

BYLAW NO. 07/055

BEING A BYLAW OF THE REGIONAL MUNICIPALITY OF WOOD BUFFALO TO AMEND BYLAW NO. 99/059 BEING THE LAND USE BYLAW FOR THE REGIONAL MUNICIPALITY OF WOOD BUFFALO

WHEREAS Section 639 of the Municipal Government Act, R.S.A., 2000, Chapter M-26 and amendments thereto authorizes Council to enact a bylaw adopting a Land Use Bylaw.

AND WHEREAS Section 191(1) of the Municipal Government Act, R.S.A., 2000, Chapter M-26 and amendments thereto authorizes Council to adopt a bylaw to amend a Land Use Bylaw.

NOW THEREFORE, the Council of the Regional Municipality of Wood Buffalo, in the Province of Alberta, in open meeting hereby enacts as follows:

1. THAT Bylaw No. 99/059 is hereby amended by:
 - (a) Changing the designation for Lot 3, Block 1, Plan 042 1905 as shown on Schedule "A", attached hereto and forming part of this bylaw, from "DC – Direct Control" to "C4 – Highway Commercial" and "BI – Business Industrial";
 - (b) Adding the following definition to Section 10.1: **AQUACULTURE FACILITY** means a facility for breeding and/ or raising fin-fish or shellfish;
 - (c) Adding the following definition to Section 10.1: **PRIVATE UTILITY** means any building, structure, plant or equipment used to provide one or more of the following for public or private consumption, benefit, convenience or use:
 - (i) water or steam;
 - (ii) fuel;
 - (iii) electric power;
 - (iv) heat;
 - (v) public transportation operated by or on behalf of the municipality;
 - (vi) irrigation;
 - (vii) sewage disposal;
 - (viii) drainage; or
 - (ix) waste management;
 - (d) Add the following definition to Section 10.0: **RESEARCH AND DEVELOPMENT** means premises used for the purpose of conducting research and developing products or services, but does not include retail or wholesale of those products or services.
 - (e) Adding subsection 108.6, as outlined in Schedule "B" and adding the map shown on Schedule "C" as Figure 108.1 after Section 108.6, as attached hereto and forming part of this bylaw;

- (f) Adding subsection 111.9, as outlined in Schedule "D", and adding the map shown on Schedule "E" as Figure 111.1 after Section 111.9, as attached hereto and forming a part of this bylaw;
 - (g) Adding subsections 22.4 and 22.5, as outlined in Schedule "E", and adding the map shown on Schedule "G" as figure 22.1 after Section 22.5, as attached hereto and forming part of this bylaw;
 - (h) Removing Section 91 from 'reserved for future use' and designating it for 'Design Guidelines';
 - (i) Adding Section 91, as outlined in Schedule "H", and adding the map shown on Schedule "I" as Figure 91.1 after Section 91, as attached hereto and forming part of this bylaw.
2. THAT the Chief Administrative Officer shall be authorized to consolidate this bylaw.
3. THAT this Bylaw shall be passed and become effective when it receives third reading and is signed by the Mayor and Chief Legislative Officer.

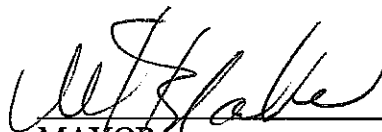
READ a first time this 26th day of June, A.D. 2007.

READ a second time this 10th day of July, A.D. 2007.

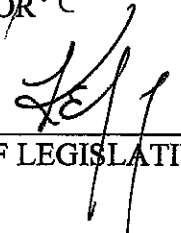
READ a third and final time this 10th day of July, A.D. 2007.

SIGNED and PASSED this 13th day of July, A.D. 2007.

CERTIFIED A TRUE COPY


MAYOR

CHIEF LEGISLATIVE OFFICER


CHIEF LEGISLATIVE OFFICER

The following regulations apply to any new development in the area shown in Figure 108.1, Schedule "C" to this Land Use Bylaw:

"108.6 Additional Provisions

(a) Purpose

Notwithstanding section 108.1, the intent of this district is to allow for the development of an attractive industrial park that demonstrates innovation and high levels of environmental and economic performance.

The purpose of this district is to provide for a wide range of light and medium industrial uses. Development in this district must also minimize environmental impacts through the application of "eco-industrial" practices. Uses in this district should not adversely affect surrounding non-industrial uses through the generation of emissions, noise, odours, vibrations, heat, light, dust or other objectionable or dangerous conditions.

(b) Permitted Uses

Notwithstanding section 108.2, there are no permitted uses in this District.

