



Building with purpose

LEED Canada-CI 1.0 Certification Review Report

Purpose The Leadership in Energy and Environmental Design (LEED) Canada Rating Systems are promoted by the Canada Green Building Council to encourage and facilitate the development of more sustainable buildings. This project was evaluated according to LEED Canada-CI (for Commercial Interiors) system as per below.

Environmental Categories The report is organized into five environmental categories as defined by LEED including: Sustainable Sites, Water Efficiency, Energy and Atmosphere, Materials and Resources and Indoor Environmental Quality. The category of Innovation and Design Process is also included.

LEED Prerequisites Prerequisites must be achieved. These prerequisites should be addressed immediately by the team, as they are mandatory.

LEED Credits The environmental categories are subdivided into the established LEED credits, which are based on desired performance goals within each category. An assessment of whether the credit is anticipated to be achieved, achieved, pending, or denied is made and a narrative describes the basis for the assessment.

Explanation of Scoring

Achieved	27	The applicant has provided the mandatory documentation (completed Letter Template and associated information) that supports achievement of the credit requirements and associated points. Credits in this category are designated as 'CAA' for credit achievement anticipated. These points may be selected for a second audit if the applicant fails to successfully demonstrate achievement for one or more Preliminary LEED Review audited credits.
Pending	0	The applicant has not totally satisfied the mandatory documentation, or the documentation is incomplete and point assessment cannot yet be made. Audited points are also counted in this category and are designated by the word 'Audited' under the point score.
Denied	7	The applicant has applied for a point in a particular credit, but has misinterpreted the credit intent or cannot substantiate meeting the requirements. The project has not demonstrated achievement of these credits.

Rating Final Review Rating is Silver

Official LEED Scores: Certified: 21-26 Silver: 27-31 Gold: 32-41 Platinum: 42-57

Important Note: Certification Reviews are not to be considered precedents for future projects wishing to achieve LEED Canada certification. Only Credit Interpretation Requests can be considered precedents.

Project Number	12889
Project Name	Osgoode Hall Law School
Review Status	Final Review
First Review Date	July 8, 2014
Second Review Date	November 19, 2014
Final Review Date	April 9, 2015
Review Level Achieved	<i>Silver</i>

Status of Prerequisites	
Achieved	EAp1 - Fundamental Commissioning
Achieved	EAp2 - Minimum Energy Performance
Achieved	EAp3 - CFC Reduction in HVAC&R Equipment
Achieved	MRp1 - Storage & Collection of Recyclables
Achieved	EQp1 - Minimum IAQ Performance
Achieved	EQp2 - Environmental Tobacco Smoke (ETS) Control

Status of Category Points			
Achieved	Pending	Denied	Total
Certified 21-26 points Silver 27-31 points Gold 32-41 points Platinum 42-57 points			
4		1	5
Sustainable Sites (7)			
2		2	2
Water Efficiency (2)			
5		1	6
Energy & Atmosphere (12)			
6		2	8
Materials & Resources (14)			
8		1	9
Indoor Environmental Quality (17)			
2		2	4
Innovation & Design (5)			
27		7	34
Project Totals			

General Review Comment (a comment will only be provided if determined necessary)

1st REVIEW	
2nd REVIEW	
FINAL REVIEW	

Achieved
Pending
Denied

4	0	1	Sustainable Sites	7 Points
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Credit 1

Select a LEED Certified Building
Credit Not Attempted

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Credit 1

OR Options A - L (Maximum 3 Points)
Option A. Brownfield Redevelopment
Credit Not Attempted

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Credit 1

Option B. Stormwater Management, Rate and Quantity
Credit Not Attempted

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Credit 1

Option C. Stormwater Management, Treatment
Credit Not Attempted

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Credit 1

Option D. Heat Island Reduction, Non-Roof
Credit Not Attempted

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Credit 1

Option E. Heat Island Reduction, Roof
Credit Not Attempted

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Credit 1

Option F. Light Pollution Reduction
Credit Not Attempted

0.5			Credit 1
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CAA

Option G. Water Efficient Irrigation, Reduced Potable Water Consumption

1st REVIEW The applicant has submitted the signed LEED letter template declaring that the project does not use any potable water for irrigation. The applicant has also submitted a narrative describing the landscaping design and indicating that the project does not have a permanent irrigation system.

The project photos indicate that the site has a significant amount of turf grass. Please refer to CIR 323, which clarifies the requirements for projects with turf grass and no irrigation system, and provide the requested documentation.

Credit achievement pending for 0.5 points.

2nd REVIEW The applicant has submitted a clarification narrative, two photos of the installed grass, a copy of the landscape drawings, and a copy of CIR 323.

As per the submittal requirements of CIR 323, please provide a clear declaration from the building owner that no irrigation system is planned for installation after construction is complete.

Credit achievement pending for 0.5 points.

FINAL REVIEW The applicant has submitted a letter from the building owner declaring that no irrigation system will be installed after the completion of construction.

Credit achieved for 0.5 points.

0.5			Credit 1
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CAA

Option H. Water Efficient Irrigation, No Potable Water Use or No Irrigation

1st REVIEW As per SSc1 Option G.

Credit achievement pending for 0.5 points.

2nd REVIEW As per SSc1 Option G.

Credit achievement pending for 0.5 points.

FINAL REVIEW As per SSc1 Option G.

Credit achieved for 0.5 points.

			Credit 1
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Option I. Innovative Wastewater Technologies

Credit Not Attempted

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 Credit 1
Denied

Option J. Water Use Reduction, 20% or 30% Reduction

1st REVIEW The applicant has submitted the signed LEED letter template declaring that the building achieves a water use reduction of 34.15%.

