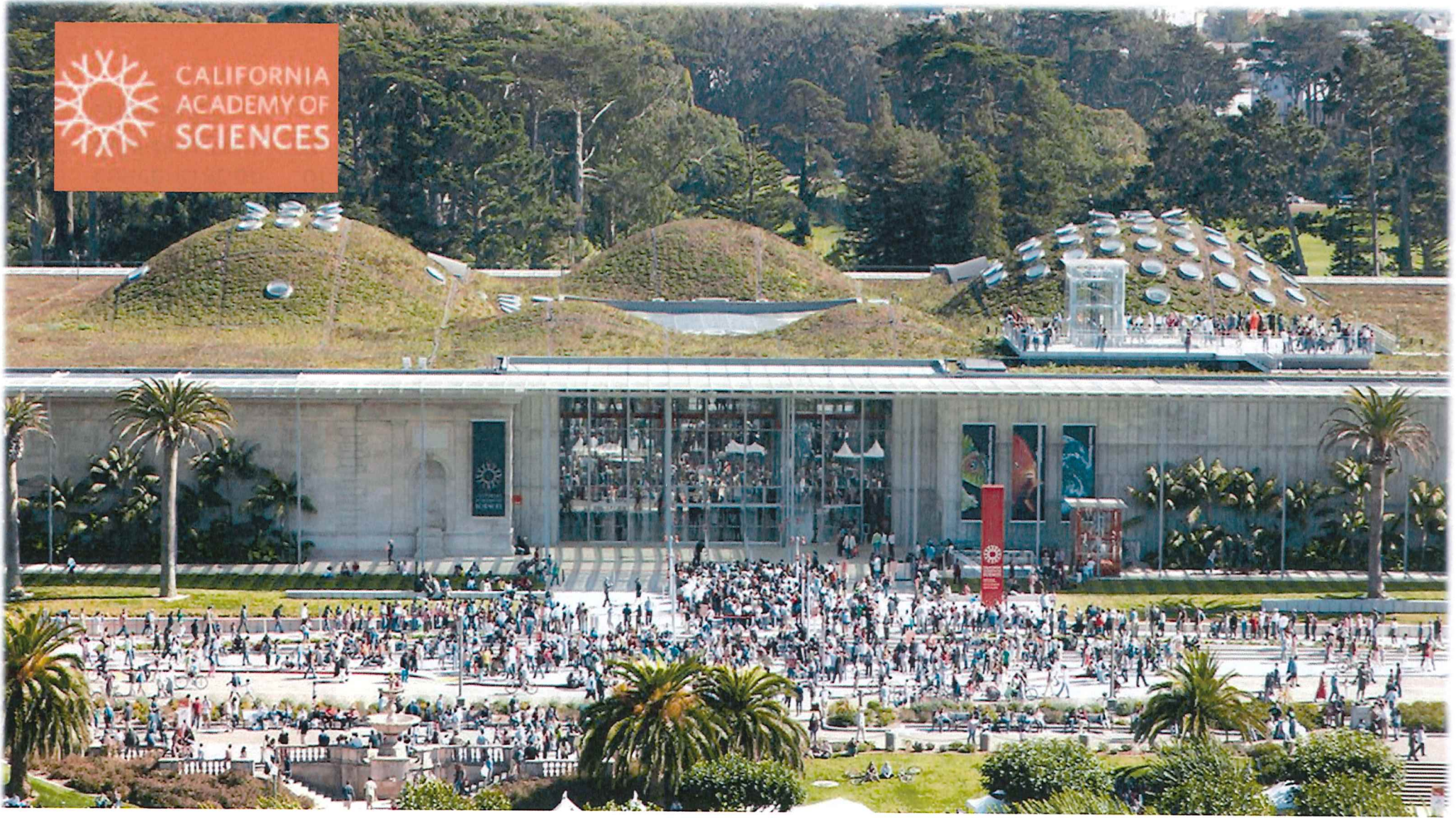
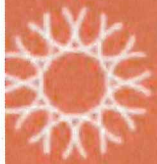