(c) Prohibited Uses

Notwithstanding sections 108.2, 108.3 and 108.4, the following uses are prohibited:

- Adult Entertainment Facility
- Automotive and Equipment Storage
- Casino
- Commercial Entertainment Facility
- Commercial Recreation Facility, Outdoor
- Contractor, General
- Drinking Lounge, Minor
- Drinking Lounge, Major
- Educational Service Facility (accessory to a Religious Assembly only)
- Fleet Service
- Liquor Store
- Manufactured Home Sales
- Nightclub
- Recreational Vehicle Park
- Religious Assembly
- Spectator Sports Facility
- Warehouse Sales

(d) Discretionary Uses – Development Officer

Notwithstanding section 108.3, the following are discretionary uses that may also be approved by the Development Officer:

- Accessory Building
- Animal Service Facility, Major & Minor

Aquaculture Facility
 Auctioneering Facility
 Automotive and Equipment Repair
 Automotive Sales/Rental
 Business Support Services Facility
 Carnival
 Childcare Facility
 Commercial Recreation Facility, Indoor
 Commercial School
 Contractor, Limited
 Custom Manufacturing
 Equipment Rentals
 Essential Public Service
 Gas Bar
 Greenhouse/Plant Nursery
 Health Service Facility
 Hostel
 Hotel
 Household Equipment Repair
 Motel
 Office, if located above first level
 Park
 Parking Lot/Structure
 Personal Service Facility
 Private Utility
 Public Use/Utility
 Recreational Vehicle Sales & Rental
 Retail Store, Convenience
 Service Station, Major & Minor
 Truck Sales

(e) Discretionary Uses – Planning Commission

Notwithstanding section 108.4, the following are discretionary uses that may be also be approved by the Municipal Planning Commission:

Farmers/Flea Market

(f) Site Provisions

In addition to the General Regulations contained in Part 5, and notwithstanding section 108.5, the following standards shall apply to every development in this district, subject to Section 63:

(i) Front Yard (minimum):

Fronting on Primary Highway if no service road	45 m
Where there is a service road	7.5 m

- | | | |
|--------|---|---------------------------------|
| (ii) | Side Yard (minimum): | |
| | Abutting a Residential District | 6.0 m |
| | If firewall provided | None required |
| | All other cases | 4.5 m |
| (iii) | Rear Yard (minimum): | |
| | Abutting a Residential District | 4.5 m |
| | If firewall provided | None required |
| | All other cases | 2.0 m |
| (iv) | Maximum setback: | 30.0 m |
| (v) | Building Height (maximum): | Lesser of 4.5 storeys or 17.5 m |
| (vi) | Lot Width (minimum): | |
| | Abutting a public lane | 15.0 m |
| | Not abutting a public lane | 40.0 m |
| (vii) | Lot Area (minimum): | 0.1 ha |
| (viii) | Floor Area Ratio (maximum): | 2.0 |
| (ix) | Lot Depth (minimum) | None required |
| (x) | Coverage (maximum) | 90% |
| (xi) | Landscaping as per Section 72 of Part 5 (General Regulations) and Subsection 108.6 (h). | |

(g) Additional Requirements: Parking and Loading Areas

- (i) Parking shall be provided as required in Part 7 of this Bylaw and as provided in this section.
- (ii) Notwithstanding Section 136(d), each use shall provide 1 preferential parking space for disabled persons for every 20 required parking spaces (minimum of 1 space)
- (iii) Each use shall provide 1 preferential parking space for every 20 required parking spaces (minimum of 1 space) for use only by any of the following types of vehicle:
 - (a) Car pool / van pool / car share vehicles
 - (b) Gas/electric hybrid, electric, and hydrogen fuelled vehicles
 - (c) Cars that are selected as the most fuel efficient model for any given year, as measured by Natural Resources Canada's Office of Energy Efficiency.

- (iv) Preferential parking spaces shall be in a convenient location and may be located within the front, side or rear yard of a building.
 - (v) Preferential parking spaces shall count towards the total parking spaces required in Part 7 of this Bylaw.
 - (vi) Notwithstanding section 72.7:
 - (a) Development of driveways, parking areas, and other paved expanses shall provide for actively landscaped boulevards, medians and borders.
 - (b) Parking areas sized to accommodate 25 or more vehicles shall be subdivided into blocks not to exceed 400 square meters in paved area. Such subdivision shall be achieved using islands and medians of sufficient width to sustain existing or new tree and shrub plantings as a strong visual border and screen.
 - (vii) Parking areas shall be located, designed, and landscaped in accordance with the Design Guidelines in Part 5, section 91.
 - (viii) Where the use of a parking space is limited on both sides by a wall or a column, the unobstructed width from face to face of the obstructions shall be 3.0m, and if in this case, a building door opens into the parking space on its long side, the unobstructed width shall be 3.3m. Where the use of a parking space is limited to one side by a wall or a column, the unobstructed width of the parking space shall be 2.7m, and if in this case, a building door opens into the parking space on its long side, the unobstructed width shall be 3.0m.
- (h) Additional Requirements: Landscaping and Screening**
- (i) Notwithstanding Section 72.9(1)(i), a continuous landscaping strip not less than 4.0 m wide shall be provided along a public right-of-way.
 - a) Between a parking or loading area and the right-of-way, the landscaping strip shall be designed to be:
 - 1. At least 75% opaque in all seasons between grade level and 1.5 m above grade;
 - 2. Less than 25% opaque in all seasons between 1.5 m and 2.5 m above grade; and
 - 3. At least 50% opaque in growing season between 2.5 m and 4.0 m above grade.
 - b) Between a building or display area and the right-of-way, the landscaping strip shall be designed to provide good visibility for signage and displays.
 - (ii) Notwithstanding section 72.7(a), the Development Authority may permit openings through required fencing & screening areas between lots in order to facilitate shared facilities (parking, storage areas, etc.) and pedestrian movement.

