 6

ATTEMPTED: 6, DENIED: 0, PENDING: 0, AWARDED: 6

07/22/2015 **DESIGN AND CONSTRUCTION PRELIMINARY REVIEW**

The LEED Form states that the project complies with Option 2: Bus Station Proximity and is located within one-quarter mile walking distance of one or more stops for two or more public, campus, or private bus lines usable by building occupants.

SSc4.2: Alternative Transportation-Bicycle Storage and Changing Rooms

Awarded: 1

POSSIBLE POINTS: 1

ATTEMPTED: 1, DENIED: 0, PENDING: 0, AWARDED: 1

07/22/2015 **DESIGN AND CONSTRUCTION PRELIMINARY REVIEW**

The LEED Form states that the project complies with Case 1: Commercial or Institutional Projects. Bicycle storage facilities (231) have been provided to serve 6.29% of the LEED project FTE and transient occupants, measured at peak occupancy, and shower facilities (4) have been provided for 1.53% of the LEED project FTE occupants.

SSc4.3: Alternative Transportation-Low-Emitting and Fuel-Efficient Vehicles

Awarded: 3

POSSIBLE POINTS: 3

ATTEMPTED: 3, DENIED: 0, PENDING: 0, AWARDED: 3

07/22/2015 **DESIGN AND CONSTRUCTION PRELIMINARY REVIEW**

The LEED Form states that the project complies with Option 1 and provides preferred parking spaces (18) for low-emitting and fuel-efficient vehicles for 5.26% of the total parking capacity.

SSc4.4: Alternative Transportation-Parking Capacity

Awarded: 2

POSSIBLE POINTS: 2

ATTEMPTED: 2, DENIED: 0, PENDING: 0, AWARDED: 2

07/22/2015 **DESIGN AND CONSTRUCTION PRELIMINARY REVIEW**

The LEED Form states that the project is non-residential and is pursuing Case 1 - Option 1. Preferred parking spaces (18) for car/vanpool vehicles have been provided for 5.26% of the total parking capacity.

SSc5.1: Site Development-Protect or Restore Habitat **Not Attempted**
POSSIBLE POINTS: 1

SSc5.2: Site Development-Maximize Open Space **Awarded: 1**
POSSIBLE POINTS: 1
ATTEMPTED: 1, DENIED: 0, PENDING: 0, AWARDED: 1

07/22/2015 **DESIGN AND CONSTRUCTION PRELIMINARY REVIEW**

The LEED Form states that the project complies with Case 1: Sites with Local Zoning Open Space Requirements. The open space provided exceeds local zoning requirements by 42.03%.

SSc6.1: Stormwater Design-Quantity Control **Awarded: 1**
POSSIBLE POINTS: 1
ATTEMPTED: 1, DENIED: 0, PENDING: 0, AWARDED: 1

07/20/2015 **DESIGN AND CONSTRUCTION PRELIMINARY REVIEW**

The LEED Form states that the project complies with Case 2: Sites with existing imperviousness more than 50%.

SSc6.2: Stormwater Design-Quality Control **Awarded: 1**
POSSIBLE POINTS: 1
ATTEMPTED: 1, DENIED: 0, PENDING: 0, AWARDED: 1

07/20/2015 **DESIGN AND CONSTRUCTION PRELIMINARY REVIEW**

The LEED Form states that storm water runoff from 90% of the average annual rainfall is captured and treated to remove 80% of the average annual post-development Total Suspended Solids (TSS).

SSc7.1: Heat Island Effect, Non-Roof **Awarded: 1**
POSSIBLE POINTS: 1
ATTEMPTED: 1, DENIED: 0, PENDING: 0, AWARDED: 1

07/22/2015 **DESIGN AND CONSTRUCTION PRELIMINARY REVIEW**

The LEED Form states that the project complies with Option 2 and 100% of the base building on-site parking is located underground or under cover.

SSc7.2: Heat Island Effect-Roof **Awarded: 1**
POSSIBLE POINTS: 1
ATTEMPTED: 1, DENIED: 0, PENDING: 0, AWARDED: 1

07/22/2015 **DESIGN AND CONSTRUCTION PRELIMINARY REVIEW**

The LEED Form states that the project complies with Option 3 and the weighted average roof area for the combined SRI compliant and vegetated roofing surfaces is greater than or equal to the total building roof area.

SSc8: Light Pollution Reduction **Awarded: 1**
POSSIBLE POINTS: 1
ATTEMPTED: 1, DENIED: 0, PENDING: 0, AWARDED: 1

08/25/2015 **DESIGN AND CONSTRUCTION FINAL REVIEW**

The additional documentation demonstrates compliance.

07/26/2015 **DESIGN AND CONSTRUCTION PRELIMINARY REVIEW**

The LEED Form states that the building complies with (Option 1: Reduced Input Power for interior lighting. Additionally, the form indicates that exterior lighting devices are present within the LEED Project Boundary and claims that the requirements for exterior lighting power density, site lumens, and light trespass have been met. However, to demonstrate compliance, the following must be addressed.

