(passed 9-0)

ORDINANCE 09-04

TO AMEND TITLE 2 OF THE BLOOMINGTON MUNICIPAL CODE ENTITLED "ADMINISTRATION AND PERSONNEL"
(Adding Chapter 2.29 Entitled "Green Building Program")

WHEREAS, as outlined in its 2002 Growth Policies Plan, the City of Bloomington recognizes its role as environmental steward and is dedicated to sustainable development; and

WHEREAS, the construction, demolition and operation of buildings in the United States collectively: consume 39 percent of the total energy used, 40 percent of raw materials and 88 percent of potable water supplies; create more than 136 million tons of waste per year; and generate 38 percent of carbon dioxide emissions (U.S. Department of Energy & U.S. Green Building Council); and

WHEREAS, while conventional buildings increase greenhouse gas emissions, green buildings reduce the human footprint of development on the environment by means of: resource and energy efficiency; use of environmentally-friendly materials and construction practices; and environmentally-sensitive design and site selection; and

WHEREAS, compared to conventional buildings, green buildings consume 30-50% less energy, save approximately 40% of potable water, realize a 70% savings on waste output and reduce carbon dioxide emissions by 39% (U.S. Department of Energy); and

WHEREAS, building green supports the City of Bloomington's commitment to reducing greenhouse gas emissions as indicated by the Mayor's signature of *the U.S. Mayors Climate Protection Agreement* and the City Council's adoption of *Resolution 06-05: Supporting the Kyoto Protocol and the Reduction of the Community's Greenhouse Gas Emissions*; and

WHEREAS, green buildings require less energy and implementation of a green building policy will prepare the community for reduced energy availability resulting from the current peak in oil and natural gas production – an inevitability recognized by the City Council through *Resolution 06-07: Recognizing the Peak of World Petroleum Production*; and

WHEREAS, building green also makes good economic sense -- The California Sustainable Building Task Force found that an upfront investment of 2% in green building design, on average, results in life cycle savings of 20% of the total construction costs; and

WHEREAS, building green also fosters a sustainable local economy by creating a demand for "green-collar" jobs; and

WHEREAS, green design and construction creates healthier, safer and more productive work environments (*See*, e.g., W.J. Fisk and Rosenfeld, [April 2004], "Estimates of Improved Productivity and Health from Better Indoor Environments," *Indoor Air: International Journal of Indoor Environment and Health*, 7(3): 158-172); and

WHEREAS, the U.S. Green Building Council's LEED® (Leadership in Energy and Environmental Design) Green Building Rating System is a nationally-recognized standard for sustainable building; and

WHEREAS, the City has demonstrated its commitment to green buildings with the establishment of the Evergreen Village subdivision – a 12-unit LEED®-certified affordable housing development; and

WHEREAS, codifying green building practices makes this commitment even stronger and follows measures taken by 50 States and 166 localities in the US who have implemented green building practices, through legislation, policies and economic incentives.

NOW, THEREFORE, BE IT ORDAINED BY THE COMMON COUNCIL OF THE CITY OF BLOOMINGTON, MONROE COUNTY, INDIANA, THAT:

SECTION 1. The Bloomington Municipal Code shall be amended by inserting Chapter 2.29 entitled "Green Building Program" which shall read as follows:

2.29.010 Establishment and Purpose

The City of Bloomington hereby establishes a "Green Building Program" as part of the Bloomington Municipal Code. The purpose of this program is to: further the City's commitment to environmental, economic and social stewardship; yield cost savings to City taxpayers through reduced operating costs; provide healthy work environments for staff and visitors; reduce local greenhouse gas emissions; and prepare for a current period of reduced supply of oil and natural gas. In furtherance of these purposes, the program adopts practices specified by the U.S. Green Building Council's LEED® (Leadership in Energy and Environmental Design) certification process.

2.29.020 Definitions

The following terms shall be understood according to the definitions below:

"City of Bloomington Building" means a building owned by the Board of Parks Commissioners, the Board of Public Works, the City Utilities Department, the Redevelopment Commission, or the Bloomington Municipal Facilities Corporation.

(a) "Existing" when modifying the term "City of Bloomington Building" shall mean a building owned by the City at the time of the effective date of this ordinance.

(b) "New" when used to modify the term "City of Bloomington Building" shall mean a building built or commissioned to be built by the City after the effective date of this ordinance.

(c) "Subsequently Acquired" when modifying the term "City of Bloomington Building" shall mean an extant building purchased by the City after the effective date of this ordinance.

(d) "Occupiable" shall mean a building or enclosed space designed for human occupancy in which occupants are engaged in labor or individuals congregate for amusement, educational or similar purposes and which is equipped with means of egress, light and ventilation.

