

Oak Hammock Marsh Interpretive Centre

OWNER: Ducks Unlimited Canada

LOCATION: Near Winnipeg, MB

DESIGN TEAM: **Mechanical Consultants**
MCW/AGE Consulting
Professional Engineers

Electrical Consultants
MCW/AGE Consulting
Professional Engineers



Ducks Unlimited conserves, restores and manages wetlands and associated habitats for North American's waterfowl. These habitats also benefit other wildlife and people. Ducks Unlimited Canada has been committed to wetland conservation for more than 65 years. Despite this, wetland loss continues across Canada. As much as 70% of Canada's original wetlands have been lost in some areas of the country.

Ducks Unlimited Canada's conservation efforts take many forms. On-the-ground work is guided by the wetland and environmental research of DUC's scientists. Ducks Unlimited Canada works to change policy in favour of wetland and habitat conservation. Ducks Unlimited Canada also delivers wetland and environmental education programs to teach Canadians about wetlands and the need to conserve them.

MCW/AGE's Role:

MCW provided mechanical and electrical design services for the construction of a 55,000 square foot environmentally friendly office and conservation centre located in a wildlife sanctuary.

Mechanical Design Scope:

The Mechanical Design specifications included ground water cooling with no use of CFC's, electric heating, heat recovery, silencers on all air intakes to reduce night time noise pollution, well water for domestic water consumption and fire protection and a roof earth covered with local vegetation.

Electrical Design Scope:

The challenge for the Electrical Engineers were to provide an exterior and interior illumination of the landscaping and building which would not disturb the migration and nature setting for the water fowl. For the landscape lighting a system of lower wattage energy efficient high pressure sodium luminaires were utilized such that one would be guided throughout the area from a pool of light to another pool of light ensuring light encroachment was eliminated from the nesting area.

The interior illumination was a combination of low wattage in wall floor lights with other controlled overhead luminaires which allowed the User to have setting for each time of day viewing requirement. Special power outlets were utilized throughout the public area to allow exhibits set up flexibility as well as special exhibits displayed on a one time basis.