The project info tab of the Excel LEED letter template indicates that the tenant occupies 100% of the base building. As per the design approach section of the LEED Canada-CI 1.0 Reference Guide, this credit applies only to those tenants who occupy 50% or less of the entire building.

Credit denied.

2nd REVIEW Credit denied.

FINAL REVIEW Credit denied.

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 Credit 1

Option K. Onsite Renewable Energy

Credit Not Attempted

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 Credit 1

Option L. Other Quantifiable Environmental Performance

Credit Not Attempted

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 Credit 2
CAA

Development Density and Community Connectivity

1st REVIEW The applicant has submitted the LEED letter template for Option 2: Community Connectivity, declaring that the project achieves the required development density and identifying amenities within 800 m of the project. The applicant has also provided a narrative, photographs, and site map showing the project location and nearby amenities.

The LEED letter template has not been signed and dated. Please submit the signed and dated LEED letter template.

Credit achievement pending.

2nd REVIEW The applicant has submitted the signed LEED letter template for Option 2: Community Connectivity, declaring that the project achieves the required development density and identifying amenities within 800 m of the project.

Credit achievement anticipated.

FINAL REVIEW Credit achieved.

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Credit 3.1
CAA

Alternative Transportation, Public Transportation Access

1st REVIEW The applicant has submitted the signed LEED letter template declaring that the project is located within 800 m of one future subway station, and within 400 m of three public bus lines. The applicant has also provided a narrative, an area map showing the building location, the bus stop locations, the subway station location, and a scale bar. Bus route maps and campus shuttle information was also provided.

Credit achievement anticipated.

2nd REVIEW Credit achievement anticipated.

FINAL REVIEW Credit achieved.

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Credit 3.2
CAA

Alternative Transportation, Bicycle Storage & Changing Rooms

1st REVIEW The applicant has submitted the signed LEED letter template declaring that there are 2 showers and 33 bicycle racks provided in the building for 183 staff and faculty FTE, 463 students and transients.

The LEED letter template has been modified by hand. For future projects, if the LEED letter template is updated, please provide a revised signed copy.

Credit achievement anticipated.

2nd REVIEW Credit achievement anticipated.

FINAL REVIEW Credit achieved.

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Credit 3.3

Alternative Transportation, Parking Availability

Credit Not Attempted

Achieved	Pending	Denied
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2	0	0	Water Efficiency
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2 Points

1			Credit 1.1
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CAA

Water Use Reduction, 20% Reduction

1st REVIEW The applicant has submitted the signed LEED letter template declaring that the project achieves a water use reduction of 34.15%.

The LEED letter template also indicates that the student FTEs have been omitted from the kitchen sink calculations. It appears as though students have access to the kitchen sinks on the 1st floor (room 127B) and 2nd floor (rooms 201 and 480). Please clarify, and if students have access to this kitchen, please revise the LEED letter template to account for the additional use.

This credit has been selected for audit. Please submit audit materials as per the LEED Canada-CI 1.0 Reference Guide.

Credit achievement pending.

2nd REVIEW The applicant has submitted the signed and revised LEED letter template declaring that the project achieves a water use reduction of 34.23%. The applicant has also submitted a clarification narrative and plumbing fixture shop drawings.

The narrative indicates that the LEED letter template was revised to account for the use of the kitchen sink fixtures by the 646 students; however, the revised LEED letter template does not account for student use of the kitchen sink fixtures. Accounting for student use of the two kitchen sink fixtures results in a water use reduction of 33.34%, so the credit achievement is unaffected.

Credit achievement anticipated.

FINAL REVIEW Credit achieved.

1			Credit 1.2
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CAA

Water Use Reduction, 30% Reduction

1st REVIEW As per WEc1.1.

Credit achievement pending.

2nd REVIEW As per WEc1.1.

Credit achievement anticipated.

FINAL REVIEW As per WEc1.1.

Credit achieved.

Achieved
Pending
Denied

5	0	1	Energy & Atmosphere	12 Points
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Achieved Prereq 1

Fundamental Commissioning

1st REVIEW The applicant has submitted the signed LEED letter template declaring that the fundamental commissioning activities have been completed. The applicant has also submitted a narrative describing the HVAC systems in the building.

Prerequisite achievement anticipated.

2nd REVIEW Prerequisite achievement anticipated.

FINAL REVIEW Prerequisite achieved.

Achieved Prereq 2

Minimum Energy Performance

1st REVIEW The applicant has submitted the signed LEED letter template declaring that the portions of the building, as covered by the tenant's scope of work, comply with ASHRAE 90.1-2004. The applicant has also submitted the mechanical schedules and a narrative describing the HVAC design.

The narrative describes the mechanical design, and reference the corresponding ASHRAE 90.1-2004 section; however, it does not list the actual equipment efficiencies. As per the Submittals section of the LEED Canada-CI 1.0 Reference Guide, please identify the mechanical equipment efficiencies, and list the corresponding ASHRAE 90.1 requirements.

The lighting narrative and schedule, referenced in the EAp2 and included in the EAc1.1 submittal, does not include equipment controls or efficiencies. As per the Submittals section of the LEED Canada-CI 1.0 Reference Guide, please identify the electrical equipment controls and efficiencies, and list the corresponding ASHRAE 90.1 requirements.

Prerequisite achievement pending.

2nd REVIEW The applicant has submitted a design narrative listing the mechanical equipment, their efficiencies, and the corresponding ASHRAE 90.1-2004 requirements.

Prerequisite achievement anticipated.

FINAL REVIEW Prerequisite achieved.

Achieved Prereq 3

CFC Reduction in HVAC&R Equipment

1st REVIEW The applicant has submitted the signed LEED letter template declaring that there are no CFC-based refrigerants in any HVAC&R systems that have been installed or renovated within the LEED-CI project scope.

