

# PROMOTING SUSTAINABLE BUILDING AND DEVELOPMENT PRACTICES IN LAKE COUNTY

SAMPLE ORDINANCES AND INFORMATION SOURCES

## EXECUTIVE SUMMARY

In 2009, the Lake County Board adopted the *Strategy for a Sustainable Lake County*, the purpose of which is to “make Lake County more sustainable and environmentally sensitive.” In adopting the *Strategy*, the County Board endorsed a broad definition of “sustainability,” similar to the widely accepted definition first endorsed by the United Nations’ World Commission on Environment and Development in 1987. “*Being ‘sustainable’ means the County is achieving economic prosperity while protecting the planet’s natural systems; and meeting the needs of the present generation without compromising the ability of future generations to meet their own needs.*”

### FUNDING

Building on the momentum established by the *Strategy for a Sustainable Lake County*, the County received nearly \$5.6 million of funds through the American Recovery and

Reinvestment Act (ARRA) for energy efficiency and energy conservation projects. A portion of this money was obtained by the Planning, Building & Development Department through the Department of Energy’s (DOE) Energy Efficiency and Conservation Block Grant Program for the design and approval of a set of Lake County-specific Building and Development Standards. The County retained The Lakota Group, Duncan Associates and Primera to assist Planning, Building and Development Department staff in identifying sustainable development practices that can be promoted through building codes and land development regulations.

### PROJECT TIMELINE

The first phase of work included an assessment of Lake County’s building and development regulations and an examination of best practices for accommodating and promoting sustainable building and development practices. Local stakeholders including municipal officials, industry professionals and County staff were invited to participate in three focus group sessions to provide input and comments on the various draft documents. This level of involvement throughout all stages of the project proved crucial to ensure the County achieved the best possible standards.



TAKEDA PHARMACEUTICALS NORTH AMERICA HEADQUARTERS IS LEED GOLD; NATIVE PLANTS REDUCE WATER CONSUMPTION BY 50%

## PURPOSE AND INTENT

The purpose for the Sustainable Building and Development Practices is twofold: to provide a basis for Lake County to re-evaluate regulations in the Unified Development Ordinance, and also to serve as a resource for the incorporated municipalities. These standards were developed as a locally based model for sustainability and contain practices which will be most beneficial and applicable to communities in Lake County. Project outcomes include provisions that will remove barriers, identify new standards and procedures, and create incentives for builders and developers that further support sustainability goals.



HYACINTH PLACE IN HIGHLAND PARK – CERTIFIED LEED GOLD

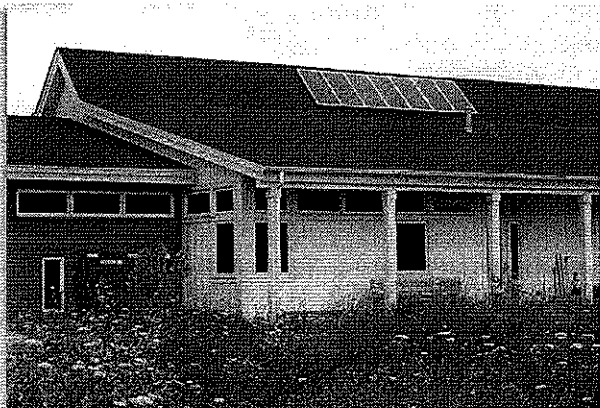
## OVERVIEW

This report highlights dozens of sustainable building and development practices that can be promoted by Lake County and other local governments. The ordinances and studies identified in the report are intended to serve as a guide for how the County and area municipalities can update zoning, subdivision and building regulations to promote sustainability. Several of the sample code and ordinance provisions work by removing unintended regulatory barriers to sustainable building and development practices. Others offer flexibility and incentives that encourage builders and developers to use sustainable building and development practices. A few of

the sample approaches suggest ways in which regulations can be amended to require more sustainable building and development measures. The following practices are covered in the full text document:

## *ENERGY CONSERVATION AND RENEWABLES*

This section focuses on the role of building and development regulations in accommodating the use of renewable energy sources and conserving energy use associated with buildings, lighting and mechanical equipment. Improving energy conservation practices and promoting greater use of renewable energy resources can help reduce pollution and greenhouse gases, foster a more energy-independent and sustainable Lake County, and save money.



