DEC 18 2013

ENERGY CONSIDERATIONS CHECKLIST (November 27, 2011)
Planning & Community Development and Code Enforcement Offices
Town Hall, 15 Newmarket Road, Durham, NH 03824; 603-868-8064



## -PURPOSE =

This checklist was developed by the Durham Energy Committee together with the Durham Planning Board. It is intended to encourage developers, applicants for Site Plan Review, applicants for building permits, and members of the Durham Planning Board to consider and discuss optional energy efficiency measures appropriate to a specific application rather than to mandate general requirements. Discussion at early stages may result in opportunities for energy and cost savings.

Project name			15 Madbury Road & 8 Mathes Terrace Redevelopment
Da	ate of	Subr	nittal 12/18/13
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En	gine	er nar	
STAINING.	200	ct nar	Fichael J. Slevert, P.E.
<b>美和</b> 等		519,535	☑ New Construction ☑ Re-Development; Addition or Renovation
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J.A.		BUL	enteronalistano en
			National Accredited Rating for Building Energy System
Che	ck o	ne box	1 Does your building make and a
		0	Does your building meet standards for:     Passive House Institute* <a href="http://www.passivehouse.us/passiveHouse/PHIUSHome.html">http://www.passivehouse.us/passiveHouse/PHIUSHome.html</a> International Living Building Path 1
			International Living Building Institute/Living Building Challenge* <a href="http://living-future.org/lbc">http://living-future.org/lbc</a> LEED* (Platinum, Gold, Silver) <a href="http://www.usgbc.org/">http://www.usgbc.org/&gt; - English Challenge - All Challenge</a>
		<b>(2)</b>	· Energy Star <a href="http://www.energystor.nov/">http://www.energystor.nov/</a>
			the self-time of the se
		'n	• Ciner Landing over the state of the first the state of
			The state of the s
			* These organizations have established energy-efficiency criteria. Qualifying applicants are encouraged to complete and attach the checklist from that certification (to be used for information).
			complete and attach the checklist from that certification (to be used for informational purposes only) and may then skip to Part IV, "Consultation with Director of Zoning, Building Codes & Health."
	<del></del>		None of the above
Yes	No	N/A	
<u>ies</u>		IN/A	Energy performance and insulation
<u> </u>	<u> </u>	<del>-</del>	2 Attic or ceiling insulation exceeds Town code (R value proposed = 40+) (see Chapter 38)  3 Walls insulation exceeds Town building the Company of the Chapter 38)
ð		<del>-</del>	5 Walls insulation exceeds flown building code (R value proposed = 2.41)/ / Cl
Ø	<del>-</del>	- <u>-</u> -	- Souries, passive all inilitiation rate proposed*. SOACH
	-급-		
X		· <del></del>	7. Lieb Value proposed
<u>X</u>	$\overline{\Box}$		8 Heating ducts: R value proposed 10+
8	لند		9 Plans to commission the building to confirm performance
			and the building to confirm performance

<sup>\* &</sup>quot;Tight" envelopes require ventilation, typically with the use of energy or heat recovery ventilation systems.