Prerequisite achievement anticipated.

2nd REVIEW Prerequisite achievement anticipated.

FINAL REVIEW Prerequisite achieved.

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1		1	Credit 1.1
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CAA

Optimize Energy Performance, Lighting Power

1st REVIEW The applicant has submitted the signed LEED letter template declaring that the project has achieved a 15.6% reduction in installed interior lighting power density, within the tenant's scope of work, beyond that required by ASHRAE 90.1-2004. The applicant has also submitted a lighting design narrative and the lighting fixture schedule.

The lighting narrative and schedule does not include equipment controls or efficiencies. As per the Submittals section of the LEED Canada-CI 1.0 Reference Guide, please identify the electrical equipment controls and efficiencies, and list the corresponding ASHRAE 90.1 requirements.

This credit has been selected for audit. Please submit audit materials as per the LEED Canada-CI 1.0 Reference Guide.

Credit achievement pending for 1 point.

2nd REVIEW The applicant has resubmitted the signed LEED letter template declaring that the project has achieved a 15.6% reduction in installed interior lighting power density, within the tenant's scope of work, beyond that required by ASHRAE 90.1-2004. The applicant has also submitted space-by-space lighting power density calculations and a list of the zone lighting controls.

As noted in Section 9.1.3 of ASHRAE 90.1-2004, the installed interior lighting power shall include all power used by the luminaires, including lamps, ballasts, current regulators and control devices. Please confirm that the total installed power includes all power used by the luminaires, and provide revised calculations as required.

As per the Audit Submittals section of the LEED Canada-CI 1.0 Reference Guide, please provide completed Lighting Compliance Documentation per the ASHRAE 90.1 User's Manual, and manufacturer's cut literature confirming lighting equipment schedule data.

Credit achievement pending for 1 point.

FINAL REVIEW The applicant has submitted completed Lighting Compliance Documentation and resubmitted the list of the zone lighting controls.

The Lighting Compliance Documentation submitted indicates different values for interior connected power and lighting power allowance than the values found in the original LEED letter template. The Lighting Compliance Documentation indicates that the project achieves a 29.3% reduction in installed interior lighting power density. For future submittals, where changes are made to the existing LEED letter template, please provide a revised LEED letter template.

The applicant did not provide manufacturer's cut literature confirming lighting equipment schedule data, as per the Audit Submittals section of the LEED Canada-CI 1.0 Reference Guide.

Furthermore, there appears to be several inconsistencies between the lighting floor plans and the lighting compliance documentation. For example, the lighting compliance documentation indicates that the project has 33 type F3 fixtures on the 1st floor, whereas the lighting plan appears to indicate at least 50 type F3 fixtures. Similarly, the lighting compliance documentation lists 3 type F10 fixtures on the 1st floor, whereas the lighting plan appears to indicate at least 5 type F10 fixtures. It appears as though the project would be able to achieve at least 1 point despite these discrepancies; however, the lack of consistency and manufacturer documentation does not allow for confirmation of the second point.

Credit achieved for 1 point, denied for 1 point.

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Credit 1.2

Optimize Energy Performance, Lighting Controls
Credit Not Attempted

2			Credit 1.3
CAA			

Optimize Energy Performance, HVAC

1st REVIEW The applicant has submitted the signed LEED letter template declaring that the HVAC systems comply with section 2.4, 2.5 and 2.6 of the E-Benchmark guide, and that appropriate zoning and controls have been implemented in the project space. The applicant has also submitted a narrative describing the equipment efficiencies, the equipment controls, and the zoning methodology.

The narrative indicates that the mechanical equipment efficiencies meet the minimum requirements of items 2.5 and 2.6 of the E-Benchmark guide; however, it does not list the mechanical equipment efficiencies. Please list the mechanical equipment efficiencies, confirming that they meet or exceed the requirements of items 2.5 and 2.6 of the E-Benchmark Guide. As per the submittal section of the LEED Canada-CI Reference Guide the submittal requirements are to demonstrate in the narrative and plans submitted that the installed HVAC systems comply with the requirements of the credit.

Also, as per the LEED Canada-CI Reference Guide, each private office and specialty occupancy room must have active controls capable of sensing space use and modulating the HVAC system in response to space demand. However, it appears from drawing M3.01 that several offices on the North of the building (project North) do not each have active controls, but are grouped in sets of 2-3 offices with only one thermostat. The same appears to be true for Group Study Rooms 012-B, 012-C & 012-D as per drawing M3.00. Please clarify how this design meets the credit requirements.

Credit achievement pending for 2 points.

2nd REVIEW The applicant has submitted a design narrative listing the mechanical equipment, their efficiencies, and the corresponding E-Benchmark efficiency requirements. The narrative also describes the HVAC controls in the North Offices and Group Study rooms.

Credit achievement anticipated for 2 points.

FINAL REVIEW Credit achieved for 2 points.

2			Credit 1.4
CAA			

Optimize Energy Performance, Equipment & Appliances

1st REVIEW The applicant has submitted the signed LEED letter template declaring that 100% of the project's Energy Star eligible equipment and appliances are ENERGY STAR rated, as determined by rated power.

Credit achievement anticipated for 2 points.

2nd REVIEW Credit achievement anticipated for 2 points.

FINAL REVIEW This credit has been audited in place of withdrawn credit MRc7.

The applicant has submitted cut sheets for the appliances and equipment confirming the Energy Star ratings. The applicant has also submitted a summary calculation table.

Credit achieved for 2 points.