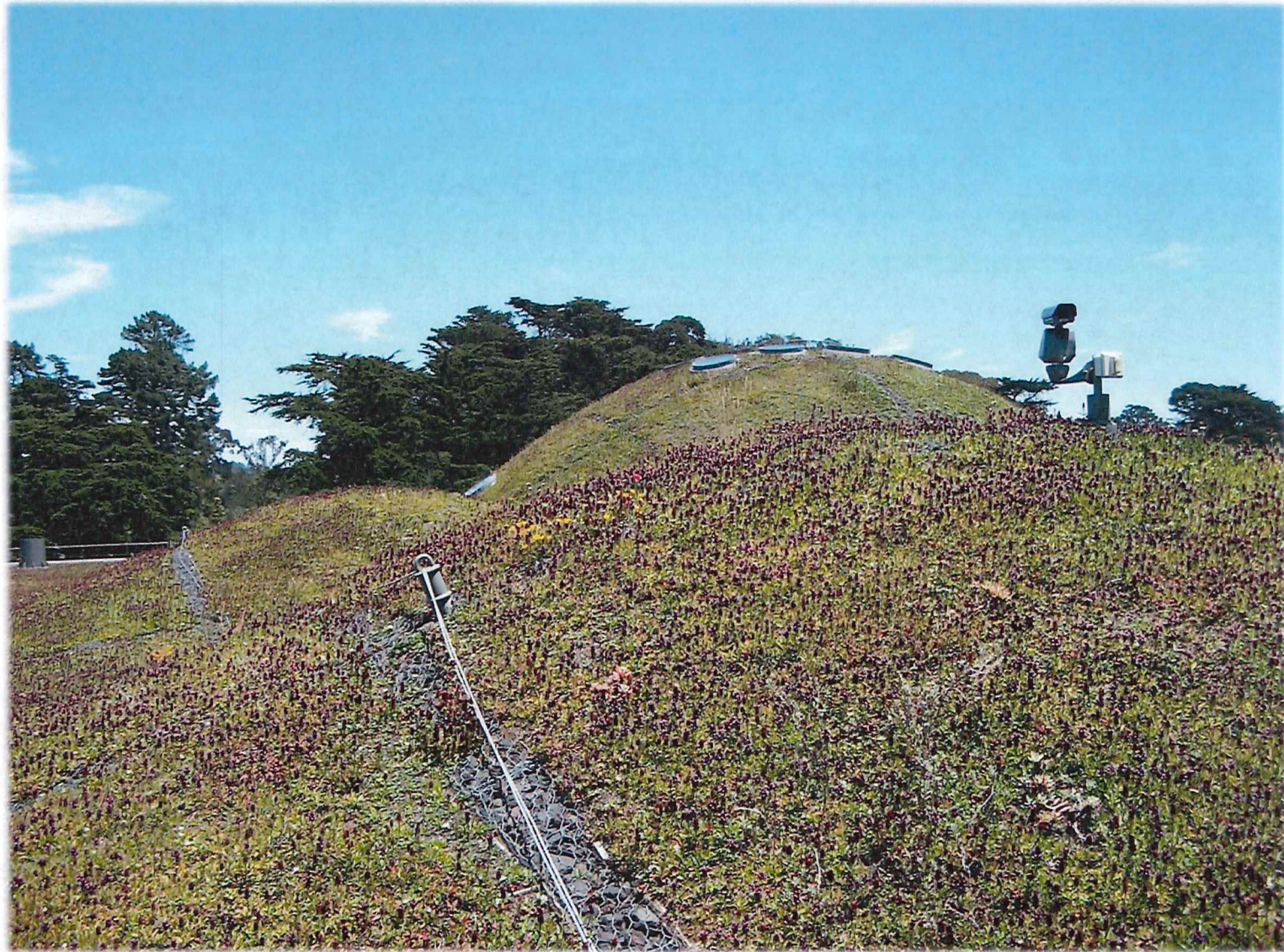
CALIFORNIA
ACADEMY OF
SCIENCES





CALIFORNIA
ACADEMY OF
SCIENCES

- Interaction with Human Scale.
- Native plants
- Food and habitat for birds, bees, butterflies, and other beneficial animals
- Most dense concentration of wild flowers in San Francisco.





Epic

- Interaction with human scale
- Variety of plant species (Sedum shown in the canopy roof example on next slide)



Epic





MILLENNIUM
PARK
CHICAGO

- Interactive with Human Scale, intended to serve as example for home gardeners.
- Native Plants.
- Healthy habitat for migratory birds, butterflies, honeybees, and beneficial insects.
- Urban model of responsible horticulture, the emphasis on sustainability also brings practical rewards: the long-life and hardiness of the garden's plants help ensure that maintenance does not become too costly.





MILLENNIUM
PARK
CHICAGO

Summer Beauty Allium

- 16 to 20" tall allium
- Summer - 2" globe-shaped lavender-pink flowers top the strappy bright green foliage.
- Fall - Reddish stems and yellow fall color.
- Winter - dried flowers can remain intact for a bit of winter-interest
- Drought and heat tolerant
- Attract honey bees and butterflies.





MILLENNIUM
PARK
CHICAGO

The Blues Little Bluestem

- Deciduous, clumping grass
- Summer blue-green foliage
- Fall - bronze to flaming orange in the fall.
- Flower spikes emerge above the foliage, displaying fluffy seed heads that persist into fall



AC Hotel Madison Green Roof

	Original Concept	Proposed Design
Green Roof	Blue or Green Roof	Green Roof
Design	Sedum	Native Plants including: <ul style="list-style-type: none"> • 292 Little Bluestem • 204 Summer Beauty Allium
Area	1220 SF Sedum (limited visibility) Approx. 2000 SF Non-Visible Sedum	1220 SF Visible Native Species
Cost		\$21,674 ADD
Benefits	<ul style="list-style-type: none"> • Low Cost • Attracts Butterflies and insects. 	<ul style="list-style-type: none"> • Visible Human Scale Interaction • Aesthetic Interest • Habitat for Honey Bees, Butterflies, Migratory Birds, and beneficial insects.

AC Hotel Madison

Other Sustainable Features

Focus on Energy Findings

Strategy Description	How does this strategy save energy?	Annual Energy Savings
Carbon monoxide sensor control of garage vent fans	Garage fan energy is reduced by cycling fans off when carbon monoxide levels are low	\$20,598
Lowest wattage lighting design	Lighting wattage is saved by reducing light level or increasing lighting system efficiency	\$14,555
Occupancy sensor control of lighting	Lighting energy is saved by turning lights off when applicable spaces are empty	\$7,720
Best Fenestration	Heating and cooling load is reduced by improved window characteristics	\$4,360
Dimming daylighting	Lighting energy is saved by dimming lights automatically in response to daylight	\$3,279
Fan system power at 0.66 bhp/1000 cfm	Building fans energy is reduced relative to maximum allowed by Appendix G	\$3,253
95% service water heating efficiency	SWH energy is reduced by increasing system efficiency	\$3,078
DX cooling, 20% increased EER, RTAC 1,2	Cooling energy is reduced by an increased system efficiency	\$841
Max envelope	Heating and cooling load is reduced by increasing insulation levels	\$576
DX cooling, 23.5% increased EER, RTAC 3	Cooling energy is reduced by use of evaporative condenser and increased efficiency	\$532