

Clarington Technology Business Park Secondary Plan

1. Introduction

1.1 The Clarington Technology Business Park is located immediately north of Highway 401, between Bennett Road and Haines Street. Highway 2 forms the area's northern boundary. The subject lands are entirely within the urban area of Bowmanville and designated as Employment Area in the Regional Official Plan.

1.2 The area for the Technology Business Park, occupies 352 acres (142.7 hectares). It has been identified as an appropriate location for prestige employment uses, forming a cluster of businesses in the technology sector that can benefit from close proximity to the planned Clarington Energy Business Park, Darlington Nuclear Generation Station, and the University of Ontario Institute of Technology.

The overall goal of this Secondary Plan is to guide development of a business park that facilitates employment growth, promotes innovation in the technology sector in particular but not limited to the *Life Sciences* and Information and Communication Technology industries. The Business Park will also demonstrate environmental sustainability and excellence in design in its development.

1.3 This Secondary Plan is based upon, and its future development should be guided by, the following overarching principles:

- a) ***Innovation-*** Businesses in the business park should research, manufacture, and demonstrate or otherwise support innovative technologies, particularly in the field of *Life Sciences* and Information and Communication Technology. The business park itself should be innovative in building design and demonstrate environmental sustainability.
- b) ***Conservation and Sustainability-*** The business park, as whole and individual elements, should be designed to use land, streets, municipal services and energy efficiently. Techniques to maximize energy efficiency and sustainability should be integrated into the design of buildings, parking lots and sites. Developments should also incorporate natural features such as small water courses and woodlots.
- c) ***Integration-*** Research and development facilities, institutional and corporate offices, and manufacturing plants should be mixed within

the business park to promote linkages and synergies among related businesses.

- d) **Diversity-** A range of business uses should be accommodated. Streets should be designed for a variety of transportation modes, including automobiles, trucks, cycling, walking and public transit.
- e) **Design excellence-** The design of buildings, streetscapes, open spaces and infrastructure should be distinctive, aesthetically pleasing and functional. The physical and business environment of the business park should make it a showcase for Clarington, Durham Region and Ontario.

2. Goals

- 2.1 To enhance the economic competitiveness and profile of Clarington by diversifying employment opportunities within Clarington and attracting high-end knowledge-based employment to the Municipality.
- 2.2 To create a prestige employment area, designed and operated to promote synergy among a select group of users in the *information and communication technologies, life sciences* and in particular the *biotechnology* and allied sectors.
- 2.3 To develop a focal point for research and development and the production of related products and services to *information and communication technologies, life sciences and biotechnology*.
- 2.4 To facilitate linkages among the University of Ontario Institute of Technology, other institutions, government agencies and private industry and to build upon and complement the planned Energy Business Park in Clarington.
- 2.5 To distinguish the Clarington Technology Business Park as a unique and innovative employment area and to establish the business park as a signature gateway to Bowmanville and the rest of the GTA through high-quality design.
- 2.6 To use land and other natural resources efficiently and to promote environmental sustainability through appropriate building and landscape design techniques.
- 2.7 To ensure buildings are designed with high urban design standards that are energy efficient and meet *LEED* or equivalent standards.

- 2.8 To encourage the protection and integration of buildings of historical significance that will help retain the community's cultural identity and to protect and restore elements of the site's natural heritage.

3. Land Use and Built Form

3.1 Objectives

- 3.1.1 To accommodate and integrate a mix of complementary industrial and prestige employment land uses focusing primarily on the *life sciences* and information and communication technology fields.
- 3.1.2 To accommodate a variety of building types and sizes while ensuring that development overall contributes to a consistent and positive image of the business park.
- 3.1.3 To provide, through the placement and massing of buildings, continuity and enclosure to the streets within the business park.
- 3.1.4 Public art will be promoted to achieve a high quality public realm and identity in the business park.
- 3.1.5 To address the interface with surrounding land uses and to devise an appropriate response to Highway 2.
- 3.1.6 To encourage the relocation of pre-existing land uses not in keeping with the vision, goals and objectives of the Plan to other areas in Clarington.

3.2 General Policies

- 3.2.1 The land use designations for the Clarington Technology Business Park shown on Map A of this Secondary Plan establish the general pattern for future development. They consist of Prestige Employment 1, Prestige Employment 2, Light Industrial, Environmental Protection, and Mixed-Use Corridor.
- 3.2.2 Stand-alone restaurants, single use warehouses, distribution facilities, truck terminals, truck service centres, gas stations, fuel distribution operations, storage units and any use with significant outdoor storage requirements shall not be permitted in any of the land use designations.
- 3.2.3 Drive-through facilities for restaurants, banks and other retail services will not be permitted in any of the land use areas, except within the Mixed Use Corridor area through a site specific zoning amendment.