Credit 2

Enhanced Commissioning
Credit Not Attempted

Credit 3

Energy Use, Measurement & Payment Accountability
Credit Not Attempted

Credit 4

Green Power
Credit Not Attempted

Achieved
Pending
Denied

6 **0** **2** **Materials & Resources** **14 Points**

Achieved

Prereq 1

Storage & Collection of Recyclables

1st REVIEW The applicant has submitted the signed LEED letter template declaring that all five mandatory recyclables will be collected and stored. The applicant has also provided a narrative, photographs of recycling storage, information on York University's waste management program, and a floor plan highlighting the location of waste collection areas.

Prerequisite achievement anticipated.

2nd REVIEW Prerequisite achievement anticipated.

FINAL REVIEW Prerequisite achieved.

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Credit 1.1

CAA

Tenant Space, Long-Term Commitment

1st REVIEW The applicant has submitted the signed letter template confirming that the tenant owns the space.

Credit achievement anticipated.

2nd REVIEW Credit achievement anticipated.

FINAL REVIEW Credit achieved.

Credit 1.2

Building Reuse, Maintain 40% of Interior Non-Structural Components
Credit Not Attempted

Credit 1.3

Building Reuse, Maintain 60% of Interior Non-Structural Components
Credit Not Attempted

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Credit 2.1
CAA

Construction Waste Management: Divert 50% from Landfill

1st REVIEW The applicant has submitted the signed LEED letter template, tabulating the amount of material diverted from the landfill declaring that 75.59% of the construction waste was diverted from the landfill.

The LEED letter template indicates "mixed recyclable waste". If off-site sorting was used, please refer to the clarification in CIR 65 and CIR 162, and provide the submittals outlined therein. Please provide a copy of the CIR used.

Credit achievement pending.

2nd REVIEW The applicant has submitted the signed LEED letter template, tabulating the amount of material diverted from the landfill declaring that 70.32% of the construction waste was diverted from the landfill. Also submitted was a copy of CIR 162 and CIR 65.

Mixed recycling has been declared as non-diverted in the revised LEED letter template.

Credit achievement anticipated.

FINAL REVIEW Credit achieved.

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Credit 2.2
Denied

Construction Waste Management: Divert 75% from Landfill

1st REVIEW As per MRc2.1.

Credit achievement pending.

2nd REVIEW As per MRc2.1.

The revised LEED letter template declares 70.32% waste diversion, which does not meet the credit threshold.

Credit denied.

FINAL REVIEW Credit denied.

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Credit 3.1

Resource Reuse, 5% Credit Not Attempted

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Credit 3.2

Resource Reuse, 10% Credit Not Attempted

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Credit 3.3

Resource Reuse, 30% Furniture and Furnishings Credit Not Attempted

1			Credit 4.1
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CAA

Recycled Content, 10% (post-consumer + ½ pre-consumer)

1st REVIEW The applicant has submitted the signed LEED letter template declaring that 29.2% of materials used (including Division 12 Furnishings) contain recycled content (post-consumer plus 0.5 pre-consumer, in aggregate).

The project Division 12 cost of \$44,140 appears low for a project of this size. The general narrative provided indicates that interior finishes are replaced throughout the project. As per the Materials and Resources Overview section of the LEED Canada-CI 1.0 Reference Guide, furniture and furnishings are defined as those materials included in CSI MasterFormat Division 12. Additionally, the Division 12 Cost identified in MRc4 is \$44,140, while it is \$50,000 in MRc5. Please clarify the Division 12 project cost, and revise and resubmit the LEED letter template as necessary.

Additionally, several products are listed with a cost of \$1, please clarify and revise and resubmit the LEED letter template to reflect the actual cost, or remove the products from the LEED letter template.

Credit achievement pending.

2nd REVIEW The applicant has submitted a narrative, the revised LEED letter template, and a copy of Project Info tab of the Excel LEED letter templates.

The narrative indicates that the contractor could not provide information on costs for the products which were previously listed at having a value of \$1. Please note that the Project Scope Construction Material Cost used must reflect the actual cost of materials used on the project. It appears that the materials value of \$3,833,759 has been calculated at 45% of the total construction value of \$8,519,466. As per the LEED Canada-CI 1.0 Reference Guide Under Materials and Resources, there is no default value for LEED Canada-CI 1.0. Because the variability of project scopes, the LEED Canada-CI 1.0 Rating System does not have an automatic default relationship between materials cost and the total construction cost. Please revise and resubmit the LEED letter template to indicate the actual materials cost for the project, as a default value is not appropriate.

Credit achievement pending.

FINAL REVIEW The applicant has submitted a narrative and the revised LEED letter template declaring that 34.4% of materials used (including Division 12 Furnishings) contain recycled content (post-consumer plus 0.5 pre-consumer, in aggregate).

Credit achieved.

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Credit 4.2
CAA

Recycled Content, 20% (post-consumer + ½ pre-consumer)

1st REVIEW As per MRc4.1.

Credit achievement pending.

2nd REVIEW As per MRc4.1.

Credit achievement pending.

FINAL REVIEW As per MRc4.1.

Credit achieved.

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Credit 5.1
CAA

Regional Materials, 20% Manufactured Regionally

1st REVIEW The applicant has submitted the signed LEED letter template declaring that 48.4% of construction materials and furnishing products are regionally manufactured; and 33.3% of construction materials and furnishing products are regionally manufactured and extracted.

Please refer to the MRc4 comment, clarify the Division 12 project cost, and revise and resubmit the LEED letter template as necessary.

As per MRc5.2.

Credit achievement pending.

2nd REVIEW The applicant has submitted the revised signed LEED letter template declaring that 43.3% of construction materials and furnishing products are regionally manufactured; and 30.6% of construction materials and furnishing products are regionally manufactured and extracted. Also submitted was a narrative and product literature.