TECHNICAL ADVICE

1. The actual exterior lighting power density reported here (1,286 Watts for tradable and 0 Watts for non-tradable surfaces) is inconsistent with the proposed exterior lighting power density reported within EAp2: Minimum Energy Performance (11,236 Watts for tradable and 0 W for non-tradable surfaces). Revise the form to ensure the actual exterior Lighting Power Density is consistent with that reported in EAp2.

2. It appears that the lighting requirements for zone LZ3 may have been exceeded at both the site boundary and at 15 feet beyond the site boundary. Please revise the Exterior Photometric Site Plan to clearly show site boundary and the light trespass limit 15 feet beyond the site boundary. Confirm that all provided exterior light measurements meet the credit requirements for lighting zone LZ3.



Water Efficiency

WEp1: Water Use Reduction-20%Reduction

Awarded

07/22/2015 **DESIGN AND CONSTRUCTION PRELIMINARY REVIEW**

The LEED Form states that the project has reduced potable water use by 42.28%.

WEc1: Water Efficient Landscaping

Awarded: 4

POSSIBLE POINTS: 4

ATTEMPTED: 4, DENIED: 0, PENDING: 0, AWARDED: 4

07/20/2015 **DESIGN AND CONSTRUCTION PRELIMINARY REVIEW**

The LEED Form states that the landscaping and irrigation systems have been designed to reduce potable water consumption for irrigation by 100% and reduce the total water used for irrigation by 50.7%. The form indicates that project conditions do not allow for the installation of vegetation on the grounds; therefore, planters, a vegetated roof, and/or courtyard landscaping have been installed.

WEc2: Innovative Wastewater Technologies

Awarded: 2

POSSIBLE POINTS: 2

ATTEMPTED: 2, DENIED: 0, PENDING: 0, AWARDED: 2

07/22/2015 **DESIGN AND CONSTRUCTION PRELIMINARY REVIEW**

The LEED Form states that the project complies with Option 2 and treats 100% of the wastewater on-site to tertiary standards. The treated water is infiltrated or used on-site.

WEc3: Water Use Reduction

Awarded: 4

POSSIBLE POINTS: 4

ATTEMPTED: 4, DENIED: 0, PENDING: 0, AWARDED: 4

07/22/2015 **DESIGN AND CONSTRUCTION PRELIMINARY REVIEW**

The LEED Form and supplemental calculations states that the project has reduced potable water use by 87.48%.



EAp1: Fundamental Commissioning of the Building Energy Systems

Awarded

07/22/2015 DESIGN AND CONSTRUCTION PRELIMINARY REVIEW

The LEED Form states that the commissioning report is pending completion and a contract is in place to ensure that the report will be completed.

EAp2: Minimum Energy Performance

Awarded

08/25/2015 DESIGN AND CONSTRUCTION FINAL REVIEW

The LEED Form has been revised to address the issues outlined in the Preliminary Review and states that the project has achieved an energy cost savings of 24.74%. The total predicted annual energy consumption for the project is 954,274 kWh/year of electricity and 35 therms/year of natural gas.

07/22/2015 DESIGN AND CONSTRUCTION PRELIMINARY REVIEW

The LEED Form states that the project complies with Option 1: Whole Building Energy Simulation and has achieved an energy cost savings of 28.44%. However, to demonstrate compliance, the following comments requiring a project response, marked as mandatory, must be addressed for the Final Review.

TECHNICAL ADVICE

REVIEW COMMENTS REQUIRING A PROJECT RESPONSE (Mandatory)

1. Provide the following:

a. A narrative response to each Preliminary Review comment below.

b. A narrative describing any additional changes made to the energy models between the Preliminary and Final Review phases not addressed by the responses to the review comments. The mandatory comments are perceived to reduce the projected savings for the Proposed design. If the projected savings increase substantially in the Final submission, without implementing any optional comments that may improve performance, a narrative explanation for these results must be provided.

2. The energy modeling report indicates that the proposed building roof was modeled using a reflectance of 0.1. However, according to ASHRAE Standard 90.1-2007, Table G3.1#5(c), the roof surface should be modeled with a reflectance of 0.45 if the reflectance of the Proposed roof is greater than 0.7 and its emittance is greater than 0.75. Otherwise, the proposed reflectance should be 0.3. The baseline roof should be modeled with a reflectivity of 0.3. Revise the energy models in accordance with Table G3.1#5(c) and update Supplemental Table 1.4 and/or the energy modeling report, as necessary.