3.3 Prestige Employment 1

3.3.1 Prestige Employment 1 areas are the gateways to the business park. These areas are the most appropriate location for employment uses exhibiting a high standard of building and landscape design. The permitted uses are:

- a) Business or administrative offices;
- b) Research and development facility;
- c) University or college facility;
- d) Commercial schools;
- e) Light industrial facility;
- f) Hotel and convention centre;
- g) Commercial, community and recreational uses that cater to businesses and employees within the business park, including banks, eating establishments, athletic clubs, business and personal services, provided they are limited in scale and located on the ground floor of a multi-storey building.

3.3.2 The following land use standards shall apply to development within the Prestige Employment 1 area. These standards will be implemented through standards established in the zoning by-law.

- a) Lot width shall generally be a minimum of 100 meters;
- b) Building height shall generally be a minimum of 9 meters;
- c) Outside storage or display of goods is not permitted.

3.4 Prestige Employment 2

3.4.1 Prestige Employment 2 areas are intended for employment uses exhibiting a high standard of building and landscape design, yet to a lesser degree than those found in Prestige Employment 1 areas. Prestige Employment 2 will accommodate smaller lots and a smaller percentage of landscaping than the Prestige Employment 1 area. The permitted uses are:

- a) Business or administrative offices;
- b) Research and development facility;
- c) University or college facility;
- d) Commercial schools;
- e) Light industrial facility;
- f) Hotel and convention centre;
- g) Commercial, community and recreational uses that cater to businesses and employees within the business park, including banks, eating establishments, athletic clubs, business and personal services, provided they are limited in scale and located on the ground floor of a multi-storey building.

3.4.2 The following land use standards shall apply to development within the Prestige Employment 2 area. These standards will be implemented through standards established in the zoning by-law.

- a) Lot width will generally be a minimum of 80 meters;
- b) Building height will generally be a minimum of 9 meters;
- c) Outside storage or display of goods is not permitted.

3.5 Light Industrial

3.5.1 Light Industrial areas are designated in less visible areas of the site. These areas generally cater for higher employment density and more truck traffic. The permitted uses are:

- a) Business offices that are accessory to another employment use, provided they do not exceed 25% of the total floor area of the building;
- b) Research and development facility;
- c) Commercial schools;
- d) Light industrial facility;
- e) Eating establishments and business and personal services that cater to businesses and employees within the business park, provided they are limited in scale and located on the ground floor of a multi-storey building.

3.5.2 The following land use standards shall apply to development within the Light Industrial area. These standards will be implemented through standards established in the zoning by-law.

- a) Lot width will generally be a minimum of 50 meters;
- b) Building height will generally be a minimum of 6 meters;
- c) Outside storage or display of goods is limited to 25% of the building area and a maximum of 10% of the lot area and it must be screened from public view and adjacent properties.

3.6 Mixed Use Corridor

3.6.1 The Mixed Use Corridor is intended for the location of employment, personal service and ancillary uses that will benefit from a high profile location along Highway 2 and complement the function of the business park.

Since this area may reflect a mix of existing and new development forms, care will be given to ensure built form is of a quality that enhances the image of the business park. The permitted uses are:

- a) Business or administrative offices;
- b) Research and development facility;
- c) Commercial schools;
- d) Day nursery;
- f) Fitness centre;
- g) Commercial, community and recreational uses that cater to businesses and employees within the business park and along Highway 2, including banks, eating establishments, athletic clubs, and business and personal services, provided they are limited in scale and located on the ground floor of a multi-storey building.

3.6.2 The following land use standards shall apply to development within the Mixed Use Corridor. These standards will be implemented through standards established in the zoning by-law:

- a) Lot width will generally be a minimum of 40 meters wide;
- b) Building height will generally be a minimum of 2 storeys and a maximum of 3 storeys;
- c) Outside storage or display of goods is not permitted.

3.7 Environmental Protection Area

3.7.1 The Environmental Protection Area is identified on Map A and encompasses natural heritage features, a floodplain and a section of the Bennett Creek that is to be re-established in accordance with Section 6.2.3 of this Plan. Lands designated Environmental Protection Area shall be subject to the policies in Section 14.4 of the Municipality of Clarington Official Plan.