As per the comment in MRc4, the narrative indicates that the contractor could not provide information on costs for the products which were previously listed at having a value of \$1. Please note that the Project Scope Construction Material Cost used must reflect the actual cost of materials used on the project. It appears that the materials value of \$3,833,759 has been calculated at 45% of the total construction value of \$8,519,466. As per the LEED Canada-CI 1.0 Reference Guide Under Materials and Resources, there is no default value for LEED Canada-CI 1.0. Because the variability of project scopes, the LEED Canada-CI 1.0 Rating System does not have an automatic default relationship between materials cost and the total construction cost. Please revise and resubmit the LEED letter template to indicate the actual materials cost for the project, as a default value is not appropriate.

As per MRc5.2.

Credit achievement pending.

FINAL REVIEW The applicant has submitted a narrative and the revised signed LEED letter template declaring 51.1% of construction materials and furnishing products are regionally manufactured; and 36.1% of construction materials and furnishing products are regionally manufactured and extracted.

As per MRc5.2. When the items of concern identified in MRc5.2 are removed from the LEED letter template, the regionally manufactured value drops to 47.9%

Credit achieved.

Important Note: Certification Reviews are not to be considered precedents for future projects wishing to achieve LEED Canada certification. Only Credit Interpretation Requests can be considered precedents.

1			Credit 5.2
CAA			

Regional Materials, 10% Extracted and Manufactured Regionally

1st REVIEW The applicant has submitted the signed LEED letter template declaring that 33.3% of construction materials and furnishing products are regionally manufactured and extracted.

Please refer to the MRc4 comment, clarify the Division 12 project cost, and revise and resubmit the LEED letter template as necessary.

This credit has been selected for audit. Please provide audit materials as per LEED Canada-CI 1.0 Reference Guide.

Credit achievement pending.

2nd REVIEW The applicant has submitted the revised signed LEED letter template declaring that 30.6% of construction materials and furnishing products are regionally manufactured and extracted. Also submitted was a narrative and product literature.

As per the comment in MRc4, the narrative indicates that the contractor could not provide information on costs for the products which were previously listed at having a value of \$1. Please note that the Project Scope Construction Material Cost used must reflect the actual cost of materials used on the project. It appears that the materials value of \$3,833,759 has been calculated at 45% of the total construction value of \$8,519,466. As per the LEED Canada-CI 1.0 Reference Guide Under Materials and Resources, there is no default value for LEED Canada-CI 1.0. Because the variability of project scopes, the LEED Canada-CI 1.0 Rating System does not have an automatic default relationship between materials cost and the total construction cost. Please revise and resubmit the LEED letter template to indicate the actual materials cost for the project, as a default value is not appropriate.

The applicant has submitted "Schedule P1 - Recycled and Regional Content" LEED material forms in place of manufacturer's product literature for several products. While several appear to be signed by the manufacturer or supplier, they are not printed on letterhead. As per the LEED Canada-CI 1.0 Reference Guide, product cut sheets, product literature, or letters from the manufacturers are acceptable forms of documentation. Should the applicant wish to provide LEED material declaration forms, they must be signed by the manufacturer and printed on manufacturer's letterhead, therefore equivalent to a letter from the manufacturer. Please revise and resubmit manufacturer's literature as per the LEED Canada-CI 1.0 Reference Guide.

Product literature provided for CertainTeed Drywall indicates that several products were provided, however only one item "Drywall" is listed on the LEED letter template, with a cost of \$536,000. Additionally, the product literature does not indicate the extraction location, however a distance of 250 km is indicated in the LEED letter template. Please resubmit product literature to confirm the extraction location, and revise and resubmit the LEED letter template to indicate each product as a separate line item.

Product literature has not been provided for AD Type 5GP 5MD 5EF Firebarrier, please provide product literature as per the LEED Canada-CI 1.0 Reference Guide, under Submittals.

Credit achievement pending.

FINAL REVIEW The applicant has submitted a narrative and the revised signed LEED letter template declaring 36.1% of construction materials and furnishing products are regionally manufactured and extracted.

The applicant has not responded to the 2nd review comments requesting revised product literature. As per the 2nd review comments, product literature was not provided for AD Type 5GP 5MD 5EF Firebarrier. Product literature provided for CertainTeed Drywall does not indicate the extraction location, however a distance of 250 km is indicated in the LEED letter template. Additionally, product literature for Coltack, AC Foam II, DensDeck Roof Board, Soprastar Flam WF, Sopraply Base 520, and Elastophene SP 2.2 was provided at 2nd review in the form of "Schedule P1 - Recycled and Regional Content" LEED material forms in place of manufacturer's product literature for several products. Should the applicant wish to provide LEED material declaration forms, they must be signed by the manufacturer and printed on manufacturer's letterhead, therefore equivalent to a letter from the manufacturer. When these items are removed from the LEED letter template, the regionally manufactured value drops to 47.9% and the regionally manufactured and extracted value drop to 17.9%.

Credit achieved.

			Credit 6
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Rapidly Renewable Materials
Credit Not Attempted

		1	Credit 7
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Denied

Certified Wood

1st REVIEW The applicant has submitted the LEED letter template declaring that 100% of all wood-based materials, including Division 12 (Furniture) products and materials, are FSC-certified. Also submitted was an unsigned LEED letter template for MRc5, a product data sheet for In2 Design, and a product data sheet for Walltite ECO.

The LEED letter template has not been signed and dated. Please submit the signed and dated LEED letter template. Additionally, the Excel and PDF copies of the LEED letter template are inconsistent. Please revise and resubmit the Excel and signed LEED letter templates to match.

The product data sheet for In2 Design furniture indicates the product contains 51% particleboard. However, the LEED letter template indicates the product is 100% wood by weight. Please revise and resubmit the LEED letter template to indicate the actual % new wood by weight.