3. The provided energy modeling report indicates that the baseline building interior lighting has been calculated using the building area method and it appears that the proposed building lighting has been calculated using the space-by-space method. Additionally, it is not clear, based on the provided documentation, how much credit and where credit has been taken for occupancy sensors. Revise the Supplemental Table 1.4 Document or revise the energy modeling report to indicate the method that was used for the interior lighting calculations (building area method or space-by-space method) and verify that the baseline values modeled reflect the values from the appropriate table. If using the space-by-space method, specifically indicate in Table 1.4 or in the energy modeling report the lighting power density per space function as well as the overall weighted average lighting power density for both the baseline and proposed case. Where credit is being claimed for lighting controls, specifically indicate where this credit is being taken and indicate both the original lighting power density values and the adjusted lighting power density values, for clarity. Ensure that the same method (building area method or space-by-space method) was used for modeling the lighting power in the baseline and proposed building energy models. If using the space by space method, confirm that the baseline values used are consistent with ASHRAE Standard 90.1-2007 Table 9.6.1 (Inch-Pound Edition). If lighting power densities were calculated using the SI edition of the table, provide the original SI values and the recalculated IP values to ensure consistency.

3. Based on the interior lighting calculation tables included in the energy modeling report, it appears that additional lighting has been included in the baseline building energy model beyond the standard allowances provided for using the Space-by-Space Method. When claiming an exemption for additional lighting, provide the specific exception that excludes the lighting from being included as part of the baseline building lighting power allowance. Ensure that this additional lighting has been modeled identically in the baseline and proposed building energy models.

4. The interior lighting demand savings (33%) is different from the interior lighting energy savings (38%), which indicates that there may be schedule differences between the baseline and proposed building energy models, or that automatic daylighting controls may have been modeled for credit in the proposed building. Please confirm that the lighting schedules have been modeled identically in the baseline and proposed building energy models or provide a narrative justifying the difference in electric demand and electric energy use with respect to interior lighting. If daylighting controls have been included in the proposed building energy model, provide a narrative describing the controls and how and where they have been implemented in the project. Describe how the controls conform to Table G3.1 Paragraph 6(f). Revise the energy models, update Supplemental Table 1.4 or the energy modeling report, and revise the supporting documentation as necessary.

5. The exterior lighting power does not appear to be consistent with the information provided in SSc8: Light Pollution Reduction. After

making any required changes to SSc8, ensure that no credit is taken in the proposed building for lighting reductions on non-tradable surfaces. Additionally, additional lighting power allowance cannot be claimed in the baseline building energy model for surfaces that are not provided with lighting in the actual design and lighting fixtures cannot be double counted for different exterior surfaces. Verify that the proposed building exterior lighting reflects the actual building design, and that the baseline building reflects the allowed lighting power from ASHRAE Standard 90.1-2007 Section 9.4.5. Version 4.0 of the SSc8 Form uses addendum i to 90.1-2007; therefore, that form calculates a more stringent requirement. Report the tradable and non-tradable surface lighting power separately (in units of Watts or Kilowatts) for both the baseline and proposed buildings in Supplemental Table 1.4 and verify that these values are appropriately updated in the model.

6. The simulation results indicate electric space heating in both the baseline and proposed building energy models. However, insufficient information has been provided to describe the heating system(s) included in the baseline and proposed building energy models. Please further describe the types and locations of electric heating in the project.

7. Service water heating has been reported as natural gas in Table EAp2-4 and as electricity in Table EAp2-5 of the EAp2 form. It is required that the service water heating energy source be the same in the baseline and proposed building energy models. Revise Tables EAp2-4 and/or EAp2-5 as necessary to address this issue.

8. IEQp1: Minimum Indoor Air Quality Performance and the energy modeling report indicate that natural ventilation is designed for some of the spaces in the project. However, it is unclear whether the heating and cooling loads associated with ventilating the building have been accounted for in the energy analysis. Most simulation software models zero ventilation when the fans are cycled off. Therefore, if the fans are modeled as cycling to meet the loads, the baseline and proposed building energy models should be revised to account for the anticipated ventilation loads anticipated when the fans are cycled off (e.g. infiltration should be increased equally in both cases to assume that a certain portion of the windows are open to meet ventilation loads). If the HVAC systems serving naturally ventilated spaces are modeled as cycling to meet the loads, then please provide further information documenting how the ventilation was accounted for when the fans cycle off. Provide sample inputs and a more detailed narrative for the baseline and proposed buildings documenting how the ventilation was accounted for, and confirming that the ventilation and infiltration have been modeled identically in the baseline and proposed building energy models.

9. Process energy accounts for less than 25% of the baseline energy cost for the building and a narrative has been provided to justify this value. However, the narrative indicates that some equipment, such as kitchen equipment and dryers, etc. have not been included in the energy models. ASHRAE 90.1-2007 Table G3.1.1(a) and G3.1.12 requires that the models reflect the actual anticipated process loads in the appropriate spaces. If some of the process loads planned for the building (such as kitchen loads, etc.) were not included in the preliminary model, revise the models to include all loads, ensure that the current process loads are modeled as accurately as possible, and update the form. If the process cost remains below 25%, provide an additional narrative justification for the low process cost.

10. Section 1.8 of the form indicates that photovoltaic energy has been included in the energy models. However, the provided documentation does not make it clear how this on-site renewable energy has been accounted for in the models. Please provide simulation input and output reports that clearly show how on-site renewable energy has been modeled in the proposed building, confirming that the savings associated with on-site renewable energy are reported consistently throughout all LEED prerequisites and credits. It is suggested that the Trace LEED compliance output printouts be provided with the final submission.

