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 Green Business Certification Inc. (GBCI®).

Metrolink DOC

Project ID	1000030008
Rating system & version	LEED-NC v2009
Project registration date	01/24/2013

Certified (Silver)

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

LEED 2009 NEW CONSTRUCTION

ATTEMPTED: 55, DENIED: 2, PENDING: 0, AWARDED: 54 OF 106 POINTS

SUSTAINABLE SITES		18 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
SSc4.1	Alternative Transportation-Public Transportation Access	6 / 6
SSc4.2	Alternative Transportation-Bicycle Storage and Changing Room	1 / 1
SSc4.3	Alternative Transportation-Low-Emitting and Fuel-Efficient V	3 / 3
SSc4.4	Alternative Transportation-Parking Capacity	0 / 2
SSc5.1	Site Development-Protect or Restore Habitat	0 / 1
SSc5.2	Site Development-Maximize Open Space	0 / 1
SSc6.1	Stormwater Design-Quantity Control	0 / 1
SSc6.2	Stormwater Design-Quality Control	1 / 1
SSc7.1	Heat Island Effect, Non-Roof	0 / 1
SSc7.2	Heat Island Effect-Roof	1 / 1
SSc8	Light Pollution Reduction	0 / 1

WATER EFFICIENCY		5 OF 10
WEp1	Water Use Reduction-20% Reduction	Y
WEc1	Water Efficient Landscaping	2 / 4
WEc2	Innovative Wastewater Technologies	0 / 2
WEc3	Water Use Reduction	3 / 4

ENERGY AND ATMOSPHERE		9 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	4 / 19
EAc2	On-Site Renewable Energy	0 / 7
EAc3	Enhanced Commissioning	0 / 2
EAc4	Enhanced Refrigerant Mgmt	2 / 2
EAc5	Measurement and Verification	1 / 3
EAc6	Green Power	2 / 2

MATERIALS AND RESOURCES		5 OF 14
MRp1	Storage and Collection of Recyclables	Y
MRc1.1	Building Reuse-Maintain Existing Walls, Floors and Roof	0 / 3
MRc1.2	Building Reuse - Maintain 50% of Interior Non-Structural Ele	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	1 / 2
MRc6	Rapidly Renewable Materials	0 / 1
MRc7	Certified Wood	0 / 1

INDOOR ENVIRONMENTAL QUALITY		12 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
IEQc3.1	Construction IAQ Mgmt Plan-During Construction	1 / 1
IEQc3.2	Construction IAQ Mgmt Plan-Before Occupancy	1 / 1
IEQc4.1	Low-Emitting Materials-Adhesives and Sealants	1 / 1
IEQc4.2	Low-Emitting Materials-Paints and Coatings	1 / 1
IEQc4.3	Low-Emitting Materials-Flooring Systems	1 / 1
IEQc4.4	Low-Emitting Materials-Composite Wood and Agrifiber Products	1 / 1
IEQc5	Indoor Chemical and Pollutant Source Control	1 / 1
IEQc6.1	Controllability of Systems-Lighting	1 / 1
IEQc6.2	Controllability of Systems-Thermal Comfort	1 / 1
IEQc7.1	Thermal Comfort-Design	1 / 1
IEQc7.2	Thermal Comfort-Verification	1 / 1
IEQc8.1	Daylight and Views-Daylight	0 / 1
IEQc8.2	Daylight and Views-Views	0 / 1

INNOVATION IN DESIGN		5 OF 6
IDc1.1	Green Cleaning	1 / 1
IDc1.1	Innovation in Design	0 / 1
IDc1.2	Green Building Education	1 / 1
IDc1.2	Innovation in Design	0 / 1
IDc1.3	Innovation in Design	0 / 1
IDc1.3	Innovation in Design	0 / 1
IDc1.4	Low Mercury	1 / 1
IDc1.4	Innovation in Design	0 / 1
IDc1.5	EAc6: Green Power	1 / 1
IDc1.5	Innovation in Design	0 / 1
IDc2	LEED® Accredited Professional	1 / 1

REGIONAL PRIORITY CREDITS		OF

TOTAL	54 OF 106

CREDIT DETAILS

Project Information Forms

PIf1: Minimum Program Requirements — Approved

02/12/2016 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 Pomona, California.

PIf2: Project Summary Details — Approved

02/15/2016 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 two stories and 22,406 gross square feet.

PIf3: Occupant and Usage Data — Approved

06/05/2018 DESIGN AND CONSTRUCTION FINAL REVIEW

The additional documentation confirms that the regularly occupied area is 10,555 square feet, the average users value is 85, the peak users value is 158, and the FTE value is 103.

02/16/2016 DESIGN AND CONSTRUCTION PRELIMINARY REVIEW

The LEED Form includes the required occupant and usage data. The project consists primarily of Other: Train Controls Operation Facility spaces. The occupancy includes non-standard occupancy patterns. The form states that the average users value is 90, the peak users value is 121, and the FTE value is 80. However, to demonstrate compliance, the following must be addressed.

TECHNICAL ADVICE

1. Based on the supplemental calculations, it does not appear that the FTE occupancy value has been reported accurately in the form (80). According to the LEED BD+C v2009 Reference Guide, for building with multiple shifts, the number of FTE occupants must be reported from all shifts. As information throughout the submittal indicates that the LEED project building will be open 365 days a year, the FTE value should be reported as 103. Provide a revised form and occupancy calculations, as necessary.

2. It is unclear whether the transient occupancy values have been calculated correctly. The project includes identical values for the peak and average transient occupancy (10). Note that for the peak occupancy, the transient value must be determined by including all transient occupants within the building measured at the peak moment. For buildings with multiple shifts, use the highest volume shift in the calculations and include shift overlap. For average occupancy, the transient value must be determined based on the daily average over the course of the year. Note that the supplemental calculations indicate that the training room can hold up to 80 occupants, which indicates that the peak transient value would be greater than 10. Provide a revised form and occupancy calculations, as necessary. If special circumstances exist, provide a narrative describing these circumstances. Ensure that all occupancy values have been reported accurately and consistently throughout the submittal.

3. The EQc8.1: Daylight and Views - Daylight calculations indicate that some non-regularly occupied areas (101 Lobby, 130 Break Room, 216 Copy & File, 221 Break Room/Lockers, Printer Area, 201 Hall, 211 Circ L2, and 234 Circ L2) have been included as regularly occupied areas. Note that regularly occupied spaces are defined as areas where workers are seated or standing as they work inside a building for at least one hour per day. Non-regularly occupied spaces include corridors, hallways, lobbies, break rooms, copy rooms, storage rooms, restrooms, and stairwells. The EQ space type matrix, which is available on the GBCI website (http://www.usgbc.org/resources/eq-space-type-matrix), provides information on classification of regularly occupied and non-regularly occupied spaces for most space types encountered within buildings that are included in each credit/prerequisite. Revise Table PIf3-1: Space Usage Type and provide a clarification narrative, if necessary, to ensure that that all spaces have been correctly reported as regularly or non-regularly occupied.

PIf4: Schedule and Overview Documents — Approved

06/05/2018 DESIGN AND CONSTRUCTION FINAL REVIEW

The additional documentation confirms that the date of substantial completion is October 30, 2014, and the date of occupancy is February 9, 2015.

02/16/2016 DESIGN AND CONSTRUCTION PRELIMINARY REVIEW

The LEED Form includes the design and construction schedule. The date of substantial completion is July 19, 2014, and the date of occupancy is September 15, 2014. The required documents have been uploaded. However, to demonstrate compliance, the following must be addressed.

TECHNICAL ADVICE

1. The date of occupancy reported in the form and in EQc7.2: Thermal Comfort - Verification (September 15, 2014) is inconsistent with the date of occupancy reported in EQc3.2: Construction IAQ Management Plan - Before Occupancy (February 9, 2015). Note that all information, including the date of occupancy, must be reported consistently throughout the submittal. Provide a revised form, as necessary, to ensure that the date of occupancy has been reported consistently throughout the submittal.

2. Provide the project narrative that describes all of the required information, including details about the applicant organization, building history, applicant project team, and process for preparing the LEED certification application. Include a description of at least three aspects that highlight the project's effort to create a sustainable project, as well as examples of substantial challenges.

Sustainable Sites

SSp1: Construction Activity Pollution Prevention — Awarded

02/15/2016 DESIGN AND CONSTRUCTION PRELIMINARY REVIEW

The LEED Form states that the project has implemented an Erosion and Sedimentation Control (ESC) Plan that conforms to local standards and codes, which are more stringent than the National Pollutant Discharge Elimination System (NPDES) program requirements.

It is noted that the form narrative does not describe how the local standard is equal to or more stringent than the referenced NPDES program. For future projects, ensure that documentation has been provided to demonstrate that the local standard is equal to or more stringent than the referenced NPDES program. In this case, independent research has confirmed that the local codes meet or exceed the NPDES program requirements. Compliance is not affected.

