

Community Improvement Plan
Hamilton LEEDING the Way



***Hamilton LEEDING the Way
Community Improvement Plan***

City of Hamilton

1.0 INTRODUCTION

1.1 What is LEED Certification?

Leadership in Energy and Environmental Design (LEED) certification is a system that takes a sustainable development approach to the design, construction and operation of the built environment. The LEED rating system was developed and is administered by the U.S. Green Building Council (USGBC) and aims to significantly minimize the impact of buildings on the environment and on occupants.

LEED certification verifies that a building project meets high performance standards. It is proof that a building is environmentally responsible, profitable, and a healthy place to live and work (USGBC, 2007). The Canada Green Building Council (CaGBC) has modeled its certification rating system after the USGBC and tailored it specifically to Canadian climates, construction practices and regulations (CaGBC, 2003). The standards for the Canadian structure include:

- Sustainable sites
- Water efficiency
- Energy and atmosphere
- Materials and resources
- Indoor environmental quality
- Innovation and design process

Certification is granted by the CaGBC based on a total point score following a review of detailed documentation submitted by the design and construction team. It assesses how well a building satisfies the above standards. The extent to which the project meets the requirements will determine the level of certification the building attains. There are four levels of certification – certified, silver, gold and platinum making it possible for buildings with a range of constraints and goals to achieve green building status and be LEED certified.

1.2 The Benefits of LEED Certification and Sustainable Building

Numerous examples of 'green buildings' exist across the globe from the UK to the North America including Hamilton itself. They are developed for many uses including office, residential, industrial and institutional uses such as schools. The United Kingdom has many 'green' schools including Notley Green Primary in Essex and Frogmore Secondary in Hampshire (Edwards, 2003. pg. 130). Sustainable building practices lead to direct economic and environmental benefits as well as indirect social benefits.

1.2.1 Economic Benefits

The economic benefits of sustainable building include increased energy efficiency, increased worker productivity, and a better marketplace advantage. Efficient energy use leads to decreased operating costs. The increased costs of sustainable building are recouped through this reduction in operating costs.

Figure 1 Financial Benefits of Green Buildings Summary of Findings (per ft²)	
Category	20 Year-Net Present Value
Energy Savings	\$5.80
Emissions Savings	\$1.20
Water Savings	\$0.50
Operations and Maintenance Savings	\$8.50
Productivity and Health Benefits	\$36.90 to \$55.30
Subtotal	\$52.90 to \$71.30
Average Extra Cost of Building Green	Neg. 3 to 5
Total 20-year Net Benefit	\$50 to \$65

Source: *Green Building Costs and Financial Benefits, 2003. Fig. 3. p.8*

As noted above, sustainable “green” building is not a new practice. Take for example the Nederlandsche Middenstandsbank (NMB) (presently known as ING Group) building in Amsterdam. In 1978, NMB was recognized as the number four bank of the Netherlands. The bank’s board of directors decided that they needed a ‘new image and a new headquarters’ (Browning, 1992. p.23). What made this rather ordinary idea extraordinary were the criteria that the board had set out for the structure. They made it clear that they wanted to have an ‘organic building’ which integrated art, natural materials, sunlight, green plants, energy conservation, low noise levels, and water conservation (Browning, 1992. p.23). In 1983 the construction was complete. At the ‘Green Buildings Pay’ conference in 1996 Lord Rodgers reported that the NMB building had experienced a yearly energy cost savings that were one twelfth that of its former building and employee absenteeism dropped 15 percent, which improved the bank’s performance (Edwards, 2003. pg.4).

Employee productivity increases due to a better indoor work environment. The Greenstone building in Yellowknife, which achieved LEEDs Canada Gold Standard, ensures occupants receive natural light 90 percent of the time (Government of Canada, 2007). Interior air was also taken into consideration during construction. Minimal use of materials such as paints and adhesives containing volatile organic compounds allow occupants a safe and healthy breathing environment (Government of Canada, 2007). Increased interior building health guarantees the likelihood of

increased worker health. Decreased absenteeism and worker illness increases employee and corporate productivity. A good working environment ‘can lead to higher productivity and fewer union disputes and make it easier to attract and retain employees’ (Grieg-Gran, 2002, p.5).

Environmental health concerns have led the idea of sustainable “green” building to be an admirable goal for companies to pursue. Companies that aim to become more sustainable are regarded more highly compared to those who maintain status quo. Better company reputations result in increased revenues and growing clienteles. Clients are more likely to pay higher prices for products produced by a sustainable company. Companies are able to market themselves better by becoming sustainable and their new environmentally friendly image is appealing to both customers and workers (Edwards, 2006. p.191).

1.2.2 Environmental Benefits

Human activity and practices are not sustainable at present. However, it is reasonable to believe that the adoption of environmentally responsible practices such as green building design will have positive environmental implications. Building design and construction is directly connected to energy consumption and greenhouse gas emissions, both of which are presently hot topics in society.

The built environment takes credit for a significant portion of raw material and energy consumption – approximately 40 percent and one third respectively (Rees, 1999). Statistics in the U.S. show that buildings are responsible for 65 percent of energy consumption and 30 percent of total greenhouse gas emissions (USGBC, 2004). Green building technology therefore has the potential to make a considerable contribution to reduce resource consumption given the premise behind LEED certified buildings – to design, construct and operate buildings in a more sustainable manner.

