

Northwest Career and Technical Academy

Clark County School District Las Vegas, Nevada



Energy Use Intensity = 100.9 kBtu/sf/yr
Percent CO2 Reduction = 36%
ENERGY STAR design rating = 87

Savings Statistics
(compared to an average building EPA rating of 50)
Energy Savings = 13,455,892 kBtu
CO2 Savings = 1,559,600 lbs CO2

- 217,700 sf 100% educational space
- Construction to be completed June, 2007
- \$190,419 annual energy cost; \$0.87/sf/yr
- Estimated energy use 33.5 kBtu/sf/yr; 44.1% savings from average building
- Geothermal Heat Exchange handles 80% of building cooling load, the remaining 20% is cooled with a cooling tower
- Cooling tower pre-cools the geothermal loop during the night to prepare for the daytime cooling needs
- No boiler, all domestic hot water heated with building's own waste heat.
- 90% of classrooms and offices have natural daylight
- Design Includes:
 - Fitness trail
 - Habitat restoration area
 - Shared parking with a neighboring city baseball park
 - Limited public use of school resources such as cooking classes held in the demonstration kitchen, community assemblies in the banquet hall

