

LEED-NC Version 2.2

Hamden Town Hall/Police Headquarters  
Hamden, CT



Steven Winter Associates Inc  
www.swinter.com

Site Area: 131,116.74  
Existing Construction:  
36,403sf  
New Construction: 49,183sf  
Total Building SF: 85,586sf  
FTE: 139  
Peak Transient: 335  
Daily Transient: 95  
Covered Parking: 89  
Non-Covered: 106

Key:  
Yes - Project either currently complies or can easily comply with minimal cost.  
Likely - Project can easily comply with minimal cost, but verification or minimal changes to current design are needed.  
Less Likely - Compliance will have significant impact on cost, design, and/or schedule.  
No - Either not applicable or cost prohibitive.

Yes	Likely	Less Likely	No
11	1	0	2

Sustainable Sites				Status / Comments:	Party:	Due by:
Y				Prerequisite SS 1 <b>Construction Activity Pollution Prevention</b> Implement an Erosion and Sedimentation Control (ESC) Plan.	CR3	TBD
1				Credit SS 1 <b>Site Selection</b> Do not develop on farmland; undeveloped land lower than 5' above 100-year flood plain; habitat for endangered or threatened species; within 100' of a wetlands; undeveloped land within 50' of a body of water; or public parkland.	CR3	TBD
1				Credit SS 2 <b>Development Density &amp; Community Connectivity</b> Opt 2: Previously developed site within 1/2 mile of residential zone (10 units/acre) and 10 basic services with pedestrian access.	SWA	TBD
	1			Credit SS 3 <b>Brownfield Redevelopment</b> Develop on a contaminated site as defined by ASTM E1903-97 or by local, state or federal governmental agency.	TH	TBD
1				Credit SS 4.1 <b>Alternative Transportation: Public Transportation</b> Within 1/4 Mile of 2 bus line stops or 1/2 mile of rail stop.	SWA	TBD
1				Credit SS 4.2 <b>Alternative Transportation: Bicycle Use</b> Provide bicycle racks for 5% of peak building users and shower facilities for 0.5% of Full-Time Equivalent (FTE) occupants.	BGW/CR3/ SWA	TBD
1				Credit SS 4.3 <b>Alternative Transportation: Low-Emitting and Fuel-Efficient Vehicles</b> Opt 3: Alternative-fuel refueling stations for 3% vehicle parking.	BGW/CR3	TBD
1				Credit SS 4.4 <b>Alternative Transportation: Parking Capacity</b> Opt 1 Non Residential: Meet but not exceed local requirements and provide 5% preferred parking for carpools or vanpools. Opt 2 Non Residential: For projects that provide parking for less than 5% of FTE, provide 5% preferred parking for carpools or vanpools.	BGW/CR3/ SWA	TBD
			1	Credit SS 5.1 <b>Site Development: Protect or Restore Habitat</b>	CR3	N/A
1				Credit SS 5.2 <b>Site Development: Maximize Open Space</b> Opt 3: For zero requirement, provide open space of 20% site area.	BGW/CR3/ SWA	TBD
1				Credit SS 6.1 <b>Stormwater Design: Quantity Control</b> Opt 2 (Existing >50% Impervious) Reduce volume by 25%.	CR3	TBD
1				Credit SS 6.2 <b>Stormwater Design: Quality Control</b> Treat 90% of average annual rainfall using BMPs.	CR3	TBD
1				Credit 7.1 <b>Heat Island Effect: Non-Roof</b> Opt 1: Shade, pave with SRI > 29, or open grid for 50% hardscape.	BGW/CR3/ SWA	TBD
1				Credit SS 7.2 <b>Heat Island Effect: Roof</b> Opt 3: Combination: $Area_{SRI} / 0.75 + Area_{Green} / 0.50 \geq Area_{Total}$	BGW	TBD
			1	Credit SS 8 <b>Light Pollution Reduction</b> Limit interior lighting exiting building and limit site lighting.	L&C	TBD