SOLAR ARRAY ON THE PRAIRIE CROSSING CHARTER SCHOOL,  
WITH BUILDINGS CERTIFIED LEED GOLD

### **LAND USE, TRANSPORTATION & MOBILITY**

The important linkage between land use patterns and transportation is reflected in one of the *Regional Framework Plan's* nine vision statements:

*In the year 2020, Lake County will have... A development pattern and transportation system that provides a variety of living and transportation choices, meets the mobility needs of all residents, and minimizes adverse environmental impacts.*

Realization of Lake County long-term planning and sustainability goals requires an integrated approach to land use and transportation planning. This section focuses on practices that will promote a vibrant, connected, multi-modal future for Lake County.

### **OPEN SPACE & NATURAL RESOURCES**

This section includes a description of regulatory measures aimed at the conservation of open space and natural resources, many of which have been in place in Lake County for years.

### **WATER QUALITY & QUANTITY**

Ensuring a reliable supply of clean water is one of the key drivers of the *Strategy for Sustainable Lake County*. This section explores several sustainable building and development practices that can help in realization of the County's water-related sustainability goals.

### **STORMWATER MANAGEMENT**

The intent of stormwater management is to reduce the impacts associated with the runoff from developed (and undeveloped) sites by reducing runoff volumes and contaminants, primarily through on-site infiltration and by mimicking predevelopment hydrology.

### **REDEVELOPMENT, WASTE MINIMIZATION & MATERIALS REUSE**

This section focuses on building and development practices that focus on redevelopment of land and the minimization of waste and, in turn, the need for virgin materials. Existing sites, buildings, and materials have inherent "embodied energy" created during their development or production. If discarded, that energy is wasted and creates the demand for virgin materials which are more costly and have a greater impact on the environment to produce.



**BIOSWALES USED IN PARKING LOTS, LIKE THIS ONE AT THE RYERSON WOODS WELCOME CENTER, A LEED PLATINUM FACILITY, FILTER STORMWATER RUN-OFF AND POLLUTANTS.**

### ***CONSTRUCTION PHASE POLLUTION CONTROLS***

When creating sustainable buildings or developments, it is important to look at not only what sustainable elements and features are included in the final development, but also how these structures are built. Construction activities can produce significant amounts of air and water pollution and solid waste. Because of this, responsible management of construction activities is an important early step that sets the tone for the ultimate development in terms of environmental sustainability.

### ***OUTDOOR LIGHTING***

This section focuses on practices that reduce the energy spent and the light pollution created by outdoor lighting. Such practices can result in energy and cost savings and an improved nighttime environment.

### ***INDOOR ENVIRONMENTAL QUALITY (IEQ)***

IEQ addresses the elements of our indoor environment that may not have an obvious impact on occupant well-being, but have been proven to increase occupant productivity and comfort with lower employee turnover rates, fewer sick days and higher productivity. IEQ can enhance occupant well-being when buildings permit adequate ventilation, maintain clean air, comfortable temperatures, and allow individuals to have a sense of control over their own spaces.



### ***FOOD SUPPLY***

Ensuring that people have access to healthy, safe and affordable food is a basic tenet of sustainability. This section describes current and possible future efforts aimed at increasing access to local food sources.

### ***Incentive-Based Approaches***

There are several economic benefits to green building and sustainable development strategies for property owners and developers, including reduced operating costs, increased return on investment, increased productivity and human health, and enhanced image and marketability.

Local governments can also establish incentive measures to stimulate property owners and developers further to consider creative, sustainable solutions to building and development challenges. Local governments can encourage green building is through procedural and financial incentives in the permitting process. Official green recognition programs are a common method to offer incentives, by offering plaques to designate achievement levels and local governmental recognition and promotion of the project's green attributes. Rewarding builders, developers, and homeowners who choose to employ sustainable building practices has proven to be a very popular and effective way to encourage the use of green building practices.