"LEED® (Leadership in Energy and Environmental Design)" means a flexible, consensus-based, rating system developed by the United States Green Building Council for evaluating the performance of a building. It is based on existing, proven technology and evaluates environmental performance from a "whole building" perspective. LEED is a self-certifying system designed for rating new and existing commercial, institutional and multi-family residential buildings. It outlines prerequisites and credits in five categories: sustainable site planning, energy efficiency, materials selection, indoor environmental quality and water conservation. Based on these categories, LEED offers four rating levels: Certified, Silver, Gold and Platinum. LEED-NC is the rating system for new construction and major renovations and LEED-EB:O&M is the rating system for the operation and maintenance of existing buildings.

"Cost-Benefit Analysis " means a method of comparing the costs and benefits of bringing an existing or subsequently-acquired City of Bloomington building up to LEED Silver with the costs and benefits of not bringing such building up to LEED Silver standards. In discerning costs and benefits, the City's analysis shall include, but not be limited to, the following: planning, design, construction, operations, maintenance, registration fees, energy costs, peak power demand, air pollutants (NOx, SOx, particulates and CO2), water, waste, worker health and productivity. Such analysis should reflect both current and future costs and benefits and should result in a monetized value representing the present value of a LEED Silver building's future financial benefits less the cost.

"Major Renovation" means any alteration that:

(a) affects more than 50% of the total building floor area; or

(b) an addition that increases the total building floor area by more than 50%; or

(c) causes the relocation of more than 50% of regular building occupants; or

(d) involves replacement of heating, ventilation or air-conditioning (HVAC) systems.

"Payback Period" means the amount of time it takes for the initial investment in green building options to be recouped in cost savings through reduced energy and water use, reduced waste and other reduced costs as described in the definition of "cost-benefit" above.

2.29.030 Applicability

Unless exempted per 2.29.050, the Green Building Program shall apply to the following:

(a) New Buildings

All new occupiable City of Bloomington buildings shall be designed, contracted and built to achieve LEED-NC Silver certification level, at minimum. The City shall strive for a higher level of LEED certification (either Gold or Platinum) where project resources and conditions permit.

(b) Existing & Subsequently-Acquired City of Bloomington Buildings

(1) Major Renovations

All major renovations to existing and subsequently-acquired occupiable City of Bloomington buildings shall be designed, contracted and built to achieve LEED-NC Silver certification standards in the renovated portion of the building. The City shall strive for a higher level of LEED certification (either Gold or Platinum) where project resources and conditions permit.

(2) Other Renovations

All renovations to existing and subsequently acquired occupiable City of Bloomington buildings which do not constitute "major renovation" per 2.29.020 shall aim to achieve LEED- EB:O&M Silver certification standards where project resources and conditions permit.

(c) LEED Certification

After registering the project with the U.S. Green Building Council, the City shall adhere to the version of LEED in effect at the time of registration, regardless of any new LEED version that may be released subsequent to registration but prior to project completion.

(d) Leased Space

In the event the City enters into a new lease agreement or a renewal of lease agreement for occupiable space, the City shall lease space in buildings that are LEED-certified, where resources and conditions permit.

2.29.040 Evaluation and Upgrade of Existing and Subsequently-Acquired Buildings

(a) Unless otherwise exempt per 2.29.050 below or subject to the standards of 2.29.030(a) or (b) above, all occupiable City buildings should eventually be brought up to at least LEED – EB:O&M Silver standards. In the interest of determining the extent and timing by which occupiable City buildings should be upgraded to LEED standards, the City shall conduct an evaluation of all existing and subsequently-acquired occupiable City buildings. The evaluation shall consist of two phases.

(1) Phase I – Basic Inventory: During Phase I, the City shall conduct a limited study of all existing buildings to discern which buildings qualify for Phase II of the evaluation process.

(A) During Phase I, the City shall collect data on existing City buildings, including, but not limited to:

(i) age of the building;
(ii) number of employees who occupy the building daily;
(iii) number of public who visit the building daily;
(iv) existing utility bills;
(v) number of square feet; and
(vi) building type

(B) Phase I shall be completed within one year after the adoption of this ordinance.

(2) Phase II – Analysis: During Phase II, the City shall examine systems that effect building performance.

(A) During Phase II, the City's analysis shall include, but not be limited to the efficiency of the following building features:

(i) the building envelope, including the walls, windows, roofs and doors;
(ii) the heating, ventilation and air conditioning system (HVAC) including all fans, boilers, and compressors and the energy that they use;
(iii) the lighting systems including the amount of energy used per square foot for lighting, and the amount of time that the light is on versus the amount of time it is needed; and
(iv) the interior finish systems, their maintenance and the impact they may have on the interior environment.

(B) After the foregoing systems are examined, the City shall perform a cost-benefit analysis of the costs of bringing each building up to LEED Silver. In the interest of maintaining close control of the cost, the City shall pursue the LEED Silver standard only when the payback period is no more than 10 years. In the event the cost-benefit analysis shows the anticipated payback to be more than 10 years, the persons responsible for the project shall recommend to the board having authority over the project which level of LEED certification is appropriate for that particular project. If no level of LEED certification is possible, then the project under consideration shall implement as many components of the LEED program as feasible.

(C) For all existing buildings, Phase II shall be completed by December 31, 2020. Starting January 1, 2011, at least one building per year shall be subjected to Phase II analysis.