Yes			Construction methods and materials	
	<b>(X)</b>	D	10 Net zero construction, i.e., building(s) uses less than or same amount of energy it generates	
K	<u> 0</u>	S. Burgara	11 Energy efficient doors and windows (including screens)	
Ž		□	12 Recycled content materials	
٧		ng saws		
Yes			Internal systems	
Ž			13 Low-flow plumbing fixtures	
		<u> </u>	14 Lighting: high efficiency	
<u> </u>		0	15 Energy usage monitoring system(s)	
<u> </u>			16 Energy efficient appliances (refrigerators, stoves, air conditioners, ceiling fans, etc.)	
-		<u> </u>	17 Energy efficient HVAC system (proposed efficiency level) 91% minimum	
0	<u> </u>	<u> </u>	18 Renewable HVAC system (e.g., biomass boiler or furnace) or geothermal	
Ø		D	19. Renewable hot water system (e.g., solar thermal)	
	ă		20 The total of the wable electricity generation system (i.e., solar panels)	
	<u> </u>	<u> </u>	21 Window technology or design that adjusts shading (active or passive, e.g., film, sensors)	:
٥	Ø	<u> </u>	22 Ability to charge electric vehicles	
0	ă		23 Grey-water system (e.g., to capture water from sinks or showers to use for toilets or flower gardens)	7 - 1 V
ă			24 Mechanical ventilation: Energy Recovery Ventilator efficiency proposed = 91% minimum.	
		0	25 Water usage monitoring system(s)	#8 W V
	Ø		26. Cooling load reduction features, e.g., ceiling fans, solar-ray-blocking blinds	(18 T
.5 V 2		ښامېدې د		
F.A.)	35.11	POLIE	Mail and the modes of Expressed from the properties of the propert	
Yes	No	N/A	Solar lighting, heating and cooling (passive and active)	
<u> </u>			27. Passive solar lighting design (optimizes natural illumination for interiors)	
<b>2</b>	O	0	28 Solariaccess: availability of, or access to unobstructed, direct sunlight, usually south-facing	author is
	102151		Preservation of abutting solar rights; e.g., solar skyspace easements applicable to all plots within a	Maria I
. O.	O	Ď.	230 Subdivision Child Voul Heldi Dols 200 113	
0	۵	Ø	30 Orientation of internal streets allows solar access	<del></del>
	0	ă	31 Deciduous trees that provide shade in summer and do not block solar gain in winter	
<u> </u>	0	Ø	32 Window placement maximizes winter solar penetration and minimizes solar penetration in summer	1 (4 ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) (
<u> </u>	Ď	<b>O</b> **	33 vegetated roomop(s), also known as a "green roof"	
V	\$ 1.		等,我就就是一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个一	
Yes	No	N/A	Parking	
Ž	0		34 Incentives for tenants without cars ("no free parking")	
<u>KU</u>	0		35 Compact car space designation	
	ū	Ø	36. Advanced technology and/or alternative fuel car space designation (e.g., hybrids; "E85")	
Yes	No	N/A	Transportation and the little and the second and th	
<u> </u>		IV/A	Transportation, accessibility, connectivity	
<u> </u>		<u> </u>	37 Pedestrian sidewalk network within the project area	
ŽÍ.	<u> </u>	<del>-</del>	38 Bicycle lane or path network within project area	
<u>a</u>	<del>-</del>	<del>-</del> -	39 Storage for bicycles outdoors (covered/uncovered) Secured/unsecured) < please circle	_
	•	u	40 Storage for bicycles indoors (secured) insecured) I lease circle	

40 Storage for bicycles indoors (secured/unsecured)<ple>please circle

PAR		্ <b>্</b>	LIEULSANDE LANGE (Genokappilende einskein)
Yes	No	N/A	Landscaping
			Lower Town water use results in lower electricity demand at water and wastewater treatment plants.
_0	Ø	_ 0	41 Rainwater storage, e.g., cisterns
K		0	42 Existing vegetation or native species plantings
Ŭ.		ū	43 Xeriscaping (low-water-demand plants)
		Ø	44 Low-nitrogen-demand turf grass
<u>[X]</u>			45 Rain garden ("bioretention system") to manage stormwater runoff from roofs, driveways, parking areas
	_		Covenant terms (e.g., for homeowner associations) allow:  46 Outdoor clotheslines
		×	
			47 Installation of outdoor energy-efficiency devices, such as solar panels
			UNIVERSE DE ESTOTES PINCEPTURS DE SESSION DE LA COMPANION DE LA COMPANION DE LA COMPANION DE LA COMPANION DE L
Prelii	mina	y and	follow-up consultations help solve problems and reduce costs
	No		Met with Town's Director of Zoning, Building Codes & Health
ă			48 Date: November 12, 2013
	-		
			Notes from consultation:
			Signature of Town's Director of Zoning, Building Codes & Health:

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