When energy efficiency, water conservation, waste minimization and indoor air quality are improved through the use of resource efficient materials, the result is decreased demand for resources (fossil fuels etc.) and ultimately a reduction of the environmental impact of public infrastructure.

1.2.3 Social Benefits

The social benefits of sustainable building are more indirect; they occur as a result of the improved building amenities. Many people spend up to 90 percent of their time indoors. The “concentration of pollutants indoors is typically higher than outdoors, sometimes by as much as ten or even one hundred times” (Kats, G. 2003. p.5). As noted previously, social benefits of sustainable building are experienced by those employees working within sustainable “green” buildings. They experience a higher quality indoor environment lowering the risk of health issues. Healthy environments

have a positive affect on workers and as a result absenteeism rates fall. Indoor air quality as well as the amount of natural daylight penetration is an important consideration. If the occupants in a building are “provided abundant light and a connection with the outdoor environment, studies have shown they will be healthier (lower absenteeism), happier (less Seasonal-Affected Disorder) and thus more productive” (VGBN, 2004). This productivity and its effects as well as the health gains “reflects the fact that the direct and indirect cost of employees is far larger than the cost of construction or energy” (Kats, G. 2003. pg. 7).

Educational institutions have also recognized the economic and human benefits of sustainable buildings. Better buildings lead to better learning outcomes for students and teachers such as higher test scores, increased attendance, and increased teacher satisfaction.

Higher quality of health is a definite benefit of building green. It has been found that buildings that have been certified by LEED (certified, silver, gold) “consistently include a range of material, design and operation measures that directly improve human health and productivity” (Kats, G. 2003. p. 6). Complete health and well-being will mean that the cost of health care will decrease proportionally to the number of building related illness thus translating into lower healthcare costs (Edwards, 2006 p.197). Cities also attain a positive regional image with the construction of green buildings and sustainable infrastructure. The reputation of the City will improve which will attract like-minded people and corporations and even perhaps become a role-model to nearby municipalities.

1.3 Purpose of the CIP

Buildings have long since been thought of as static entities; once they're built they're built. Many city buildings are still standing tall after decades of structural and technological innovation. Despite these innovations, many buildings are still employing construction techniques that are unsustainable and eventually do their part to denigrate the environment. Buildings are the most infamous when it comes to energy use and emissions. In New York City, for example “the consumption of electricity, natural gas, fuel oil and steam needed to operate buildings generates 79 percent of the city's total carbon count” (Kugler, S. 2007), carbon which acts as a heating blanket, trapping radiation and gradually warming the atmosphere. Remedies to this problem include retrofitting current buildings, and integrated planning for future developments, both can be graded based on LEED guidelines.

Green and sustainable technologies and building practices are a solution to the conventional energy squandering structures that dot our landscape. Green building and LEED certification are fast becoming global phenomena. Numerous examples exist in the United States, Canada, and Europe as well as Hamilton. Governments and businesses alike are starting to apply these sustainable principles. There is a growing understanding of the importance of sustainability to the future generations

and the current population needs to act now so as to provide them with a sustainable and economical future.

In recent local news, Toronto's inner city buildings are being targeted by the Clinton Foundation. The former president has partnered with several banks to provide businesses the initial cost of retrofitting, and the loans will be paid back from the energy savings generated. These banking institutions, such as Citigroup, Deutsche Bank AG, JP Morgan Chase and Co., UBS AG, and ABN Amro, "have committed \$1 billion to finance the upgrades of municipal buildings in participating cities, which include New York, Chicago, Houston, Toronto, Mexico City, London, Berlin, and Tokyo" (Kugler, S. 2007). Upgrades are performed on the building to promote its energy efficiency, and to lessen its ecological footprint. Building retrofits include:

- Replacing heating, cooling, and lighting systems with energy-efficient networks
- Making roofs white or reflective to deflect more of the Sun's heat (to reduce the urban heat island effect)
- Operable, energy efficient windows and installing new models that let more light in, and
- Setting up sensors to control more efficient use of lights and air conditioning (Kugler, S. 2007).

The purpose of the **Hamilton LEEDING the Way Community Improvement Plan (CIP)** is to provide information and incentives for the improvement and enhancement of existing and future industrial, commercial, mixed use and multi-unit residential (as defined in Part 3 (Group C) of the National Building Code) developments within the urban area of the City of Hamilton. This plan was designed to improve economic, environmental and social conditions across the city.

There are a myriad of complex and interconnected reasons for promoting sustainable building at all levels of government. This includes the significant economic, environmental and social benefits that accrue at all geographic levels, but particularly at the local level. This solid "public good" rationale supports government involvement at all levels in promoting sustainable building. These public goods include:

- increased tax assessment for the municipality and the Province;
- creation and retention of employment opportunities;
- utilisation of existing infrastructure resulting in a reduction of urban sprawl and its related costs (hard and soft services);
- reduced reliance on new and existing infrastructure (storm sewers, heat, hydro, water etc.);
- contribution toward the revitalisation of particular areas and neighbourhoods; and,
- environmental preservation/restoration which can remove threats to the health of workers and residents;

2.0 LEGISLATIVE AUTHORITY AND PLANNING POLICIES

2.1 Legislative Authority

Section 106 of the *Municipal Act, 2001* provides that a municipality 'shall not assist directly or indirectly any manufacturing, business or other industrial or commercial enterprise through the granting of bonuses for that purpose'. However, an exception is made in Section 106(3) of the *Municipal Act, 2001* for municipalities exercising powers under Section 28 (6) or (7) of the *Planning Act* or under Section 365.1 of the *Municipal Act, 2001*. This exception provides the legislative basis for the financial assistance programs contained in this Plan.