EAp3: Fundamental Refrigerant Management

Awarded

07/22/2015 DESIGN AND CONSTRUCTION PRELIMINARY REVIEW

The LEED Form states that there are no CFC-based refrigerants serving the project building.

EAc1: Optimize Energy Performance

Awarded: 7

POSSIBLE POINTS: 19

ATTEMPTED: 7, DENIED: 2, PENDING: 0, AWARDED: 7

08/25/2015 DESIGN AND CONSTRUCTION FINAL REVIEW

Additional documentation has been provided for EAp2: Minimum Energy Performance claiming an energy cost savings of 24.74%.

07/22/2015 DESIGN AND CONSTRUCTION PRELIMINARY REVIEW

The LEED Form states that the project has achieved an energy cost savings of 28.44%. However, to demonstrate compliance, the following must be addressed.

TECHNICAL ADVICE

1. Refer to the comments within EAp2: Minimum Energy Performance and resubmit this credit.

EAc2: On-Site Renewable Energy

Awarded: 6

POSSIBLE POINTS: 7

ATTEMPTED: 7, DENIED: 1, PENDING: 0, AWARDED: 6

08/25/2015 DESIGN AND CONSTRUCTION FINAL REVIEW

Additional documentation has been provided for EAp2: Minimum Energy Performance and that the project has offset 12.93% of the total

energy costs through renewable energy generated on-site.

07/22/2015 DESIGN AND CONSTRUCTION PRELIMINARY REVIEW

The LEED Form states that the project complies with Option 1: Whole Building Energy Simulation and that the project has offset 13.08% of the total energy costs through renewable energy generated on-site. However, to demonstrate compliance, the following must be addressed.

TECHNICAL ADVICE

1. Refer to the comments within EAp2: Minimum Energy Performance and resubmit this credit.

EAc3: Enhanced Commissioning

Awarded: 2

POSSIBLE POINTS: 2

ATTEMPTED: 2, DENIED: 0, PENDING: 0, AWARDED: 2

07/22/2015 DESIGN AND CONSTRUCTION PRELIMINARY REVIEW

The LEED Form states that enhanced commissioning has been implemented.

EAc4: Enhanced Refrigerant Management

Awarded: 2

POSSIBLE POINTS: 2

ATTEMPTED: 2, DENIED: 0, PENDING: 0, AWARDED: 2

07/22/2015 DESIGN AND CONSTRUCTION PRELIMINARY REVIEW

The LEED Form states that the project selected refrigerants and HVACR systems that minimize or eliminate the emission of compounds that contribute to ozone depletion and climate change. Additionally, all fire suppression systems in the LEED project do not use ozone-depleting substances including CFCs, HCFCs, or Halons. The refrigerant impact calculation indicates that the total refrigerant impact of the LEED project is 42 per ton, which is less than the maximum allowable value of 100.

EAc5: Measurement and Verification

Awarded: 3

POSSIBLE POINTS: 3

ATTEMPTED: 3, DENIED: 0, PENDING: 0, AWARDED: 3

07/22/2015 DESIGN AND CONSTRUCTION PRELIMINARY REVIEW

The LEED Form states that the project complies with Option 1 and has developed and implemented a Measurement and Verification (M&V) plan consistent with Option D: Calibrated Simulation (Savings Estimation Method) in the IPMVP Volume III: Concepts and Options for Determining Energy Savings in New Construction, April 2003.

EAc6: Green Power

Awarded: 2

POSSIBLE POINTS: 2

ATTEMPTED: 2, DENIED: 0, PENDING: 0, AWARDED: 2

08/25/2015 DESIGN AND CONSTRUCTION FINAL REVIEW

Additional documentation has been provided for EAp2: Minimum Energy Performance and that the project has a two-year purchase agreement to procure 35.63% of electricity for this LEED project that meets the Green-e definition for renewable power using Option 1: Whole Building Energy Simulation.

07/22/2015 DESIGN AND CONSTRUCTION PRELIMINARY REVIEW

The LEED Form states that the project has a two-year purchase agreement to procure 35.17% of electricity for this LEED project that meets the Green-e definition for renewable power using Option 1: Whole Building Energy Simulation. However, to demonstrate compliance, the following must be addressed.

TECHNICAL ADVICE

1. Refer to the comments within EAp2: Minimum Energy Performance and resubmit this credit.



Materials and Resources

MRp1: Storage and Collection of Recyclables

Awarded

07/22/2015 **DESIGN AND CONSTRUCTION PRELIMINARY REVIEW**

The LEED Form states that the project has provided appropriately sized dedicated areas for the collection and storage of materials for recycling.