3.7.2 No development shall be permitted in Environmental Protection Areas. It is intended mainly for passive recreation, environmental rehabilitation, visual relief and uses related to erosion control and storm water management.

3.7.3 An Environmental Impact Study shall be required for development applications on lots adjacent to the significant woodlands identified on Map C. The Environmental Impact Study shall be prepared in accordance with Section 4.4.35 of the Municipality of Clarington Official Plan.

3.7.4 Bennett Creek will be re-established and realigned, as shown on Map A, to link other open spaces within the business park and to contribute towards downstream fish habitat.

3.8 Urban Design General Policies:

3.8.1 Building location and design

- a) Buildings at the corner of two streets must address the corner through architectural massing and architectural detail. Landscaping should reinforce this special corner condition.
- b) Main building entrances should address and be accessible from a public street.
- c) High-quality exterior cladding materials such as glass, steel, metal paneling, and masonry shall be used on the facades of buildings. A significant portion of a façade's surface area must be glazed.
- d) Mechanical penthouses, antennae, vents, and chimneys will be screened from view or incorporated into the design of the roof.

3.8.2 Lighting and signage

- a) The light levels on privately owned land must meet the Lighting Guidelines, as amended, should be functional to provide safe pedestrian passage, and should not impact on adjacent residential uses.
- b) Light levels within the municipal right of way should meet the Illumination Engineering Society of North America (IESNA) developed Recommended Practice 8 (RP8) for the appropriate street designation.
- c) Exterior building lighting for nightscapes will be restricted to prominent buildings at entrances and corners in the business park.
- d) Signage shall be integrated into and complement the design of buildings and the landscape and shall meet the provisions of the Clarington Sign By-law, as amended.

3.8.3 Landscaping

- a) Areas between the building face and public right-of-way shall be attractively landscaped. Only decorative fences that are less than 1.2 metres high will be permitted between the building and the street.
- b) In all instances, the 4 metres of property adjacent to the public right of way shall be landscaped.
- c) Landscaped areas should be located and designed to enhance the setting and image of development and provide passive amenity space. These landscaped areas may contain storm water facilities.

- d) Integration/coordination of landscaped areas between neighbouring properties is encouraged.

3.8.4 Access and Parking

- a) Parking structures shall generally be located at the rear of buildings and screened from view from primary and secondary streets and from the Highway 401 corridor. Where parking structures face roads, high-quality exterior cladding materials and architectural details shall be used.
- b) Parking lots shall generally be located to the side and/or rear of buildings and screened from view through landscaping.
- c) Parking lots should include landscaping and be lit to provide safe, comfortable walking environments and to minimize energy consumption. Large parking lots should be divided by islands containing a minimum of two trees for every fifteen parking spaces.
- d) Driveways shall generally be located between buildings. Shared driveways are encouraged.
- e) Servicing and loading areas shall be located at the rear of the primary building, away from public streets or appropriately screened from view in the interior side yard of the lot. Garbage facilities shall be located within the primary building.

3.9 Urban Design Policies for the Mixed Use Corridor

3.9.1 Building location and design

- a) Developments shall ensure compatibility with existing uses and with those on adjacent lands.
- b) Higher density land uses and taller buildings shall be permitted at intersections of arterial roads.
- c) Key intersections should be planned and designed to mark the entrance to the business park, establish gateways, create a strong sense of arrival, and give the business park a distinct identity. This should be achieved through the articulation of building mass and materials. Landscaping should reinforce this special gateway condition.
- d) To encourage pedestrian activity, buildings shall be oriented toward the street and transit services, with active uses located at ground level.

3.9.2 Lighting and Signage

- a) Lighting and signage within the Mixed Use Corridor shall comply with Section 3.8.2 of this plan.

3.9.3 Landscaping

- a) A consistently high quality of landscaping on private lands will be achieved that enhances streetscapes and the overall image and environment of the Mixed Use Corridor.