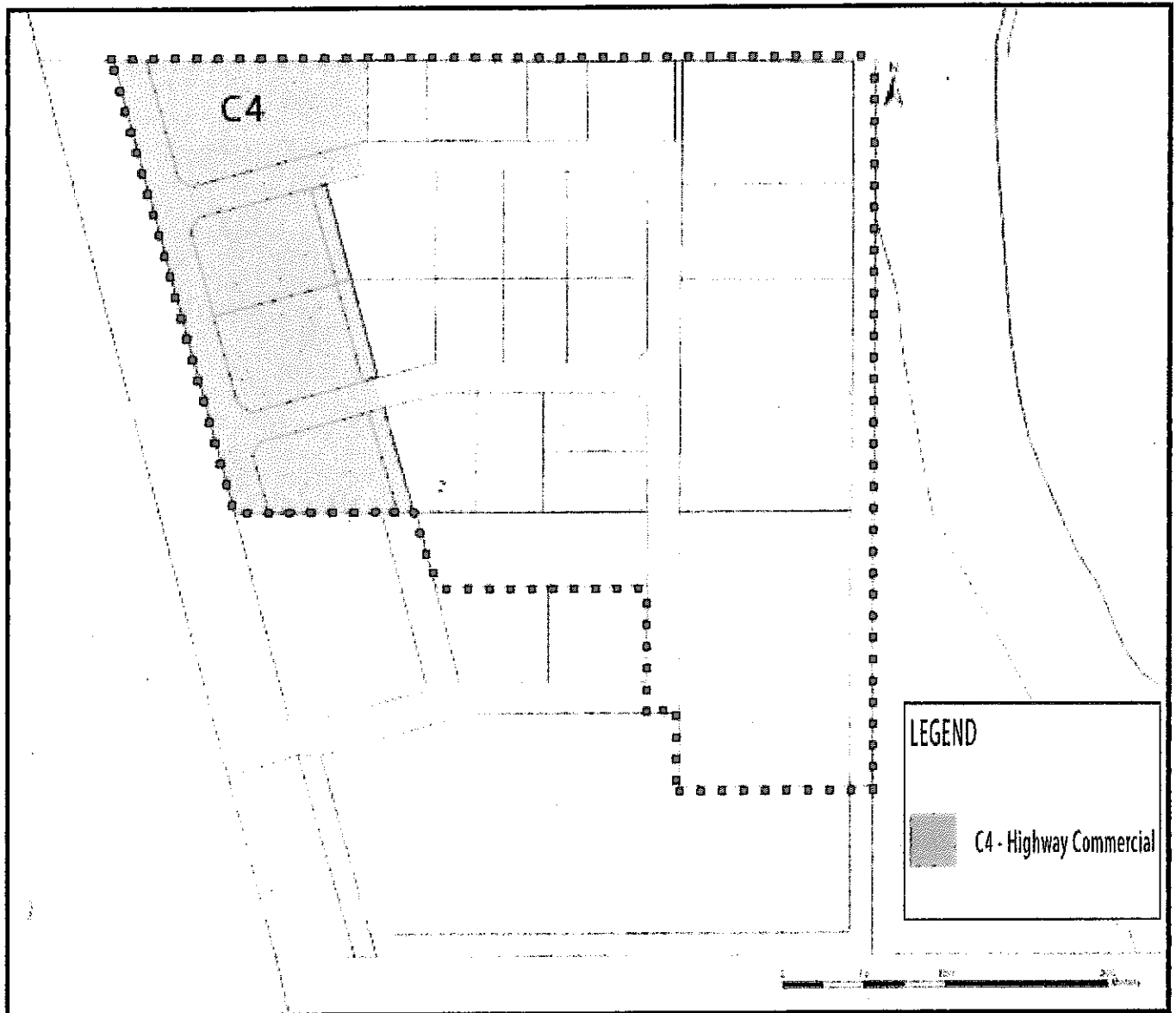
- (iii) Landscaped areas must be located in such a way as to create continuity of landscaped areas with those on adjacent parcels and park areas.
- (iv) Landscape areas must be concentrated or clustered to avoid sparse tree plantings and create functional green spaces that are not easily damaged by automobiles.
- (v) Choose plants that reduce the need for maintenance, pesticide use, and irrigation. Plants must be:
 - a) Species native to the area, as identified on the native plant list available from the development Authority.
 - b) Include a combination of groundcover, shrubs and trees, planted to provide a multi-storey vegetative community.
 - c) Hardy, drought-tolerant, perennial species.
- (vi) Tree trunks must be protect from winter snow clearing equipment.
- (vii) The landscape must be designed in conformance with Crime Prevention through Environmental Design (CPTED) principles.
- (viii) In landscape areas, trees must be planted in clusters, double rows or triangles instead of as a single tree row, and must be spaced in accordance to recognized horticultural practice.
- (ix) Design to minimize landscaping irrigation requirements. Strategies can include, but are not limited to the following:
 - a) Not installing an irrigation system
 - b) Use of collected stormwater
 - c) Use of other non-potable water
 - d) Use of a temporary and/or high efficiency drip irrigation system