MRc1.1: Building Reuse-Maintain Existing Walls, Floors and Roof

Not Attempted

POSSIBLE POINTS: 3

MRc1.2: Building Reuse, Maintain 50% of Interior

Not Attempted

POSSIBLE POINTS: 1

MRc2: Construction Waste Management

Awarded: 2

POSSIBLE POINTS: 2

ATTEMPTED: 2, DENIED: 0, PENDING: 0, AWARDED: 2

07/22/2015 **DESIGN AND CONSTRUCTION PRELIMINARY REVIEW**

The LEED Form states that the project has diverted 79.78% of the on-site generated construction waste from landfill.

MRc3: Materials Reuse

Not Attempted

POSSIBLE POINTS: 2

MRc4: Recycled Content

Awarded: 2

POSSIBLE POINTS: 2

ATTEMPTED: 2, DENIED: 0, PENDING: 0, AWARDED: 2

07/22/2015 **DESIGN AND CONSTRUCTION PRELIMINARY REVIEW**

The LEED Form states that 21.35% of the total building materials content, by value, has been manufactured using recycled materials.

MRc5: Regional Materials

Awarded: 2

POSSIBLE POINTS: 2

ATTEMPTED: 2, DENIED: 0, PENDING: 0, AWARDED: 2

08/19/2015 **DESIGN AND CONSTRUCTION FINAL REVIEW**

The additional documentation provided demonstrates compliance for installation of 29.01% regional materials for two points.

07/22/2015 **DESIGN AND CONSTRUCTION PRELIMINARY REVIEW**

The LEED Form states that 42.98% of the total building materials value includes materials or products shipped by rail or water that have been extracted, harvested, or recovered, as well as manufactured, within a 500 mile (800 kilometer) total travel distance from the project site using a weighted average determined through the following formula: (Distance by rail/3) + (Distance by inland waterway/2) + (Distance by sea/15) + (Distance by all other means) # 500 miles (800 kilometers). Additionally some products have been manufactured and extracted within 500 miles of the project site. However, to demonstrate compliance, the following must be addressed.

TECHNICAL ADVICE

1. The documentation provided for the Ahmsa structural steel, Deacero steel for concrete reinforcement, and Deacero post-tensioning tendons does not confirm the extraction locations. Only the manufacturing locations have been confirmed. Additionally, it is unclear whether 100% of each material complies. Only the compliant proportion of each product's individual raw material components (virgin and recycled material) by weight can contribute. The point of extraction for a recycled item could include a recycling facility, scrap yard, depository, stockpile, or any other location where the material was collected and packaged for market purchase before manufacturing. Therefore, the extraction location for a recycled material may or may not be the same as the manufacturing location. In most cases, the extraction location for a recycled material will be a recycling facility or scrap yard. Provide documentation, such as manufacturer letters or cut sheets, specifying that the materials listed above were manufactured and extracted within a 500 mile radius of the project. Ensure that the extraction location for the recycled content and the raw material content has been accounted for. Ensure that only the portion of the material where the extraction location is known is used toward compliance. Revise the form and LEED Materials and Resource Calculator if necessary.

MRc6: Rapidly Renewable Materials
POSSIBLE POINTS: 1

Not Attempted

MRc7: Certified Wood

Awarded: 1

POSSIBLE POINTS: 1

ATTEMPTED: 1, DENIED: 0, PENDING: 0, AWARDED: 1

07/22/2015 DESIGN AND CONSTRUCTION PRELIMINARY REVIEW

The LEED Form states that 100% of the total wood-based building materials are certified in accordance with the principles and criteria of the Forest Stewardship Council (FSC).



Indoor Environmental Quality

IEQp1: Minimum Indoor Air Quality Performance

Awarded

07/22/2015 **DESIGN AND CONSTRUCTION PRELIMINARY REVIEW**

The LEED Form states that the project is mechanically ventilated and that the ventilation system has met the minimum requirements of ASHRAE 62.1-2007.

IEQp2: Environmental Tobacco Smoke (ETS) Control

Awarded

07/28/2015 **DESIGN AND CONSTRUCTION PRELIMINARY REVIEW**

The LEED Form states that smoking is prohibited within 25 feet of entries, outdoor air intakes, and operable windows. Additionally, smoking is prohibited within the building.

IEQc1: Outdoor Air Delivery Monitoring

Awarded: 1

POSSIBLE POINTS: 1

ATTEMPTED: 1, DENIED: 0, PENDING: 0, AWARDED: 1

08/25/2015 **DESIGN AND CONSTRUCTION FINAL REVIEW**

This credit was submitted for initial review during the Design Final Review. The LEED Form states that the project is mechanically ventilated, that a CO2 sensor has been installed within each densely occupied space, that an outdoor airflow measurement device has been installed for all systems where 20% or more of the design supply airflow services non-densely occupied spaces, and these devices are programmed to generate an alarm when the conditions vary by 10% or more from the design value.

IEQc2: Increased Ventilation

Not Attempted

POSSIBLE POINTS: 1

IEQc3.1: Construction IAQ Management Plan-During Construction

Awarded: 1

POSSIBLE POINTS: 1

ATTEMPTED: 1, DENIED: 0, PENDING: 0, AWARDED: 1

07/22/2015 **DESIGN AND CONSTRUCTION PRELIMINARY REVIEW**

The LEED Form states that the project reduces air quality problems resulting from construction to promote the comfort and well-being of construction workers and building occupants.

