

Community Green Building Projects

Trinity Management Group, LLC

Our Role

- Design team –
 - Sustainability
 - Integrated design
 - Cost analysis
 - Checklists, certification target
- Contractor –
 - Assist with submittals
 - LEED documentation
 - Waste management plans, Indoor Air Quality management



Courtesy Kai Markell

BGCH Nanakuli Youth Education Town (YET)

- Boys and Girls Clubs of Hawaii Clubhouse
 - Youths 7-12 years old
- LEED Gold Certified, 2010
- One-story, 10,000 SF
- \$5m; some funding came from NFL Foundation
- 1.6 acres of DHHL lands
- Mitsunaga & Associates; G. Lindeman & Sons, T. Iida Contracting



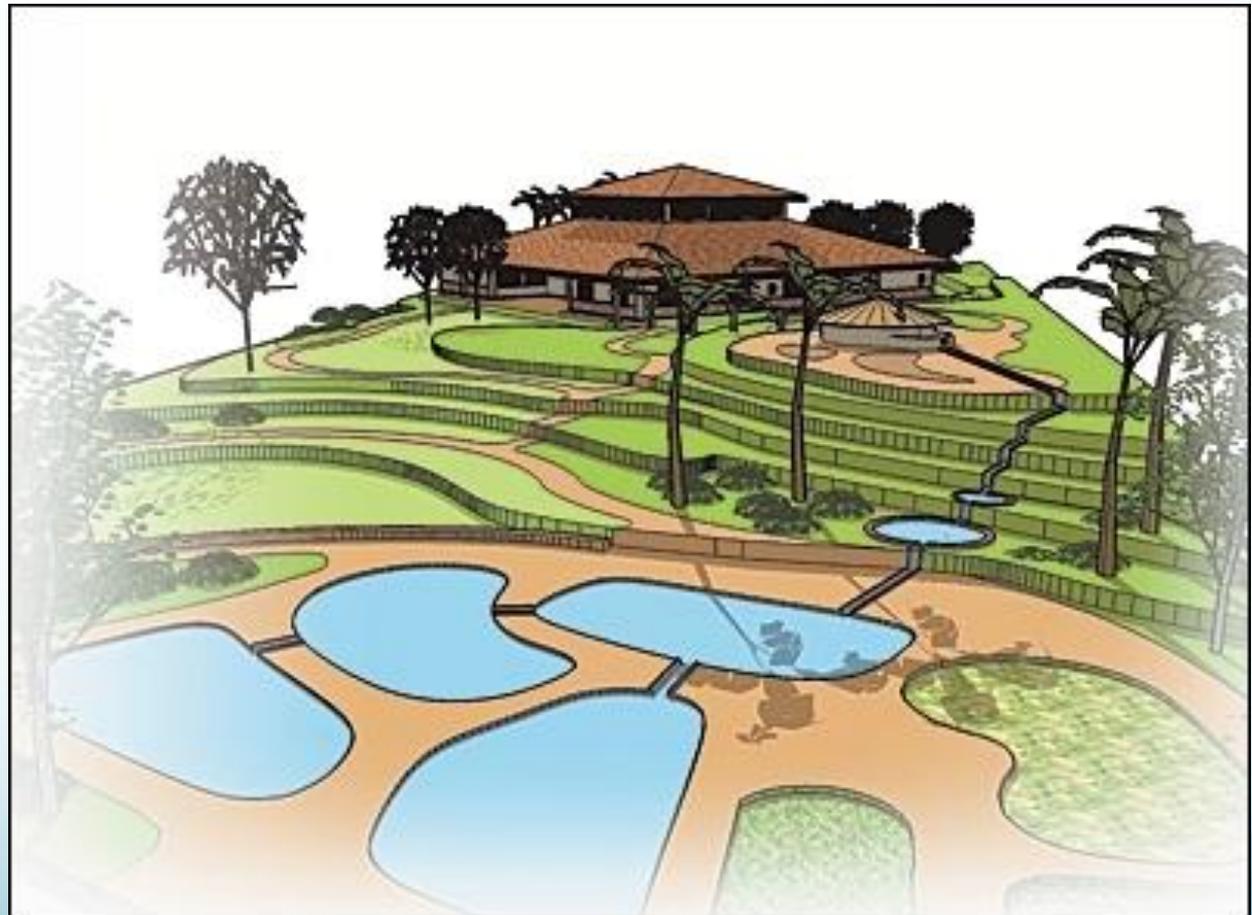


**NFL YOUTH
EDUCATION
★ TOWN ★**

HAWAII



**BOYS & GIRLS CLUBS
OF HAWAII**

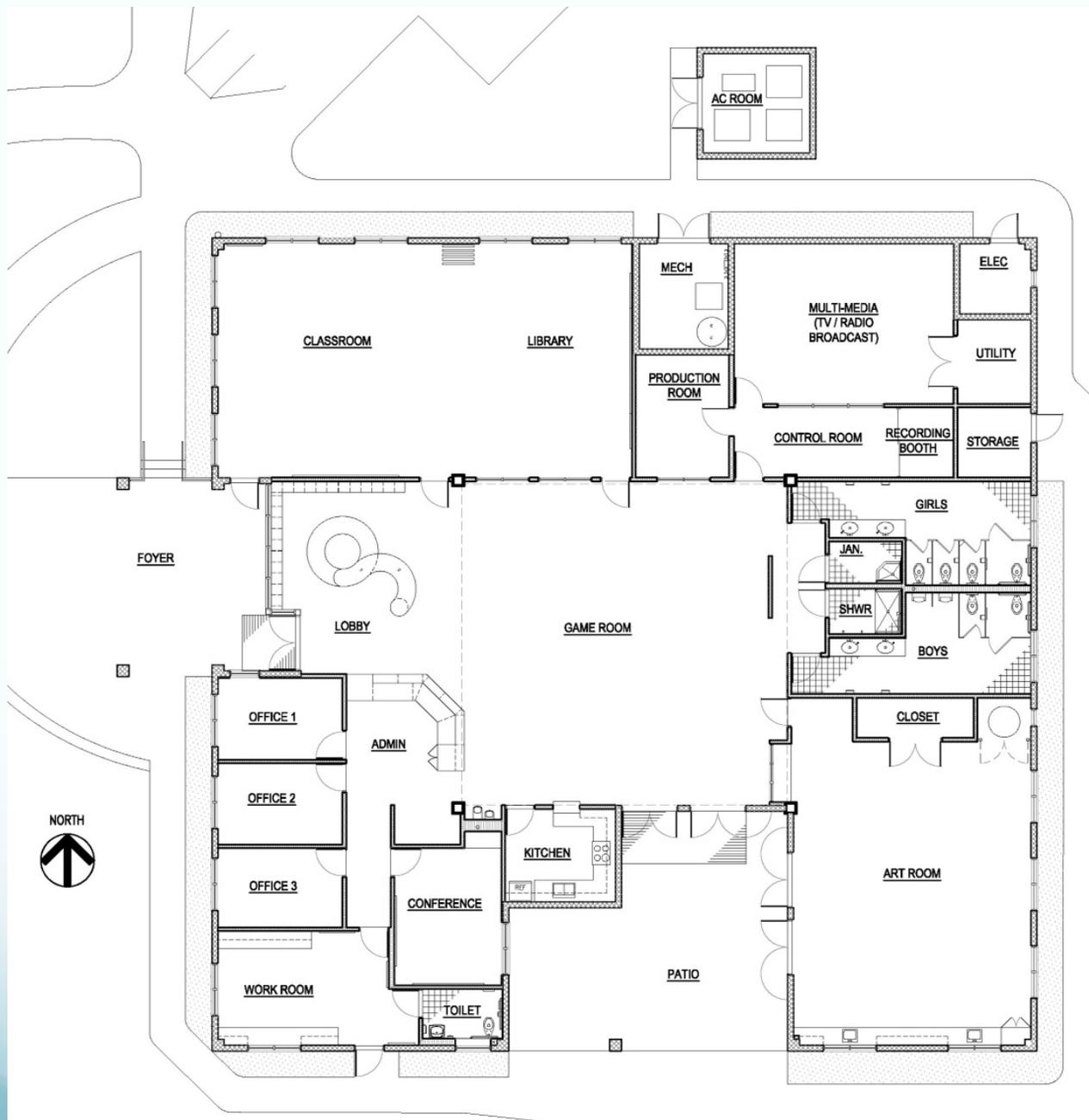