(i) Building Design, Character and Appearance

- (i) The Front Façade must be designed to create visual interest by articulating the facade into a series of intervals. One or more of the following methods may be used:
 - a) Modulating the façade - stepping back or extending forward a portion of it;
 - b) Use the pattern of fenestration to reinforce the façade modulation;
 - c) Incorporating any merchandising display windows into the façade;
 - d) Changing materials, colours, patterns, and textures within the building plane to reinforce the articulation both horizontally and vertically;
 - e) Designing the building with visually distinct bottom, middle, and top.
 - f) As an alternative to detailing the entire front facade, less architecturally significant portions of the front facades of buildings may be set back and screened from public view by mature, dense landscaping.
- (ii) Blank walls facing public streets are not permitted.

- (iii) Create visual interest through articulation of building walls adjacent to pedestrian/cyclist access routes. One or more of the following methods may be used: changes to materials, textures, colours and patterns, facade modulation; substantial, clustered landscape elements, and fenestration providing a sense of transparency.
 - (iv) Express the structural system (or implied structural system) of the building through visible exterior elements.
 - (v) For flat Roofs, distinguish the cornice from the wall by using suitable wood, metal, or stone materials, and/or by changing colour.
 - (vi) Define the entry. One or more of the following methods may be used:
 - a) facade and structural elements such as overhangs, columns, pilasters, window placement
 - b) Signage
 - c) Feature extra-height lobby space, distinctive doorways, a distinctive landscaped entry area, and/or changes in paving materials, textures or colour;
 - d) Use wood or stone planting boxes.
 - (vii) In multi-building complexes, a consistent architectural concept must be maintained through the use of complementary building design, material and colors.
 - (viii) All mechanical, electrical, pollution control or waste handling equipment ancillary to a building must be screened from view from public rights of way. Such screening may be achieved through landscaping or by using materials identical to, or structurally and visually compatible with, the principal building on the site.
 - a) At the discretion of the Development Authority, equipment and facilities that are intended to provide educational or aesthetic benefit, such as alternative water treatment facilities, innovative recycling systems, etc. may be exempt from this requirement.
 - (ix) Building design, character and materials for all development must be consistent with principles and regulations outlined in the Gateway South Zone.
- (j) Signage**
- (i) In addition to the provisions in the Sign Bylaw (01/068), the following requirements must be met:
 - a) The maximum height of freestanding signs is restricted to the highest roof line of the building.

- b) All signs must be architecturally compatible with the other buildings and structures on a site.
 - c) A comprehensive sign design or multiple tenant sign is required for highway commercial sites, to ensure harmony and reduce sign clutter.
 - d) Portable signs are not permitted.
 - e) All signs must be consistent with principles and regulations outlined in the Gateway South Zone.
- (ii) Notwithstanding the provisions in the Sign Bylaw (01/068), additional signage may be permitted if the signage is considered informative, educational, or profiles Eco-Industrial Networking, subject to the approval of the Development Authority.
- a) Signs must not be floodlit in such a manner as to cause interference to Highway traffic.
- (k) Additional Requirements: Other**
- (i) An outdoor display area visible from a public roadway may not exceed the lesser of:
 - a) 30 m in width, as measured along the front lot line; and
 - b) 33% of the lot width.
 - (ii) In addition to Section 131.1(c)(iv) of this Bylaw, on corner lots, access from a public roadway must be at the side or rear of the building.
 - (iii) Grading and Drainage Plan must be submitted to the municipality for approval. In addition to requirements of Section 74, the plan must show how the developer intends to meet the intent and all requirements of the relevant Stormwater Master Plan.
 - (iv) Minimize light pollution throughout site by using fixtures that provide absolute cut-off (vertical cut-off at 90 degrees above nadir)."