3.9.4 Access and Parking

- a) The number and location of vehicular access points on Highway 2 shall be limited to minimize disruption to traffic flow and they will be appropriately spaced in accordance with Section 19.5 of the Municipality of Official Plan and the Durham Region Arterial Corridor Guidelines.
- b) Where access is required from arterial roads consolidation of access points of adjacent properties should be considered.
- c) Shared parking, parking/service lanes, and access driveway entrances are encouraged.
- d) Driveways to access loading, servicing and parking areas shall be provided off Local Roads and Secondary Streets, wherever possible.
- e) Off-street parking areas, loading areas and service areas shall be screened, landscaped and located to the rear or side yard of a building. Loading and service areas should not be visible from Highway 2, Lambs Road and Bennett Road.
- f) As Highway 2 is identified as a cycling spine in the Regional Cycling Plan, provisions should be made to accommodate cyclists as recommended in the cycling plan either on street or on a separate cycling path.

4. Streets and Transportation

4.1 Objectives

- 4.1.1 To provide a balanced transportation network that encourages walking, cycling and public transit use while accommodating vehicles efficiently.
- 4.1.2 To establish a road network that provides a framework for development, maximizes property frontage, and optimizes vehicular access and movement.
- 4.1.3 To establish an interconnected network of sidewalks that link areas within the business park and provide linkage to adjacent trails.
- 4.1.4 To establish a continuous sidewalk along Highway 2 promoting safe, convenient and barrier-free pedestrian travel to each site and to transit stops.

4.1.5 To develop attractive, tree-lined streets with high-quality lighting and other landscape elements that help to establish a positive, consistent image of the business park. This will also enhance the pedestrian environment and mitigate the urban heat island effect.

4.1.6 The development of the Highway 2 Mixed Use Corridor shall be consistent with the objectives of the Region of Durham's Long Term Transit Strategy, Cycling Plan, and the Durham Arterial Corridor Guidelines.

4.2 Policies

4.2.1 The future network of roads within and adjacent to the business park is shown on Map A.

4.2.1.1 Arterial roads:

- a) Baseline Road will be the primary entrance to the business park and be constructed in phases. The design of Baseline Road will accommodate the future expansion of two traffic lanes into four. The extra width between the sidewalk and the road in the initial phase will become travel lanes in the later phase. It shall have a right-of-way width of 36 meters to ultimately accommodate future lane expansion. Extensive streetscaping is recommended.
- b) Lambs Road will connect north of Highway 2 to the future residential neighbourhood. It will accommodate four lanes of traffic and eventually connect with the new interchange at Highway 401. Development in the vicinity of the proposed interchange will be discouraged until the Ministry of Transportation has completed their study of the preferred interchange location. The Lambs road right of way width shall be 36 meters in its ultimate configuration.
- c) Bennett Road runs north-south along the eastern edge of the business park and will for the interim period, until the new interchange at Lambs Road and Highway 401 has been constructed, serve as the main connection route to Highway 401. The right-of way width should be 30 meters to accommodate sidewalks on both sides, landscaped boulevards, and four traffic lanes.

4.2.1.2 Collector roads:

- a) Haines Street runs north-south and forms the "interface" between the existing industrial area to the west and the

business park lands to the east. The right-of way width shall be 23 meters to accommodate sidewalks on both sides, landscaped boulevards, and two traffic lanes.

- b) Esplanade Drive or the “Esplanade” will provide a more formal north-south street in the eastern half of the business park. Trees will line either side of the sidewalk. The road will accommodate two-lanes of traffic in addition to a parking lane. The “Esplanade” is an integral part of the public realm and will significantly enhance visual connections from Highway 401 to the interior of the park. The right of way width shall be 23 meters. Extensive streetscaping is recommended.

4.2.1.3 Local roads:

- a) Innovation Drive should reinforce the identity and prominence of the Holburn Research facility as the catalyst in the development of the business park. Innovation Drive will be a gateway to the business park welcoming workers and visitors to the site, and its right of way shall be 23 meters. Extensive streetscaping is recommended.
- b) Discovery Drive will create a modified grid road network, connect paths throughout the business park, and provide an alternative circulation movement from the arterial roads. It will be the road that connects all places within the park and its right of way width shall be 23 meters.
- c) Knowledge Drive and other local roads will complete the main elements of the street network. In conjunction with development of the business park these roads will be constructed and/or upgraded to a right of way width of 20 meters, accommodate landscaped borders, sidewalks, and boulevards with street trees.

4.2.3 Intersections shall be designed to maximize the comfort and safety of pedestrians while safely accommodating required vehicular movements.

4.2.4 Additional Local Roads and private streets to those shown on Map A may be permitted to subdivide land, serve development and improve the efficiency of the road network. Such roads and streets shall respect the overall modified grid pattern of blocks, have right-of-way widths of 20-23 meters, and be designed and built to municipal standards.

