



**ADA COUNTY PARAMEDICS  
ADMINISTRATION AND TRAINING FACILITY**  
370 N Benjamin Lane - Boise, ID 83704  
(208) 287-2962 - [www.adaweb.net](http://www.adaweb.net)  
**Case Study**  
*Prepared by Selena O'Neal, CEM, LEED AP  
Ada County Energy Specialist, Operations Department*

**Project Overview**

Size: 24,351 square feet  
Type: Paramedic Admin and Training Facility  
w/ Ambulance Repair Shop  
Location: Boise, Idaho  
Utilities: Idaho Power  
Intermountain Gas  
Completion Date: May 2011  
LEED Certification: 2009 New Construction and Major  
Renovation, Gold level (pending)  
Green Features: Optimized Energy Performance  
Natural Daylight and Views  
Local/Regional Materials  
Low-Emitting Paints and Carpeting  
Light Pollution Reduction  
Water Efficient Landscaping  
Construction Waste Management



Ada County Paramedics provide advanced life support services around the clock to over 361,500 residents of Boise, Meridian, Garden City, Eagle, Star, Kuna, and rural Ada County. ACP is an emergency service dispatched by the county's 9-1-1 communications center, just like area law enforcement. In order to keep up with major growth in the Treasure Valley, the Board of Ada County Commissioners determined a new administration building was needed to serve an ever-expanding community and an increasing number of paramedics.

In 2011, the Ada County Paramedics Department undertook a major construction project to build a new administration and training facility in Boise. The facility was specifically designed and tailored to provide a comfortable and efficient facility for the administrative staff, highly functional training facilities for Paramedics, and a vehicle shop to service the ambulance fleet.

The site was ideal site for many reasons. It had an existing building that could be remodeled to meet the needs of the paramedics and the site is centrally located within Ada County in close proximity to the interstate. The ground level of the existing building was originally built in 1977 and a second level was added in 1992. It totaled approximately 15,000 square feet situated on a 1.5-acre site with parking a room for an additional building.

The project required a complete, major renovation of the existing building to serve as the new administration and training building, and construction of an entirely new detached vehicle shop on the east side of the site. The new renovated administration building consists mainly of office space and large, spacious rooms to train the emergency medical technicians and paramedics. The new 8,000 square foot detached vehicle shop includes office space, equipment storage, 3 mechanic bays, and 1 wash bay.

The administration building is pending a LEED-NC Gold certification by the US Green Building Council. LEED (Leadership in Energy and Environmental Design) is a national rating system used to develop high-performance, sustainable buildings. LEED emphasizes state-of-the-art strategies for site development, water savings, energy efficiency, materials selection, and indoor environmental quality.



Space planning began for the \$2.5 million project in October 2009 with construction completed in May 2011. The design team was made up of LEED Accredited architects and engineers who had prior experience designing and building high performance, LEED-certified buildings for Ada County. A design charette was held with the design team, County Operations staff, and Paramedics administrative staff who would occupy the building, to begin developing a functional facility that would best serve the unique needs of department.

The basis of design for the mechanical system was developed using the current version of the International Energy Code, ASHRAE Standard 90.1, and ASHRAE Standard 62 for ventilation. The HVAC system for the administration building consists primarily of 12 packaged rooftop air conditioning units with SEER ratings of 13.

The electrical basis of design also used the current International Energy Code. The interior spaces were equipped with energy efficient T8 light fixtures with all areas being control by occupancy sensors and low voltage switches. The offices have dual level light switching which can override the occupancy sensor.

The vehicle maintenance shop has a built-in mechanical exhaust system to automatically eliminate vehicle fumes from the space. The vehicle bay is heated with infrared radiant heaters and cooled with an evaporative cooling system in lieu of a traditional rooftop air conditioner, adding to the building's energy efficiency.

Ada County earned over \$11,000 back from the local utility's incentive program for installing an energy-efficient cooling system with air side economizers, and incorporating energy-saving devices such as occupancy sensors, high efficiency exit signs, high performance windows, and a "cool" roof.

While much planning went into designing the facility to provide comfortable, energy-efficient work space for the department, equal attention was paid to minimizing its impact on the environment. The water fixtures in the facility include dual-flush water closets, and low-flow lavatories, showers, and faucets to reduce the burden on municipal water supply and wastewater systems.

As per LEED standards, the entire construction process was managed to protect the indoor air quality including ensuring the ductwork was kept sealed, clean, and dust-free during installation. The County incorporated environmentally-friendly, sustainable material into the facility such as carpet tiles rather than broad-loom carpet. Indoor air contaminants that are odorous, irritating, and/or harmful to the comfort and well-being of the installers and occupants were minimized. All floor covering, wall base adhesives, and paints were low- or VOC-free. And finally, the building underwent a fresh-air flush before any of occupants were allowed to move in.

Nearly all of the construction waste was recycled. Wood, metal (tin, copper, aluminum), concrete, asphalt, and even 67 tons of sod was diverted from the landfill. Overall, 99% of the construction waste, or 856 tons of material, was kept out of the landfill. This includes 633 tons of asphalt from the old parking lot that was crushed and reused on site and 22,000 pounds of metals that will be returned to the material stream and reused for new products.

The new facility certainly meets the County's standards of affordable, sustainable, high-performance construction that also provides a safer, healthier environment for the occupants.



**PROJECT TEAM**

**Board of Ada County Commissioners:**

Vern Bisterfeldt  
Sharon M. Ullman  
Rick Yzaguirre

**Ada County Paramedics:**

Troy Hagen, Director  
Darby Weston, Deputy Director

**Ada County Operations:**

Dave Logan, Director  
Scott Williams, Deputy Director  
Bruce Krisko, Construction Manager  
Selena O'Neal, Energy Specialist

**Design Team:**

Lombard Conrad Architects  
Musgrove Engineering, Mechanical  
Electrical Engineering Company, Electrical  
Stapley Engineering, Structural  
Engineering & Waste Solutions, Civil  
Breckon Landscape, Landscape  
HDR Inc, Commissioning

**General Contractor:**

Scott Hedrick Construction