(Figure 108.1)
Highway 63 North Eco-Industrial Park site map
Part of Lot 3, Block 1, Plan 042 1905

111.9 Additional Provisions**(a) Purpose**

Notwithstanding section 111.1, the intent of this district is to allow for the development of an attractive industrial park that demonstrates innovation and high levels of environmental and economic performance.

The purpose of this district is to provide for a wide range of light and medium industrial uses. Development in this district must also minimize environmental impacts through the application of "eco-industrial" practices. Uses in this district should not adversely affect surrounding non-industrial uses through the generation of emissions, noise, odours, vibrations, heat, light, dust or other objectionable or dangerous conditions.

(b) Prohibited Uses

Notwithstanding sections 111.2, 111.3 and 111.4, the following uses are prohibited:

- Adult Entertainment Facility
- Automotive/Recreational Vehicle Sales and Rental
- Business Support Services Facility
- Casino
- Contractor, Limited
- Custom Manufacturing
- Drinking Lounge, Major
- Drinking Lounge, Minor
- Single Detached Dwelling (hamlets only)
- Spectator Sports Facility
- Warehouse Sales

(c) Discretionary Uses

Notwithstanding section 111.3, the following are discretionary uses that may also be approved by the Development Officer:

- Aquaculture Facility
- Carnival
- Greenhouse/Plant Nursery
- Manufactured Home Sales
- Office
- Park
- Public Use/Utility
- Private Utility
- Research & Development
- Truck Sales
- Waste Management Facility

(d) Discretionary Uses Planning Commission

Notwithstanding section 111.4, the following are discretionary uses that may also be approved by the Municipal Planning Commission:

Commercial School
 Food Service, Drive-In or Drive Through
 Food Service, Major Restaurant
 Food Service, Minor Restaurant
 Food Service, Mobile Catering
 Food Service, Take Out Restaurant
 Related Industrial Facility

(e) Site Provisions

In addition to the General Regulations contained in Part 5, and notwithstanding section 111.5, the following standards shall apply to every development in this district.

- | | | |
|--------|---|---------------|
| (i) | Front Yard (minimum): | 6.0 m |
| (ii) | Side Yard (minimum) | |
| | If Required for Vehicular Access to Rear of Lot: | 6.0 m |
| | If Firewall Provided: | None required |
| | All Other Cases: | 1.2 m |
| (iii) | Rear Yard (minimum): | |
| | If Firewall Provided: | None required |
| | Abutting Railway Line: | 4.5 m |
| | All Other Cases: | 1.2 m |
| (iv) | Maximum setback: | 30.0 m |
| (v) | Building Height (maximum): | 14.0 m |
| (vi) | Lot Width (minimum): | |
| | Abutting a public lane | 15.0 |
| | Not abutting a public lane | 40.0 m |
| (vii) | Lot Area (minimum): | 0.2 ha |
| (viii) | Floor Area Ratio (maximum): | 2.0 |
| (ix) | Lot Depth (minimum) | None required |
| (x) | Coverage (maximum) | 90% |
| (xi) | Landscaping as per Section 72 of Part 5 (General Regulations) and Subsection 111.9 (g). | |

