

Boulder Canyon Operations Office Lower Colorado River Operations Program Green Building

The Lower Colorado River Operations Program Green Building in Boulder City, Nevada, received \$19.5 million in American Recovery and Reinvestment Act funding to construct a 49,800 square foot, two story office building and associated site improvements including paving, walkways, perimeter fencing and low water-use landscaping. A 270 kiloWatt ground-mounted solar farm is installed next to the building, which provides approximately 480,100 kilowatt hours of electricity annually, enough to meet the annual electrical demand of the facility.

The building provides space for 200 employees. The design takes maximum advantage of modular furniture which allows the floor plan to be reconfigured at minimal cost as needs change. To the greatest extent possible, work areas are lit with natural light and nearly all employees have a direct view to the outdoors.

The building uses 30 percent less energy than a similar office building constructed to current building codes. Energy efficiency was achieved by use of high efficiency HVAC systems, motion sensor and dimmable lighting control systems and a thermally efficient building envelope. The facility is monitored by a building management system which continually monitors the performance of climate control systems and automatically adjusts equipment operations for optimal energy efficiency.



The building is in the viewshed of the Boulder City Historic District and, as required under Section 106 of the National Historic Preservation Act, consultations with interested parties, including the Nevada State Historic Preservation Office (SHPO), were undertaken during design and construction. SHPO consultations helped guide design factors such as massing, orientation, window layout and exterior finish materials, resulting in a finding of no adverse effect.

The facility was designed and constructed in compliance with Reclamation's Guiding Principles for Federal Leadership in High Performance and Sustainable Buildings. The building was also awarded Platinum certification from the U.S. Green Building Council under its Leadership in Energy and Environmental Design (LEED) program.