Several products are listed with a cost of \$1. Please confirm the cost, and revise and resubmit the LEED letter template with the actual product cost.

Please provide confirmation of FSC Chain of Certificate number for the D&H custom Woodworking plywood, Algoma Doors, and Uniboard Fostoria, as it does not appear in the FSC Certificate database. Please revise and resubmit the LEED letter template with the correct FSC COC numbers.

No furniture products have been listed in the LEED letter template aside from the In2 Design furniture. As per the Requirements section of the LEED Canada-CI 1.0 Reference Guide, Division 12 material should be included in the determination of the certified wood content. If any furniture and furnishings on the project contain new wood, please revise and resubmit the LEED letter template to include them.

This credit has been selected for audit. Please provide audit materials as per LEED Canada-CI 1.0 Reference Guide.

Credit achievement pending.

2nd REVIEW The applicant has submitted the LEED letter template declaring that 100% of all wood-based materials, including Division 12 (Furniture) products and materials, are FSC-certified. Also submitted was product literature.

Products such as Wilsonart In-2 Design, NuGreen particleboard, Green Zero Particleboard, and Report 8, have been removed from the LEED letter template without justification. Please revise and resubmit the LEED letter template to include all wood supplied on the project, and provide audit materials as per the LEED Canada-CI 1.0 Reference Guide.

As per the 1st review comment, it is not apparent that furniture and furnishings have been included in the LEED letter template. Please confirm, and revise and resubmit the LEED letter template as necessary to include wood containing furniture and furnishings. Please also submit audit documentation such as vendor invoices confirming FSC certification for furniture and furnishings.

Please note that as per the LEED Canada-CI 1.0 Reference Guide under Submittals, appropriate audit documentation includes vendor invoices and/or letters from suppliers for each product installed that clearly demonstrates supplied wood meets FSC certification requirements. Documentation should reference the vendor's chain of custody certificate number and identify certified products on an item-by-item basis. For example, the documentation provided for Algoma hardwoods meets this criteria. LEED declaration forms and attached FSC COC certificates does not meet this criteria, however it is apparent that these products are FSC certified. Please note this for future projects.

Credit achievement pending.

FINAL REVIEW The applicant has withdrawn the credit.

Credit denied.

Achieved
Pending
Denied

8	0	1	Indoor Environmental Quality	17 Points
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Achieved

Prereq 1

Minimum IAQ Performance

1st REVIEW The applicant has submitted the signed LEED letter template declaring that the project is fully compliant with Section 4, 5, 6 and 7 of ASHRAE 62.1-2004 and all accepted Addenda. The applicant has also submitted instructions for the multi-zone ventilation calculations, as well as ventilation rate calculation tables.

The EAp1 narrative lists the air flow capacities of all the new air handlers; however, it is unclear what the minimum design outdoor air rates are for each system. Please clarify.

If the calculations are updated, please ensure that the party responsible for this prerequisite confirms that designed equipment capacity meets the outdoor airflow rate required by ASHRAE 62-2004.

Prerequisite achievement pending.

2nd REVIEW The applicant has submitted a clarification narrative.

Prerequisite achievement anticipated.

FINAL REVIEW Prerequisite achieved.

Achieved

Prereq 2

Environmental Tobacco Smoke (ETS) Control

1st REVIEW The applicant has submitted the signed LEED letter template declaring that smoking is prohibited in the building and within 7.5 metres of any entrance, outdoor air intake or operable window.

Prerequisite achievement anticipated.

2nd REVIEW Prerequisite achievement anticipated.

FINAL REVIEW Prerequisite achieved.

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Credit 1

Outdoor Air Delivery Monitoring
Credit Not Attempted

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Credit 2

Increased Ventilation
Credit Not Attempted

1			Credit 3.1
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CAA

Construction IAQ Management Plan, During Construction

1st REVIEW The applicant has submitted the LEED letter template, signed by the contractor, declaring that a construction IAQ management plan has been developed and implemented according to the SMACNA IAQ Guideline. The applicant has also submitted 18 photographs depicting the IAQ measures implemented.

Credit achievement anticipated.

2nd REVIEW Credit achievement anticipated.

FINAL REVIEW Credit achieved.

		1	Credit 3.2
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Denied

Construction IAQ Management Plan, Before Occupancy

1st REVIEW The applicant has submitted the signed LEED letter template declaring that after construction ends and prior to occupancy, baseline IAQ testing has been conducted and that all areas tested do not exceed the maximum allowable concentration limits. The applicant has also submitted a copy of the IAQ testing results.

Page 3 of the IAQ testing report indicates that construction activities were ongoing in the Library Upper. As per the Requirements section of the LEED Canada-CI 1.0 Reference Guide, the baseline IAQ testing must be performed after construction ends and prior to occupancy. Please clarify how this requirement was met.

Credit achievement pending.

2nd REVIEW The applicant has submitted a clarification narrative, a copy of the first floor plan, and a copy of the original IAQ testing results.

The IAQ testing results indicates that since the Library Upper was still under construction, Group Study 140-Q was selected as an alternative testing location, where the narrative indicates that the Alternative Dispute Resolution Centre Studies Lab was selected as an alternative testing location. As per the Design Approach section of the LEED Canada-NC 1.0 Reference Guide Addendum, for each building area where the maximum concentration limits are exceeded, any contaminant concentrations that were exceeded must be retested. Please provide documentation of re-testing and passing of the Library Upper test location, and confirm that the same sampling location was chosen for both tests.

Credit achievement pending.

FINAL REVIEW The applicant has submitted a general response narrative, a copy of the first floor plan, and a copy of the original IAQ testing results.