(f) Additional Requirements: Parking and Loading Areas

- (i) Parking shall be provided as required in Part 7 of this Bylaw and as provided in this section.
 - (ii) Notwithstanding Section 136(d), each use shall provide 1 preferential parking space for disabled persons, for every 20 required parking spaces (minimum of 1 space).
 - (iii) Notwithstanding Section 136(d), each use shall provide 1 preferential parking space for every 20 required parking spaces (minimum of 1 space) for use only by the following types of vehicle:
 - a) Car pool / van pool / car share vehicles
 - b) Gas/electric hybrid, hydrogen, or electric fuelled vehicles
 - c) Cars that are selected as the most fuel efficient model for any given year, as measured by Natural Resources Canada's Office of Energy Efficiency
 - (iv) All preferential parking spaces shall be located close to a suitable building entry.
 - (v) Preferential parking spaces shall count towards the total required parking spaces required in Part 7 of this Bylaw.
 - (vi) Notwithstanding section 72.7 of this Bylaw:
 - a) Development of driveways, parking areas, and other paved areas shall incorporate actively landscaped boulevards, medians and borders.
 - b) Parking areas sized to accommodate 25 or more vehicles shall be subdivided into blocks not to exceed 400 square meters in paved area. Such subdivision shall be achieved using islands and medians of sufficient width to sustain existing or new tree and shrub plantings as a strong visual border and screen.
 - (vii) Where the use of a parking space is limited on both sides by a wall or a column, the unobstructed width from face to face of the obstructions shall be 3.0m, and if in this case, a building door opens into the parking space on its long side, the unobstructed width shall be 3.3m. Where the use of a parking space is limited to one side by a wall or a column, the unobstructed width of the parking space shall be 2.7m, and if in this case, a building door opens into the parking space on its long side, the unobstructed width shall be 3.0m.
- (g) Additional Requirements: Landscaping and Screening**
- (i) Notwithstanding Section 72.9(1)(i), a continuous landscaping strip not less than 4.0 m wide shall be provided along a public right-of-way.
 - a) Between a parking or loading area and the right-of-way, the landscaping strip shall be designed to be:
 - A. At least 75% opaque in all seasons between grade level and 1.5 m above grade;
 - B. Less than 25% opaque in growing season between 2.5 m and 4.0 m above grade.

- C. At least 50% opaque in growing season between 2.5 m and 4.0 m above grade.
- b) Between a building or display area and the right-of-way, the landscaping strip shall be designed to provide good visibility for signage and displays.
- (ii) Notwithstanding section 72.7(a), the Development Authority may permit openings through required fencing & screening areas between lots in order to facilitate shared facilities (parking, storage areas, etc.) and pedestrian movement.
- (iii) Landscaped areas must be located in such a way as to create continuity of landscaped areas with those on adjacent parcels and park areas.
- (iv) Landscaped areas must be concentrated or clustered to avoid sparse tree plantings and to create functional green spaces that are not easily damaged by automobiles.
- (v) Choose plants that:
 - a) Are species native to the area, as identified on the native plant list available from the Development Authority.
 - b) Provide a complex multi-storey vegetative community through inclusion of a combination of groundcover, shrubs and trees;
 - c) Are hardy, drought-tolerant, perennial species, reducing the need for maintenance, pesticide use, and irrigation.
- (vi) Tree trunks must be protected from winter snow clearing equipment.
- (vii) The landscape must be designed in conformance with Crime Prevention Through Environmental Design (CPTED) principles.
- (viii) In landscape areas, trees must be planted in clusters, double rows or triangles instead of as a single tree row, and must be spaced in accordance to recognized horticultural practice.
- (ix) Design to minimize landscaping irrigation requirements. Strategies can include, but are not limited to the following:
 - a) Not installing an irrigation system
 - b) Use of collected stormwater
 - c) Use of other non-potable water
 - d) Use of a temporary and/or high efficiency drip irrigation system
- (h) Building Design, Character and Appearance**
 - (i) The Front Façade must be designed to create visual interest by articulating the facade into a series of intervals. One or more of the following methods may be used:
 - a) Modulating the façade - stepping back or extending forward a portion of it;
 - b) Use the pattern of fenestration to reinforce the façade modulation;

- c) Incorporating any merchandising display windows into the façade;
 - d) Changing materials, colours, patterns, and textures within the building plane to reinforce the articulation both horizontally and vertically;
 - e) Designing the building with visually distinct bottom, middle, and top.
 - f) As an alternative to detailing the entire front facade, less architecturally significant portions of the front facades of buildings may be set back and screened from public view by mature, dense landscaping.
- (ii) Blank walls facing public streets are not permitted.
- (iii) Create visual interest through articulation of building walls adjacent to pedestrian/cyclist access routes. One or more of the following methods may be used: changes to materials, textures, colours and patterns, facade modulation; substantial, clustered landscape elements, and fenestration providing a sense of transparency.
- (iv) Express the structural system (or implied structural system) of the building through visible exterior elements.
- (v) For flat Roofs, distinguish the cornice from the wall by using suitable wood, metal, or stone materials, and/or by changing colour.
- (vi) Define the entry. One or more of the following methods may be used:
- a) facade and structural elements such as overhangs, columns, pilasters, window placement
 - b) Signage
 - c) Feature extra-height lobby space, distinctive doorways, a distinctive landscaped entry area, and/or changes in paving materials, textures or colour;
 - d) Use wood or stone planting boxes.
- (vii) In multi-building complexes, a consistent architectural concept must be maintained through the use of complementary building design, material and colors.
- (viii) All mechanical, electrical, pollution control or waste handling equipment ancillary to a building must be screened from view from public rights of way. Such screening may be achieved through landscaping or by using materials identical to, or structurally and visually compatible with, the principal building on the site.
- a) At the discretion of the Development Authority, equipment and facilities that are intended to provide educational or aesthetic benefit, such as alternative water treatment facilities, innovative recycling systems, etc. may be exempt from this requirement.