Yes	Likely	Less Likely	No
4	0	0	1

Water Efficiency				Party:	Due by:
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1				Credit WE 1.1 <b>Water Efficient Landscaping:</b> Reduce by 50%	No permanent irrigation	CR3	TBD
1				Credit WE 1.2 <b>Water Efficient Landscaping:</b> No Potable Use/Irrigation	No permanent irrigation	CR3	TBD
			1	Credit WE 2 <b>Innovative Wastewater Technologies</b>	Credit not attempted	N/A	N/A
1				Credit 3.1 <b>Water Use Reduction:</b> 20% Reduction	3:1 male to female occupancy for FTE (139) and 50/50 for visitors. A very large majority of staff is male and the number of facilities reflects this. 42.3% savings	SWA	TBD
1				Credit 3.2 <b>Water Use Reduction:</b> 30% Reduction	See above.	SWA	TBD

Yes	Likely	Less Likely	No
5	1	2	9

Energy & Atmosphere				Status / Comments:	Party:	Due by:
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Y				Prerequisite EA 1 <b>Fundamental Commissioning</b> Implement a commissioning plan using an independent agent.	BVH's Commissioning(Cx) group will provide Cx services for the project.	BVH	TBD
Y				Prerequisite EA 2 <b>Minimum Energy Performance</b> Design the building to comply with ASHRAE/IESNA Standard 90.1-2004.	350 ton system derated for freeze conditions, chiller in parking structure	L&C	TBD
Y				Prerequisite EA 3 <b>Fundamental Refrigerant Management</b> Use no CFC based-refrigerants (or phase out current use).	Chiller, rooftop AC and split systems do not contain CFC-based refrigerants. Verified by L&C	L&C	TBD
3	1	1	5	Credit EA 1 <b>Optimize Energy Performance</b> Improve energy performance beyond ASHRAE/IESNA 90.1-2004. As of June 2007, a minimum 2 credits are required (14% new, 7% existing). One addit. credit for each addit. 3.5% improvement.	Energy modeling predicted 20 to 25% more efficient than the ASHRAE 90.1 2004 (w/ Appendix G) Baseline. Potentially 3 or 4 points are targeted based on the model.	SWA	TBD
			3	Credit EA 2 <b>On-Site Renewable Energy</b> Produce energy to offset 2.5, 7.5 or 12.5% of bldg. energy cost.	Credit not attempted	SWA/L&C	TBD
1				Credit EA 3 <b>Enhanced Commissioning</b> Begin process in DD and provide follow up after construction.	BVH's Commissioning(Cx) group will provide Cx services for the project.	BVH	TBD
1				Credit EA 4 <b>Enhanced Refrigerant Management</b> Opt 2: Minimize Ozone Depletion Potential and Global Warming Potential of refrigerants and no Halon fire suppression systems.	Option 2 pursued. Equipment seems to be compliant. Waiting on info from manufacturer to complete documentation.	L&C	TBD
			1	Credit EA 5 <b>Measurement &amp; Verification</b>	Credit not attempted	N/A	N/A
		1		Credit EA 6 <b>Green Power</b> Provide 35% of the building's electricity from renewable sources.	Town to review this option for a 2 year contract.	TH	TBD

