



New Ecology, Inc. provides the following sustainable design review in accordance with LEED BD+C Core and Shell (v4) rating system. Our review consisted of the Zoning Review documents dated January 9, 2019 and additional information provided by the team through conference calls.

LEED Credit / Prerequisite	LEED Points					D/ C	Credit Status	Comments / Responses
	P	Y	?Y	?N	N			
Integrative Process			1			D	Integrative design process will be documented.	
<b>Location and Transportation</b>								
Sensitive Land Protection			2			D	Project is located on previously developed parcel.	
High Priority Site			2			1D	Project is located in a Difficult Development Area as defined by HUD. Sanborn Head confirmed no remediation required.	
Surrounding Density and Diverse Uses			3			3D	Greater than 22k sf floor area per buildable acre of land within 1/4 mile assumed post-development. Additionally, greater than 4 diverse uses will be available on the ground floor within the development.	
Access to Quality Transit			1			5D	Project is located nearby Riverside MBTA Station serving the Green line as well as bus 558. Green line provide approximately 70 rides per day and bus provides approximately 10 rides per day.	
Bicycle Facilities			1			D	Bike storage will be provided in Buildings 1 and 2. Showers are also required. Assuming 1 FTE/400sf and 445k gsf lab space, 8 showers required. Project is located on a bike network as Grove St is 25 mph and connects to Riverside MBTA station.	
Reduced Parking Footprint					1	D	Pending better understanding of parking distribution required for each building.	
Green Vehicles			1				EV charging equipment will be provided.	
<b>Sustainable Sites</b>								
Construction Activity Pollution Prevention	P					C	Construction and demolition waste management plan will be created and will identify at least 5 different materials targeted to be separated on site.	
Site Assessment			1			D	Site Assessment form will be completed.	
Site Development - Protect or Restore Habitat					1	1C	1 point can be purchased by donating \$0.20/sf of development to a local land trust (approximately \$125k for entire 14 acre site).	
Open Space					1	D	Could be achieved on a site-wide bases. Landscape architect to calculate.	
Rainwater Management			1			2D	VHB confirmed that the two proposed infiltration systems will capture 107% of the 80th percentile storm and 92% of the 85th percentile storm. The proposed systems are designed to capture and treat stormwater from the entire project site, and not just Buildings 1 and 2.	
Heat Island Reduction			2			D	Assumes that roof will be light colored TPO. Team to discuss specifying light colored concrete and pavers as well.	
Light Pollution Reduction			1			D	Exterior lighting designer to confirm exterior luminaires do not to exceed maximum uplight, backlight, and glare ratings or calculated values for MLO lighting zone.	
Tenant Design and Construction Guidelines			1			C	Tenant Guidelines will be developed by New Ecology.	
<b>Water Efficiency</b>								
Outdoor Water Use Reduction	P					D	EPA WaterSense Water Budget Tool, will be completed by landscape architect, comparing proposed system to baseline= to confirm 30% reduction from baseline.	

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Indoor Water Use Reduction	P					D	20% reduction in indoor potable water use will be achieved through the use of low-flow fixtures.	
Building-Level Water Metering	P					D	A whole building water meter will be installed.	
Outdoor Water Use Reduction			1	1		D	EPA WaterSense Water Budget Tool, will be completed by landscape architect, comparing proposed system to baseline= to confirm 50% reduction from baseline (1 pt). Additional 1 point available for eliminating irrigation or irrigating using captured rainwater.	
Indoor Water Use Reduction			4			2D	Assumes 40% reduction in indoor water use using low-flow fixtures. Assumes dual flush 1.28/0.8gpf WC's, 0.125gpf urinals, 0.35gpm public lav faucet, 0.5gpm kitchen faucets, 1.5gpm showers. Note that lease rider will be needed to require tenants to install fixtures with these rates.	
Cooling Tower Water Use			1	1		D	Requires conducting a one-time potable water analysis. Additional point is available if minimum number of cycles are achieved by increasing treatment of make up water OR using minimum of 20\$ recycled non-potable water. Additional 1 point also available for installing eliminating the need for a cooling tower by installing alternative heat rejection equipment just as GSHP.	
Water Metering			1			D	Assumes project will install meters for 2 or more of the required subsystems (irrigation, DHW, boiler makeup, etc. MEP to confirm this approach.	
<b>Energy and Atmosphere</b>								
Fundamental Commissioning and Verification	P					C	CxA will be engaged by end of DD to perform Cx services for all base-building HVAC&R equipment serving the project. OPR, BOD, and Current Facilities Requirements and O&M Plan will be prepared with information necessary to keep the building operating efficiently.	
Minimum Energy Performance	P					D	MA Stretch Energy Code is more stringent than LEED prerequisite. Design will comply.	
Building-Level Energy Metering	P					D	Whole building electricity and gas meters will be provided.	
Fundamental Refrigerant Management	P					D	CFC based refrigerants will not be used in HVAC&R systems.	
Enhanced Commissioning			5	1		C	Assumes CxA will be engaged to perform both enhanced MEP and envelope commissioning. Additional point available for pursuing ongoing, monitoring based Cx.	
Optimize Energy Performance			10	1	1	6D	10 credit points assumes 21% reduction from ASHRAE 90.1-2010 baseline. MA Stretch energy code is approximately XX% more stringent than LEED baseline.	
Advanced Energy Metering					1	D	Deterring final system-level energy metering strategy and provide list of planned energy metering data points.	
Demand Response						2D	Unlikely that tenants will be interested in giving utility control of energy systems.	
Renewable Energy Production				1	1	1D	Team to provide New Ecology with preliminary PV feasibility report to determine likelihood of meeting 1% threshold.	
Enhanced Refrigerant Management				1		D	Refrigerant ODP and GWP will be calculated once required refrigerant volumes are understood.	
Green Power and Carbon Offsets			2			C	Green power and carbon offsets can be procured (estimated 8,000 MTCO2e/yr @ \$2.60 each = \$104k over 5 years)	
<b>Materials and Resources</b>								
Storage and Collection of Recyclables	P					D	Storage/collection areas for recyclable materials, including hazardous waste will be provided.	
Construction and Demolition Waste Management Planning	P					C	Construction and demolition waste management plan identifying at least 5 different materials and estimated diversion percentage and weight will be developed.	
Building Life-Cycle Impact Reduction			1			5C	Likely that Newton will require LCA to be created by architect using Tally.	
Building Product Disclosure and Optimization - EPD			1			1C	At least 10 products from 5 manufacturers with third-party verified environmental product declarations (EPD) will be used.	