BGCH's Mission

- **“To enable all young people, especially those who need us most, to reach their full potential as productive, caring, responsible citizens.**
- We accomplish this by providing:
 - A safe place to learn and grow
 - Ongoing relationships with caring, adult professionals
 - Life-enhancing programs and character development experiences
 - Hope and opportunity”

Scope

- Arts and crafts center, technology center and multimedia studio, teen center, community room and learning center
- Native Hawaiian garden and amphitheater
- Neighboring Nanaikapono Elementary
- 33,000 young families in Nanakuli community
- 700 youths served in 2013





Site Considerations

- Reflective roof
- **Permeable Pavement**
- Reduced parking (shared with elementary school)
- Easy access to public transit
- Drought tolerant native plant garden



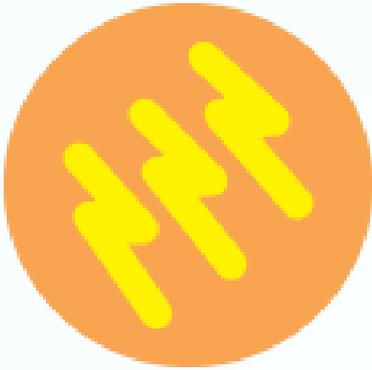
35%



47%

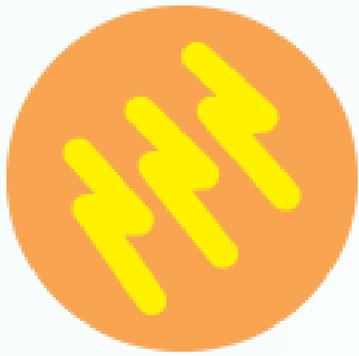


51%



Sustainable Features: Energy

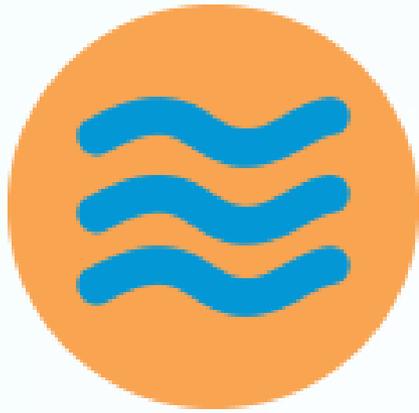
- 51% energy savings over a conventional design
 - Lighting
 - LED exit signs
 - Energy Star appliances
- **Direct DC lighting** ~10% more efficient
 - EPRI and HECO pilot project



Sustainable Features: Energy

- Photovoltaic array
- Current monthly bill \$33.00

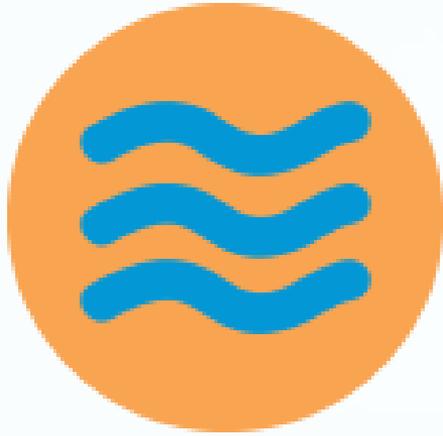




Water Efficiency

- **15,000 gallon water catchment system**
- Native plants





Water Efficiency

- 47% more efficient
- Dual flush water closets (1.1/1.6 gal)
- **Waterless urinals**
 - 45,000 gallons of water per year