The general narrative reiterates that the Group Study Room 5 (140-Q) was an alternative location to the Library Upper for Testing Phase 3, and that both testing locations failed. The narrative also indicates that only the Group Study Room was re-tested in Phase 4, and seems to infer that the Library Upper would pass, but does not confirm that this space was tested in Phase 4. As per the Design Approach section of the LEED Canada-NC 1.0 Reference Guide Addendum, for each building area where the maximum concentration limits are exceeded, any contaminant concentrations that were exceeded must be retested. Since the Library Upper was not retested after the original test failed, the credit requirements have not been met.

Credit denied.

1			Credit 4.1
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CAA

Low-Emitting Materials, Adhesives and Sealants

1st REVIEW The applicant has submitted the signed LEED letter template listing the adhesives and sealants used in the project and their corresponding VOC limits in compliance with the credit requirements.

The list of adhesives and sealants appears brief. Project photographs show tile and wall base. Please clarify that all adhesives and sealants have been listed (e.g., tile adhesive, wall base adhesive, adhesives for finish materials, washroom caulk, PVC or ABS welding, contact cement). Please revise and resubmit the LEED letter template to include all adhesives and sealants used on the project.

This credit has been selected for audit. Please submit audit materials as per the LEED Canada-CI 1.0 Reference Guide.

Credit achievement pending.

2nd REVIEW The applicant has submitted a copy of the unchanged LEED letter template provided with the 1st submission. Also submitted was product literature.

As there are no changes to the submitted LEED letter template, the applicant has not responded to the 1st review comment. As per the 1st review, the list of adhesives and sealants appears brief. Project photographs show tile and wall base. Please clarify that all adhesives and sealants have been listed (e.g., tile adhesive, wall base adhesive, adhesives for finish materials, washroom caulk, PVC or ABS welding, contact cement). Please revise and resubmit the LEED letter template to include all adhesives and sealants used on the project.

An inconsistency was found between product literature and the LEED letter template for Intumescent Caulk. Product literature indicates the VOC content s 45 g/L, while the LEED letter template indicates 0 g/L. The product is compliant therefore credit achievement is not affected. Please ensure consistency between submittals for future projects.

Credit achievement pending.

FINAL REVIEW The applicant has submitted a narrative stating that "no information on adhesives was obtained from the contractor, who insisted that all adhesives used on the project are included."

For future projects, please address first review comments in the 2nd review. The applicant did not respond to the comment that project photos show tile and wall base, and these adhesives do not appear to be included in the signed LEED letter template. Additionally, for future projects please provide clarification from the responsible party, the Contractor, verifying that all adhesives and sealants have been included in the LEED letter template. The narrative provided will be accepted in this case, however please note for future projects that verification from the responsible party must be provided (e.g., signed letter from the Contractor).

Credit achieved.

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Credit 4.2
CAA

Low-Emitting Materials, Paints and Coatings

1st REVIEW The applicant has submitted the signed LEED letter template listing paints and coatings used on the project, along with their VOC levels and limits.

Credit achievement anticipated.

2nd REVIEW Credit achievement anticipated.

FINAL REVIEW Credit achieved.

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Credit 4.3
CAA

Low-Emitting Materials, Carpet Systems

1st REVIEW The applicant has submitted the signed LEED letter template listing all carpet systems used on the project and stating that they comply with the Carpet and Rug Institute's Green Label Indoor Air Quality Test Program.

GlasBac / GlasBac RE is the backing system used for carpet products by Interface Flor. Please revise and resubmit the LEED letter template to list the actual product name or product line.

Credit achievement pending.

2nd REVIEW The applicant has submitted the revised signed LEED letter template listing all carpet systems used on the project and stating that they comply with the Carpet and Rug Institute's Green Label Indoor Air Quality Test Program.

The revised LEED letter template indicates the Interface Baseline carpet was installed.

Credit achievement anticipated.

FINAL REVIEW Credit achieved.

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 Credit 4.4
 CAA

Low-Emitting Materials, Composite Wood and Laminate Adhesives

1st REVIEW The applicant has submitted the signed LEED letter template listing all the composite wood products used in the building and stating that they contain no added urea-formaldehyde resins.

Laminate adhesives have not been included in the LEED letter template. Please clarify if laminate adhesives were used, and revise and resubmit the LEED letter template to include all laminating adhesives used in the building and stating that they contain no urea-formaldehyde.

As per the Submittals section of the LEED Canada-CI 1.0 Reference Guide, please provide documentation for all core and adhesive products used on the project indicating that products used contained no added urea-formaldehyde.

Credit achievement pending.

2nd REVIEW The applicant has submitted a narrative indicating no laminate adhesives were used. Also submitted were manufacturer's product literature.

Product literature has not been provided for wood doors, please submit documentation indicating that wood doors contained no added urea-formaldehyde.

Credit achievement pending.

FINAL REVIEW The applicant has submitted a narrative and product literature for Algoma wood doors.

Credit achieved.

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 Credit 4.5

Low-Emitting Materials, Systems Furniture and Seating

Credit Not Attempted

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 Credit 5
 CAA

Indoor Chemical and Pollutant Source Control

1st REVIEW The applicant has submitted the signed LEED letter template declaring that all indoor chemical and pollutant source control measures have been implemented.

The architectural first floor plan does not appear to indicate that a permanent entryway system was installed in the Entrance Vestibule 100. As per the Requirements section of the LEED Canada-CI 1.0 Reference Guide, permanent entryway systems are required to be installed at all high volume exterior entryway systems within the tenant area. Please clarify how this requirement has been met.

Credit achievement pending.

2nd REVIEW The applicant has submitted a clarification narrative.

The clarification narrative does not demonstrate that the credit requirements for permanent entryway systems has been met. Please provide evidence, such as photos, floor plans or shop drawings, of the installed permanent entryway system.