SSc1: Site Selection — Awarded: 1

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

02/11/2016 DESIGN AND CONSTRUCTION PRELIMINARY REVIEW

The LEED Form states that the project site does not meet any of the prohibited criteria.

SSc2: Development Density and Community Connectivity — Awarded: 5

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

02/15/2016 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

02/15/2016 DESIGN AND CONSTRUCTION PRELIMINARY REVIEW

The LEED Form states that the project complies with Option 1: Rail Station, Bus Rapid Transit, and Ferry Terminal Proximity and is located within a one-half-mile walking distance of at least one commuter rail, light rail, subway station, bus rapid transit station, or commuter ferry terminal.

SSc4.2: Alternative Transportation-Bicycle Storage and Changing Rooms — Awarded: 1

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

02/16/2016 DESIGN AND CONSTRUCTION PRELIMINARY REVIEW

The LEED Form states that the project complies with Case 1: Commercial or Institutional Projects. Bicycle storage facilities have been provided to serve 8.26% of the LEED project FTE and transient occupants, measured at peak occupancy, and shower/changing facilities have been provided for 1.25% of the LEED project FTE occupants.

It is noted that PIf3: Occupant and Usage Data is pending clarification to the FTE occupant and peak transient occupant values, which affects the calculations for this credit. For future projects, ensure that the occupancy has been calculated correctly and that all occupancy values have been reported accurately and consistently throughout the submittal. In this case, when recalculated utilizing a FTE occupancy of 111 and a peak building user value of 191, bicycle storage facilities have been provided to serve 5.23% of the LEED project FTE and transient occupants, measured at peak occupancy, and shower/changing facilities have been provided for 0.90% of the LEED project FTE occupants. Compliance is not affected.

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

POSSIBLE POINTS: 3

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

06/07/2018 DESIGN AND CONSTRUCTION FINAL REVIEW

The additional documentation confirms that preferred parking spaces have been provided for Clean Air vehicles for 10.04% of the total parking capacity.

02/16/2016 DESIGN AND CONSTRUCTION PRELIMINARY REVIEW

The LEED Form states that the project complies with Option 1: Preferred Parking and provides preferred parking spaces for low-emitting and fuel-efficient vehicles for 5.02% of the total parking capacity. However, to demonstrate compliance, the following must be addressed.

TECHNICAL ADVICE

1. The site plan indicates that the preferred parking spaces are reserved for "Clean Air/Vanpool/EV, " and the signage details on the following page indicate that the parking is reserved for "Hybrid/Alternative Vehicles." As two different signage details have been provided, it is unclear which signage will be utilized on site. Note that, while it is acceptable to combine preferred parking for car/vanpool and low-emitting and fuel-efficient vehicles, the project must meet the preferred parking requirements for SSc4.3: Alternative Transportation - Low-Emitting and Fuel-Efficient Vehicles and SSc4.4: Alternative Transportation - Parking Capacity separately. Preferred parking must be provided for 5% of the total parking for each type of vehicle (low-emitting/fuel-efficient or car/vanpool), or 10% of the total parking if preferred spaces are combined. This applies whether or not SSc4.4 is attempted. Refer to LEED Interpretation 10369 for guidance on using the CALgreen building code requirements to achieve this credit. Also note that the signage must clearly confirm that parking spaces have been reserved for low-emitting/fuel-efficient vehicles, as not all hybrid/alternative vehicles are low-emitting/fuel-efficient and vice versa. Provide a revised form, site plan, and signage details demonstrating that preferred parking for low-emitting and fuel-efficient vehicles has been provided for at least 5% of the total parking or 10% of the total parking if preferred spaces are combined.

SSc4.4: Alternative Transportation-Parking Capacity — **Not Attempted**
POSSIBLE POINTS: 2

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

SSc5.2: Site Development-Maximize Open Space — **Not Attempted**
POSSIBLE POINTS: 1

SSc6.1: Stormwater Design-Quantity Control — **Not Attempted**
POSSIBLE POINTS: 1

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

02/11/2016 DESIGN AND CONSTRUCTION PRELIMINARY REVIEW

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

SSc7.1: Heat Island Effect, Non-Roof — **Not Attempted**
POSSIBLE POINTS: 1

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

02/15/2016 DESIGN AND CONSTRUCTION PRELIMINARY REVIEW

The LEED Form states that the project complies with Option 1, and 133.33% of the weighted building roof surface has a Solar Reflectance Index (SRI) meeting the credit requirements.

It is noted that the roof access path indicated on the provided roof plan appears to have been excluded from the total roof area. For future projects, note that, although mechanical equipment is excluded from the total roof area, the walkway between or surrounding the mechanical equipment must be included. In this case, based on the roof plan, it is

clear that at least 75% of the roofing materials used on the project meet the SRI requirements of the credit. Compliance is not affected.

SSc8: Light Pollution Reduction **Not Attempted**
POSSIBLE POINTS: 1

Water Efficiency

WEp1: Water Use Reduction-20% Reduction — Awarded

06/05/2018 DESIGN AND CONSTRUCTION FINAL REVIEW

The requested clarifications for PIf3: Occupant and Usage Data and the additional documentation confirm that the project has reduced potable water use by 36.6%.

02/16/2016 DESIGN AND CONSTRUCTION PRELIMINARY REVIEW

The LEED Form states that the project has reduced potable water use by 38.87%. However, to demonstrate compliance, the following must be addressed.

TECHNICAL ADVICE

1. PIf3: Occupant and Usage Data is pending clarifications regarding the occupancy values. Provide the requested clarifications for PIf3 and resubmit this prerequisite. Revise this prerequisite, as necessary, to ensure that all occupants (daily average) have been included in the water use calculations. Ensure that the occupancy values have been reported consistently across the submittal.

2. Provide a plumbing fixture schedule or manufacturers' documentation to confirm the fixture manufacturer, model, and flush or flow rate for all fixtures, as reported in the form. Note that the provided documentation appears to be a water saving calculator rather than the project's plumbing fixture schedule.

3. The floor plans provided for PIf4: Schedule and Overview Documents indicate that the project includes a unisex restroom that does not contain urinals (Unisex Restroom 223). The calculations in the form automatically assume that 100% of male occupants will use restrooms that contain urinals. As a percentage of male occupants will not have access to or will not be expected to use restrooms with urinals, the default total daily uses for water closets and urinals must be adjusted in the form accordingly. Provide a narrative and supporting daily use calculations to explain the anticipated urinal usage. Revise the form to ensure that the total daily uses column for the water closets and urinals has been modified appropriately.

4. The L-1 and L-2 lavatories have been indicated as belonging to the Private Lavatory Faucet fixture family, yet it does not appear that the private lavatory classification is appropriate for this project type. Private or private use applies to plumbing fixtures in residences, apartments, and dormitories; private (non-public) bathrooms in transient lodging facilities (hotels and motels); and private bathrooms within hospitals and nursing facilities. All other facilities are considered to be public or public use. Revise the form to ensure that the lavatories are classified as public, using the appropriate baseline for the public lavatory fixtures.

Refer to the LEED BD+C v2009 Reference Guide and the Water Use Reduction Additional Guidance found on the USGBC website for additional information regarding how to document this prerequisite.

WEc1: Water Efficient Landscaping — Awarded: 2

POSSIBLE POINTS: 4
ATTEMPTED: 2, DENIED: 0, PENDING: 0, AWARDED: 2

02/16/2016 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 72.47% and the total water used for irrigation by 72.47%.

The following issues are noted:

1. The baseline case does not use the average values for the species factor (ks) of the turf landscape type (0.7), as required. For future projects, ensure that the baseline case calculations use the average ks values, as shown within Table 1: Landscape Factors in the WEc1 section of the LEED BD+C v2009 Reference Guide, for each landscape type.

2. The documentation provided to verify the reported Controller Efficiency (CE) states that the CE ranges between 0.6 and 0.8. For future projects, when a range has been provided for the CE, the lowest value (in this case, 0.8) must be utilized in the calculations.

When recalculated utilizing the average ks value for the baseline case turf area and utilizing the lowest value in the provided CE range, the landscaping and irrigation systems have been designed to reduce potable water consumption for irrigation by 66.28% and the total water used for irrigation by 66.28%. Compliance is not affected.

WEc2: Innovative Wastewater Technologies — Not Attempted

POSSIBLE POINTS: 2

WEc3: Water Use Reduction Awarded: 3

POSSIBLE POINTS: 4

ATTEMPTED: 4, DENIED: 2, PENDING: 0, AWARDED: 3

06/07/2018 DESIGN AND CONSTRUCTION FINAL REVIEW

The requested clarifications for WEp1: Water Use Reduction - 20% Reduction confirm that the project has reduced potable water use by 37%.

