

# SUSTAINABLE ENERGY DISCOVERY DISTRICT

The University of Iowa, Iowa City, Iowa

#### **Project Data**

Vehicle Charging Station Construction: \$950,000 PV System: 70 kW Start: 2010 Complete: 2011

CAMBUS Roofing Construction: N/A PV System: 38 kW Start: 2008 Complete: 2009

#### Owner

Wendy Moorehead Facilities Management wendy-moorehead@uiowa.edu (319) 335-1246

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#### **Project Team**

Principal-In-Charge Dwight Schumm, PE, LEED AP

Project Manager Marc Foster, PE, LC

Electrical Engineer Marc Foster, PE, LC



## **Partners in Energy Innovation**

Design Engineers has long been a partner at the University of Iowa in energy innovation and implementation. The Beckwith Boathouse, completed 2009, was the first LEED-certified building on the University of Iowa campus, followed by 5 more DE-partnered LEED projects, and multiple photovoltaic solar arrays. Two of UI's largest photovoltaic arrays, detailed here, are components of the University's Sustainable Energy Discovery District, and include a Smart Grid Station for energy-related learning and research.

## **Electric Vehicle Charging Station**

Designed with OPN Architects, this project provides shaded parking for up to 40 electric vehicles. The 180-foot grid-tied charging station produces 70 kilowatts, and is projected to reduce gasoline use by 15,000 gallons annually. Funded in-part by the US Department of Energy, it was the largest array in the state of Iowa in 2011 and features a data network connection to the UI Energy Control Center for system tracking and analysis.

## **CAMBUS Maintenance Facility Building-Integrated Roofing**

This 38 kW thin-film roofing project was a component of a facility renovation with Neumann-Monson Architects. Solar cells are integrated directly into the facility roofing materials (blueish roof in photo below) and power is fed back into the campus utility grid.