- (ix) Building design, character and materials for all development must be consistent with principles and regulations outlined in section the Gateway South Zone.

- (i) **Signage**
 - (i) In addition to the provisions in the Sign Bylaw (01/068), the following requirements must be met:
 - a) The maximum height of freestanding signs is restricted to the highest roof line of the building.
 - b) All signs must be architecturally compatible with the other buildings and structures on a site.
 - c) A comprehensive sign design or multiple tenant sign is required for *highway commercial sites*, to ensure harmony and reduce sign clutter.
 - d) Portable signs are not permitted.
 - e) All signs must be consistent with principles and regulations outlined in section the Gateway South Zone.

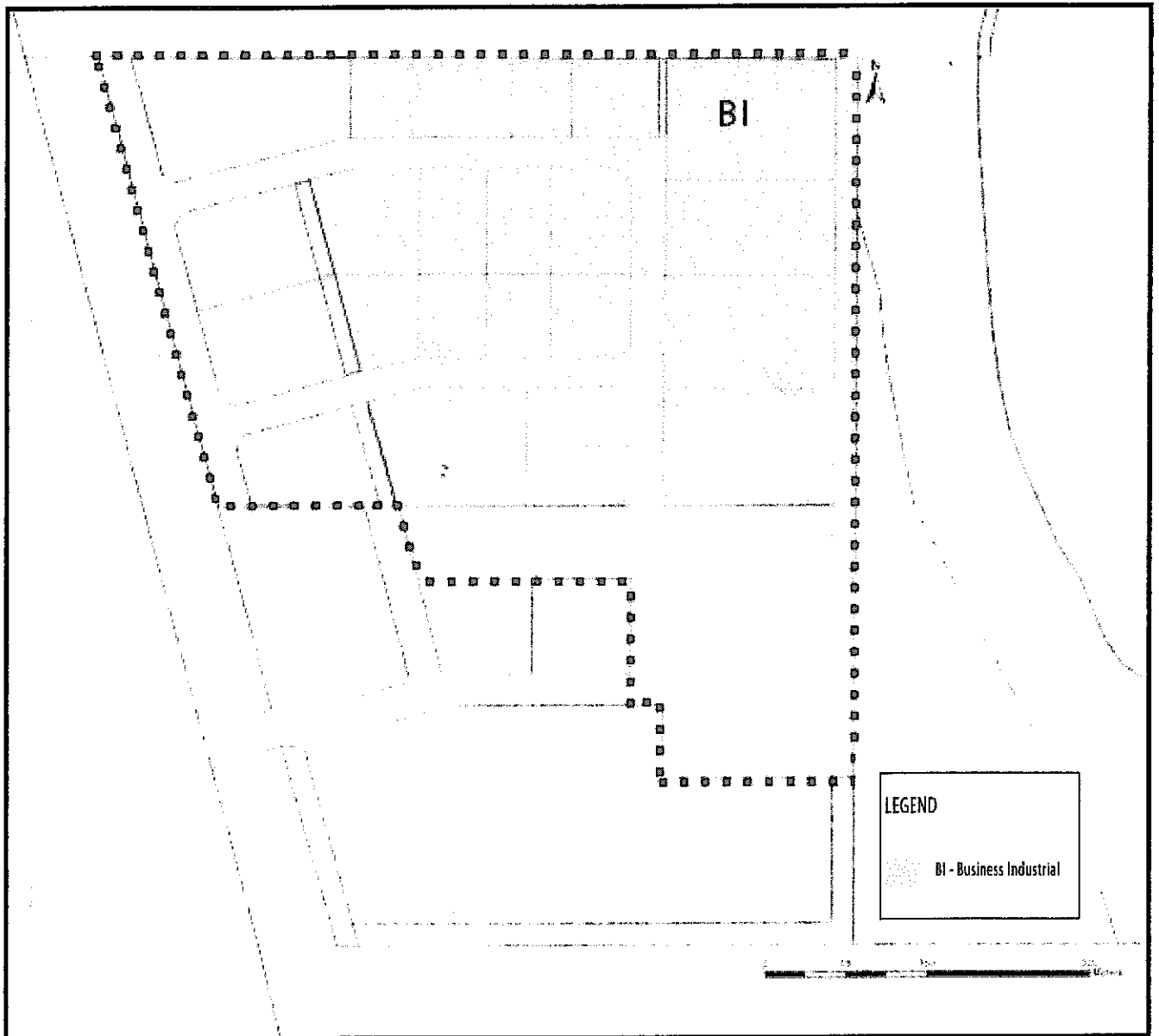
 - (ii) Notwithstanding the Sign Bylaw (01/068), additional signage may be permitted if the signage is considered informative, educational, or profiles Eco-Industrial Networking; subject to the approval of the development authority.
 - a) Signs must not be floodlit in such a manner as to cause interference to Highway traffic.

