Note: As documentation, all Prerequisites and Credits claimed require a brief narrative of the approach used to meet the intent of the criteria. This sample CHPS Scorecard provides examples of the Narrative, Calculations and References required to complete the scorecard. These examples are intended as an example of the type of information required by CHPS. Your narrative should document the design approach the design team has chosen for each of the criteria While this example scorecard has provided examples for all credits and prerequistes, no school will claim points for all the credits available. A narrative should only be provided for prerequisites and credits being claimed for your particular school.

Collaborative for High Performance Schools (CHPS) Sample Scorecard

School: Name Of School & District **Date:** Date Scorecard submitted

Contact (Name, Title, Firm)**:**

Contact Information (Phone & Email)**:**

Verification: Registered Principal Architect (Signature)**:**

(Name, Title, Date)

Verification: Project Manager (Signature)**:**

(Name, Title, Date)**:**

CHPS SECTION	CREDIT NUMBER[1]	TITLE	POSSIBLE POINTS	SUMMARY[2]	POINTS EARNED	NARRATIVE, CALCULATIONS, DOCUMENT/ PLAN REFERENCE (Use Separate Sheet as Necessary)
SITE (2 prerequisites; 14 possible points)						
Site Selection	P 1	Code Compliance	Req	P1.1. Comply with all requirements of Title 5	**X**	DTSC ans SFPD have validated that this site complies with Title 5 requirements.
	C 1	Sustainable Site Selection	1	1.1. No development on sites that are: prime agricultural land, in flood zone, habitat for endangered species, parkland	**1**	Site was former commercial site prior to acquisition by school district. Site is more than a mile from nearest wetlands and is 20' above the 100 year flood.
			1	1.2. Do not develop on greenfields	**1**	Site was former commercial site prior to acquisition by school district.
			1	1.3. Create centrally located sites within which 50% of students are located within minimum distances of the school	**1**	The Middle School site is centrally located in a high density neigborhood. 65% of students live within 2 miles of the school site.
			1	1.4. Joint use of facilities	**1**	Multipurpose Room is used by community for meetings , performances and as an emergency shelter
			1	1.5. Joint use of parks	**1**	Playground and sports field on the North side of the school will be open to the local community. The local Parks and Recreation department has agreed to share the cost of maintaining this area.
			1	1.6. Reduced building footprint	**1**	Buildings are two story on a compact site. Gym and multipurpose room are 2 story spaces. FAR=1.75
Transportation	C 2	Transportation	1	2.1. Near public transit	**1**	2 bus lines stop at the corner of the site and one bus stop has been added at the entrance to the site. As part of this project a 200 sf covered waiting area was built at the site entrance to serve this bus stop.
			1	2.2. Provide bike racks & bike lanes for 15% of school population		15% x 600 = 90 Bicycles. Racks have been provided for 100 Bicycles. Biker lanes are provided on school site to provide seperation from vehicle traffic.
			1	2.3. Minimize parking lot & create preferred parking for carpools	**1**	Max Spaces: 3 x 34 Clsrms = 102 spaces, Spaces Provided: 75, Carpool/Van:: 5% x 75 = 4 spaces Identify preferred spaces for Carpools and/or Vanpools.
Stormwater Management	P 2	Construction Erosion	Req	P2.1. Control erosion & sedimentation to reduce negative impacts on water & air quality	**X**	A Stormwater Pollution Prevention Plan was developed before the start of construction. A silt fence was used to prevent soil erosion from the constrcution area. The stored topsoil was covered with tarps throughout the construction phase.