2.2 Section 28 – Planning Act

Section 28 of the *Planning Act* allows municipalities with provisions in their official plans relating to community improvement to designate by by-law a "community improvement project area". Once this is done, a municipality may prepare and adopt a "community improvement plan" for the community improvement project area. Once the community improvement plan is approved, the municipality may exercise any power or authority under Section 28(6) or (7) of the *Planning Act* in order that the exception provided for in Section 106(3) of the *Municipal Act, 2001* will apply.

According to Section 28(1) of the *Planning Act*, a "community improvement project area" is defined as "a municipality or an area within a municipality, the community improvement of which in the opinion of the council is desirable because of age, dilapidation, overcrowding, faulty arrangement, unsuitability of buildings or for any other environmental, social or community economic development reason". There is strong justification for designating the City's entire urban area (as amended time to time) as the Hamilton LEED community improvement project area (appended as Appendix A to this plan). The designation of the Hamilton LEED Community Improvement Project Area conforms to the definition of "community improvement project area" under Section 28(1) of the *Planning Act*.

For the purposes of carrying out a community improvement plan that has come into effect, a municipality may engage in the following within the community improvement project area:

- a) acquire, hold, clear, grade or otherwise prepare land for community improvement
(28(3));
- b) construct, repair, rehabilitate or improve buildings on land acquired or held by it in conformity with the community improvement plan (28(6));
- c) sell, lease, or otherwise dispose of any land and buildings acquired or held by it in conformity with the community improvement plan (28(6)); and,

-
- d) make grants or loans to the registered owners, assessed owners, and tenants, and to any person to whom such an owner or tenant has assigned the right to receive a grant or loan, to pay for the whole or any part of the cost of rehabilitating such lands and buildings in conformity with the community improvement plan (28(7)).

Section 28(7.1) specifies that the eligible costs of a community improvement plan may include costs related to environmental site assessment, environmental remediation, development, redevelopment, construction and reconstruction of lands and buildings for rehabilitation purposes or for the provision of energy efficient uses, buildings, structures, works, improvements or facilities. Section 6 of this Plan presents the programs which the City of Hamilton, through adoption of this Plan, will implement within the Hamilton LEED Community Improvement Project Area.

2.3 Regional Municipality of Hamilton-Wentworth Official Plan

The Official Plan for the former Regional Municipality of Hamilton-Wentworth, "Towards a Sustainable Region" contains the necessary Community Improvement Policies.

Amendment No. 11 to the above noted Official Plan was passed on February 26, 2003. This amendment added a new Section 6A on Community Improvement Policies to Part D – Implementation, Section 6 – Secondary/Neighbourhood Plans of the Official Plan of the former Regional Municipality of Hamilton Wentworth. The primary purpose of this amendment was to add a new policy to the Official Plan to establish city-wide community improvement policies. These policies allow a range of community improvement issues such as environmental issues to be addressed across the entire urban area rather than just in small defined geographic locations. Section 6A.1 clearly permits that the entire Urban Area or any part of the Urban Area may by by-law be designated as a community improvement project area.

Section 6A.2 sets out the characteristics or criteria to be used when designating community improvement project areas. Section 6A.2 requires only that one or more of the following characteristics be present:

- a) building stock or property in need of rehabilitation;
- b) buildings and structures of heritage or architectural significance;
- c) encroachment of incompatible land uses or activities;
- d) deteriorated or insufficient physical infrastructure such as, but not limited to, sanitary and storm sewers and water mains, public transit, roads/streets, curbs, sidewalks, street lighting and utilities;
- e) deteriorated or insufficient community services such as, but not limited to public indoor/outdoor recreational facilities, public open space and public social facilities;
- f) inadequate mix of housing types;

- g) known or perceived environmental contamination;
- h) deteriorated or insufficient parking facilities;
- i) poor overall visual amenity of the area, including, but not limited to streetscapes and urban design;
- j) existing Business Improvement Areas or potential for inclusion in a Business Improvement Area designation;
- k) inappropriate road access and traffic circulation;
- l) shortage of land to accommodate building expansion and/or parking and loading facilities;
- m) other barriers to the improvement or redevelopment of under utilized land or buildings; and,
- n) any other environmental or community economic development reasons for designation.

A number of properties in the urban area exhibit several of these characteristics, including:

- buildings in need of rehabilitation due to poor energy efficiency etc.
- a shortage of land to accommodate building expansion;
- deteriorated infrastructure; and,
- poor overall visual amenity.

Section 1.0 outlines numerous environmental, economic and social reasons (benefits) for the promotion of sustainable building. The Hamilton LEEDING the Way CIP applies to both new construction as well as redevelopment.

Section 6A.3 of the Official Plan outlines the actions which the City can take through community improvement plans. This includes:

- a) provision of grants and loans;
- b) acquisition of land or buildings and subsequent clearance, rehabilitation, redevelopment or resale of these properties or other preparation of land or buildings for community improvement; and,
- c) other municipal actions, programs or investments for the purpose of strengthening and enhancing neighbourhood stability, stimulating production of a variety of housing types, facilitating local economic growth, improving social or environmental conditions, or promoting cultural development.