02/11/2016 DESIGN AND CONSTRUCTION PRELIMINARY REVIEW

The LEED Form states that the project has reduced potable water use by 39%. However, to demonstrate compliance, the following must be addressed.

TECHNICAL ADVICE

1. WEp1: Water Use Reduction - 20% Reduction is pending clarifications. Refer to the comments within WEp1 and resubmit this credit.

Energy and Atmosphere

EAp1: Fundamental Commissioning of the Building Energy Systems — Awarded

06/05/2018 DESIGN AND CONSTRUCTION FINAL REVIEW

The additional documentation demonstrates compliance.

02/16/2016 DESIGN AND CONSTRUCTION PRELIMINARY REVIEW

The LEED Form states that the fundamental commissioning is complete. However, to demonstrate compliance, the following must be addressed.

TECHNICAL ADVICE

1. Provide a copy of the Executive Summary of the Commissioning Report, ensuring that a a summary of issues corrected and a list of of any major outstanding/unresolved issues are included.

The following issues are noted:

1. The form indicates that Jonathon Kilora of CEM Solutions is the Commissioning Agent (CxA) for this project, whereas the provided Pre-functioning, Commissioning, and Training Plan indicates that an employee of the General Contractor (USS Cal Builders) served as the Commissioning Agent. For future projects, ensure that the documentation accurately and consistently reports the name and employing organization of the Commissioning Agent. Note that, as outlined in Table 2: Commisioning Authority Qualifications in the EAp1 section of the LEED BD+C v2009 Reference Guide, while an employee of the General Contractor may serve as the Commissioning Agent in order to meet the requirements of this prerequisite, EAc3: Enhanced Commissioning cannot be achieved if the Commissioning Agent is an employee of the General Contractor. In this case, this issue does not affect compliance of this prerequisite, as an employee of the contractor may serve as the Commissioning Agent for fundamental commissioning of buildings less than 50,000 square feet.

2. The form indicates that renewable energy systems are included in the commissioning scope, whereas PIf2: Project Summary Details and EAp2: Minimum Energy Performance indicate that this project does not utilize on-site renewable energy. For future projects, ensure that the form accurately reports the systems included in the commissioning scope. In this case, it is clear that renewable energy systems are not included in the project scope.

Compliance is not affected by these issues.

EAp2: Minimum Energy Performance — Awarded

06/07/2018 DESIGN AND CONSTRUCTION FINAL REVIEW

The additional documentation states that the project has achieved an energy cost savings of 18.82%. The total predicted annual energy consumption for the project is 254,012 kWh of electricity and 14,144 therms of natural gas.

It is noted that the outdoor air volume for the HVAC systems in the Proposed model appear inconsistent with the outdoor air volumes in the actual design when comparing the simulation input summary reports to the mechanical schedules provided for EQp1: Minimum Indoor Air Quality Performance. For example, the SV-A reports indicate that the outdoor air volume for AC-2 was modeled at 528 cfm, whereas the mechanical schedules indicate that the outdoor air volume for this system must be reflected at 1,000 cfm. Note that Table G3.1.10 in the Proposed building column requires that the Proposed model reflect all HVAC systems at actual equipment capacities and efficiencies. For future projects, ensure the Proposed model reflects all HVAC systems at actual equipment capacities and efficiencies. In this case, this issue is not deemed sufficient enough to affect the energy cost savings. The documentation demonstrates compliance.

02/16/2016 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 15.28%. However, to demonstrate compliance, the following comments requiring a project response (marked as Mandatory) must be addressed for the Final Review. For the remaining review comments (marked as Optional), a project response is optional.

Note that both a spreadsheet and PDF format Section 1.4 file were uploaded for this prerequisite, and the pdf format was used for this review because the inputs more closely matched the inputs observed in the SV-A and other energy modeling reports.

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 BEPS reports for the Proposed and Baseline models appear to indicate that the total building area reflected in each model is approximately 16,976 square feet (i.e., 2,653 MBTU/156.3 kBtu/sf per square foot * 1,000 kBtu/MBTU indicated in the BEPS report for the Proposed model), which is inconsistent with the total building area of 22,406 square feet indicated in PIf2: Project Summary Data. Revise the Proposed and Baseline models, Section 1.1A, and Section 1.2, as needed, to reflect the total building area reflected in the actual design, and/or provide a supplemental narrative explaining the discrepancy. Note the energy consumption associated with unconditioned spaces (interior lighting, process loads, etc.) must be included in the Proposed and Baseline models.

3. Section 1.1A of the form indicates that the energy code used is the Title 24-2005, Part 6; however, it appears that the energy models are using the ASHRAE Standard 90.1-2010, Appendix G methodology as indicated in the supporting documentation provided. Revise Section 1.1A and/or the energy models, as needed, so that the intended energy code used in the energy models is appropriately reflected. Note that if using the Title 24 Standard as the energy code to demonstrate compliance for this prerequisite, the energy models must be simulated in compliance mode to ensure that all the input parameters are modeled according to the standard including but not limited to the schedules, HVAC systems, and internal gains. In addition, ensure that the energy models are simulated in compliance mode. Alternatively, if using the Appendix G methodology as the energy code to demonstrate compliance for this prerequisite, ensure that the envelope U-values, lighting power densities, HVAC system type, etc. for the Baseline design are consistent with the input parameters described in ASHRAE Standard 90.1-2010.

4. Table 1.4.3A indicates that the Building Area Method is used to distribute the lighting power in each model; however, it appears that the Space-by-Space Method is used to distribute the lighting power since the lighting power density (LPD) varies for each space type. Table G3.1.6 requires that the same method (Building Area Method or Space-by-Space Method) is used to distribute the lighting power in each model. Revise the Proposed and/or the Baseline model, as needed, so the same method is used to distribute the lighting power in each model. If using the Building Area method to distribute the lighting power in each model, provide the building average LPD for the Proposed model and building type LPD from Table 9.5.1 for the Baseline model in Table 1.4.3A. If using the Space-by-Space method in each model, provide the different LPDs used for the different space types in the Baseline model in Table 1.4.3A, the building average lighting power density for each model in Table 1.4.5, and separate Section 1.2 of the form into the different space types. Further, provide revised input reports for each model, as needed, reflecting the changes.

5. It is unclear if the fan power for the HVAC equipment in the Proposed model reflects the equipment capacities in the actual design. It appears that the fan power for the HVAC systems have been modeled using the brake horsepower; however, the motor efficiencies must be included for each fan system in the Proposed model and the brake horsepower must not be directly converted to kW. Revise the Proposed model to reflect all HVAC systems at actual equipment capacities and ensure that the motor efficiencies have been included for each fan system. In addition, update Table 1.4.7B and provide revised SV-A reports for the Proposed model reflecting the changes. Furthermore, if the equipment capacities and efficiencies are based on updated mechanical schedules and/or HVAC submittal sheets, provide the updated mechanical schedules and/or HVAC submittal sheets.

EAp3: Fundamental Refrigerant Management — Awarded

06/05/2018 DESIGN AND CONSTRUCTION FINAL REVIEW

Additional documentation has been provided.

02/16/2016 DESIGN AND CONSTRUCTION PRELIMINARY REVIEW

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

It is noted that, based on the mechanical schedule provided for PIf4: Schedule and Overview Documents, it is unclear if all mechanical cooling equipment serving the project building has been listed in the form, as required. The form includes units manufactured by Trane, Carrier, and Liebert, whereas the mechanical schedules indicate that the units are manufactured by York, Mitsubishi, and Liebert. Additionally, the mechanical schedules indicate that the Liebert units contain R-407C refrigerant rather than R-410A, as reported in the form. Furthermore, based on Table EAc4-1: Refrigerant Impact Calculation within EAc4: Enhanced Refrigerant Management, it appears that the two split system units (FC-1 and FC-2) have been grouped in one line and listed as the Carrier 38AUZ007 unit in this form. For future projects, ensure that the mechanical equipment has been reported accurately and consistently throughout the submittal. In this case, the mechanical schedules confirm that there is no equipment that contains CFC-based refrigerants serving the project building. Compliance is not affected.

EAc1: Optimize Energy Performance — Awarded: 4

POSSIBLE POINTS: 19

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

06/06/2018 DESIGN AND CONSTRUCTION FINAL REVIEW

Additional documentation has been provided for EAp2: Minimum Energy Performance, claiming an energy cost savings of 18.82%.

