



118-150 Robson Street
LEED 2009 NC Progress Report
Last update: January 9, 2017

KANE CONSULTING



Y	?	N	63	3	44	Total Project Score & Rating	GOLD	Possible Points	110	
			Certified	40 to 49 points	Silver	50 to 59 points	Gold	60 to 79 points	Platinum	80 or more points

Y	?	N	Sustainable Sites		Possible Points	26
Y			Prereq 1	Construction Activity Pollution Prevention		
1			Credit 1	Site Selection		1
5			Credit 2	Development Density and Community Connectivity		3,5
		1	Credit 3	Brownfield Redevelopment		1
6			Credit 4.1	Alternative Transportation, Public Transportation Access		3,6
1			Credit 4.2	Alternative Transportation, Bicycle Storage & Changing Rooms		1
3			Credit 4.3	Alternative Transportation, Low-Emitting and Fuel-Efficient Vehicles		3
		2	Credit 4.4	Alternative Transportation, Parking Capacity		2
		1	Credit 5.1	Site Development, Protect and Restore Habitat		1
1			Credit 5.2	Site Development, Maximize Open Space		1
		1	Credit 6.1	Stormwater Design, Quantity Control (CoV: SSc6.1 or SSc6.2 for 1 pt minimum).		1
1			Credit 6.2	Stormwater Design, Quality Control (CoV: SSc6.1 or SSc6.2 for 1 pt minimum).		1
1			Credit 7.1	Heat Island Effect, Non-Roof		1
		1	Credit 7.2	Heat Island Effect, Roof		1
1			Credit 8	Light Pollution Reduction		1

Y	?	N	Water Efficiency		Possible Points	10
Y			Prereq 1	Water Use Reduction		
2			Credit 1	Water Efficient Landscaping, Reduce by 50%, No potable water use (CoV: WEC1 or c3 for 1 pt)		2,4
		2	Credit 2	Innovative Wastewater Technologies		2
3			Credit 3	Water Use Reduction, 30%, 35%, 40% Reduction (CoV: WEC1 or WEC3 for 1 pt).		2-4

Y	?	N	Energy and Atmosphere		Possible Points	35
Y			Prereq 1	Fundamental Commissioning of Building Energy Systems		
Y			Prereq 2	Minimum Energy Performance		
Y			Prereq 3	Fundamental Refrigerant Management		
8			Credit 1	Optimize Energy Performance (CoV: 6 pts minimum)		1-19
		7	Credit 2	On-site Renewable Energy		1-7
		2	Credit 3	Enhanced Commissioning		2
2			Credit 4	Enhanced Refrigerant Management		2
		3	Credit 5	Measurement & Verification		3
2			Credit 6	Green Power		2

Legend		
Y		Credit Targeted
		Not Attempting
Y		Prerequisite (Must Achieve)

* Red text indicates a strategy required by CoV.

LEED Analysis by: Kane Consulting

January 9, 2017

Project: 118-150 Robson Street

Re: Green Building Components

The following list highlights the prominent sustainable features of the 150 Robson Street project. Many of these features are a passive response to energy conservation, thermal comfort and protection or restoration of a more natural environment.

We have also provided a draft LEED Scorecard. The Scorecard shows the project is incorporating numerous sustainable strategies currently targeting 63 LEED points (60 points are required for Gold). Several more points are potentially available and will be confirmed, as the design is refined. These strategies are consistent with the City of Vancouver Green Building Rezoning Policy. The Project has also been registered with the CaGBC and has been assigned the project #19026.

Y	?	N	Materials and Resources		Possible Points	14
Y			Prereq 1	Storage and Collection of Recyclables		
		3	Credit 1.1	Building Reuse, Maintain Existing Walls, Floor and Roof		1-3
		1	Credit 1.2	Building Reuse, Maintain Interior Non-Structural Elements		1
2			Credit 2	Construction Waste Management, Divert 50% , 75%		1-2
		2	Credit 3	Materials Reuse, 5%, 10%		1-2
1			Credit 4	Recycled Content, 10%, 20%		1-2
2			Credit 5	Regional Materials, 20%, 30%		1-2
		1	Credit 6	Rapidly Renewable Materials		1
		1	Credit 7	Certified Wood		1

Y	?	N	Indoor Environmental Quality		Possible Points	15
Y			Prereq 1	Minimum IAQ Performance		
Y			Prereq 2	Environmental Tobacco Smoke (ETS) Control		
		1	Credit 1	Outdoor Air Delivery Monitoring		1
1			Credit 2	Increased Ventilation		1
1			Credit 3.1	Construction IAQ Management Plan, During Construction		1
1			Credit 3.2	Construction IAQ Management Plan, Before Occupancy		1
1			Credit 4.1	Low-Emitting Materials, Adhesives & Sealants		1
1			Credit 4.2	Low-Emitting Materials, Paints and Coatings		1
1			Credit 4.3	Low-Emitting Materials, Flooring Systems		1
1			Credit 4.4	Low-Emitting Materials, Composite Wood and Agrifiber		1
1			Credit 5	Indoor Chemical & Pollutant Source Control		1
1			Credit 6.1	Controllability of Systems, Lighting		1
1			Credit 6.2	Controllability of Systems, Thermal Comfort		1
1			Credit 7.1	Thermal Comfort, Design		1
		1	Credit 7.2	Thermal Comfort, Verification		1
		1	Credit 8.1	Daylight & Views, Daylight 75% of Spaces		1
1			Credit 8.2	Daylight & Views, Views for 90% of Spaces		1