Yes	Likely	Less Likely	No
4	3	1	5

Materials & Resources				Status / Comments:	Party:	Due by:
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Y				Prerequisite MR 1 <b>Storage &amp; Collection of Recyclables</b> Dedicated space for the storage and collection of recyclables.	Dedicated space required for certain recycling activities. Requires collection of paper, cardboard, plastic, glass and metal.	BGW	TBD
1				Credit MR 1.1 <b>Building Reuse:</b> 75% of Existing Walls, Floors & Roof Applies to building structure and envelop (excluding windows).	Existing building to retain existing exterior shell and structure. Over 93% calculated reuse	NCA	TBD
			1	Credit MR 1.2 <b>Building Reuse:</b> 95% of Existing Walls, Floors & Roof	Credit not attempted	NCA	TBD
			1	Credit MR 1.3 <b>Building Reuse:</b> 50% of Interior Non-Str. Elements	Credit not attempted	NCA	TBD
1				Credit MR 2.1 <b>Construction Waste Management:</b> Divert 50% Waste can be sorted off site. Exclude soil and land-clearing debris.	SWA to provide spec information for incorporation in bid docs. Targeting both points as achievable.	SWA/BGW/CM	TBD
	1			Credit MR 2.2 <b>Construction Waste Management:</b> Divert 75% As above. Divert 95% for Exemplary Performance Credit.	See above.	SWA/BGW/CM	TBD
			1	Credit MR 3.1 <b>Materials Reuse:</b> 5%	Credit not attempted	N/A	N/A
			1	Credit MR 3.2 <b>Materials Reuse:</b> 10%	Credit not attempted	N/A	N/A
1				Credit MR 4.1 <b>Recycled Content:</b> 10% (post + 1/2 pre-consumer) Based on cost. Recycled content of materials based on weight.	SWA provided spec information for incorporation in bid docs. Targeting one point but both points are achievable. Concrete, steel, drywall, carpet are some targeted items.	SWA/BGW/CM	TBD
	1			Credit MR 4.2 <b>Recycled Content:</b> 20% (post + 1/2 pre-consumer) As above. Use 30% for Exemplary Performance Credit.	See above.	SWA/BGW/CM	TBD

1				Credit MR 5.1 <b>Regional Material:</b> 10% Extracted, Processed & Manufactured Regionally Based on material cost. Fractions of content are based on weight.	Materials within 500 miles of the site. SWA provided spec information for incorporation in bid docs. Targeting one point but both points are achievable.	SWA/BGW/CM	TBD
		1		Credit MR 5.2 <b>Regional Material:</b> 20% Extracted, Processed & Manufactured Regionally As above. Use 40% for Exemplary Performance Credit.	See above.	SWA/BGW/CM	TBD
			1	Credit MR 6 <b>Rapidly Renewable Materials:</b> 2.5 %	Credit not attempted	N/A	N/A
	1			Credit MR 7 <b>Certified Wood</b> Use FSC certified wood for 50% of all new wood components.	SWA provided spec information for incorporation in bid docs.	SWA/BGW/CM	TBD