- 4.2.5 Traffic signals will be installed at the Hwy 2 and Lambs Road intersection when warranted.
- 4.2.6 An Access Management Plan for the business park area may be considered in conjunction with the Master Infrastructure Plan.
- 4.2.7 The intersection configurations at major road intersections and the alignment of other future local roads are subject to further detailed study and may be altered without amendment to this Plan.
- 4.2.8 The Municipality, Durham Region and GO Transit will work cooperatively to develop a long-term public transit strategy for the business park.
- 4.2.9 Council may require that applications for development include a Travel Demand Management (TDM) Plan. The intent of the TDM Plan shall be to implement and promote measures to reduce low-occupancy trips and to increase transit use, cycling and walking. To that end, measures to be considered include organizing and promoting car pooling, providing cycling amenities, providing financial subsidies for transit passes and other measures that may be identified by Municipal staff.
- 4.2.10 Recognition shall be given to the 14 meters buffer on both sides of Hwy, 401. Lands should only be developed with the consent of the Ministry of Transportation.

5. Open Space and Landscaping

5.1 Objectives

- 5.1.1 To encourage the integration of ecological functions with site development and building design.
- 5.1.2 To establish where appropriate, a network of connected open spaces.
- 5.1.3 To encourage the use of the re-established Bennett Creek as a source of connectivity through the business park.
- 5.1.4 To highlight the stormwater pond as a focal point for the business park's open space network.
- 5.1.5 Stormwater management facilities are an amenity to enhance the image of the business park. They should be incorporated into the planning and design of open spaces, buildings, and paved areas. Stormwater management facilities and other elements should contribute to a business park setting and establish connections to other open space amenities.

- 5.1.6 To reestablish the Bennett Creek tributary in the business park area, through:
- a) the dedication of the lands required to re-establish this channel through the development process;
 - b) the design of the conveyance channel.

5.2 Policies

- 5.2.1 The open space network will use the natural features of the site to enhance pedestrian activity and develop the business park's identity.
- 5.2.2 Following the reestablishment of Bennett Creek north of Baseline Road, a pedestrian trail of at least 3 metres in width will be constructed along the re-established creek and will provide connectivity to the centralized municipal stormwater pond in the southwestern corner of the business park.
- 5.2.3 The further development of a trail/sidewalk system should be promoted to connect to the existing Soper Creek Trail on the west side of Soper Creek into the business park.
- 5.2.4 Future developments along the re-established Bennett Creek will be encouraged to integrate their landscape design with the creek, creating a cohesive development pattern alongside it.
- 5.2.5 The proposed municipal stormwater management facility south of Baseline Road shall be designed as part of the park's "gateway" in anticipation of the potential future re-location of the interchange.
- 5.2.6 Visual connectivity between private open spaces shall be encouraged.
- 5.2.7 To enhance the image of the business park and help achieve the goal of environmental sustainability, the following measures and techniques related to landscape design, construction and maintenance shall be encouraged:
- a) Protecting existing stands of trees and hedgerows, and integrating them into the open space network.
 - b) Identification and re-establishing the habitat of native flora and fauna, and managing such areas appropriately.
 - c) The use of native plants.
 - d) Locating and selecting plants to provide climate protection for buildings and employees, for example, using deciduous trees with large canopies planted on south sides of buildings and at the periphery of parking lots to reduce and redirect sun exposure in summer.

- e) Coordinating landscaping treatments among neighbouring developments.
- f) The use of landscaped drainage basins internal to large parking areas.
- g) The use of permeable materials instead of impervious surfaces for walkways, driveways and parking areas, where feasible.
- h) Selecting, designing and operating outdoor lighting, to conserve energy and minimize light pollution.
- i) The integration of stormwater management systems into the design of buildings and landscaping.

5.2.8 Naturalized landscape areas for the benefit of wildlife habitat and reduction in water use are encouraged provided that appropriate landscape management practices are implemented.

5.2.9 As the site is “urbanized”, elements of its rural landscape should be preserved where appropriate.

5.2.10 Enhance the unimpaired views of the study area from Highway 401 where practical through urban and landscape design.

5.2.11 Landscaping of road right of ways should:

- a) Plan the location of sidewalks, driveways and utilities around existing healthy trees.
- b) Invest in the longevity of landscaping with proper planting and care.
- c) Seek permission from adjacent landowners to plant on their properties, if the right-of-way is too narrow to support plantings.
- d) Plant deciduous trees between the curb and the sidewalk.
- e) Plant trees at grade.
- f) Plant trees further from the curb on wide, high-speed roads, to protect them from harmful salt spray, strong winds, fumes and heat reflected from the road.