Credit achievement pending.

FINAL REVIEW The applicant has submitted annotated floor plans and photos highlighting the entryway systems in the project.

It is unclear whether the permanent entryway systems depicted in the photos are sufficiently recessed to collect dirt and prevent it from spreading throughout the building. It is unclear what type of material the systems are, as the photos appear to show wear. As per the Strategies section of the LEED Canada-CI 1.0 Reference Guide, open grates/grilles or other entryway systems that have a recessed collection area are generally thought to be most effective. For future projects, please ensure that this requirement is met.

Credit achieved.

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 Credit 6.1

Controllability of Systems, Lighting

Credit Not Attempted

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 Credit 6.2

Controllability of Systems, Temperature and Ventilation

Credit Not Attempted

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 Credit 7.1
 CAA

Thermal Comfort, Compliance

1st REVIEW The applicant has submitted the signed LEED letter template declaring that the project space is in compliance with ASHRAE 55-2004. The applicant has also submitted a design narrative and documentation of compliance as per Section 6.1.1 of ASHRAE 55-2004.

Credit achievement anticipated.

2nd REVIEW Credit achievement anticipated.

FINAL REVIEW Credit achieved.

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Credit 7.2

CAA

Thermal Comfort, Monitoring

1st REVIEW The applicant has submitted the signed LEED letter template declaring that a permanent monitoring system and process for corrective action to ensure performance to the desired comfort criteria as determined by EQc7.1. The applicant has also submitted a brief design narrative describing the permanent monitoring system.

This credit has been selected for audit. Please submit audit materials as per the LEED Canada-CI 1.0 Reference Guide.

Credit achievement pending.

2nd REVIEW The applicant has submitted a narrative describing the commissioning of temperature, airflow and humidity controls; the monitoring system; and the process for corrective action.

Credit achievement anticipated.

FINAL REVIEW Credit achieved.

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Credit 8.1

Daylight and Views, Daylight 75% of Spaces
Credit Not Attempted

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Credit 8.2

Daylight and Views, Daylight 90% of Spaces
Credit Not Attempted

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Credit 8.3

Daylight and Views, Views for 90% of Seated Spaces
Credit Not Attempted

Achieved	Pending	Denied	Innovation & Design Process		5 Points
2	0	2			

		1	Credit 1.1
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Denied

Innovation in Design
Erosion and Sedimentation Control

1st REVIEW The applicant has submitted the signed LEED letter template for Erosion and Sedimentation Control. Also submitted was a narrative.

As per the clarification in CIR 553, prerequisites from other LEED rating systems cannot be used to achieve innovation in design points. Only credits are considered of sufficient value to be used as potential innovation in design points.

Credit denied.

2nd REVIEW Credit denied.

FINAL REVIEW Credit denied.

1			Credit 1.2
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CAA

Innovation in Design
Exemplary Performance: Regional Materials

1st REVIEW The applicant has submitted the signed LEED letter template for Exceptional Performance in Regional Materials at 30%.

It is not apparent if the applicant is pursuing Exceptional Performance of MRc5.1 Regionally Manufactured Materials at 40%; or Exceptional Performance of MRc5.2 Regionally Manufactured and Extracted Materials at 20%. Please clarify.

As per MRc5.1 and MRc5.2.

Credit achievement pending.

2nd REVIEW As no submittals were provided and as per the 1st review comments, it is not clear if the applicant is pursuing Exceptional Performance of MRc5.1 Regionally Manufactured Materials at 40%; or Exceptional Performance of MRc5.2 Regionally Manufactured and Extracted Materials at 20%. Please clarify.

As per MRc5.1 and MRc5.2.

Credit achievement pending.

FINAL REVIEW As per MRc5.1.

As per the 1st and 2nd review comments, the applicant has not clarified in the project is pursuing Exceptional Performance of MRc5.1 Regionally Manufactured Materials at 40%; or Exceptional Performance of MRc5.2 Regionally Manufactured and Extracted Materials at 20%. However, as per MRc5.1, the project has achieved 47.9% regionally manufactured and extracted materials, therefore Exceptional Performance of MRc5.1 is achieved.

Credit achieved.

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 Credit 1.3
Denied

Innovation in Design
Campus Wide Zero-Waste Program

1st REVIEW The applicant has submitted the signed LEED letter template for a Campus Wide Zero-Waste Program. Also submitted was a narrative, a FAQ sheet, website print-outs of the waste management program, and a summary of the benefits of communal waste bins.

As per the Design Approach section of the LEED Canada-CI 1.0 Reference Guide, the Innovation in Design section provides design teams the opportunity to be awarded points and/or innovation performance in the tenant improvement space only. The Zero Waste program consists of mini trash bins, cancelling waste pick-up, and communal bins which does not appear to be a comprehensive innovative approach. As the Zero Waste program is a campus-wide initiative rather than a tenant initiative, an Innovation in Design credit may not be achieved. The applicant may submit the credit under SSc1L. If the applicant wishes to pursue SSc1L, LEED Canada EB:O&M 2009 MRC7 may be pursued. If pursued, please submit the signed LEED Canada EB:O&M 2009 letter template and all required submittals.

Credit denied.

2nd REVIEW Credit denied.

FINAL REVIEW Credit denied.

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 Credit 1.4

Innovation in Design

Credit Not Attempted

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 Credit 2
CAA

LEED® Accredited Professional

1st REVIEW The applicant has submitted the LEED letter template, signed by the LEED Consultant, declaring that Shenshu Zhang was a principal participant of the project team during the design of the LEED project. A copy of Shenshu's LEED Accredited Professional award certificate is also provided.

Credit achievement anticipated.

2nd REVIEW Credit achievement anticipated.

FINAL REVIEW Credit achieved.