2.4 Provincial Policy Statement

This plan is consistent with the Provincial Policy Statement 2005 in that it intends to build strong communities within the City of Hamilton. The plan promotes efficient land use and development patterns that support strong, livable and healthy

communities as well as facilitating economic growth. This Plan also encourages and provides assistance for sustainable building practices which include alternative energy etc. The plan not only maintains, but encourages enhancing the vitality and viability of business parks and industrial areas.

2.5 Growth Plan for the Greater Golden Horseshoe

The Growth Plan envisages increasing intensification of the existing built-up area, with a focus on urban growth centres, intensification corridors, major transit station areas, brownfield sites and greyfields. To this end, the Hamilton LEED Community Improvement Project Area is entirely within the “Built-up Area” designation.

The vision for the GGH is grounded in the following principles that provide the basis for guiding decisions on how land is developed, resources are managed and public dollars invested:

- Build compact, vibrant and complete communities.
- Plan and manage growth to support a strong and competitive economy.
- Protect, conserve, enhance and wisely use the valuable natural resources of land, air and water for current and future generations.
- Optimize the use of existing and new infrastructure to support growth in a compact, efficient form.
- Provide for different approaches to managing growth that recognize the diversity of communities in the GGH.
- Promote collaboration among all sectors – government, private and non-profit and residents to achieve the vision.

Further, providing opportunities for businesses and residences to locate in the GGH is fundamental to using land wisely and ensuring a prosperous economic future.

This plan also encourages the private sector to take a non-traditional approach to land development and building. In doing this, the Growth Plan’s “Culture of Conservation” principle is further enhanced. Some of the areas in which conservation may be applied include:

- a) Water Conservation
 - i. water demand management, for the efficient use of water
 - ii. water recycling to maximize the reuse and recycling of water.

- b) Energy conservation
 - i. energy conservation for facilities
 - ii. identification of opportunities for alternative energy generation and distribution
 - iii. energy demand management to reduce energy consumption
 - iv. land-use patterns and urban design standards that encourage and support energy-efficient buildings and opportunities for cogeneration.

-
- c) Air quality protection, including reduction in emissions from municipal and residential sources.
 - d) Integrated waste management, including –
 - i. enhanced waste reduction, composting, and recycling initiatives and the identification of new opportunities for source reduction, reuse, and diversion where appropriate
 - ii. promotion of reuse and recycling of construction materials

2.6 Vision 2020

Vision 2020 is a vision statement with detailed strategies and actions to achieve sustainable development. It was adopted by Regional Council in 1992 and modified in 1998. Vision 2020 is designed to serve as a basis for decision-making and is very supportive of urban revitalization and development which make efficient and economical use of existing infrastructure and services, as is the case with this Community Improvement Plan. Some of the Vision 2020 themes that this plan supports and attempts to enhance include:

Local Economy

Sustainability principles are still not well understood in the economic development community and therefore the opportunities they create are not appreciated. Often sustainability issues are seen as obstacles or restraints to economic development. The task for this theme area is to highlight the opportunities so that economic development activities in the City lever the vision of a Sustainable Community as a unique positioning for Hamilton's future.

Consuming Less Energy

Although the one goal in this theme area is simply stated, energy is used in every facet of our daily lives. As Hamilton works toward long-term livability and sustainability, where does energy fit? In fact, the way we use and deliver energy affects all of these community goals. Deregulation and technology development are profoundly affecting the energy options available to Hamilton. Many are not aware of the financial, environmental and social costs of our energy supply and use.

Businesses and developers all have access to information to take advantage of long term cost savings from energy investments. Local energy resources are used to build a strong local economy.

Improving Air Quality

The quality of the air we breathe has an impact on our health, environment and well-being. In 1997, the Hamilton-Wentworth Air Quality Initiative summarized the social, environmental and economic impacts of poor air quality in Hamilton. In response to the conclusions and recommendations published in the study, Clean Air Hamilton

was formed to implement a community-wide action plan to improve air quality. Clean Air Hamilton is now a multi-stakeholder committee that supports measures to reduce emissions that are considered to be the most harmful to human and environmental health. The action plan engages all individuals, businesses and governments to take on responsible actions that will minimize local impacts on the atmosphere. As air pollution is generated by transportation, industry and trans-boundary sources, the only way to meet the air quality goals of the VISION is by encouraging positive change in lifestyles; change that will lead to a downward trend in the levels of air pollutants that human activity currently generates and contribute positively to climate change.

Goals for Climate Change

- To ensure the City has the best air quality of any major urban centre in Ontario
- To have effective plans that identify, reduce and manage risks
- To reduce greenhouse gas emissions (20 percent of 1994 levels in municipal operations and six percent of 1994 levels city-wide)

3.0 LEEDING the Way Community Improvement Project Area

The Hamilton LEEDING the Way Community Improvement Plan (CIP) applies to the lands within the areas identified as the Hamilton LEEDING the Way Community Improvement Project Area (CIPA) as designated by by-law which may be subsequently amended from time to time. The CIPA applies to the City's urban area (Appendix 'A').

The Hamilton ERASE CIP was approved by City Council in 2001 and subsequently amended in 2005. The ERASE CIPA applies to the entire "Urban Area" of the City of Hamilton. Obviously there is overlap of the two CIPAs as both have the same project area.

The Hamilton ERASE CIP provides financial assistance to registered owners, assessed owners, and tenants to assist with the costs of assessing and remediating brownfield sites throughout the urban area of the City.