02/16/2016 DESIGN AND CONSTRUCTION PRELIMINARY REVIEW

The LEED Form states that the project has achieved an energy cost savings of 15.28%. 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 — Not Attempted
POSSIBLE POINTS: 7

EAc3: Enhanced Commissioning — Not Attempted
POSSIBLE POINTS: 2

EAc4: Enhanced Refrigerant Management — Awarded: 2
POSSIBLE POINTS: 2
ATTEMPTED: 2, DENIED: 0, PENDING: 0, AWARDED: 2

06/05/2018 DESIGN AND CONSTRUCTION FINAL REVIEW

The additional documentation demonstrates compliance.

02/15/2016 DESIGN AND CONSTRUCTION PRELIMINARY REVIEW

The LEED Form states that the project selected refrigerants and HVAC and R systems that minimize or eliminate the emission of compounds that contribute to ozone depletion and global 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 158 per ton. However, to demonstrate compliance, the following must be addressed.

TECHNICAL ADVICE

1. The total refrigerant impact per ton reported in the form is 158, which is greater than the maximum allowable value of 100. The total refrigerant impact per ton must be equal to or less than 100 in order to meet the requirements of this credit. Revise the form to confirm that the total refrigerant impact per ton is less than 100, if applicable.

2. The two split system units shown in the mechanical schedules provided for PIf4: Schedule and Overview Documents (FC-1 and FC-2) appear to be been grouped in one line in the form (reported as Carrier 38AUZ007), whereas these units use different types of refrigerants (R-410A and R-407C, respectively) and must be listed separately. Revise the form to ensure that FC-1 and FC-2 have been listed separately.

EAc5: Measurement and Verification — Awarded: 1
POSSIBLE POINTS: 3
ATTEMPTED: 1, DENIED: 0, PENDING: 0, AWARDED: 1

02/11/2016 DESIGN AND CONSTRUCTION PRELIMINARY REVIEW

The LEED Form states that the project complies with Option 3 and has committed to sharing whole-building energy and water data through the ENERGY STAR Portfolio Manager.

EAc6: Green Power — Awarded: 2
POSSIBLE POINTS: 2
ATTEMPTED: 2, DENIED: 0, PENDING: 0, AWARDED: 2

06/06/2018 DESIGN AND CONSTRUCTION FINAL REVIEW

This credit was submitted for initial review during the Final Review. The LEED Form states that the project has a two-year purchase agreement to procure 70.08% of electricity for this LEED project that meets the Green-e definition for renewable power using Option 1: Whole Building Energy Simulation.

Materials and Resources

MRp1: Storage and Collection of Recyclables — **Awarded**

02/11/2016 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 Non-Structural Elements — **Not Attempted**
POSSIBLE POINTS: 1

MRc2: Construction Waste Management — **Awarded: 2**
POSSIBLE POINTS: 2
ATTEMPTED: 2, DENIED: 0, PENDING: 0, AWARDED: 2

02/15/2016 DESIGN AND CONSTRUCTION PRELIMINARY REVIEW

The LEED Form states that the project has diverted 89.81% of the on-site generated construction waste from landfill.

It is noted that the provided waste disposal reports indicate that the construction waste was commingled rather than site separated, whereas the form does not indicate that the waste is commingled. For future projects, ensure that the form accurately classifies the materials as diverted (site separated), commingled, or landfill waste. In this case, documentation has been provided to verify the diversion rate for the commingled waste reported in the form. Compliance is not affected.

MRc3: Materials Reuse — **Not Attempted**
POSSIBLE POINTS: 2

MRc4: Recycled Content — **Awarded: 2**
POSSIBLE POINTS: 2
ATTEMPTED: 2, DENIED: 0, PENDING: 0, AWARDED: 2

06/05/2018 DESIGN AND CONSTRUCTION FINAL REVIEW

The additional documentation confirms that 24.29% of the total building materials content, by value, has been manufactured using recycled materials.

02/16/2016 DESIGN AND CONSTRUCTION PRELIMINARY REVIEW

The LEED Form states that 48.29% of the total building materials content, by value, has been manufactured using recycled materials. However, to demonstrate compliance, the following must be addressed.

TECHNICAL ADVICE

1. The Actual Materials Cost for Divisions 3-10, 31, and 32 listed in the LEED Materials and Resource Calculator ($1,212,208.57) is greater than the total materials cost ($1,042,972.59), and therefore, it appears that the Actual Materials Costs does not include the costs of all materials associated with this LEED project. The Actual Materials Cost must include the cost of all materials that are part of any specifications within Divisions 3-10, 31, and 32 (for example, including any adhesives, sealants, coatings, etc., that are contained within those specification sections). Provide a narrative clarifying the project scope of work and the Actual Materials Cost. Revise the Actual Materials Cost to accurately reflect the true total cost of all materials used within the LEED project (including those materials that do not contribute toward compliance).

2. The provided manufacturer’s documentation for the CLS products does not support the recycled content values reported in the Calculator for these products. Provide additional manufacturer's documentation confirming the recycled content values of the CLS products and revise the Calculator to ensure that the recycled content values have been reported accurately and consistently throughout the submittal. Note that it appears that the manufacturer's documentation lists the CLS products by concrete mix numbers (CM 76, CM5412, etc.), whereas the Calculator lists the CLS products by the individual components of these mixes (Aggregate, Cement, etc.). Therefore, it is unclear how the recycled content values reported in the Calculator have been determined.

3. The recycled content for Kretschmar & Smith Masonry has been entered incorrectly in the calculations (50% post-consumer and 50% pre-consumer). The manufacturer’s documentation indicates a total recycled content (10%) that is

broken down to 50% post-consumer and 50% pre-consumer. Therefore, the product is 5% post-consumer and 5% pre-consumer. Revise the calculations using the correct recycled content for Kretschmar & Smith Masonry.

4. Southcoast Acoustical Interiors Ceiling Tile has been reported with a recycled content of 44% post-consumer and 4% pre-consumer, whereas the provided manufacturer's documentation indicates that this material is composed of 4% post-consumer and 44% pre-consumer material. Verify the values for pre-consumer or post-consumer recycled content for all products and revise the Calculator, as necessary.

5. Qualifying manufacturers' documentation has not been provided for some products, though the "Cutsheet Provided" box in the Calculator has been checked for these products, including the BAS Engineering products (Beams, Metal Decking, Pipe Stainless Steel, Diamond Plate, Flat Bar/ Round Bar, Stainless Steel Bollards, Flat Bar Channel (all instances), Beams & Columns (all instances), HR Sheet Metal, and Concrete Filled Material); the OCP products (Metal Framing, Dupont Tyvek, USG, CEMCO, Westpack-Red Dot All-Purpose, Westpack-Green Dot Topping, 5/8" Gypsum Board, and 1" Gold Board); Southcoast Acoustical Interiors Wall Panel; the Multiscope products (Panels & Doors and Plastic Lockers); the L2 Specialties products (Corner Guards, Partitions, and Bicycle Racks); Alcal Wall Insulation and Board Insulation; USS Cal Tubular Skylights; Tycho Services products (Tiles, Grout, and Adhesives); Southcoast Acoustical Interiors Ceiling Grid and Metal Ceiling Tile; and DHK Stone Countertops. When these products are excluded, manufacturers' documentation has not been provided for at least 20% of the compliant materials. Note that the material cover sheets filled out by contractors, subcontractors, and/or distributors, are not sufficient to verify the recycled content. Documentation from the manufacturer, such as cut sheets or manufacturers' letters, must be provided for at least 20% of the compliant materials (by value) to support the recycled content values claimed in the Calculator. Revise the Calculator to ensure that the Calculator checkboxes are accurate. Note that only manufacturer's documentation for materials which are compliant with the requirements of this credit can contribute towards meeting the minimum 20% threshold. Provide additional manufacturer's documentation for at least 20% of the compliant materials, by value.

MRc5: Regional Materials — Awarded: 1

POSSIBLE POINTS: 2
ATTEMPTED: 1, DENIED: 0, PENDING: 0, AWARDED: 1

06/05/2018 DESIGN AND CONSTRUCTION FINAL REVIEW

The additional documentation confirms that 13.11% of the total building materials value includes materials and products that have been manufactured and extracted within 500 miles of the project site.

02/15/2016 DESIGN AND CONSTRUCTION PRELIMINARY REVIEW

The LEED Form states that 14.1% of the total building materials value includes materials and products that 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 Actual Materials Cost for Divisions 3-10, 31, and 32 listed in the LEED Materials and Resource Calculator ($1,212,208.57) is greater than the total materials cost ($1,042,972.59), and therefore, it appears that the Actual Materials Costs does not include the costs of all materials associated with this LEED project. The Actual Materials Cost must include the cost of all materials that are part of any specifications within Divisions 3-10, 31, and 32 (for example, including any adhesives, sealants, coatings, etc., that are contained within those specification sections). Provide a narrative clarifying the project scope of work and the Actual Materials Cost. Revise the Actual Materials Cost to accurately reflect the true total cost of all materials used within the LEED project (including those materials that do not contribute toward compliance).