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Building Product Disclosure and Optimization - Sourcing of Raw Materials			1	1			At least 20% of the value of products used will meet the responsible extraction criteria (recycled, regional, FSC, etc.)	
Building Product Disclosure and Optimization - Material Ingredients			1			1 C	At least 10 products from 5 manufacturers with product chemical inventory to at least 0.1% or health product declaration (HPD) will be used.	
Construction and Demolition Waste Management			2			C	Refer to C&D waste prerequisite above. A 75% diversion rate will be targeted.	
<b>Indoor Environmental Quality</b>								
Minimum Indoor Air Quality Performance	P					D	Ventilation design will comply with ASHRAE 62.1. Additionally, a direct outdoor airflow measurement device capable of measuring the minimum outdoor air intake flow will be provided.	
Environmental Tobacco Smoke Control	P					D	Smoking will be prohibited in the building as well as 25 ft from the building on the exterior.	
Enhanced Indoor Air Quality Strategies (common areas only)			2			D	Permanent grates, grilles, or walk off mats for the first 10' + at all entrances. Self-closing doors and deck-to-deck partitions will be provided at rooms where cleaning supplies or other hazardous chemicals are stored. MERV 13 or higher filters will be used at all equipment providing OA. Additionally, carbon dioxide monitoring and controls will be provide for all applicable space types.	
Low Emitting Materials			2	1		C	All paints/coatings, flooring and ceiling systems will be specified as low emitting to comply with the VOC and emissions criteria.	
Construction Indoor Air Quality Management Plan			1			C	A Construction Indoor Air Quality Management Plan will be developed and implemented.	
Daylight						3 C	Unlikely that requirement can be met given deep floor plate and interior regularly occupied spaces.	
Quality Views					1	D	Unlikely that requirement can be met given deep floor plate and interior regularly occupied spaces.	
<b>Innovation</b>								
Pilot: Integrative Analysis of Building Materials			1			D	New Ecology to complete Integrative Materials Analysis using information provided in EPD's and HPD's	
IN: Purchasing-Lamps			1			C	100% of lighting will be LED.	
IN: Walkable Project Site			1			D	Walkability features of the project site will be documented.	
IN: LEED O&M Starter Kit			1			C	Green O&M and Integrated Pest Management plans will be developed.	
Pilot: Planning for Resilience				1		D	Pilot credit requirements and options will be evaluated.	
LEED AP			1			D	Several team members are LEED AP accredited.	
<b>Regional Priority</b>								
RP: Rainwater Management (2 pts)						1 D	Refer to credit details above.	
RP: Opt. Energy Performance (8 pts)			1			D	Refer to credit details above.	
RP: Renewable Energy Production (2 pts)					1	D	Refer to credit details above.	
RP: High Priority Site (2 pts)			1			D	Refer to credit details above.	
RP: Indoor Water Use (4 pts)			1			D	Refer to credit details above.	
RP: Building LCA (2 pts)						1 D	Refer to credit details above.	
			<b>60</b>	<b>9</b>	<b>8</b>	<b>35</b>		