	C 3	Post-construction Management	1	3.1. Minimize runoff	**1**	Rain water from roof is diverted to cisterns for landscape irrigation. Impervious area kept to a minimum by providing minimal parking and driveways. Parking area graded so that all stormwater drains to catch basins. See below.
			1	3.2. Treat runoff	**1**	All parking and roadway surfaces drain to a catch basin / filtration system.
Outdoor Surfaces	C 4	Design to Reduce Heat Islands	1	4.1. Shade or lighten impervious areas, OR reduce impervious parking	**1**	All Walkways and bike paths are light colored / high albedo (0.5) pavement. Maturing trees will cover 50% of parking area within 3 years. The parking area closest to the building is shaded to reduce heat transfer to the building.
			1	4.2. Install cool roof	**1**	EPDM white, single-ply thermoset roofing. Initial Solar Reflectance = 0.76, Initial Thermal Admittance = 0.9. Cool Roof Rating Council Product ID#: 0628-0003
Outdoor Lighting	C 5	Light Pollution Reduction	1	5.1. Minimize outdoor illumination with no direct beam leaving site	**1**	Walkway lighting accomplished with bollards. Roadway and parking lighting uses Cutoff Type fixtures. Illuminance level in this Zone E2 site is maximum 0.3 fc.
WATER (1 prerequisite; 5 possible points)						
Outdoor Systems	P 1	Create Water Use Budget	Req	P1.1. Establish & comply with water use budget	**X**	MAWA = (Eto)(.8)(LA)(.62) =(51 inches)(.8)(50,000 ft²)(.62) =1,264,800 gallons/year. Landscaping designed to use irrigation level below 1,264,800 gallons/year.
	C 1	Reduce Potable Water for Landscaping	1-2	1.1. Use high efficiency irrigation technology, OR reduce potable water consumption for irrigation by 50 or 100%	**1**	Native climate tolerant plantings and high efficiency irrigation system requires 750,000 gallons/year. Captured rainwater will provide 250,000 gal/year, resulting in 500,000 gallons of potable water used. This results in a **60%** savings over the landscape budget baseline of 1,264,800 gal/year.
Indoor Systems	C 2	Water Use Reduction	1	2.1. 50% reduction in potable water use for sewage conveyance with reclaimed water	**1**	Municipally supplied reclaimed water used for all toilets. Waterless urinals used throughout the school.
			1-2	2.2. Decrease water use by 20 or 30% after meeting Energy Policy Act	**2**	**37%** water use reduction achieved with the use of low flow fixtures. See attached calculations.
ENERGY (2 prerequisites; 24 possible points; minimum 2 points required)						
Energy Efficiency	P 1	Minimum Energy Performance	Req	P1.1. Design building to exceed Title 24-2001 by 10%, OR include prescriptive package of measures	**X**	Three rows of high efficiency direct/indirect luminaries in all classrooms and efficient lighting in hallways, the gym, multipurpose room and library result in an average adjusted LPD of .95 W/ft² for entire school. Integrated economizers installed on all package roof top units.
	C 1	Superior Energy Performance	2-10	1.1. 15% to 35% reduction in total net energy use from Title 24-2001 baseline, or include prescriptive package of measures.	**4**	A **21%** reduction in total net energy use compared to the Title 24-2001 baseline was achieved. Energy efficiency features include tall north facing glass for daylighting, wide overhangs and side fins to control solar gain through glazing, excellent wall and roof insulation, thermal breaks in glazing, radiant slab heating, natural ventilation supplemented with circulated cooled water via a cooling tower in the radiant slab, use of high efficiency condensing boilers, daylighting controls, and occupancy sensors for lighting. A photovoltaic system for building generated power and backfeed into the grid provides about half of the building's annual electricity consumption.
	C 2	Natural Ventilation	1	2.1. HVAC interconnect controls with operable windows & doors	**1**	Interlocks are installed in the computer lab, the multipurpose room and the gym to turn off the air conditioning in these space when windows or doors are left open. Ventilation fans are not turned off by the interlocks. The remainder of the school is not air conditioned.
			3	2.2. Design 90% of classrooms without air conditioning	**3**	All classrooms were designed without air conditioning. The buildings are cooled primarily by natural means. Cross ventilation occurs in regularly occupied classrooms with windows occurring at high and low locations. Exhaust fans provide the minimum required ventilation levels and assist with natural ventilation. See Arch. dwgs A3.01-A3.08, A6.04 & Mech dwgs M2.03 & M4.02.
Alternate Energy Sources	C 3	Renewable Energy	1-6	3.1. 5 to 50% of net energy use supplied by renewable energy or distributed generation	**6**	An on site 23 kW photovoltaic laminate system was installed on the roof to provide renewable energy for the facility. A saw-tooth roof system provides a grater angle to increase efficiency of the laminates. This system will provide approximately 42,000 kWh or 55% of the building's electricity use per year.
Commissioning & Verification	P 2	System Testing & Training	Req	P2.1. Third party or district verification of building systems & training	**X**	Add Narrative
	C 4	Commissioning	2-3	4.1. Basic commissioning tasks		
	C 5	Energy Management Systems	1	5.1. Install an Energy Management System to measure & control loads	**1**	EMS system installed to monitorand control lighting and HVAC systems throughout the school. The system is monitored and controlled from district headquarters.
MATERIALS (1 prerequisite; 11 possible points)						