6. Servicing

6.1 Objectives

6.1.1 Generally, development shall proceed on the basis of full municipal water and sanitary services being in place at building occupancy. However, temporary alternative methods may be considered with the approval of the Regional Municipality of Durham and other approval agencies.

- 6.1.2 The business park will be serviced by centralized stormwater management facilities in accordance with the Bennett Creek Master Drainage Plan.
- 6.1.3 Centralized stormwater management facilities are proposed in the north and in the southwest corner of the business park site, and their approximate location is identified by a * symbol on Map A Land Use and Primary Roads of the Secondary Plan. The * symbols are merely for illustrative purposes and the precise location, dimensions and design of the centralized stormwater facilities will be further detailed through the consideration of development applications.

6.2 Policies

- 6.2.1 All new utilities shall be buried below grade in the street right-of-way, in easements, or beneath trails where required. For ease of access and maintenance, shared utility trenches are encouraged.
- 6.2.2 Interim storm water management solutions may be considered, prior to the construction of municipally owned storm management facilities, provided that proponents contribute their proportionate share towards the acquisition of the lands for and the construction of ultimate detention and control facilities. The costs to purchase the lands and to construct the municipal storm water ponds shall be borne by all benefiting land owners whose proportionate contributions will be determined through an Infrastructure Master Plan.
- 6.2.3 The lands required to re-establish the Bennett Creek tributary north of Baseline Road, shall be dedicated through development applications, shall have a minimum width of 30 meters, and shall include at least a 3 metre wide pedestrian trail.
- 6.2.4 Development proposals shall incorporate on-site controls such as green roofs, porous paving materials and other infiltration and detention facilities, according to the requirements of the Bennett Creek Master Drainage Plan.
- 6.2.5 Council will require that development applications include a Sustainability Plan. Sustainability Plans shall consider, but not be limited to the following techniques to reduce stormwater runoff, improve water quality and conserve energy:
- a) Cisterns to capture rainwater for reuse in landscape irrigation and other non-potable water applications.
 - b) Vegetated swales to filter and detain storm water.
 - c) Porous surfaces for pathways, patios and parking lots to allow infiltration of storm water.

- d) Grey water systems that capture storm water runoff and other grey water for reuse in toilets and industrial operations.
- e) The use of renewable energy sources for building systems and exterior lighting, such as solar, spacing, wind and geothermal.
- f) Cogeneration, i.e., capturing and using heat from power generation;
- g) Green roofs.
- h) Techniques outlined in Section 7.2.1 of this plan.
- i) Other techniques encouraged by the policies of this Secondary Plan and which may be identified by Municipal staff.

7. Building Design and Construction

7.1 Objectives

- 7.1.1 Provide for excellence in building and landscape design to create an identity that will distinguish the business park as a unique place within Ontario.
- 7.1.2 To facilitate and promote buildings that incorporate energy-saving and environmentally-friendly materials and techniques.
- 7.1.3 To utilize and demonstrate new building sciences that maximize energy conservation and efficiency.
- 7.1.4 To maximize the life span of buildings.
- 7.1.5 Promote and enforce good design practices to ensure the business park maintains a consistent, high-quality image and sense of place.

7.2 Policies

- 7.2.1 Best practices in “green” development should apply to all elements within the Business Park, including buildings, landscaping, parking, servicing and other infrastructure. All buildings should be designed to at least LEED’s Silver level or equivalent. Energy conservation measures and techniques may include:
 - a) Windows that open to allow for natural cross ventilation and reduce the use of air conditioning.
 - b) Glazing on the south side of a building to maximize direct sunlight in winter.
 - c) Sun louvers to minimize direct sunlight in summer.
 - d) Green roofs - roofs that are partially or completely covered with vegetation to minimize water runoff and improve building insulation.

- 7.2.2 Eight buildings have been identified by the Clarington Heritage Committee as cultural heritage resources. The incorporation of these structures into the redevelopment of sites, in accordance with Section 8.3 (Policies on Cultural Heritage) in the Municipality of Clarington Official Plan, is encouraged.
- 7.2.3 Building signage must be incorporated into, and complement the architecture of the building. Stand-alone and directional signage shall be incorporated into the design of the landscape.
- 7.2.4 Main building entrances must address and be accessible from roads. Building location and design should contribute towards the creation of open space vistas.
- 7.2.5 Buildings should be designed with inherent flexibility to meet the changing needs of current and future businesses.
- 7.2.6 High quality exterior cladding materials, such as glass, steel, metal paneling and masonry, shall be used on the facades of buildings facing primary streets.