IEQc3.2: Construction IAQ Management Plan-Before Occupancy

Not Attempted

POSSIBLE POINTS: 1

IEQc4.1: Low-Emitting Materials-Adhesives and Sealants

Awarded: 1

POSSIBLE POINTS: 1

ATTEMPTED: 1, DENIED: 0, PENDING: 0, AWARDED: 1

07/22/2015 **DESIGN AND CONSTRUCTION PRELIMINARY REVIEW**

The LEED Form states that all adhesive and sealant products used on the inside of the weatherproofing system and applied on-site have been included in the tables and comply with the VOC limits of the referenced standards for this credit.

IEQc4.2: Low-Emitting Materials-Paints and Coatings

Awarded: 1

POSSIBLE POINTS: 1

ATTEMPTED: 1, DENIED: 0, PENDING: 0, AWARDED: 1

07/22/2015 **DESIGN AND CONSTRUCTION PRELIMINARY REVIEW**

The LEED Form states that all paint and coating products used on the inside of the weatherproofing system and applied on-site have been included in the tables and comply with the VOC limits of the referenced standards for this credit.

IEQc4.3: Low-Emitting Materials-Flooring Systems**Awarded: 1**

POSSIBLE POINTS: 1

ATTEMPTED: 1, DENIED: 0, PENDING: 0, AWARDED: 1

07/22/2015 DESIGN AND CONSTRUCTION PRELIMINARY REVIEW

The LEED Form states that all interior flooring materials meet or exceed applicable criteria for the Carpet and Rug Institute, South Coast Air Quality Management District, the California Department of Health Standard, or FloorScore; the carpet adhesives used have a VOC level of less than 50 g/L; all floor finishes meet the requirements of SCAQMD Rule 1113; and all tile setting adhesives and grout meet SCAQMD Rule 1168. It is noted that the Comex and BASF Comex Floor Coatings should be listed in this credit as well; however this does not affect compliance, as the documentation in IEQc4.2: Low-Emitting Materials — Paints and Coatings confirms IEQc4.3 compliance.

IEQc4.4: Low-Emitting Materials-Composite Wood and Agrifiber Products**Not Attempted**

POSSIBLE POINTS: 1

IEQc5: Indoor Chemical and Pollutant Source Control**Not Attempted**

POSSIBLE POINTS: 1

IEQc6.1: Controllability of Systems-Lighting**Awarded: 1**

POSSIBLE POINTS: 1

ATTEMPTED: 1, DENIED: 0, PENDING: 0, AWARDED: 1

08/25/2015 DESIGN AND CONSTRUCTION FINAL REVIEW

The additional documentation demonstrates compliance.

07/22/2015 DESIGN AND CONSTRUCTION PRELIMINARY REVIEW

The LEED Form states that lighting controls are provided for 100% of building occupants and 100% of shared multi-occupant spaces to enable adjustments that meet needs and preferences. However, to demonstrate compliance, the following must be addressed.

TECHNICAL ADVICE

1. The total quantity of individual workstations presented here (145) is inconsistent with the total full-time equivalent (FTE) occupants reported in Pf3: Occupant and Usage Data (262 occupants). It seems that each occupant would have an individual workstation. Update the form so that the quantity of individual occupant workstations is consistent with the total FTEs reported in Pf3 or provide a detailed narrative describing the discrepancy.

2. The documentation is not clear what controls are included in the "Master switch wireless" controls that are used for multi-occupant spaces. Note that this credit requires a high level of lighting system control in multi-occupant spaces, such as dimming or bi-level control switches. If on-off controls are used, an additional explanation must be provided to justify that the level of controls is sufficient for the uses of the space. Meeting spaces that can be subdivided must be designed with individual control of each area. In classrooms, room darkening shades where required by function (e.g. if AV presentations are anticipated in the space) should also be included. Provide documentation, such as a narrative and a revised schedule, lighting control table, or floor plans, to demonstrate that spaces served by a Master switch wireless have adequate controls to provide functionality to suit the activities within the space.

IEQc6.2: Controllability of Systems-Thermal Comfort**Not Attempted**

POSSIBLE POINTS: 1

IEQc7.1: Thermal Comfort-Design**Not Attempted**

POSSIBLE POINTS: 1

IEQc7.2: Thermal Comfort-Verification**Not Attempted**

POSSIBLE POINTS: 1

IEQc8.1: Daylight and Views-Daylight**Awarded: 1**

POSSIBLE POINTS: 1

ATTEMPTED: 1, DENIED: 0, PENDING: 0, AWARDED: 1

07/22/2015 DESIGN AND CONSTRUCTION PRELIMINARY REVIEW

The LEED Form states that the project has achieved the daylighting requirements in 86.89% of all regularly occupied spaces via Option 3, Measurement.

