A chart listing "Energy and Environmental Opportunities for the Town of Princeton's Proposed New Public Safety Building" is below. This document provides a list of the types of elements that might be considered with regard to energy, water efficiency, landscape, transportation, indoor environmental quality, and waste management. The list is neither inclusive or exclusive of all opportunities, but is a product of EAC member brainstorming, and meant to instigate further discussion, inquiry, and cost-benefit analysis.

We understand and expect any final elements must fit within the existing budget and comport with architect and contractor recommendations. We expect final recommendations will be based on how the element might bring cost-effective value of economic benefits in cost-savings operation (i.e., energy, water, maintenance, and waste savings); health benefits (i.e., indoor and outdoor air quality); and environmental benefits (i.e., reduced energy use, reduced carbon emissions, water conservation, reduced waste). Moving forward in considerations, the team might look to Stretch Energy Code guidance and/or LEED (Leadership in Energy and Environmental Design) green building system guidance.

There are many examples of LEED-certified Massachusetts municipal buildings to which the Town might look for inspiration and ideas including Arlington's Central Fire Station; Lexington's Samuel Hadley Public Services Building; Springfield's White Street Fire Station; Great Barrington Fire Station; Northampton Police Department (designed by Caolo & Bieniek) (see Sustainable Concept Design Brief); UMass Police Station (designed by Caolo & Bieniek).

Energy and Environmental Opportunities for the Town of Princeton's Proposed New Public Safety Building

ENERGY			
	Lighting		
		LED fixtures (ceiling and task lighting)	
		Sensors: Occupancy and Daylight	
		Utilize Natural Light (Daylighting)	
		Outdoor Lighting—Night Sky Friendly (shading; warm LED;	

		timers/motion sensors)	
	Energy Systems		
		Programmable Thermostats / Occupancy Sensors for room temperature control	
		Radiant Heating (particularly in garage bays)	
		Heat Pump Air Handling Units	
		Heat Pump Water Heaters	
		On-Demand Water Heater	
		Passive Solar Heating through properly sized and oriented windows	
		Thermal energy storage	
		Computerized energy management system	
	Weatherization		
		Vestibule or Double Doors at Entrances/Exits	
		Insulation:	

		- Foundation to roof (high R value) - Water pipes - HVAC ductwork	
		Triple Pane Windows	
		Sunshades at Windows	
	Renewable Energy		
		Bio-Fuel (Wood) Boiler	
		Geothermal HVAC System	
		Rooftop Solar Array	
		Solar Canopy/Carport Parking Lot Installation	
	Other		
		Energy Efficient Appliances	
		Bathroom Exhaust Timer or Humidistat	
		“Off” and “Unplug” policy for after business hours	
WATER EFFICIENCY			
	Plumbing Fixtures		
		Dual-flush and high-efficiency toilets	

		Low-flow faucets and showerheads	
		Auto-shut off faucets	
		Flush valves and shower heads on battery-operated sensors	
		Water-efficient appliances (dishwasher; washing machine)	
SUSTAINABLE LANDSCAPE			
	Plants		
		Drought-tolerant and native plants	
	Other Water Conservation/Stormwater Management		
		Roof runoff directed to rain barrels (to be utilized for outdoor watering needs)	
		Curbside Rain Gardens	
		Permeable Parking Lot Pavement/Pavers in low-use areas (shoulders; patios; walkways)	
	Irrigation		

		Install timer-activated drip irrigation in garden beds	
TRANSPORTATION			
	EVs		
		EV Charging Station	
	Other		
		Bicycle racks for staff and public	
INDOOR ENVIRONMENTAL QUALITY			
	Building Materials		
		Low-VOC (paint; wallpaper; sealants)	
		Minimize carpeted areas and use “Green Label” carpet, pad, adhesives	
		Avoid Vinyl Flooring	
		Avoid products with formaldehyde (which may be in particleboard, fiberboard, plywood, and joint compound)	
		Operable Windows	
		Non-Toxic Pest Control	
	Cleaning		

		Non-Toxic Cleaning Products	
	Other		
		No-Smoking Policy	
		Anti-Idling Policy	
WASTE MANAGEMENT			
	Construction Waste		
		Divert Construction Waste through recycling options	
	Waste		
		Receptacles for waste next to receptacles for recycling—inside and outside of building	
		Recycling policy and enforcement	