2. The Calculator indicates that several products have the same manufacture and harvest/extraction distance (the CLS products (Select Seal Plus, Black Tintura Stain, Gray Tintura Stain, and Tintura Base); Alcal Board Insulation; and DHK Countertops), and manufacturers' documentation has not been provided to verify the identical manufacturing/extraction distances. It is not clear that the materials/products would be manufactured and extracted from the same location. Note that 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's 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 Calculator, as necessary.

3. No extraction distance has been listed in the Calculator for OCP Metal Framing, and the provided manufacturer's documentation does not verify the extraction distance. Not entering the extraction distance implies that the product was extracted on site. For any products where the manufacture/extraction distance is unknown or outside of compliance, a value of 501 miles must be indicated. Provide additional manufacturer's documentation to verify the extraction distance for this product and revise the Calculator.

4. The Calculator indicates that 100% of OCP Dens Glass has been manufactured and extracted within 500 miles of the project site, whereas the provided manufacturer's documentation states that 94% of this product has been manufactured/extracted within 500 miles. Additionally, the Calculator indicates that 100% of OCP 5/8" Gypsum Board has been manufactured and extracted within 500 miles of the project site, whereas the provided manufacturer's

documentation states that 95% has been manufactured/extracted within 500 miles. Revise the Calculator to indicate the correct percentage of regionally manufactured/extracted material for these products.

MRc6: Rapidly Renewable Materials — **Not Attempted**
POSSIBLE POINTS: 1

MRc7: Certified Wood — **Not Attempted**
POSSIBLE POINTS: 1

Indoor Environmental Quality

IEQp1: Minimum Indoor Air Quality Performance — Awarded

06/06/2018 DESIGN AND CONSTRUCTION FINAL REVIEW

The additional documentation states that the breathing zone outdoor air intake ventilation rates for all occupied spaces meet the minimum established in ASHRAE Standard 62.1-2007.

It is noted that the revised ventilation calculations indicate a peak occupancy of 98 people (with diversity), whereas PIf3: Occupant and Usage Data and the supplemental occupancy calculations indicate that the total building users is 158 people. The peak occupancy (with diversity) must be reported consistently across all forms, prerequisites, and credits. For future projects, ensure that the peak occupancy is consistent across all forms, prerequisites, and credits. Additionally, confirm the occupancy for each zone and ensure that all occupiable spaces have been reflected with the actual occupancy in the ventilation calculations. Note that the ASHRAE default occupancy values should not be used when the expected occupancy is known or can be estimated (e.g., furniture plans). Finally, due to the project location (mild climate with low heating energy consumption), note that an Ez of 1.0 may be used for interior zones since the supply air temperature entering the space will likely be cooler than the space temperature or any warm supply air temperature entering any zone will be less than 15 degrees-F (8 degrees-C) of the space heating set point temperature. When recalculated to address these issues, the breathing zone outdoor air intake ventilation rates for all occupied spaces meet the minimum established in ASHRAE Standard 62.1-2007. The documentation demonstrates compliance.

02/16/2016 DESIGN AND CONSTRUCTION PRELIMINARY REVIEW

The LEED Form states that the project is mechanically ventilated and that the ventilation systems have met the minimum requirements of ASHRAE Standard 62.1-2007. However, to demonstrate compliance, the following must be addressed.

TECHNICAL ADVICE

1. The ventilation calculations indicate a peak occupancy of 89 people; however, PIf3: Occupant and Usage Data indicates that the total building users is 121 people. The peak occupancy must be reported consistently across all forms, prerequisites, and credits. Confirm the appropriate peak occupancy for the building and update the peak occupancy and/or the diversity, as needed, so that the peak occupancy is consistent across all forms, prerequisites, and credits. Provide a detailed narrative, as necessary, describing any difference in occupant values. Note that the ASHRAE default occupancy values should not be used when the expected occupancy is known or can be estimated (e.g., furniture plans).

2. The design system primary supply airflow (Vpsd) indicated for the multiple zone system in the ventilation calculations appears inconsistent with the design supply air volume for each ventilation system in the actual design. For example, the calculations for AC-2 indicate a Vpsd value of 8,575 cfm; however, the mechanical schedules provided for PIf4: Schedule and Overview Documents indicate that the Vpsd for this system must be 6,000 cfm. It appears that a Vdzd value of 2,900 cfm has been reflected for VAV 2-1-5; however, the mechanical schedules indicate that the peak supply cfm for VAV 2-1-5 is 400 cfm. Revise the ventilation calculations, as needed, so the Vdzd values are consistent with the actual design for each ventilation zone.

3. The ventilation calculations indicate that the percentage of design airflow at the condition analyzed (Ds) value has been modeled as 100%; however, the Ds is typically much lower for systems that include VAV terminal units in heating mode, which is typically the worst-case condition. For heating mode, the Ds can be determined for each zone by dividing the minimum VAV terminal primary air volume during heating mode by the peak VAV terminal primary air volume during cooling mode. For example, the Ds for VAV 1-1-1 should be approximately 30% based on the minimum VAV terminal primary air volume of 80 cfm during heating mode by the peak VAV terminal primary air volume of 270 cfm during cooling mode, as indicated in the mechanical schedules provided for PIf4: Schedule and Overview Documents. Note that, for some zones that will not require heating, the worst case condition may be considered cooling part load conditions, at peak occupancy, and the Ds must be determined for each zone by dividing the minimum anticipated VAV terminal primary air volume by the peak VAV terminal primary air volume. Revise the ventilation calculations, as needed, so the value for Ds is consistent with the actual design.

4. The ventilation calculations have been performed with a Zone Air Distribution Effectiveness (Ez) value of 1.0; however, the mechanical schedules, provided for PIf4: Schedule and Overview Documents, appear to indicate that the leaving air temperature (LAT) for some of the VAV terminal units is greater than 15 degrees-F (8 degrees-C) of the space heating set point temperature. For example, applying the sensible heat equation for standard air (heat capacity (Btuh) = 1.08 * supply air volume (cfm) * temperature rise across the heating coil (degrees-F)) to the design parameters indicated for VAV 1-1-1 in the mechanical schedules, it appears that the maximum supply air temperature entering the space is 103 degrees-F. Provide revised ventilation calculations using an Ez of 0.8 for each ventilation zone or provide additional information to justify the parameters utilized.

IEQp2: Environmental Tobacco Smoke (ETS) Control — Awarded

02/16/2016 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

06/05/2018 DESIGN AND CONSTRUCTION FINAL REVIEW

The additional documentation demonstrates compliance.

02/16/2016 DESIGN AND CONSTRUCTION PRELIMINARY REVIEW

The LEED Form states that the project is mechanically ventilated, that a CO2 sensor has been installed within each densely occupied space, and that these devices are programmed to generate an alarm when the conditions vary by 10% or more from the design value. However, to demonstrate compliance, the following must be addressed.

TECHNICAL ADVICE

1. The Ventilation Rate Procedure calculations provided in EQp1: Minimum Indoor Air Quality Performance and the floor plans provided for PIf4: Schedule and Overview Documents indicate that there are additional spaces within the project qualifying as densely occupied that have not been listed in the form (including Conference Rooms 102, 215, and 219), and the mechanical drawings indicate that CO2 sensors have not been provided for these spaces. Provide documentation, including a revised form and mechanical drawings, confirming that all spaces with a design occupant density greater than or equal to 25 people per 1,000 square feet are monitored by CO2 sensors.

It is noted that the form indicates that the project does not include non-densely occupied spaces, whereas information provided throughout the submittal indicates that the project includes many non-densely occupied spaces. For future projects, note that densely occupied spaces are those areas with a design occupant density greater than or equal to 25 people per 1,000 square feet. In this case, the mechanical schedules confirm that all outside air inlets of the packaged rooftop units are equipped with outdoor airflow measurement devices. Compliance is not affected by this issue.

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

06/05/2018 DESIGN AND CONSTRUCTION FINAL REVIEW

The additional documentation demonstrates compliance.

02/16/2016 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. However, to demonstrate compliance, the following must be addressed.

TECHNICAL ADVICE

1. Provide a revised form narrative describing the methods by which absorptive materials (installed or stored on site) were protected from moisture damage during the construction and pre-occupancy phases.

2. It appears that the provided Construction IAQ Management Plan is a photocopy of the SMACNA IAQ Guidelines for Occupied Buildings under Construction, 1995, Chapter 3. Provide the Construction IAQ Management Plan for this project, including the IAQ management practices implemented during construction and pre-occupancy phases. Ensure that the plan addresses all five of the SMACNA IAQ Guidelines Design Approaches (HVAC Protection, Source Control, Pathway Interruption, Housekeeping, and Scheduling).