IEQc8.2: Daylight and Views-Views

Awarded: 1

POSSIBLE POINTS: 1

ATTEMPTED: 1, DENIED: 0, PENDING: 0, AWARDED: 1

07/22/2015 **DESIGN AND CONSTRUCTION PRELIMINARY REVIEW**

The LEED Form states that the project has provided direct line of sight views from 94.17% of all regularly occupied spaces.



Innovation in Design

IDc1.1: Green Building Education

Awarded: 1

POSSIBLE POINTS: 1

ATTEMPTED: 1, DENIED: 0, PENDING: 0, AWARDED: 1

07/22/2015 **DESIGN AND CONSTRUCTION PRELIMINARY REVIEW**

The LEED Form states that the project team has developed and implemented a Public Education program. This strategy is detailed in the LEED BD+C v2009 Reference Guide. The documentation provided for the development of a case-study and website or electronic newsletter complies with the Reference Guide requirements.

IDc1.1: Innovation in Design

Not Attempted

POSSIBLE POINTS: 1

IDc1.2: Water Performance Measurement

Awarded: 1

POSSIBLE POINTS: 1

ATTEMPTED: 1, DENIED: 0, PENDING: 0, AWARDED: 1

07/22/2015 **DESIGN AND CONSTRUCTION PRELIMINARY REVIEW**

The LEED Form states that the project team has developed and implemented an ID credit proposal in compliance with LEED-EBOM 2009 WEc1: Water Performance Measurement. The documentation states that the project has permanently installed water meters that measure the total potable water use for the entire building and associated grounds and at least one water subsystem.

IDc1.2: Innovation in Design

Not Attempted

POSSIBLE POINTS: 1

IDc1.3: Innovation in Design

Not Attempted

POSSIBLE POINTS: 1

IDc1.3: Heat Island Effect, Non-Roof

Awarded: 1

POSSIBLE POINTS: 1

ATTEMPTED: 1, DENIED: 0, PENDING: 0, AWARDED: 1

07/22/2015 **DESIGN AND CONSTRUCTION PRELIMINARY REVIEW**

The LEED Form states that the project achieves exemplary performance for SSc7.1: Heat Island Effect - Nonroof. The requirement for exemplary performance in Option 2 is 100% and the project has documented 100%.

IDc1.4: Innovative Wastewater Technologies

Awarded: 1

POSSIBLE POINTS: 1

ATTEMPTED: 1, DENIED: 0, PENDING: 0, AWARDED: 1

07/22/2015 **DESIGN AND CONSTRUCTION PRELIMINARY REVIEW**

The LEED Form states that the project achieves exemplary performance for WEc2: Innovative Wastewater Technologies. The requirement for exemplary performance is 100% and the project has documented 100%.

IDc1.4: Innovation in Design

Not Attempted

POSSIBLE POINTS: 1

IDc1.5: Innovation in Design

Not Attempted

POSSIBLE POINTS: 1

IDc1.5: Water Use Reduction

Awarded: 1

POSSIBLE POINTS: 1

ATTEMPTED: 1, DENIED: 0, PENDING: 0, AWARDED: 1

07/22/2015 **DESIGN AND CONSTRUCTION PRELIMINARY REVIEW**

The LEED Form states that the project achieves exemplary performance for WEc3: Water Use Reduction. The requirement for exemplary performance is 45% and the project has documented 87.48%.

IDc2: LEED® Accredited Professional

Awarded: 1

POSSIBLE POINTS: 1

ATTEMPTED: 1, DENIED: 0, PENDING: 0, AWARDED: 1

07/22/2015 DESIGN AND CONSTRUCTION PRELIMINARY REVIEW

The LEED Form states that a LEED AP has been a participant on the project development team.



Regional priority

SSc2: Development Density and Community Connectivity

POSSIBLE POINTS: 1

ATTEMPTED: 1, DENIED: , PENDING: , AWARDED: 1

SSc7.1: Heat Island Effect, Non-Roof

POSSIBLE POINTS: 1

ATTEMPTED: 1, DENIED: , PENDING: , AWARDED: 1

SSc8: Light Pollution Reduction

POSSIBLE POINTS: 1

ATTEMPTED: 1, DENIED: , PENDING: , AWARDED: 1

WEc2: Innovative Wastewater Technologies

POSSIBLE POINTS: 1

ATTEMPTED: 1, DENIED: , PENDING: , AWARDED: 1

TOTAL

110

83

3

0

81

REVIEW SUMMARY

Review			POINTS:			
	SUBMITTED	RETURNED	SUBMITTED	DENIED	PENDING	AWARDED

Design and Construction Preliminary	07/15/2015	07/29/2015	85	0	25	60
--------------------------------------------	-------------------	-------------------	-----------	----------	-----------	-----------