Yes	Likely	Less Likely	No
7	1	3	4

Indoor Environmental Quality	Status / Comments:	Party:	Due by:
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Y				Prerequisite EQ 1 <b>Minimum IAQ Performance</b> Meet minimum requirements of ASHRAE 62.1-2004 (Sections 4 - 7) and approved Addenda (see ASHRAE 62-2001, Appendix H) using the Ventilation Rate Procedure.	Discussed the specified system should comply.	L&C	TBD
Y				Prerequisite EQ 2 <b>Environmental Tobacco Smoke (ETS) Control</b>	Smoking not permitted within building. Designated smoking areas (if any) will be at least 25' away from building entrances, windows and intakes.	TH/SWA	TBD
1				Credit EQ 1 <b>Outdoor Air Delivery Monitoring</b> Provide permanent monitoring of CO2.	Discussed the specified system should comply.	L&C	TBD
			1	Credit EQ 2 <b>Increased Ventilation</b>	Credit not attempted	L&C	TBD
1				Credit EQ 3.1 <b>Construction IAQ Mgmt. Plan: During Construction</b> Implement IAQ plan per SMACNA Guidelines, protect absorptive materials from moisture and use MERV 8 filters during construction.	SWA provided spec information for incorporation in bid docs. Targeting one as achievable.	SWA/CM	TBD
	1			Credit EQ 3.2 <b>Construction IAQ Mgmt. Plan: Before Occupancy</b> Opt 1: Flush out. Opt 2: Air quality testing.	SWA provided spec information for incorporation in bid docs. Targeting one as achievable.	SWA/CM	TBD
1				Credit EQ 4.1 <b>Low-Emitting Materials: Adhesives &amp; Sealants</b> In accordance with SCAQMD Rule #1168.	SWA to provide spec information for incorporation in bid docs.	BGW/SWA/CM	TBD
1				Credit EQ 4.2 <b>Low-Emitting Materials: Paints &amp; Coatings</b> Limit VOCs for interior paints and coatings applied on site.	SWA to provide spec information for incorporation in bid docs.	BGW/SWA/CM	TBD
1				Credit EQ 4.3 <b>Low-Emitting Materials: Carpet Systems</b> Per Carpet and Rug Institute's Green Label Plus program.	SWA to provide spec information for incorporation in bid docs.	BGW/SWA/CM	TBD
		1		Credit EQ 4.4 <b>Low-Emitting Materials: Composite Wood &amp; Agrifiber</b> No urea-formaldehyde resins.	SWA provided spec information for incorporation in bid docs. This is achievable but can be costly. Review.	BGW/SWA/CM	TBD
			1	Credit 5 <b>Indoor Chemical &amp; Pollutant Source Control</b> Install permanent entryway systems, separate and exhaust point sources of air contaminants, and use MERV 13 filtration.	Credit not attempted	N/A	N/A
		1		Credit 6.1 <b>Controllability of Systems: Lighting</b> Provide control for 90% occupants and control for shared spaces.		F&C	TBD
		1		Credit 6.2 <b>Controllability of Systems: Thermal Comfort</b> Provide control for 50% occupants and control for shared spaces.		F&C	TBD
1				Credit 7.1 <b>Thermal Comfort: Design</b> Design in accordance with ASHRAE 55-2004.	Appears achievable	F&C	TBD
1				Credit 7.2 <b>Thermal Comfort: Verification</b> Implement verification survey within 6 to 18 months of occupancy.	Town of Hamden interested in this point. SWA to provide sample surveys.	TH/SWA	TBD
			1	Credit 8.1 <b>Daylight &amp; Views: Daylight 75% of Spaces</b>	Despite additional auditorium windows, 75% cannot be achieved	SWA	TBD
			1	Credit 8.2 <b>Daylight &amp; Views: Views for 90% of Spaces</b>	Too many regularly occupied spaces are located in the center of the building	SWA	TBD

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**Innovation & Design Process**

Status / Comments:

Party:

1				<p>Credit ID 1.1  <b>Innovation in Design: WEc3 Water Use Reduction</b>                      Exemplary performance or use of new innovative technologies.</p>	WEc3 - 40% +	SWA	TBD
	1			<p>Credit ID 1.2  <b>Innovation in Design: Education &amp; Outreach</b>                      Project can earn an innovation credit using the building as a case study to educate users and public about green buildings. Two of the following three requirements need to be pursued:                      1. Building integrated feature (Signage, Kiosk, etc.) that speaks to the green features of the project.                      2. Outreach Component (webpage, tours, lectures, etc.) that speaks to the green features of the project.                      3. Case Study Document that speaks to the green building features of the project and is provided to the USGBC for their use.</p>	SWA can provide samples from projects that have achieved this credit.	SWA	TBD
		1		<p>Credit ID 1.3  <b>Innovation in Design: Green Operations and Maintenance</b>                      Exemplary performance or use of new innovative technologies.</p>	SWA will provide requirements to Town of Hamden.	TH/SWA	TBD
		1		<p>Credit ID 1.4  <b>Innovation in Design: Open</b>                      Exemplary performance or use of new innovative technologies.</p>		BGW/CR3/SWA	TBD
1				<p>Credit ID 2  <b>LEED® Accredited Professional</b>                      At least one LEED® AP on the project team.</p>	Numerous LEED AP's on project team	SWA	TBD

Yes  
Likely  
Less Likely  
No

33 7 8 21

**Project Totals (pre-certification estimates)**

**69 Points**

69

Certified 26-32 points Silver 33-38 points Gold 39-51 points Platinum 52-69 points