The City also has a Downtown Hamilton, Community Downtowns and Business Improvement Area CIP. The area of the CIPA for the Downtown Hamilton, Community Downtowns and Business Improvement Area also overlaps the Hamilton LEEDING the Way CIP.

4.0 Goals of the Hamilton LEEDING the Way CIP

The goals of the Hamilton LEEDING the Way CIP are:

- a) to encourage sustainable development within the City of Hamilton;
- b) to enhance the City's image as a great city in which to live, work and play;
- c) to enhance the City's business parks and industrial areas as great places in which to invest and do business;
- d) retain and increase employment opportunities;
- e) to fully utilize and reduce pressure and reliance on existing infrastructure for industry;
- f) to encourage and assist private property owners/developers in rehabilitating buildings and properties to ensure their long-term economic viability;
- g) to focus municipal efforts that address the provision of municipal services and infrastructure; and,
- h) to promote the continued development the City's business parks and industrial areas as a primary business centres for the City and the greater Region.
- i) to promote and encourage infill development

5.0 Objectives of the Hamilton LEEDING the Way CIP

The objectives of the Hamilton LEEDING the Way CIP are:

- a) to encourage the co-ordination of municipal expenditures and planning and development activity;
- b) rejuvenate existing buildings by retrofitting them with various efficient products;
- c) reduce emissions created by outdated buildings;
- d) increase efficiency of both water, and energy used by buildings;
- e) improve environmental health and safety both inside and outside of the building;
- f) encourage building owners to pursue sustainability if not LEED Certification;
- g) encourage developers planning to develop buildings to pursue LEED Certification;
- h) inform companies about incentives available to aid in the green construction process; and,

i) improve the quality of the urban landscape visually and physically.

6.0 CIP Initiatives and Implementation Strategies

The following list summarizes the strategies and initiatives that may be pursued through this Community Improvement Plan, and through any other City action intended to foster revitalization and renewal. This list is not intended to be exclusive or exhaustive it is intended simply to provide a framework for revitalization and renewal.

6.1 Provision of Loans, Grants and Tax Grants

The City of Hamilton may make grants or loans, in conformity with this community improvement plan, to registered owners, assessed owners and tenants of lands and buildings within the community improvement project area, and to any person to whom such an owner or tenant has assigned the right to receive a grant or loan, to pay for the whole or any part of the eligible costs of this community improvement plan.

Undertakings such as the renovation of existing buildings to achieve reduced energy and resource consumption, the construction of new sustainable buildings, the development of vacant lands etc. are eligible for financial assistance along with costs associated with energy modeling and costs for LEED Certification fees to the Canadian Green Building Council. These undertakings will encourage sustainable building practices.

The total of all grants, loans and tax assistance provided under this and any other City of Hamilton CIP will not exceed the cost of rehabilitating the lands and buildings.

6.1.1 The LEED Grant Program

The intent of the LEED Grant program is to provide an economic catalyst for sustainable building and sustainable land development practices located within the LEEDING the Way Community Improvement Project Area.

The purpose of the grant program is for the City to share the incremental construction cost, consultation, and energy modeling and certification fees with the applicant to achieve LEED certification. Grants are calculated on the basis of the rating of official certification under the LEED rating system by the Canadian Green Building Council (CaGBC).

The program authorizes for each approved grant application a five (5) year grant, the amount of which is subject to Council approval, in an amount not exceeding the increase in municipal realty taxes as a direct result of the development/redevelopment of land and/or building. The grant which may be approved by Council shall be an amount which does not exceed 75% of the

municipal realty tax increase during the term of the grant. For purposes of determining the eligible amount of the increase in municipal realty taxes, special charges shall be excluded from the calculation. The grant would reduce the effect of an increase in municipal (City portion only) realty taxes attributable to the differential between the pre-development assessment and the post-development assessment. The approved grant is assignable. The grant program may be applied for with other incentive programs that the City of Hamilton offers except for other Tax Increment Financing programs.

Council shall adopt by resolution detailed implementation measures to allow for the efficient administration of this program. These administration procedures are appended in Appendix 'B' to this C.I.P. and must be adopted by City Council and can only be amended by City Council.

6.2 Co-operation/Participation with Private Sector Entities

The City of Hamilton will enter into public / private partnerships with developers where appropriate to achieve a desired public good. An example could include a public/private partnership for the development of a co-generation heating plant etc. The City of Hamilton may participate financially or otherwise with private sector entities for the objective of furthering the goals and objectives of the C.I.P.

6.3 Capital Improvements

The City of Hamilton will undertake capital improvements in order to enhance the attractiveness of developing within the City's Business Parks and Industrial Areas. These improvements will include but are not limited to road construction/reconstruction, service extension, etc.

6.4 Signage to Business Parks and Industrial Areas and gateway features

The City of Hamilton will develop and install appropriate signage leading to Downtown the City's Business Parks and Industrial Areas. The entrances to such areas will be identified by appropriately designed and located gateway features.

6.5 Municipal Land Acquisition

The City of Hamilton may acquire land for the purposes of redevelopment within the Community Improvement Project Area;

6.6 Municipal Land Disposition

The City of Hamilton may dispose, including sale, lease, or otherwise, of municipal land within the Community Improvement Project Area for the purpose of achieving the goals and objectives of this Plan.

6.7 Relief from fees and charges

The City of Hamilton may offer relief from fees, levies and charges associated with redevelopment.