IEQc3.2: Construction IAQ Management Plan-Before Occupancy — Awarded: 1

POSSIBLE POINTS: 1

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

06/07/2018 DESIGN AND CONSTRUCTION FINAL REVIEW

The requested clarifications for PIf4: Schedule and Overview Documents and the additional documentation demonstrate compliance.

02/16/2016 DESIGN AND CONSTRUCTION PRELIMINARY REVIEW

The LEED Form states that an Indoor Air Quality (IAQ) Management Plan was developed and implemented and that the project complies with Option 1, Path 1: Pre-Occupancy Flush-Out. However, to demonstrate compliance, the following must be addressed.

TECHNICAL ADVICE

1. The documentation indicates that the flush-out took place in December 2014, whereas the expected project occupancy date is listed as September 15, 2014 in PIf4: Schedule and Overview Documents. This credit requires that the testing is complete and compliant prior to occupancy. Refer to the comments within PIf4 and revise the form and supporting documentation, as necessary. Confirm the date of occupancy and the dates of the testing.

2. Based on the floor plans provided for PIf4, it is unclear whether all finishes within Dispatch Suite 240 (including Dispatch 242, 243, 244, 246, 247, 248, 249, and 250) were installed prior to the flush-out. The LEED BD+C v2009 Reference Guide states that the flush-out must begin after construction and the installation of all finishes (including furniture and furnishings). Provide a clarification narrative to confirm that all finishes (including furniture and furnishings) within the project building were installed prior to the flush-out.

3. The mechanical schedules provided for PIf4 indicate that the outdoor airflow delivery rates reported in the supplemental narrative are based on approximately 100% of the supply airflow rates for all packaged rooftop units (including AC-1, AC-2, AC-3, and AC-4), whereas the supplemental narrative states that these units are operated in economizer mode during the flush-out. Therefore, it is unclear whether the outdoor airflow delivery rates during the flush-out have been accurately reported. It is consequently unclear whether a total air volume of 14,000 cubic feet of outdoor air per square foot of floor area has been delivered during the flush-out. Provide a narrative to confirm the outdoor airflow delivery rates during the flush-out. Confirm that a total air volume of 14,000 cubic feet of outdoor air per square foot of floor area has been delivered prior to occupancy.

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

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

06/05/2018 DESIGN AND CONSTRUCTION FINAL REVIEW

The additional documentation demonstrates compliance.

02/16/2016 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. However, to demonstrate compliance, the following must be addressed.

TECHNICAL ADVICE

1. It is unclear whether all adhesives and sealants used on the inside of the weatherproofing system and applied on site have been included in the table. For example, the finish plans provided for PIf4: Schedule and Overview Documents indicate that carpets have been installed in this project, but a carpet adhesive has not been included in the documentation for this credit. Note that, though Forbo C930 has been listed as an Indoor Carpet Adhesive in the form, the manufacturer's documentation provided in EQc4.3: Low-Emitting Materials - Flooring Systems indicates that this product is a vinyl flooring adhesive. Also note that, while documentation has been provided for Tandus Flooring C-XL Adhesive in EQc4.3, it is unclear if this adhesive has been used on site, as the product has not been listed in the form for this credit or the form for EQc4.3. Additionally, manufacturer's documentation has been provided for Prism SureColor Grout, but this product has not been listed in the form. Refer to the referenced standards of this credit and confirm whether the comprehensive list of adhesives and sealants, as defined by the referenced standards, used on the inside of the weatherproofing system and applied on site have been included in the table. The following are common products included in this credit: flooring adhesives, subfloor adhesives, drywall and panel adhesives, wall-base adhesives, multipurpose construction adhesives, structural glazing and wood adhesives, substrate adhesives, tile adhesives, contact adhesives, architectural sealants (including grouts, and polyurethane or plastic foams), duct sealants, plumbing adhesives and sealants, wall-covering adhesives, fiberglass panel adhesives, welding adhesives, and aerosol adhesives. Refer to the South Coast Air Quality Management District (SCAQMD) South Coast Rule 1168 (effective date of July 1, 2005 and rule amendment date of January 7, 2005) for the complete list and definitions. Consult SCAQMD and product manufacturers for assistance in properly classifying products. Revise the form, provide additional manufacturer's documentation, and include a narrative to explain any special circumstances, if necessary. Ensure that all applicable products have been included in the documentation.

It is noted that the manufacturers' documentation for Experius 300 Base Adhesive and Forbo C930 has been provided in EQc4.3. For future projects, ensure that manufacturer's documentation has been provided within the credit when the form indicates that the source of VOC data has been provided. In this case, the documentation provided in EQc4.3 verifies that the products are compliant with the VOC limits of the referenced standards. Compliance is not affected by this issue.

IEQc4.2: Low-Emitting Materials-Paints and Coatings — Awarded: 1

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

06/05/2018 DESIGN AND CONSTRUCTION FINAL REVIEW

The additional documentation demonstrates compliance.

02/16/2016 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. However, to demonstrate compliance, the following must be addressed.

TECHNICAL ADVICE

1. Qualifying manufacturer's documentation has not been provided for any of the products listed in the form, though the "Source of VOC Data Provided" box in the form has been checked for all products. Note that material cover sheets filled out by contractors, subcontractors, and/or distributors, are not sufficient to verify the VOC content. Documentation from the manufacturer, such as cut sheets or manufacturers' letters, must be provided for at least 20% of the materials (by item) to support the VOC content claimed in the form. Provide manufacturers' documentation for at least 20% of the materials.

2. The LEED Materials and Resource Calculator provided for MRc4: Recycled Content includes CLS products (Select Seal Plus, BlackTintura Stain, Gray Tintura Stain, Tintura Base), which have been reported as concrete sealers in the Calculator, yet these products have not been listed in the form for this credit. Note that concrete, wood, and bamboo floor finishes, such as sealer, stain, and finish, must be included in the documentation for both EQc4.2 and EQc4.3: Low-Emitting Materials - Paints and Coatings. Provide a revised form, which includes each of the interior paints and coatings used on the inside of the weatherproofing system and applied on site. If the revised form does not include the products listed above, provide a narrative to confirm that they have not been utilized.

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

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

06/07/2018 DESIGN AND CONSTRUCTION FINAL REVIEW

The requested clarifications for EQc4.1: Low-Emitting Materials - Adhesives and Sealants and the additional documentation demonstrate compliance.

02/16/2016 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. However, to demonstrate compliance, the following must be addressed.

TECHNICAL ADVICE

1. EQc4.1: Low-Emitting Materials - Adhesives and Sealants is pending clarifications. Therefore, it is unclear whether the adhesives comply with the requirements of EQc4.1. Provide the requested clarifications for EQc4.1 and resubmit this credit.

2. The LEED Materials and Resource Calculator provided for MRc4: Recycled Content includes CLS products (Select Seal Plus, BlackTintura Stain, Gray Tintura Stain, Tintura Base), which have been reported as concrete sealers in the Calculator, yet these products have not been listed in the form for this credit. Note that concrete, wood, and bamboo floor finishes, such as sealer, stain, and finish, must be included in the documentation for both EQc4.2: Low-Emitting Materials - Paints and Coatings and in this credit. Provide a revised form, which includes each of the interior paints and coatings applied on site. If the revised form does not include the products listed above, provide a narrative to confirm that they have not been utilized inside of the weatherproofing system.

3. It is does not appear that all interior flooring materials and finishes applied on site have been included, as required. The finish plans provided in PIf4: Schedule and Overview Documents indicate that carpets are installed in this project, but no carpet product has been listed in the form. Additionally, manufacturer's documentation has been provided for Tandus Carpeting, but no Tandus product has been listed in the form. Therefore, it is unclear whether the Tandus product is the carpet product utilized in the project. Confirm that all applicable interior flooring materials and finishes (carpet, carpet pad, hard surface flooring, wall base, floor finishes, and tile setting adhesives and grouts) within the scope of work are listed in the tables. Revise the form and provide additional manufacturer's documentation and a narrative, if necessary.

IEQc4.4: Low-Emitting Materials-Composite Wood and Agrifiber Products Awarded: 1

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

06/05/2018 DESIGN AND CONSTRUCTION FINAL REVIEW

The additional documentation demonstrates compliance.

02/16/2016 DESIGN AND CONSTRUCTION PRELIMINARY REVIEW

The LEED Form states that all composite wood and agrifiber products used on the interior of the building and all laminating adhesives used to fabricate on-site and shop-applied composite wood and agrifiber assemblies contain no added urea-formaldehyde resins. However, to demonstrate compliance, the following must be addressed.

TECHNICAL ADVICE

1. The finish plans provided for PIf4: Schedule and Overview Documents indicate that plastic laminate materials are used in the office area of the project, but laminating adhesives have not been included in the table. Revise the form to include all laminating adhesives used to fabricate on-site and shop-applied composite wood and agrifiber assemblies. Provide additional manufacturer's documentation and a narrative, if necessary.