Waste Reduction & Efficient Material Use	P 1	Storage and Collection of Recyclables	Req	P1.1. Meet local standards for recycling space & have spaces dedicated to recycling	**X**	Dedicated recycling space is included in all common areas. Casework in each classroom and administrative areas includes space for recyclable materials collection. Multipurpose room has built in recycling center. Compost bin located in close proximity to kitchen and student demonstration garden. Centralized trash collection area has separate recycling collection containers.
	C 1	Site Waste Management	1-2	1.1. Meet local ordinances, develop waste management plan, & recycle 50 or 75% of construction waste	**1**	Site Waste Management Plan developed by General Contractor resulted in 60% diversion from landfill. The following materials were recycled or composted: concrete (50 tons), land clearing debris (40 tons),wood (18.5 tons), gypsum board (8 tons) and cardboard (7.2 tons). 82.4 tons ended up un the landfill. Recycle Rate = Recycled Waste/ (Recycled waste + Grabage) x 100 = 123.7/ (123.7 + 82.4) = **60%**
	C 2	Building Reuse	1-3	2.1. Reuse 75% or 100% of previous structure (+ 50% of non-shell systems for 3 points)	**1**	Existing office building converted to middleschool. 100% of the structure was reused and 68% of the existing shell, resulting in **84%** total building reuse. See the attached calculations. How did you come up with this percent? I think an example calculation is warranted here.
	C 3	Resource Reuse	1-2	3.1. Specify salvaged or refurbished materials for 5 or 10% of building	**1**	Salvaged brick ($75,000) has been used on all brick exterior facades. The heavy timber trusses in the gym and multi purpose room were also salvaged ($60,000). Salvage Rate (%) = Salvaged Material ($)/ Total Material ($) X 100 = 135,000/2,500,000 X 100 = **5.4%**
Sustainable Materials	C 4	Recycled Content	1-2	4.1. 25 or 50% of building materials meet requirements	**1**	Pursued the Prescriptive Approach: Specified and installed the following products, which meet the EPA's Comprehensive Procurement Guidelines: Fiberglass Insulation, Concrete w/ Fly Ash, Plastic Restoom Dividers and Interior Paints.
	C 5	Rapidly Renewable Materials	1	5.1. 5% of materials are rapidly renewable	**1**	The following rapidly renewable products were used in this school: Linoleum floors ($50,000) and compressed straw board for the built-in cabinetry ($90,000). Rapidly Renewable Material Portion (%) = Rapidly Renewable Material ($)/ Total Material ($) X 100 = 140,000/2,500,000 X 100 = **5.6%**
	C 6	Certified Wood	1	6.1. 50% of wood must be certified	**1**	This school is not wood framed, except for the salvaged trusses in the gym and multipurpose room. All (HOW CAN ALL WOOD BE FSC CERTIFIED IF YOU GET 63%?) finished wood components are FSC certified. This includes exposed built in furnishings, display cases and other architectural features. Certified Wood Material Portion (%) = FSC Wood Products ($)/ Total Virgin Wood ($) X 100 = 32,250/51,550 X 100 = **63%**
INDOOR ENVIRONMENTAL QUALITY (3 prerequisites; 17 possible points)						
Daylighting	C 1	Daylighting in Classrooms	3	1.1. Minimum 2% daylight factor in 75% of classrooms	**3**	The building is oriented on a north-south axis with emphasis on north light and south shading. Shading components such as overhangs and wing walls have been integrated into the building design to reduce glare as well as unwanted solar gain. Light shelves on the south facade, 10' ceilings in all classrooms and occupancy/ photosensor controls are also part of the lighting/daylighting strategy.
			1	1.2. Direct line of site glazing for 90% of classrooms	**1**	All classrooms and administrative areas have a full length window wall with a 3'-0" sill. The view windows extend to a light shelf at 7-'6" on South facing windows and to the ceiling on North facing windows. Some classrooms have alcoves which acount for less than 10% of the floor area.
Indoor Air Quality	P 1	Minimum Requirements	Req	P1.1. HVAC must meet Title 24 ventilation requirements, Cal/OSHA performance requirements, & satisfy ASHRAE 62 requirements for outdoor air supply	**X**	Mechanical systems are designed to meet 15 cfm per person of ventilation air. The fans run even when cooling and heating mode are off, and are connected to the occupancy sensors for the lighting system. Drip irrigation systems do not spray on buildings. All filters were replaced prior to occupancy.
	C 2	Low-Emitting Materials	1-4	2.1. Building materials (paints, ceiling tiles, carpet, adhesives, etc.) meet chemical emission rates detailed in CHPS material specifications	**3**	The following products used in the construction are listed on the CHPS Low-Emitting Materials Table: Ultra Touch Natural Cotton Insulation, Marmoleum, Medex Medium Density Fiberboard.
	C 3	Pollutant Source Control	1	3.1. Control dust, segregate pollutant sources, local exhaust in kitchens, appropriately plumbed drains in chemical storage areas	**1**	Walk-off mats are located at all entrances. Custodial areas and the chemistry lab are physically isolated with individual exhaust systems. All vented hoods in the kitchen and chemistry lab are vented diredtly to the outside.
			1	3.2. Install ducted HVAC returns	**1**	All HVAC returns are ducted, plenum returns are not used. See Mechanical plans.
			1	3.3. Use high efficiency filters	**1**	Air filtesr rated at minimum 65% throughout school.