6.8 Promotion and Advertising

The City of Hamilton may promote and advertise the City's Business Parks and Industrial Areas for the purpose of achieving the goals and objectives of this Plan.

6.9 Other Strategies

The City of Hamilton may develop other strategies and programs provided said strategies and programs are consistent with the goals and objectives of this plan.

Each initiative is to be developed and evaluated on its own merit and taken through the appropriate approval process including the Economic Development and Planning Committee and Council if needed, and if applicable, the appropriate funding process. An example could be the creation of an Eco-Industrial Network.

As these projects and others are approved they may be attached as further appendices to this document without requiring amendment to the plan. Programs in which financial assistance is provided and would be prohibited by the Municipal Act, 2001 will be approved by City Council as prescribed by the Planning Act. (refer to section 8.1)

7.0 PROGRAM MONITORING AND ADJUSTMENT

The Economic Development and Real Estate Division will monitor participation in LEED programs, including the variables listed below in Figure 1 on an individual project and aggregate basis. The Division will report annually to Council regarding monitoring and program performance. Based on monitoring results and feedback obtained from applicants, the City may periodically review and adjust the terms and requirements of the programs, or discontinue any of the programs described in this Plan, without amendment to the Plan. Program additions or program modifications that would require additional financial expenditures to this Plan will require formal amendment in accordance with the Planning Act, requiring notice of public meeting, public and agency consultation and approval by Council.

Minor changes or discontinuation of programs will be provided to the Ministry of Municipal Affairs and Housing for information purposes. The increase in financial assistance to registered owners, assessed owners, and tenants, and to any person to whom such an owner or tenant has assigned the right to receive a grant or loan, the addition of any new financial incentive programs, or a change to the Community Improvement Project Areas will require a formal amendment to this Plan. Any formal

amendments will be circulated to the Minister of Municipal Affairs and Housing for comment and shall be undertaken in accordance with Section 28 of the Planning Act. Please refer to the appendices for complete program details, terms and administration. Council shall adopt by resolution detailed implementation measures to allow for the efficient administration of financial incentive programs. These administration procedures are appended in Schedule A to this C.I.P. and must be adopted by City Council and can only be amended by City Council.

Figure 1 LEED Grant Program Variables To Be Monitored

	PROGRAM	VARIABLE
8.2	LEED Grant Program (LGP)	<ul style="list-style-type: none"> - Number of applications - Breakdown of eligible costs by type - Total cost of LGP grants - Hectares (acres) of land cleaned up/redeveloped - Hectares of vacant industrial lands developed - Industrial/commercial space (sq.ft.) constructed or refurbished - Value of private sector investment leveraged - Estimated increase in assessed value - Estimated increase in municipal and education taxes - Jobs created/retained - Energy savings (if available) - Number of new residential unit created

9.0 CONCLUSION

The approval of this Community Improvement Plan will provide a legislative basis and context for some of the initiatives identified to foster sustainable building on both greenfield, brownfield and greyfield properties within the urban area of the City of Hamilton. The Plan is intended promote sustainable industrial, commercial, mixed-use and multi-unit residential buildings.

The goals of this CIP are consistent with and build upon the community improvement goals in the former Regional Municipality of Hamilton-Wentworth Official Plan and Vision 2020 along with the Province's Provincial Policy Statement and Places to Grow. The preparation and adoption of the Hamilton LEEDing the Way CIP is in conformity with, and supported by, existing planning policies. This Plan, through its programs, also emphasizes particular land uses in various areas within the Project Area that are in keeping with future planned land uses.

12.0 REFERENCES

References

- An Introduction to the LEED Green Building Rating System. Washington D.C.: U.S. Green Building Council, 2004.
- Bartlett, Ed, and Nigel Howard. "Informing the Decision Makers on the Cost and Value of Green Building." Building Research & Information 28 (2007): 315-324.
- Browning, William. (1992) NMB Bank Headquarters: The impressive Performance of a Green Building. *Urban Land*. pp 23-25
- Edwards, Brian. (2003) *Green Buildings Pay*. Spon Press: New York
- Edwards, Brian. (2006) Benefits of Green Offices in the UK: Analysis from Examples Built in the 1990's. *Sustainable Development*. Vol. 14, pp 190-204
- Enermodal Engineering (2007). LEED Green Building Rating System Explained. Retrieved on May 25, 2007, from: http://www.enermodal.com/Canadian/leed_explained.html
- Government of Canada (2007). Greenstone Government of Canada Building. *Sustainable Buildings*. Retrieved on May 9, 2007, from: <http://www.sustainablebuildings.gc.ca/default.asp?lang=En&n=E9A57CDA-1>
- Grieg-Gran, Maryanne. "Financial Incentive for Improved Sustainability Performance: The Business Case and the Sustainability Dividend." Mining, Minerals and Sustainable Development Vol. 47 (2002)
- Kats, Gregory. H. (2003) Green Buildings Costs and Financial Benefits. Massachusetts Technology Collaborative: USA.
- Kugler, Sara. (2007). Clinton Green Plan Targets Toronto. *The Toronto Star*. Retrieved on My 18th 2007, from: <http://www.thestar.com/News/article/214459>
- "LEED Rating System." Canada Green Building Council. 2003. 09 May 2007 <http://www.cagbc.org/building_rating_systems/leed_rating_system.php>.
- "LEED." U.S. Green Building Council. 2007. 9 May 2007 <<http://www.usgbc.org/DisplayPage.aspx?CategoryID=19>>.
- Rees, William E. "The Built Environment and the Ecosphere: a Global Perspective." Building Research & Information 27 (1999): 206-220.
- Roodman & Lenssen. (2002). A Building Revolution: How Ecology and Health Concerns are Transforming Construction. Congressional Information Service.
- VGBN. (2004) *Why Build Green: Creating Healthier Environments*. Vermont Green Building Network. Retrieved on May, 18th 2007, from: <http://vgbn.org/whybuildgreen.php?rec=69>