2. The documentation within MRc7: Certified Wood indicates that Southwest Door Fire Rated Mineral Core Doors and Particle Core Doors are used in the project but have not been included in the list for this credit. Confirm whether all composite wood, agrifiber, and laminating adhesives used on the project contain no added urea-formaldehyde. Provide additional manufacturer's documentation and a narrative, if necessary.

IEQc5: Indoor Chemical and Pollutant Source Control — Awarded: 1

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

06/05/2018 DESIGN AND CONSTRUCTION FINAL REVIEW

The additional documentation demonstrates compliance.

02/16/2016 DESIGN AND CONSTRUCTION PRELIMINARY REVIEW

The LEED Form states that the project has been designed to minimize building occupant exposure to particulates and chemical pollutants. The project has selected the Licensed Professional Exemption (LPE). However, to demonstrate compliance, the following must be addressed.

TECHNICAL ADVICE

1. There appears to be an exterior entry that does not have an entryway system (entry from the Patio into Training 131), and it is unclear whether this entryway is regularly used/available. Provide a revised plan highlighting all regularly used/available building entries and entryway systems, as well as indicating any doorways that would be exempt from the requirements of this credit (such as emergency exits or non-regularly used/available building entries). Confirm that all applicable entryways have the required entryway systems installed, and demonstrate that all of the installed building entryway systems are at least 10 feet long in the primary direction of travel.

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

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

06/05/2018 DESIGN AND CONSTRUCTION FINAL REVIEW

The additional documentation confirms that lighting controls have been provided for 94.05% of building occupants and 100% of shared multi-occupant spaces to enable adjustments that meet occupant needs and preferences.

02/16/2016 DESIGN AND CONSTRUCTION PRELIMINARY REVIEW

The LEED Form states that lighting controls have been provided for 143.75% of building occupants and 43.75% of shared multi-occupant spaces to enable adjustments that meet occupant needs and preferences. However, to demonstrate compliance, the following must be addressed.

TECHNICAL ADVICE

1. It is unclear whether the number of individual workstations and the number of shared multi-occupant spaces have been reported correctly.

a. The form indicates that the number of individual workstations (32) is less than the number of individual workstations with controls (46), resulting in a percentage of workspaces with controls that is greater than 100%. Note that each workstation within the open plan office spaces must be counted as one individual workstation, and the percentage of individual workstations with lighting controls cannot be greater than 100%.

b. The form indicates that one or more open office area(s) has been incorrectly classified as a shared multi-occupant

space. Note that in individual occupant spaces, occupants perform distinct tasks from one another. Examples are private offices and open office areas with multiple workers. Shared multi-occupant spaces include conference rooms, classrooms, and other indoor spaces used as places of congregation.

c. Break rooms have been incorrectly included in the form as shared multi-occupant spaces. Note that break rooms are non-regularly occupied areas which are not included in this credit; therefore, they must be excluded from the form.

Revise the form to confirm that the number of individual workstations and the number of shared multi-occupant spaces have been reported accurately. Ensure that all spaces are appropriately classified and that the percentage of workstations with controls is not greater than 100%.

2. This credit requires that 100% of the shared multi-occupant spaces have been provided with lighting controls that enable adjustments that meet occupant needs and preferences, whereas the form indicates that only 43.75% of the shared multi-occupant spaces have been provided with lighting controls. Revise the form and documentation to demonstrate that all shared multi-occupant spaces have been provided with adequate controls (such as dimming or multi-level lighting) to provide functionality to suit the activities within. Note that occupancy sensors alone do not qualify for compliance in shared multi-occupant spaces.

3. The form and the lighting drawings indicate that the sole lighting control provided for the Open Plan Workstations and the Reception Station are occupancy sensors. Note that occupancy sensors alone do not meet the credit requirements, as they do not provide functionality to allow the lighting to be adjusted by the individual workstation occupant to suit specific task needs. Revise the form, as necessary, to accurately represent the spaces that have been provided with the required individual lighting controls, such as task lighting. Note the task lighting must be provided as part of the scope of work of the project; providing receptacles only, for the future plug-in of task lighting, is not sufficient. Also note that individual controls must be provided for each individual workstation; a single control provided for an entire open plan area does not qualify as an individual occupant control.

IEQc6.2: Controllability of Systems- Thermal Comfort — Awarded: 1

POSSIBLE POINTS: 1

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

06/05/2018 DESIGN AND CONSTRUCTION FINAL REVIEW

The additional documentation confirms that thermal controls have been provided for 51.19% of building occupants and 100% of shared multi-occupant spaces to enable adjustments that meet occupant needs and preferences.

02/16/2016 DESIGN AND CONSTRUCTION PRELIMINARY REVIEW

The LEED Form states that thermal controls have been provided for 68.75% of building occupants and 100% of shared multi-occupant spaces to enable adjustments that meet occupant needs and preferences. However, to demonstrate compliance, the following must be addressed.

TECHNICAL ADVICE

1. It is unclear whether the number of individual workstations and the number of shared multi-occupant spaces have been reported correctly.

a. The form indicates that one or more open office area(s) has been incorrectly classified as a shared multi-occupant space. Note that in individual occupant spaces, occupants perform distinct tasks from one another. Examples are private offices and open office areas with multiple workers. Shared multi-occupant spaces include conference rooms, classrooms, and other indoor spaces used as places of congregation.

b. The provided floor plans indicate that the project includes only one training room, whereas the form indicates that two training rooms have been provided with thermal controls. It appears that Training Storage 132 may have been counted as a training room. Additionally, break rooms have been incorrectly included in the form as shared multi-occupant spaces. Note that storage and break rooms are non-regularly occupied areas which are not included in this credit; therefore, they must be excluded from the form.

Revise the form to confirm that the number of individual workstations and the number of shared multi-occupant spaces have been reported accurately. Ensure that all spaces are appropriately classified and that the number of individual workstations and the number of shared multi-occupant spaces are consistent with EQc6.1: Controllability of Systems - Lighting.

2. The form and the mechanical plans indicate that there is only one thermal control provided for each of the Open Office Areas. Note that a group of individual workstations using a single thermal control does not meet the requirements of this credit. Revise the form, as necessary, to confirm that the required thermal controls are provided for at least 50% of the individual workstations.

It is noted that mechanical plans showing the location of the thermal controls have not been provided for this credit, as required. For future projects, ensure that the requested documentation for each credit has been provided within the credit. In this case, the mechanical plans provided in PIf4: Schedule and Overview Documents confirm the locations of the controls. Compliance is not affected by this issue.

IEQc7.1: Thermal Comfort-Design — Awarded: 1

POSSIBLE POINTS: 1

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

02/11/2016 DESIGN AND CONSTRUCTION PRELIMINARY REVIEW

The LEED Form states that the mechanically ventilated and mechanically conditioned project space is in compliance with ASHRAE Standard 55-2004.

IEQc7.2: Thermal Comfort-Verification — Awarded: 1

POSSIBLE POINTS: 1

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

06/05/2018 DESIGN AND CONSTRUCTION FINAL REVIEW

The requested clarifications for PIf4: Schedule and Overview Documents and the additional documentation demonstrate compliance.

02/11/2016 DESIGN AND CONSTRUCTION PRELIMINARY REVIEW

The LEED Form states that a permanent monitoring system will be installed and a thermal comfort survey of building occupants will be conducted between 6 and 18 months after occupancy. However, to demonstrate compliance, the following must be addressed.

TECHNICAL ADVICE

1. PIf4: Schedule and Overview Documents is pending clarifications to the date of occupancy. Provide the requested clarifications for PIf4 and revise this form, as necessary, to ensure that the date of occupancy has been reported accurately and consistently throughout the submittal. Confirm that the survey will be initially administered between 6 and 18 months after the date of occupancy.

IEQc8.1: Daylight and Views-Daylight — Not Attempted

POSSIBLE POINTS: 1

IEQc8.2: Daylight and Views-Views — Not Attempted

POSSIBLE POINTS: 1

Innovation in Design

IDc1.1: Green Cleaning — Awarded: 1

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

06/07/2018 DESIGN AND CONSTRUCTION FINAL REVIEW

This credit was submitted for initial review during the Final Review. The LEED Form states that the project has developed and implemented a Green Housekeeping program. To receive an Innovation in Design point, the project team must demonstrate compliance with LEED-EB O+M v2009 EQp3: Green Cleaning Policy. The Green Cleaning Policy has been provided.