	C 4	Construction IAQ Management Plan	1	4.1. Create & implement specified construction IAQ plan	**1**	All Requirements of Specification Section 01350 1.6C Construction Ventilation and Preconditioning have been met. Including; 72 hours of continuous ventilation was supplied by temporary fans during installation of materials that emit VOC's and carpet was installed after continuous ventilation was completed. Ventilation system was turned off and all grills and diffusers sealed during construction.
			1	4.2. Flush out building or conduct IAQ testing	**1**	Building flush-out started on 7/25. Contractor performed touch up work on 8/16 & 8/17. Therefore 6 days were added to flush-out (2 days of work + 4 days per requirement). Flush-out finished on 8/30.
Acoustics	P 2	Minimum Acoustical Performance	Req	P2.1. Classrooms must have a maximum (unoccupied) noise level of 45dbA, with maximum (unoccupied) reverberation times of 0.6 sec.	**X**	See Credit 5.1 below.
	C 5	Improved Acoustical Performance	1-2	5.1. Classrooms must have a maximum (unoccupied) noise level of 40dbA or 35 dbA, with maximum (unoccupied) reverberation times of 0.6 sec.	**1**	AHU are not located directly over classrooms, diffusers are NC-20 (or lower) and 15 minimum ductwork is used before any diffusers. Interior walls with STC __ extend to the structural deck and windows on street side are STC __. Ceilings are acoutical tile, NRC = .70. See attached Acoustical Services report.
Thermal Comfort	P 3	ASHRAE 55 Code Compliance	Req	P3.1. Comply with Title 24 required ASHRAE 55-1992 thermal comfort standard	**X**	HVAC system designed to comply with ASHRAE Standard 55-1992.
	C 6	Controllability of Systems	1	6.1. Operable windows in classrooms	**1**	Each classroom has several operable windows allowing the occupants to tailor their own comfort level by tuning the openings.
			1	6.2. Temperature & lighting controls in all classrooms	**1**	Each classroom is a separate thermal zone, allowing teachers to adjust the space temperature via a thermostat. Lights are photo sensor and user controlled for full override to off positions when necessary and when teachers wish to demonstrate how little light is needed in the rooms.
DISTRICT RESOLUTIONS (10 possible points)						
Institutionalize High Performance	C 1	District Resolutions	1	1.1. Institutionalize High Performance Goals on a district level	**1**	Resolution adopting CHPS for all new school construction and modernization projects on a district wide level passed by the School Board on 2/13/01
Indoor Air Quality	C 2	IAQ Management Plan	1	2.1. Create IAQ Management Plan and include in Facility Maintenance & Commissioning Plans. Designate a trained staff person with clear responsibility to implement & update the plan	**1**	Resolution adopting EPA's Tools for Schools Program on a district level adopted by School Board on 11/24/02. Schools Facilities Director is responsible for the IAQ Management Plan.
Maintenance	C 3	Maintenance Plan	1	3.1. Create a maintenance plan that includes an inventory of all equipment in the school & their preventative maintenance needs	**1**	Maintenance Plan for school developed by Facilities Director and maintenance staff. Plan includes scheduled inspections, cleaning and replacement of components.
			1	3.2. District allocates budget to fund plan at 100%	**1**	School Board has passed resolution funding maintenance plan at $100,000 per year for the 04/05 - 06-07 school years. Further funding to be provided in 2007.
Energy	C 4	Equipment Performance	1-2	4.1. Require Energy Star equipment & prohibit wasteful technologies or new equipment to be within 20% of EPA Energy Star "best available" for the category	**2**	Resolution requiring new equipement and appliances be within 20% of the EPA ENERGY STAR 'best available' for the category and that halogen torchies and electrical resistance space heaters not be used within the school passed by School Board on 11/24/02.
	C 5	Green Power	2	5.1. Engage in a two-year power contract to purchase power generated from renewable sources approved by CEC	**2**	Power for school from 9/04 through 9/06 to be provided by Sierra Renewable Energy Corp. SREC is approved by the California Enegy Commission as a renewable energy source provider.
Transportation	C 6	Buses & Alternate Fuels	1	6.1. Provide busing service	**1**	Busing provided to select areas where distance or unsafe conditions warrant.
			1	6.2. 20% of bus & maintenance vehicle fleet serving the school must use alternative fuels	**1**	20% of buses currently run on natural gas, to be 25% by 2006.
TOTAL (Minimum points required for CHPS school is 28 of possible 81)					**63**	

1. P = Prerequisite; C = Credit
2. For specific requirements for each credit, see CHPS Best Practices Manual, Volume III, Criteria, available at www.CHPS.net