Hamilton

Planning and Economic Development Department
Economic Development and Real Estate Division
71 Main Street West, 7th Floor
Hamilton, Ontario L8P 4Y5
Phone: (905) 546- 2424 ext. 5602
Fax: (905) 546-4107

LEED GRANT PROGRAM

PROGRAM DESCRIPTION

The intent of the LEED Grant Program is to provide an economic catalyst for the construction and or redevelopment of sustainable industrial, commercial, mixed-use and multi-unit residential (as defined in Part 3 (Group C) of the National Building Code) buildings and land development in the urban area. This program applies to the Hamilton LEEDING the Way Community Improvement Project Area (as such boundaries are presently defined).

The purpose of the grant program is for the City to share (50/50) the incremental construction cost (to a maximum, as per the table provided on page 2), consultation, energy modeling and certification fees with the applicant to achieve LEED certification. Grants are calculated on the basis of the rating of official certification under the LEED rating system by the Canadian Green Building Council (CaGBC). Please refer to table below.

This program authorizes for each approved grant application, a five year grant, the amount of which is subject to Council approval, in an amount not exceeding the increase in municipal realty taxes as a direct result of the development/redevelopment of the land and/or building. The grant, which may be approved by Council, shall be an amount, which does not exceed 75% of the municipal realty tax increase during the first five (5) years following which the building has been officially certified under the LEED rating system by the Canadian Green Building Council (CaGBC). The base year for determining pre-development taxes will be the year building permit is issued.

The grants may be received by an owner in conjunction with any other available municipal program except for other tax increment financing programs. The approved grants are not assignable by the owner to anyone, except to the initial purchaser of any condominium unit.. The total of each property's five years of approved grants shall not exceed the City's share of the incremental construction cost.

A limited assignment of the grant under the terms of the Program may be made from a registered or assessed owner of the property to the initial purchaser of each new condominium unit. The assignment of the grant shall not apply to any subsequent re-sale of any such unit. The assigned grant shall be restricted to the balance of the five (5) year term following the date of the registration of the condominium and from the date which the building has been officially certified under the LEED rating system by the CaGBC. The first-year grant is payable during the calendar year in which 75% of the condominium units within the project are fully assessed, and is calculated on a rateable per unit basis. A one time administration fee of \$340 per unit shall be deducted from the initial grant payment. Fees will be authorized through a by-law passed by City Council. The rate of the fees may be changed from time to time as approved by City Council.

For applicants who choose not to assign the grant to the initial purchasers of each condominium unit, the grant will be earned by the applicant if they have met all terms and conditions of the Program including payment of taxes *during the development stage only*. The annual grant to the applicant will be pro-rated if an appeal has been filed with the Municipal Property Assessment Corporation by any of the condominium unit owners. The grant for condominium units that are under appeal will not be released until the appeals are settled through the Assessment Review Board. The first year grant is payable during the calendar year in which 75% of the condominium units within the project are fully assessed, and is calculated on a rateable per unit basis.

The grant terminates following the five (5) year period (5 grant payments) or when the City's share of the incremental construction cost has been granted in full (whichever comes first).

For purposes of determining the eligible amount of the increase in municipal realty taxes, special charges shall be excluded from the calculation. The base year for the purposes of calculating the grant is the taxes the day prior to the issuance of a building permit. The grant would reduce the effect of an increase in municipal (City portion only) realty taxes attributable to the differential between the pre-development assessment and the post-development assessment.

Before any grant is provided to the applicant for a property for which a satisfactory grant application has been received and approved, realty taxes are required to have been paid in full each year and, in compliance with the City's by-laws and policies.

LEED Rating	Certified	Silver	Gold	Platinum
LEED Points	26 - 32	33 - 38	39 - 51	52 - 69
Energy Savings	25 – 35%	35 – 50%	50 – 60%	> 60%
Annual Utility Savings	\$0.75/sq.ft	\$1.00/sq.ft	\$1.25/sq.ft	\$1.50/sq.ft

*Return on Investment	Under 3 years	3 – 5 years	5 – 10 years	10+ years
Incremental Construction Cost				
Total	1%	3%	5%	8%
Applicant Share	0.50%	1.5%	2.5%	4%
City Share	0.50%	1.5%	2.5%	4%

* **Please note** – Return on Investment includes only annual utility energy savings.
Source: Enermodal Engineering, Kitchener ON

GRANT CRITERIA

Developing, redeveloping or renovating lands and buildings within the Hamilton LEEDING the Way Community Improvement Project area for LEED certified industrial, commercial, mixed-use and multi-unit residential projects, are eligible for grant approval following the owner's grant application for Council approval. Such application shall be submitted and only received if it is prior to the owners commencement of development of their property and shall include plans, estimates, contracts and other details as may be required to satisfy the City as to the cost of the project and as to the conformity of the project with the objectives of the Hamilton LEEDING the Way Community Improvement Plan.