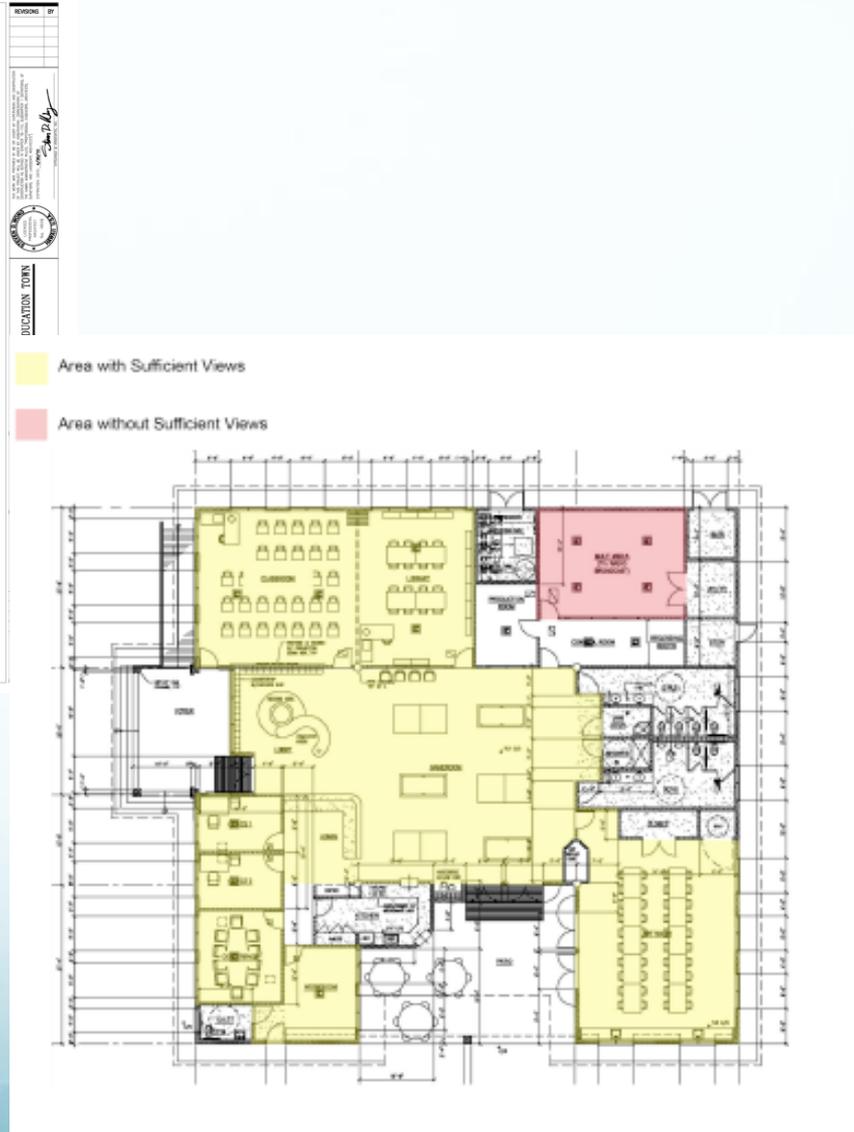
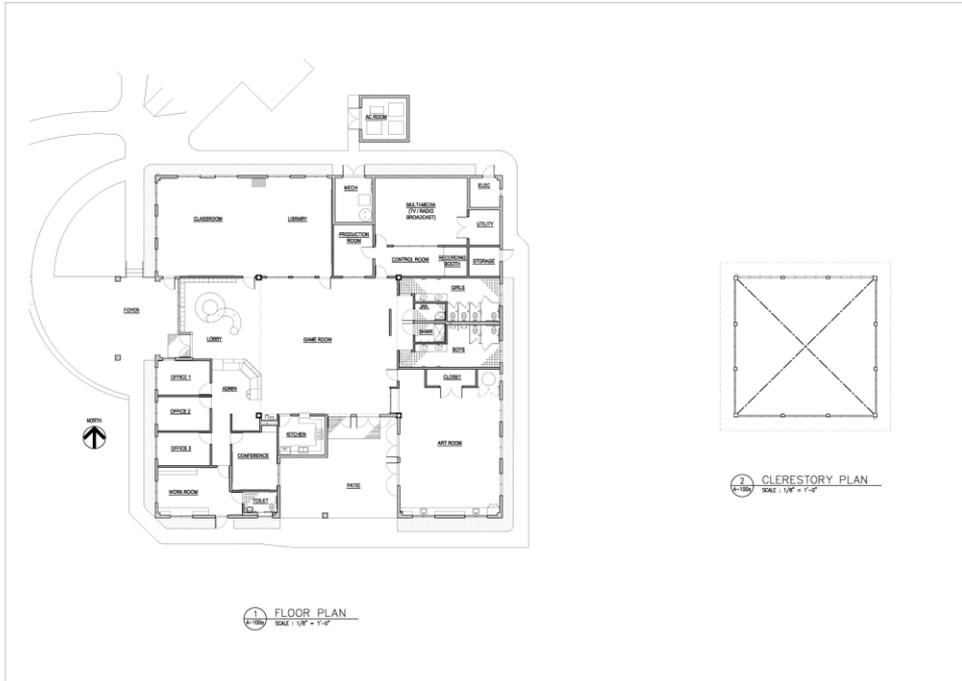


