



PART I

• **SITE OVERVIEW**

PART II

• **CURRENT DRC SITE PLAN  
APPROVAL SET**

PART III

• **SUSTAINABILITY  
INFORMATION**

PART IV

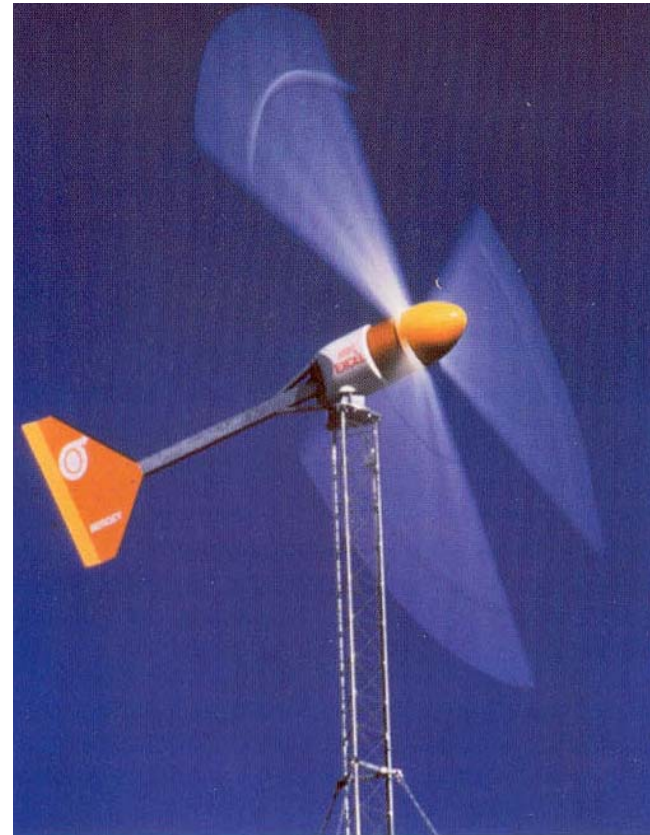
• **PARKING / TRAFFIC  
INFORMATION**

# Green Building Update

- MTC Funded Renewable Energy Study
- LEED and MA-CHPS
- Life Cycle Costing and HVAC system selection

# Renewable Energy Systems Study

- Feasibility Study Funded by MTC Green Schools Grant
- Study to examine wind and solar photo-voltaic power
- Study to be completed by June 30, 2006



# MA-CHPS and LEED

- MA-CHPS: rating system created by MSBA and MTC to assess environmental performance of schools in Massachusetts.
- Assessment under MA-CHPS partially funded by MTC grant.
- LEED: Green building rating system developed by USGBC for all types of buildings.
- LEED Certification required by design team contract.
- Charrette held in March to assess opportunities under each system.

# MA-CHPS

- Current assessment: project should 44 of 85 points available for design and construction.
- No set “passing score” by MSBA