8. IMPLEMENTATION

- 8.1 Zoning By-law Amendments for lands within the Clarington Technology Business Park shall conform to this Secondary Plan.
- 8.2 The review and approval of Site Plan Applications for lands within the business park shall be guided by the policies of this Secondary Plan.
- 8.3 Applications for Plans of Subdivision for lands within the business park shall include a Phasing Plan. Phasing Plans shall establish the order of private development and the staging of construction of landscaping, public infrastructure and services. The Phasing Plan shall take into account the responsibility for construction of the public infrastructure and services and shall be considered by the Municipality in enacting Zoning By-law Amendments and recommending Plans of Subdivision for approval.
- 8.4 The Municipality will work with landowners and the Regional Municipality of Durham to develop an Infrastructure Master Plan for the phasing and financing of roads, municipal water and sanitary sewer and stormwater facilities for the business park.
- 8.5 The Municipality will, through the Infrastructure Master Plan, provide further direction with regard to the acquisition of the relevant portions of lands for the establishment of centralized storm water ponds for the business park. The costs to purchase the lands that have been identified

as necessary for publicly owned centralized storm water ponds and the cost of constructing the ponds, shall be borne by all benefiting land owners, as stipulated in Section 6.2.2 of this Secondary Plan.

- 8.6 In addition to the provisions of Section 23.4.2 of the Municipality of Clarington Official Plan, Holding Symbols may be used to ensure achievement of the policies of this Secondary Plan. Prior to the lifting of a Holding Symbol, the following provisions apply in respect to the Secondary Plan Area:
- a) plans for the proposed development must show that the proponent has successfully implemented the Urban Design Policies and transportation objectives of this Secondary Plan to the satisfaction of the Municipality; and,
 - b) arrangements have been made satisfactory to the Municipality and the Region of Durham for the proponent's contributions and dedications to implement the Sustainability, Streetscape Implementation and Infrastructure Master Plans referenced in Sections 5.2.11, 6.2.5 and 8.4.
- 8.7 The Municipality will work with the Regional Municipality of Durham to expedite the provision of municipal services to allow development of the business park.
- 8.8 The Municipality, in consultation with the Regional Municipality of Durham, will prepare a Streetscape Implementation Plan to ensure quality of streetscape and consistency in design along local roads and roads under regional jurisdiction.
- 8.9 The Municipality, through Development Charges Levies and/or subdivision approvals, will make provision for streetscaping within local road right of ways, and encourage the Regional Municipality of Durham to follow suit;
- 8.10 The Municipality will explore the different tools available to promote and stimulate the development of the business park.

9. INTERPRETATION

- 9.1 Some flexibility in the interpretation of the policies contained in this Secondary Plan is permitted provided that its general intent is maintained. The boundaries of land use areas are approximate and shall be defined by the precise alignment of new streets or implementing Zoning By-laws.
- 9.2 The policies of this Plan shall be interpreted in conjunction with the applicable policies of the Municipality of Clarington Official Plan. In the event of a conflict between the provisions of the Municipality of Clarington Official Plan and this Plan, the Secondary Plan shall prevail.

9.3 Definitions

Biotechnology

The application of biological knowledge and techniques pertaining to molecular, cellular and genetic processes to develop products and services.

Information and Communication Technology

The technology required for information processing. In particular the use of electronic computers and computer software to convert, store, protect, process, transmit, and retrieve information from anywhere, anytime. It includes computer hardware and software development, telecommunications equipment manufacturing, telecommunications service providers and associated service providers.