Materials & Resources

- 20% recycled content
- 12% regional materials
 - **Reused coral rock found onsite**



Daylighting & Views





Daylight and Views

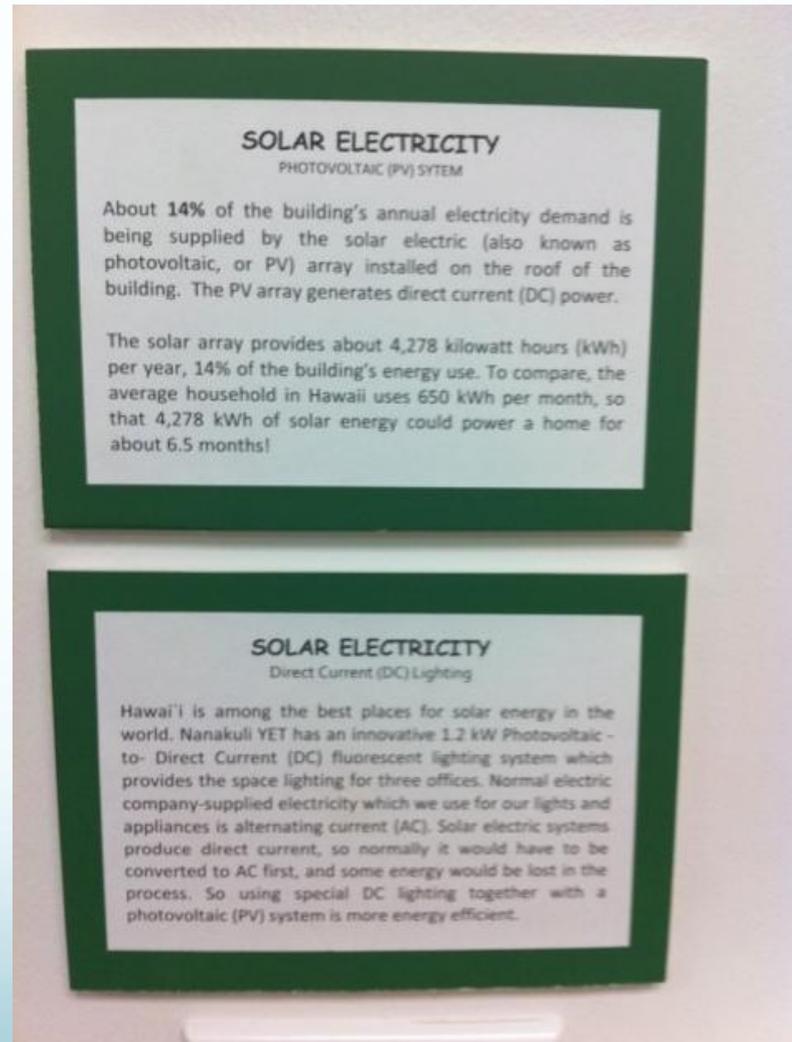


Building a Community



Green Building Education

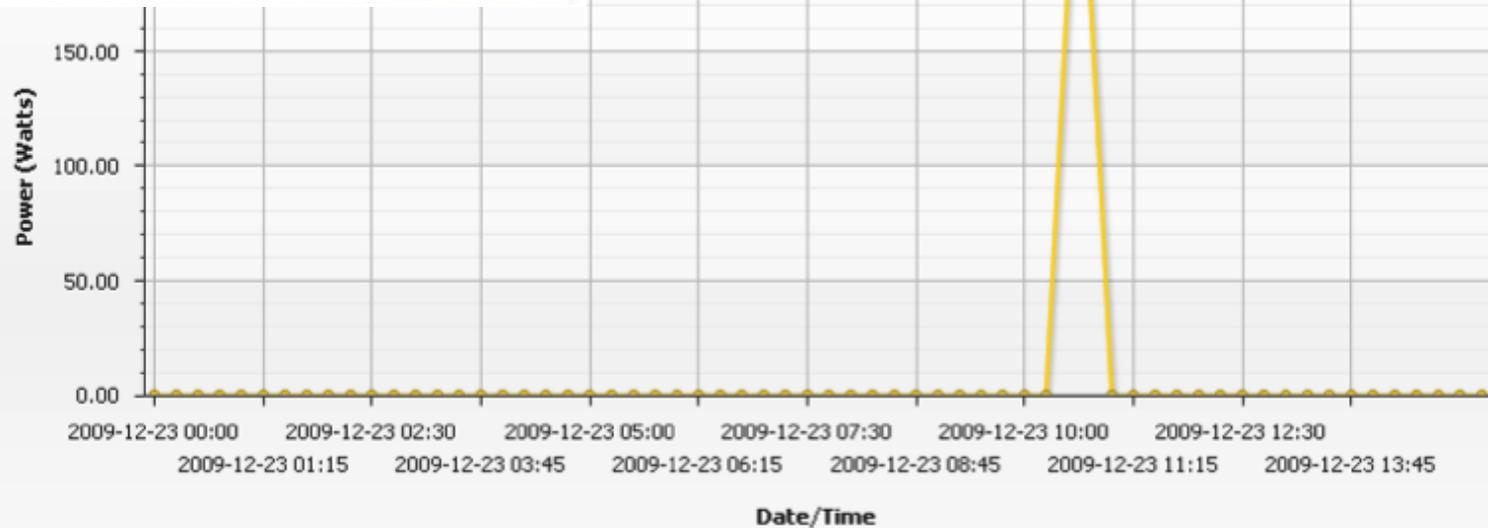
- Tours given by youth
- Signage for green building features
- Tying in concepts of malama 'aina and kuleana





Real-Time Data

Solar DC Power Profile Today



Average and Maximum Values for Today

Average Solar Power: 5.82Watts Maximum Solar Power: 180.96Watts

Solar energy produced today: 0.09 kWh
Amount of #2 fuel oil avoided: 0.002 gallons
Amount of CO2 release avoided: 0.11 pounds
This is like playing Game Boy for 22 hours!

Programs

- Community Service/Civics
- Sports
- Aquaponics/Aquaculture
- Gardening
- Hawaiian Culture
- New Media/Recording Arts
- Mentoring













Educational Projects

UH- Manoa Dance Studio

Karen Shishido

UH- Manoa Kuykendall Hall

Trinity Management
Group

Ewa Elementary Addition

Iwakuni Elementary School,
Middle School, High School

[kshishido@trinity-
hawaii.com](mailto:kshishido@trinity-hawaii.com)

Hawaii Baptist Academy

Central Union Pre-School

(808) 354-2159

MCAS Iwakuni Recreation
Center