MA-CHPS SCORECARD			
This matrix includes each point that is available. Please fill in the credits you are applying for with a numerical value for a <b>Total Project Score.</b>			<b>Total Possible Points 98</b>
44		Total Project Score	
11	Points	SITE	Possible Points 14
	--	SP 1 Comply with 603 CMR 38.04 (1-6)	
	--	SP 2 Joint Use of Facilities	
	--	SP 3 Joint Use of Parks	
	--	SP 4 Construction Erosion & Sedimentation Control	
	1	SC 1.1 Sustainable Site Selection	
	1	SC 1.2 No Development on Floodplains	
	1	SC 1.3 No Development Near Wetlands	
	1	SC 1.4 No Development on Greenfields	
	1	SC 1.5 Centrally Located Site	
	m	SC 1.6 Reduced Building Footprint	
	1	SC 1.7 Sustainable Site and Building Layout	
	1	SC 2.1 Locate Near Public Transit	
	1	SC 2.2 Transportation, Pedestrian/Bike Access	
	1	SC 2.3 Transportation, Minimize Parking	
	1	SC 3 Post-Construction Stormwater Management	
	m	SC 4.1 Design to Reduce Heat Islands, Non-Roof	
	1	SC 4.2 Design to Reduce Heat Islands, Roof	
	m	SC 5 Exterior Light Pollution Reduction	
3	Points	WATER	Possible Points 6
	m	WC 1.1 No Irrigation	
	m	WC 1.2 Water Reduction and Sports Turf Management	
	1	WC 1.3 Irrigation System Commissioning	
	m	WC 2.1 Reduce Water Used for Sewage Conveyance	
	1	WC 2.2 Indoor Water Use Reduction, 20% Reduction	
	1	WC 2.3 Indoor Water Use Reduction, 30% Reduction	
11	Points	ENERGY	Possible Points 30
	--	EP 1 Exceed Energy Code by 20%, Prescriptive Approach	
	--	EP 1 Exceed Energy Code by 20%, Performance Approach	
	--	EP 2 Elimination of CFC-based Refrigerants	
	--	EP 3 Fundamental Building Systems, Testing	
	--	EP 4 Fundamental Building Systems, Training	
	2	1-2 EC 1 Superior Energy Performance, Prescriptive Approach	
	4	1-10 EC 1 Superior Energy Performance, Performance Approach	
	2	EC 2 Minimize Air Conditioning	
	1	2-11 EC 3 Renewable Energy	
	2	EC 4.1 Commissioning	
	1	EC 4.2 Additional Commissioning	
	1	EC 5.1 Energy Management Systems	
	1	EC 5.2 Submetering	
11	Points	MATERIALS	Possible Points 12
	--	MP 1 Storage & Collection of Recyclables	
	1	MC 1.1 Site Waste Management, 75% Diversion	
	m	MC 1.2 Site Waste Management, 90% Diversion	
	1	MC 2.1 Building Reuse, Maintain 75% of Existing Shell	
	1	MC 2.2 Building Reuse, Maintain 95% of Existing Shell	
	1	MC 2.3 Building Reuse, Interior 50%	
	1-7	MC 3 Combined Materials Attributes	
18	Points	IEQ	Possible Points 23
	--	IEQP 1 Access to Views, 70%	
	--	IEQP 2 ASHRAE Standard 62.1-2004 Compliance	
	--	IEQP 3 SMACNA IAQ Guidelines	
	--	IEQP 4 Walk-Off Grills/Mats	
	--	IEQP 5 Condensate Drainage	
	--	IEQP 6 Irrigation Design	
	--	IEQP 7 Mold Protection & Filters	
	--	IEQP 8 Electric Ignition Stoves	
	--	IEQP 9 Air Intake Location	
	--	IEQP 10 Duct Insulation	
	--	IEQP 11 Prohibit Fossil Fuel Burning Equipment, indoors	
	--	IEQP 12 Filter Requirements for HVAC Equipment	
	--	IEQP 13 Minimum Acoustical Performance	
	--	IEQP 14 ASHRAE Standard 55-2004 Compliance	
	3	IEQC 1.1 Daylighting in Classrooms	
	2	IEQC 1.2 Access to Views, 90%	
	3	1-4 IEQC 2.1 Low-Emitting Materials	
	1	IEQC 2.2 Pollutant Source Control, Off-gassing	
	1	IEQC 2.3 Pollutant Source Control, Ducted HVAC Returns	
	1	IEQC 2.4 Pollutant Source Control, High Efficiency Filters	
	1	IEQC 2.5 Construction IAQ, Ventilation of VOC's	
	1	IEQC 2.6 Construction IAQ, Duct Protection	
	m	IEQC 2.7 Construction IAQ, HEPA Vacuuming	
	1	IEQC 2.8 Construction IAQ, Building Flushout	
	1	IEQC 3.1 Improved Acoustical Performance, Max 35 NC	
	m	IEQC 3.2 Improved Acoustical Performance, Max 30 NC	
	1	IEQC 3.3 Improved Acoustical Performance, Noise Isolation	
	1	IEQC 4.1 Controllability of Systems, Operable Windows	
	1	IEQC 4.2 Controllability of Systems, Thermal/Light Control	
0	Points	POLICY & OPERATIONS	Possible Points 13
	--	P&OP 1 Maintenance Plan	
	1	P&OC 1 Maintenance Plan, CMMS	
	1	P&OC 2 Indoor Environmental Management Plan	
	1	P&OC 3 Energy Star Equipment Performance	
	m	P&OC 4.1 Clean Energy, 25%	
	m	P&OC 4.2 Clean Energy, 50%	
	1	P&OC 5 Alternative Fuels, Buses	
	1	P&OC 6 Alternatively Fueled Vehicles & Equipment	
	1	P&OC 7 High Performance Policy	
	1	P&OC 8 Anti-Idling Measures	
	1-3	P&OC 9 Innovation	

Sustainable Sites      Water Efficiency      Energy & Atmosphere      Materials and Resources      Indoor Environmental Quality      Innovation and Design Process

		EA PR1 Fundamental Building System			
		EA PR2 Minimum Energy Performance			EQ PR1 Minimum IAQ Performance
SS PR1 Erosion & Sedimentation Control		EA PR3 CFC Reduction in HVAC&R Equipment	MR PR1 Storage & Collection of Recyclables		EQ PR2 Environmental Tobacco Smoke Control
SS CR1 Site Selection	WE CR1 Water Efficient Landscape	EA CR1 Optimize Energy Performance	MR CR1 Building Reuse	EQ CR1 Carbon Dioxide Monitoring	ID CR1 Innovation in Design
SS CR2 Development Density				EQ CR2 Ventilation Effectiveness	
SS CR3 Brownfield Redevelopment	WE CR2 Innovative Wastewater Technologies			EQ CR3 Construction IAQ Management Plan	
SS CR4 Alternative Transportation	WE CR3 Water Use Reduction		MR CR2 - Construction Waste Management		
				MR CR3 - Resource Reuse	EQ CR4 Low Emitting Materials
SS CR5 Reduced Site Disturbance			MR CR4 Recycled Content		
				EQ CR5 Indoor Chemical & Pollutant Source Control	
SS CR6 Stormwater Management			MR CR5 Local Regional Materials	EQ CR6 Controllability of Systems	
		EA CR2 Renewable Energy			
SS CR7 Heat Island Effect			MR CR6 Rapidly Renewable Materials	EQ 7 Thermal Comfort	
			MR CR7 Certified Wood		
SS CR8 Light Pollution Reduction		EA CR3 Additional Commissioning		EQ CR8 Daylight & Views	
		EA CR4 Ozone Depletion			
		EA CR5 Measurement & Verification			
		EA CR6 Green Power			

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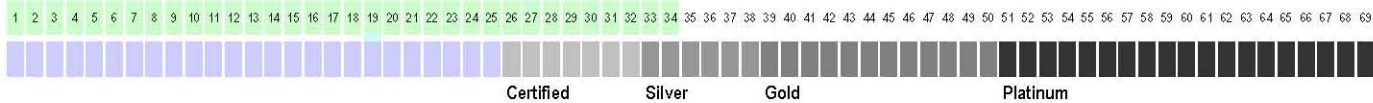
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17

13

15

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Certified

Silver

Gold

Platinum