(b) For all existing occupiable City of Bloomington buildings whose payback period does not exceed 10 years per Phase II above, the City shall complete the following by December 31, 2022: 1) register the building with the United States Green Building Council under the LEED-EB:OM program and 2) and implement operational improvements and equipment upgrades necessary to obtain certification. The City will then continue with the LEED certification process. The December 31, 2022 deadline shall be subject to available funds.

(c) Subsequently-acquired occupiable City of Bloomington buildings obtained after the passage of this ordinance shall be subject to the evaluative process outlined in 2.29.040(a) if said building will not immediately undergo major renovation as defined in section 2.29.020 above. Where a subsequently-acquired building does not undergo immediate major renovation, and where said building is not exempt per 2.29.050 below, the City shall undertake Phase I and Phase II evaluations as described above and complete these evaluations within three years of acquiring the building.

2.29.050 Exemptions.

(a) The following building types shall be exempt from the requirements of this Chapter:
(1) industrial with limited office space;
(2) industrial with no office space;
(3) seasonal use only;
(4) space without a heating, ventilation and air conditioning (HVAC) system;
(5) conditioned storage space; and
(6) fire stations

(b) The requirements of this Chapter may be waived in an emergency situation which endangers public health or safety. In such case, the City department operating under this subsection shall report to the City Council the emergency that prevented compliance with this Chapter within ten business days. Under these circumstances, a reasonable effort must still be made to maximize the number of LEED points attained.

(c) If, due to specific circumstances, compliance with this Chapter would defeat the intent of the Green Building Program or create an unreasonable burden on the City department operating under this Chapter, the department may request a waiver from the requirements of this Chapter from the Common Council. The Council may grant a waiver from the requirements of this Chapter upon a finding that the City department requesting the waiver has:
(1) documented the circumstances and burdens at issue; and
(2) developed a reasonable plan to maximize the number of LEED points attainable.

2.29.060 Annual Report

The persons responsible for administering this Chapter shall annually report to the Common Council on the progress of the implementation of the Green Building Program.

2.29.070 Encouragement of Green Building Strategies in Private Development

Although the requirements of this ordinance do not extend to private development projects, the City of Bloomington promotes the use of green building strategies in private development projects by offering a number of resources and incentives. Development projects are encouraged to take advantage of the *Green Development Incentives* and *Sustainable Development Incentives* found in the City's Unified Development Ordinance and to consult the City of Bloomington Environmental Commission's resource website for *Green Building Methods*.

SECTION II. If any section, subsection, sentence, clause, or phrase of this Ordinance is for any reason held to be invalid or unconstitutional by a decision of any court of any competent jurisdiction, such decision shall not affect the validity of the remaining portions of this Ordinance. The City Council hereby declares that it would have passed this Ordinance, and each and every Section, subsection, sentence, clause, or phrase not declared invalid or unconstitutional without regard to whether any portion of the Ordinance would be subsequently declared invalid or unconstitutional.

SECTION III. This ordinance shall be in full force and effect from and after its passage by the Common Council of the City of Bloomington and approval of the Mayor.

PASSED AND ADOPTED by the Common Council of the City of Bloomington, Monroe County, Indiana, upon this 25th day of MARCH, 2009.

ANDY RUFF, President
Bloomington Common Council

ATTEST:

REGINA MOORE, Clerk
City of Bloomington

PRESENTED by me to the Mayor of the City of Bloomington, Monroe County, Indiana, upon this 26th day of MARCH, 2009.

SIGNED and APPROVED by me upon this 26th day of MARCH, 2009.

MARK KRUZAN, Mayor
City of Bloomington

Synopsis

This ordinance is sponsored by Councilmembers Piedmont-Smith and Rollo and adds Chapter 2.29 "Green Building Program" to Title 2 "Administration and Personnel" of the Bloomington Municipal Code. The Green Building Program requires that all new construction and major renovation of occupiable City buildings be designed, contracted and built to achieve, at minimum, the U.S. Green Building Council's LEED® Silver level of certification. The ordinance also calls for a two-part evaluation of the City's existing building stock, calls for this evaluation to be complete by 2020 and requires the City to both register eligible buildings with the U.S. Green Building Councils and implement improvements necessary to obtain LEED certification by 2022.

Note: This ordinance was revised subsequent to introduction to correct a formatting error in the definition of "Major Renovation."

Note further: The Council adopted Ord 09-04 with the adoption of Am 1, which provided a transitioning in of the City's "Phase II" analysis of all buildings and which also required the City to register applicable buildings and implement improvements necessary for LEED certification by 2022. Am 1 also provided for a technical correction for the definition of "LEED." The Synopsis of this ordinance has been changed to reflect the substantive contents of Am 1.

Signed copies to:

legal (10)	PARKS & REC	REDEVELOPMENT COMM.	deputy
controller	PUBLIC WORKS	CA/CA (3)	BME bldgs
Planning	COB UTILITIES	Clerk	