LEED

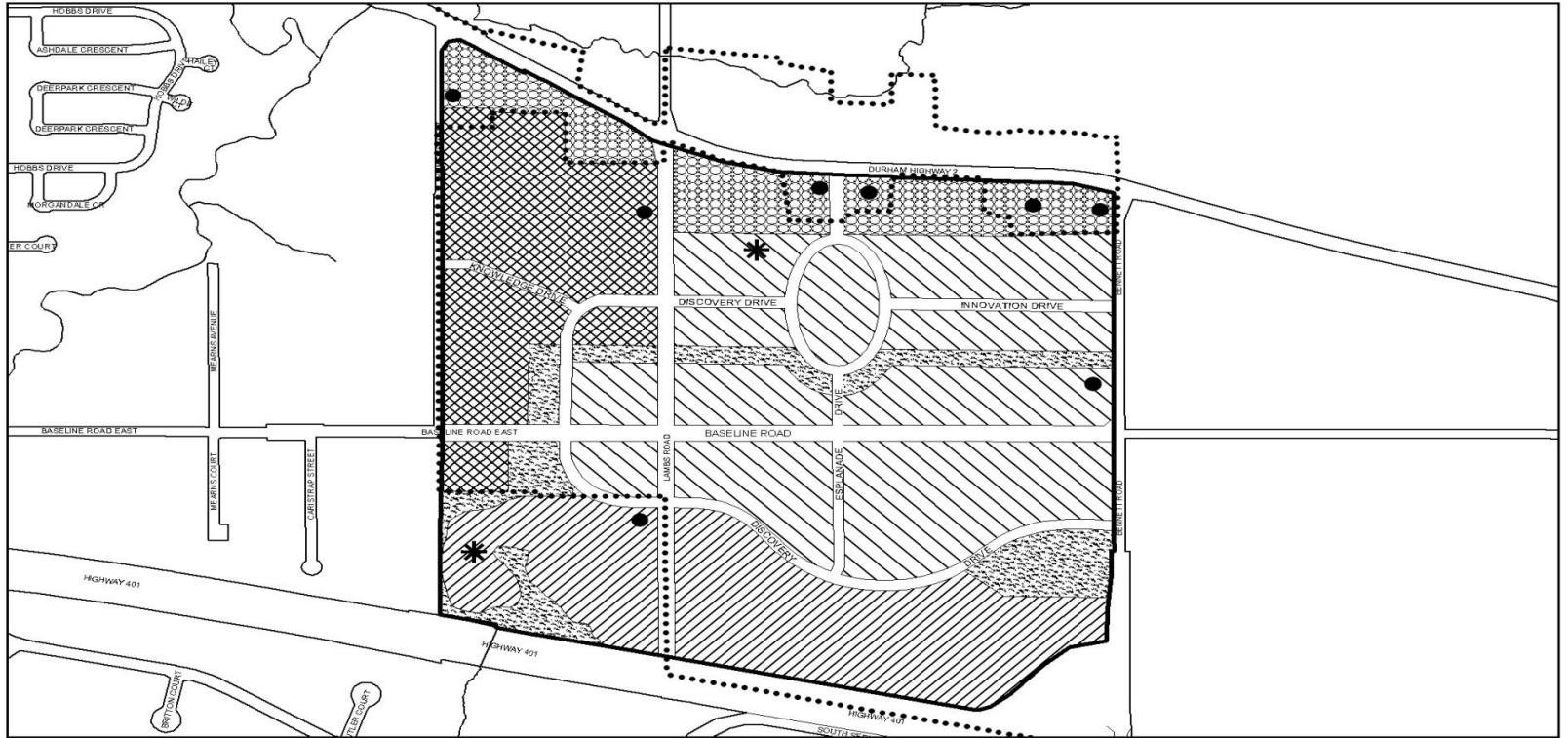
Refers to the Leadership in Energy and Environmental Design Green building rating system established by the Canada Green Building Council as amended from time to time.

Life Sciences










The study of living things: a branch of science that is concerned with plants, animals, and other living organisms and includes research and development in pharmaceutical and medicine manufacturing, medical devices and health and non-health *biotechnology*.

Light Industrial Facility

Shall mean an industry which is engaged in assembly, manufacturing, fabricating or processing activities within a wholly enclosed building that are not offensive or not likely to be offensive by reason of the amount of noise, smoke, odour, emissions, or vibration produced therein, but excludes a recycling facility, a waste management or processing facility or a waste incineration facility.



LEGEND

-  Built Boundary
-  Clarington Technology Business Park
-  Light Industrial Area
-  Prestige Employment 1
-  Mixed Use Corridor Special Study Area
-  Environmental Protection Area
-  * Proposed Location of Storm Water Management Pond
-  • Heritage Resource
-  Prestige Employment 2

**MAP A
LAND USE
AND PRIMARY ROADS**

CLARINGTON TECHNOLOGY
BUSINESS PARK
SECONDARY PLAN

JUNE 22, 2010

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AND REPRESENTS REQUESTED MODIFICATIONS AND APPROVALS