Credit	STATUS	TYPE	POINTS: ATTEMPTED	DENIED	PENDING	AWARDED
Plf1: Minimum Program Requirements	Approved		0	0	0	0
Plf2: Project Summary Details	Approved		0	0	0	0
Plf3: Occupant and Usage Data	Approved		0	0	0	0
Plf4: Schedule and Overview Documents	Approved		0	0	0	0
SSp1: Construction Activity Pollution Prevention	Awarded	Construction	0	0	0	0
SSc1: Site Selection	Awarded	Design	1	0	0	1
SSc2: Development Density and Community Connectivity	Awarded	Design	6	0	0	6
SSc4.1: Alternative Transportation-Public Transportation Access	Awarded	Design	6	0	0	6
SSc4.2: Alternative Transportation-Bicycle Storage and Changing Rooms	Awarded	Design	1	0	0	1
SSc4.3: Alternative Transportation-Low -Emitting and Fuel-Efficient Vehicles	Awarded	Design	3	0	0	3
SSc4.4: Alternative Transportation-Parking Capacity	Awarded	Design	2	0	0	2
SSc5.2: Site Development-Maximize Open Space	Awarded	Design	1	0	0	1
SSc6.1: Stormwater Design-Quantity Control	Awarded	Design	1	0	0	1
SSc6.2: Stormwater Design-Quality Control	Awarded	Design	1	0	0	1
SSc7.1: Heat Island Effect, Non-Roof	Awarded	Construction	2	0	0	2
SSc7.2: Heat Island Effect-Roof	Awarded	Design	1	0	0	1
SSc8: Light Pollution Reduction	Pending	Design	2	0	2	0
WEp1: Water Use Reduction-20% Reduction	Awarded	Design	0	0	0	0
WEc1: Water Efficient Landscaping	Awarded	Design	4	0	0	4
WEc2: Innovative Wastewater Technologies	Awarded	Design	3	0	0	3
WEc3: Water Use Reduction	Awarded	Design	4	0	0	4
EAp1: Fundamental Commissioning of the Building Energy Systems	Awarded	Construction	0	0	0	0
EAp2: Minimum Energy Performance	Pending	Design	0	0	0	0
EAp3: Fundamental Refrigerant Management	Awarded	Design	0	0	0	0
EAc1: Optimize Energy Performance	Pending	Design	10	0	10	0
EAc2: On-Site Renewable Energy	Pending	Design	7	0	7	0
EAc3: Enhanced Commissioning	Awarded	Construction	2	0	0	2
EAc4: Enhanced Refrigerant Management	Awarded	Design	2	0	0	2
EAc5: Measurement and Verification	Awarded	Construction	3	0	0	3
EAc6: Green Power	Pending	Construction	2	0	2	0

MRp1: Storage and Collection of Recyclables	Awarded	Design	0	0	0	0
MRc2: Construction Waste Management	Awarded	Construction	2	0	0	2
MRc4: Recycled Content	Awarded	Construction	2	0	0	2
MRc5: Regional Materials	Pending	Construction	2	0	2	0
MRc7: Certified Wood	Awarded	Construction	1	0	0	1
IEQp1: Minimum Indoor Air Quality Performance	Awarded	Design	0	0	0	0
IEQp2: Environmental Tobacco Smoke (ETS) Control	Awarded	Design	0	0	0	0
IEQc3.1: Construction IAQ Management Plan-During Construction	Awarded	Construction	1	0	0	1
IEQc4.1: Low -Emitting Materials-Adhesives and Sealants	Awarded	Construction	1	0	0	1
IEQc4.2: Low -Emitting Materials-Paints and Coatings	Awarded	Construction	1	0	0	1
IEQc4.3: Low -Emitting Materials-Flooring Systems	Awarded	Construction	1	0	0	1
IEQc6.1: Controllability of Systems-Lighting	Pending	Design	1	0	1	0
IEQc8.1: Daylight and View s-Daylight	Awarded	Design	1	0	0	1
IEQc8.2: Daylight and View s-View s	Awarded	Design	1	0	0	1
IDc1.1: Green Building Education	Awarded	Design	1	0	0	1
IDc1.2: Water Performance Measurement	Awarded	Design	1	0	0	1
IDc1.3: Heat Island Effect, Non-Roof	Awarded	Construction	1	0	0	1
IDc1.4: Innovative Wastewater Technologies	Awarded	Design	1	0	0	1
IDc1.5: Water Use Reduction	Awarded	Construction	1	0	0	1
IDc2: LEED® Accredited Professional	Awarded	Construction	1	0	0	1

Design and Construction Final

08/18/2015

08/27/2015

23

3

0

21

Credit

	STATUS	TYPE	POINTS: ATTEMPTED	DENIED	PENDING	AWARDED
SSc8: Light Pollution Reduction	Awarded	Design	2	0	0	2
EAp2: Minimum Energy Performance	Awarded	Design	0	0	0	0
EAc1: Optimize Energy Performance	Awarded	Design	8	2	0	7
EAc2: On-Site Renewable Energy	Awarded	Design	7	1	0	6
EAc6: Green Power	Awarded	Construction	2	0	0	2
MRC5: Regional Materials	Awarded	Construction	2	0	0	2
IEQc1: Outdoor Air Delivery Monitoring	Awarded	Design	1	0	0	1
IEQc6.1: Controllability of Systems-Lighting	Awarded	Design	1	0	0	1