It is noted that the policy does not include provisions for collecting occupant feedback. For future projects, ensure that the policy includes provisions for collecting occupant feedback and continuous improvement to evaluate new technologies, procedures, and processes. Note that a sample policy template is available from the Resources tab of LEED-EB O+M v2009 EQp3 in the LEED Credit Library (http://www.usgbc.org/resources/ieqp3-green-cleaning-policy-template) and may be helpful as a reference in documenting the policy. If using this template for future projects, ensure that it is tailored as appropriate to reflect the circumstances of operations in the project building. In this case, the policy follows the LEED-EB O+M Policy Model and demonstrates the development of a comprehensive and quantitative green cleaning program. Compliance is not affected.

IDc1.1: Innovation in Design — Not Attempted

POSSIBLE POINTS: 1

IDc1.2: Green Building Education — Awarded: 1

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

06/07/2018 DESIGN AND CONSTRUCTION FINAL REVIEW

This credit was submitted for initial review during the Final 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 signage program and a case study complies with the Reference Guide requirements.

IDc1.2: Innovation in Design — Not Attempted

POSSIBLE POINTS: 1

IDc1.3: Innovation in Design — Not Attempted

POSSIBLE POINTS: 1

IDc1.3: Innovation in Design — Not Attempted

POSSIBLE POINTS: 1

IDc1.4: Low Mercury — Awarded: 1

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

06/07/2018 DESIGN AND CONSTRUCTION FINAL REVIEW

This credit was submitted for initial review during the Final 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 signage program and a case study complies with the Reference Guide requirements.

IDc1.4: Innovation in Design — Not Attempted

POSSIBLE POINTS: 1

IDc1.5: EAc6 — Awarded: 1

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

06/06/2018 DESIGN AND CONSTRUCTION FINAL REVIEW

This credit was submitted for initial review during the Final Review. The LEED Form states that the project achieves

exemplary performance for EAc6: Green Power. The requirement for exemplary performance is 70%, and the project has documented 70.08%.

IDc1.5: Innovation in Design — **Not Attempted**
POSSIBLE POINTS: 1

IDc2: LEED® Accredited Professional — **Awarded: 1**
POSSIBLE POINTS: 1
ATTEMPTED: 1, DENIED: 0, PENDING: 0, AWARDED: 1

02/11/2016 DESIGN AND CONSTRUCTION PRELIMINARY REVIEW

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

Regional priority

SSc5.2: Site Development-Maximize Open Space
POSSIBLE POINTS:

WEc2: Innovative Wastewater Technologies
POSSIBLE POINTS:

WEc3: Water Use Reduction
POSSIBLE POINTS:

EAc2: On-Site Renewable Energy
POSSIBLE POINTS:

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

IEQc8.1: Daylight and Views-Daylight
POSSIBLE POINTS:

TOTAL	**106**	**55**	**2**	**0**	**54**

REVIEW SUMMARY

Review	SUBMITTED	RETURNED	POINTS: SUBMITTED	DENIED	PENDING	AWARDED
Design and Construction Preliminary	**12/09/2015**	**02/17/2016**	**51**	**0**	**29**	**22**

Credit	STATUS	TYPE	POINTS: ATTEMPTED	DENIED	PENDING	AWARDED
PIf1: Minimum Program Requirements	**Approved**		**0**	**0**	**0**	**0**
PIf2: Project Summary Details	**Approved**		**0**	**0**	**0**	**0**
PIf3: Occupant and Usage Data	**Not Approved**		**0**	**0**	**0**	**0**
PIf4: Schedule and Overview Documents	**Not 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	**5**	**0**	**0**	**5**
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	**Pending**	Design	**3**	**0**	**3**	**0**
SSc6.2: Stormwater Design-Quality Control	**Awarded**	Design	**1**	**0**	**0**	**1**
SSc7.2: Heat Island Effect-Roof	**Awarded**	Design	**1**	**0**	**0**	**1**
WEp1: Water Use Reduction-20% Reduction	**Pending**	Design	**0**	**0**	**0**	**0**
WEc1: Water Efficient Landscaping	**Awarded**	Design	**2**	**0**	**0**	**2**
WEc3: Water Use Reduction	**Pending**	Design	**5**	**0**	**5**	**0**
EAp1: Fundamental Commissioning of the Building Energy Systems	**Pending**	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	**2**	**0**	**2**	**0**
EAc4: Enhanced Refrigerant Management	**Pending**	Design	**2**	**0**	**2**	**0**
EAc5: Measurement and Verification	**Awarded**	Construction	**1**	**0**	**0**	**1**
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	**Pending**	Construction	**2**	**0**	**2**	**0**
MRc5: Regional Materials	**Pending**	Construction	**1**	**0**	**1**	**0**
IEQp1: Minimum Indoor Air Quality Performance	**Pending**	Design	**0**	**0**	**0**	**0**
IEQp2: Environmental Tobacco Smoke (ETS) Control	**Awarded**	Design	**0**	**0**	**0**	**0**
IEQc1: Outdoor Air Delivery Monitoring	**Pending**	Design	**1**	**0**	**1**	**0**
IEQc3.1: Construction IAQ Management Plan-During Construction	**Pending**	Construction	**1**	**0**	**1**	**0**
IEQc3.2: Construction IAQ Management Plan-Before Occupancy	**Pending**	Construction	**1**	**0**	**1**	**0**

IEQc4.1: Low-Emitting Materials-Adhesives and Sealants	**Pending**	Construction	**1**	**0**	**1**	**0**
IEQc4.2: Low-Emitting Materials-Paints and Coatings	**Pending**	Construction	**1**	**0**	**1**	**0**
IEQc4.3: Low-Emitting Materials-Flooring Systems	**Pending**	Construction	**1**	**0**	**1**	**0**
IEQc4.4: Low-Emitting Materials-Composite Wood and Agrifiber Products	**Pending**	Construction	**1**	**0**	**1**	**0**
IEQc5: Indoor Chemical and Pollutant Source Control	**Pending**	Design	**1**	**0**	**1**	**0**
IEQc6.1: Controllability of Systems-Lighting	**Pending**	Design	**1**	**0**	**1**	**0**
IEQc6.2: Controllability of Systems-Thermal Comfort	**Pending**	Design	**1**	**0**	**1**	**0**
IEQc7.1: Thermal Comfort-Design	**Awarded**	Design	**1**	**0**	**0**	**1**
IEQc7.2: Thermal Comfort-Verification	**Pending**	Design	**1**	**0**	**1**	**0**
IDc2: LEED® Accredited Professional	**Awarded**	Construction	**1**	**0**	**0**	**1**

Design and Construction Final	05/29/2018	06/08/2018	33	2	0	32

Credit	STATUS	TYPE	POINTS: ATTEMPTED	DENIED	PENDING	AWARDED
PIf3: Occupant and Usage Data	Approved		0	0	0	0
PIf4: Schedule and Overview Documents	Approved		0	0	0	0
SSc4.3: Alternative Transportation-Low-Emitting and Fuel-Efficient Vehicles	Awarded	Design	3	0	0	3
WEp1: Water Use Reduction-20% Reduction	Awarded	Design	0	0	0	0
WEc3: Water Use Reduction	Awarded	Design	4	2	0	3
EAp1: Fundamental Commissioning of the Building Energy Systems	Awarded	Construction	0	0	0	0
EAp2: Minimum Energy Performance	Awarded	Design	0	0	0	0
EAp3: Fundamental Refrigerant Management	Awarded	Design	0	0	0	0
EAc1: Optimize Energy Performance	Awarded	Design	4	0	0	4
EAc4: Enhanced Refrigerant Management	Awarded	Design	2	0	0	2
EAc6: Green Power	Awarded	Construction	2	0	0	2
MRc4: Recycled Content	Awarded	Construction	2	0	0	2
MRc5: Regional Materials	Awarded	Construction	1	0	0	1
IEQp1: Minimum Indoor Air Quality Performance	Awarded	Design	0	0	0	0
IEQc1: Outdoor Air Delivery Monitoring	Awarded	Design	1	0	0	1
IEQc3.1: Construction IAQ Management Plan-During Construction	Awarded	Construction	1	0	0	1
IEQc3.2: Construction IAQ Management Plan-Before Occupancy	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
IEQc4.4: Low-Emitting Materials-Composite Wood and Agrifiber Products	Awarded	Construction	1	0	0	1
IEQc5: Indoor Chemical and Pollutant Source Control	Awarded	Design	1	0	0	1
IEQc6.1: Controllability of Systems-Lighting	Awarded	Design	1	0	0	1
IEQc6.2: Controllability of Systems-Thermal Comfort	Awarded	Design	1	0	0	1
IEQc7.2: Thermal Comfort-Verification	Awarded	Design	1	0	0	1
IDc1.1: Green Cleaning	Awarded	Design	1	0	0	1
IDc1.2: Green Building Education	Awarded	Design	1	0	0	1
IDc1.4: Low Mercury	Awarded	Design	1	0	0	1
IDc1.5: EAc6: Green Power	Awarded	Design	1	0	0	1