Y	?	N	Innovation & Design Process		Possible Points	6
1			Credit 1.1	Innovation in Design: Ex'y SSc7.1 - 100% U/G Parking		1
1			Credit 1.2	Innovation in Design: Ex'y SSc4.1 - Double ridership		1
1			Credit 1.3	Innovation in Design: Solid Waste Management or IPMP		1
1			Credit 1.4	Innovation in Design: Low Mercury Lighting		1
1			Credit 1.5	Innovation in Design: Exemp MRc4, MRc5 or Solid Waste Man		1
1			Credit 2	LEED™ Accredited Professional		1

Y	?	N	Regional Priority		Possible Points	4
1			Credit 1	Durable Building		1
1			Credit 2.1	Regional Priority:SSc2		1
1			Credit 2.2	Regional Priority: WEC3		1
1			Credit 2.3	Regional Priority:MRc2		1

o SSp1 - Construction Activity: An erosion and sedimentation control plan will be implemented to minimize erosion and sedimentation during demolition, site preparation and throughout construction.

o SSc2 - Development Density & Community Connectivity: The project is located in downtown area with high density and close proximity to a variety of community services.

o SSc4.1 - Access to Transit: The project location is situated in close proximity to the Canada, Expo and Millennium lines and numerous bus lines surround the site.

o SSc4.2 & 4.3 - Alternative Transportation: The project will incorporate bicycle storage, changing rooms with showers and provide electric vehicle charging stations to further strengthen the use of alternative methods of transportations.

o SSc5.2 - Open Space: The project will incorporate a significant amount of plantings and public open space.

o SSc7.1 - Heat Island Effect: Strategies such as minimizing asphalt roadway and placing 100% of parking under the building will help reduce Urban Heat Island Effect.

o WEC1 - Water Efficient Landscaping: Landscaping will utilize drought tolerant plant material (tree shrubs, groundcover and ornamental grasses), and adaptive plants to reduce the reliance on irrigation.

o WEC1 - Irrigation Efficiency: High efficiency irrigation system will include a central controller and soil/rain sensors. The irrigation system will include pressure-reducing nozzles to reduce and equalize water pressure at the nozzle locations to reduce misting. The optimized positioning of spray nozzles, appropriate selection of spray heads for precise coverage and water delivery, and elimination of turf grass will all enhance irrigation efficiency.

o WEC3 - Water Efficiency: Low flow/flush plumbing fixtures, including toilets, showerheads, lavatory faucets and kitchen faucets will be provided. They will not only reduce water consumption but also reduce the amount of energy required to produce hot water.

o EAc1 - Energy Efficiency: Energy efficiency measures are evaluated via a full building energy simulation. The project will be designed to meet/exceed the City requirement of 22% below ASHRAE 90.1-2010.

o EAc3 - Energy Efficiency: The project will undergo an enhanced commissioning process to ensure that the building's energy related systems are operating efficiently and as designed.

o EAc4 - Refrigerant Management: Refrigerant with low ozone depletion and global warming potential will be selected for HVAC&R system to protect the environment.

o MRc2 - Construction Waste Management: A construction waste management plan will be developed and implemented throughout construction with a goal of diverting over 75% of waste generated.

o MRc4 & 5 - Building Materials: Many of the building materials will be selected based on recycled content and/or regional manufacturing.

o MRc4 - GHG Reduction: Use of cement substitutes such as flyash will reduce the developments CO2 footprint.

o EQc3.1 - Indoor Air Quality: Best practices will be implemented during construction to optimize air quality and provide a clean and healthy building for the future residents.

o EQc5 - Indoor Air Quality: Permanent entryway systems will be incorporated to minimize occupants' exposure to hazardous particulates and chemical pollutants.

o EQc4.1 & 4.2 Indoor Air Quality: Low VOC finishes including adhesives, sealants and paints.

o EQc4.3 - Indoor Air Quality: Low emitting carpet and flooring systems will be sourced.



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NOTES

REVISIONS

No.	Date	Description
01	-	issued for REZONING

150 ROBSON

MIXED USE DEVELOPMENT

SUSTAINABILITY RATIONALE

DATE	23/02/2017 5:04:01 PM
DRAWN BY	RP
CHECKED BY	DE
SCALE	

JOB NUMBER 1160