Such project is also required to be in compliance with the City's other by-laws and policies, including zoning, site plan approval, design guidelines, etc. The compliance of each application with the criteria of this program and the amount and the property's grants (within the permitted terms of this program) is in the discretion of and subject to Council approval.

The applicant will be required to enter into an Agreement with the City of Hamilton that sets out the conditions of the annual grant.

LEED EXPLAINED

By Enermodal Engineering of Kitchener ON

The LEED™ (Leadership in Energy and Environmental Design) green building rating system was originally developed by the U.S. Green Building Council (USGBC) to provide a recognized standard for the construction industry to assess

the environmental sustainability of building designs. Canadian Green Building Council (CaGBC) has since adapted the USGBC LEED™ rating system to the specific concerns and requirements of buildings in Canada.

LEED™ is a point-based rating system; points are earned for building attributes considered environmentally beneficial. LEED™ differs from other rating systems in that it has quantified most of the "green credits". For example, 5% of the building materials must be from salvaged materials to earn a point for the salvaged materials credit.

LEED™ 69 points (70 for LEED™ Canada) covering six topic areas. Each topic area has a statement of associated goals.

Site Development: minimize storm water run-off, encourage car pooling and bicycling, increase urban density and green space

Water Efficiency: eliminate site irrigation, reduce water consumption, minimize or treat wastewater

Energy Efficiency: reduce building energy consumption, use renewable energy, eliminate ozone-depleting chemicals, commission building systems

Material Selection: minimize construction waste, re-use existing building façade, use recycled and salvaged materials, use renewable construction materials and design and build more durable buildings

Indoor Environmental Quality: incorporate day lighting, use low off-emitting materials, provide operable windows and occupant control of work space, improve delivery of ventilation air

Innovation in Design: use a LEED Accredited Professional, greatly exceed the requirements of a credit, incorporate innovative environmental features not covered in other areas.

Designers can pick and choose the credits most appropriate to their project to achieve a rating. LEED™ has four performance ratings:

26 to 32 points: Certified

Certified 33 to 38 points: Silver

39 to 51 points: Gold

Gold 52 or more: Platinum

The LEED™ system can be used in three ways to improve the "green-ness" of a building design:

1. LEED™ can serve as a design guide for the design team. The LEED™ credit

system is a systematic way of ensuring that the most important environmental issues are considered during the design of a building.

2. LEED™ reports are a valuable means of showing the client and other interested parties that the design has effectively addressed environmental issues.
3. A building design can be certified by the USGBC or CaGBC.

Certification provides increased market exposure and places the building in elite company among the greenest buildings in North America. LEED™ registration and certification fees are 4 cents U.S. or 7 CDN cents per square foot. In addition, LEED™ requires calculations and documentation to validate each LEED™ credit claimed.

LEED™ is the most recognized green building rating system in North America. There are over 200 buildings that have been registered with the CaGBC (over 2000 are registered with the USGBC to become LEED™ certified). Many developers, particularly those working on federal government and leading-edge private sector buildings, are requiring that building designs meet LEED™ Silver performance. Given that conventional new buildings would likely score only a few LEED™ points, achievement of any LEED™ level represents a significant reduction in building environmental impact and improvement of indoor environment.

The Canadian version of LEED™ is similar to the U.S. version with the exception that energy efficiency is relative to the Canadian Model Energy Code for Building.

The larger benefit of LEED™ buildings is an improved indoor environment (lower absenteeism, greater productivity, better thermal comfort), lower maintenance costs (commissioned building, more durable materials, smaller or eliminated building systems), higher corporate profile (increased product sales, marketing advantage, improved employee morale), and reduced risk of remedial measures (to deal with sick building syndrome or environmental contaminants).

EXAMPLE

GRANT CALCULATION – FOR A LEED SILVER INDUSTRIAL BUILDING IN STONEY CREEK INDUSTRIAL BUSINESS PARK

The Grant shall be calculated according to the following formulas:

Grant Level (% of Tax Increment):	75%
Total Construction Cost	\$1,360,000
Cost increment for LEED Silver	\$40,800
Total Eligible Costs City's Share (Maximum):	\$20,400

Pre-project AV: \$ 48,500.00 Year: 2004

Municipal Levy:	\$	127.55
Education Levy:	\$	35.89
Pre-project Property Taxes:	\$	163.44

Post-project AV: \$ 3,185,000.00 Year: 2007

Municipal Tax Increment = Post-project Municipal Taxes (actual) - Pre-project Municipal Taxes

“Grant Payment in Year 1” (first full calendar year after re-valuation of the completed and occupied project by the Municipal Property Assessment Corporation) or the “Initial Grant Payment” = Municipal Tax Increment*100%

Calculation of Grant Payment in Year 1 (Initial Grant)

Pre-project **Municipal** Taxes = Municipal Levy = \$127.55

Post-project Property Taxes = \$183,616.94

Post-project Municipal Taxes = \$126,724.46

Municipal Tax Increment = \$126,724.46 - \$127.55 = \$126,596.91

Maximum Grant Payment in Year 1 = \$126,596.91x 0.75 = \$94,947.68

NOTE: Tax increment exceeds the eligible amount, therefore, only eligible amount is payable

Therefore, Grant Payment Year 1 is \$20,400 and the program ends.

Eligible Costs if:

LEED Gold = \$34,000

LEED Platinum = \$54,400