- (j) **Additional Requirements: Other**
 - (i) An outdoor display area visible from a public roadway may not exceed the lesser of:
 - a) 30 m in width, as measured along the front lot line; and
 - b) 33% of the lot width.

 - (ii) In addition to Section 131.1(c)(iv) of this Bylaw, on corner lots, access from a public roadway must be at the side or rear of the building.

 - (iii) Grading and Drainage Plan must be submitted to the municipality for approval. In addition to requirements of Section 74, the plan must show how the developer intends to meet the intent and all requirements of the relevant Stormwater Master Plan.

 - (iv) Minimize light pollution throughout site by using fixtures that provide absolute cut-off (vertical cut-off at 90 degrees above nadir)."



(Figure 111.1)
Highway 63 North Eco-Industrial Park site map
Part of Lot 3, Block 1, Plan 042 1905

The following regulations apply to any new development in the area shown in Figure 22.1, Schedule D to this Land Use Bylaw:

- 22.4.** Notwithstanding Sections 22.1, 22.2 and 22.3 a development permit application shall be made to the Development Officer on the form prescribed for developments in the area shown in Figure 22.1, Schedule A-4 to this Land Use Bylaw, and shall be signed by the owner or his agent.
- (a) In addition to the information required in Section 22.1, the following information must accompany the application:
- (i) A list of inputs and outputs (e.g., energy, fuels & lubricants, water, materials, products, wastes, etc) and other resource needs (e.g. training, logistics, transportation) generally associated with your operation, or anticipated operations.
 - a) A Development Officer may consider an application for a Development Permit that does not provide all the information required by subsection 22.4.a(i) if, in the opinion of a Development Officer the information provided is sufficient to show that the development permit provisions of the bylaw shall be met.
 - (ii) A statement of confirmation that the applicant has obtained a list of existing business resource needs and waste production of operations on nearby sites from the Municipality.)
 - (iii) Provide an environmental management plan that describes how the facility will avoid, in the case of a flood, the release into the environment of a substance in an amount, concentration or level or at a rate of release that causes or may cause a significant adverse effect. The Development Authority may also require the environmental management plan to address any or all of:
 - a) Materials and solid waste in general
 - b) Liquid waste
 - c) Noxious odours
 - d) Noise and vibration
 - e) Energy efficiency
 - f) Traffic
 - (iv) A construction management plan indicating how the following goals will be addressed:
 - a) Minimize waste, e.g. by selecting products that conform to required material dimensions;
 - b) Separate waste materials for recycling where possible;
 - c) Manage hazardous materials and wastes;
 - d) Minimize construction truck traffic;

- e) Minimize health impacts of indoor air quality on construction personnel;
 - f) Maintain local water quality by minimizing pollution
- (v) Signed statements from a professional engineer:
- Description of strategies that are being used to provide pedestrians and cyclists with safe and clearly marked pathways that are separated from heavy traffic. Details of strategies must be included on a site or landscape plan.
 - Confirmation of the use of a hydronic-compatible heating system.
 - Building energy performance report, indicating an improvement in energy efficiency of either 25% over the Model National Energy Code for Buildings (MNECB) baseline determined for your building, or 15% improvement over the ASHRAE 90.1 (2004) standard.
 - If the development is to connect to a District Energy System, the District Energy System will be considered as part of the building for the purposes of assessing this requirement.
 - For build-to-suit applications, part of the required performance improvement may be from process changes, as follows:
 - up to 15% of the total improvement over MNECB or
 - up to 10% the total improvement over ASHRAE.
 - Statement of intent from engineer indicating all HVAC equipment to be installed will be designated as non-hydro chlorofluorocarbon (HCFC) or low-HCFC.
 - Report of feasibility of pooling backup systems with other buildings.
 - Evaluation of options considered for stormwater recycling, describing which, if any, were implemented
 - Evaluation of options considered for using reclaimed wastewater, describing which, if any, were implemented.
- (vi) Signed statements from either a professional engineer or a registered architect:
- Description of opportunities that were considered to reduce resource needs and waste generation. Examples of strategies include, but are not limited, to the following:
 - a) Options to recover waste heat and/or water, e.g. from wastewater or industrial process, for reuse or sale to nearby businesses
 - b) Discussion of opportunities with neighbouring businesses
 - Outline of strategies that were considered to maximize land use efficiency. The statement must indicate which strategies were implemented and how.
 - Description of site design for universal accessibility. Details of accessibility must be included on a site plan.

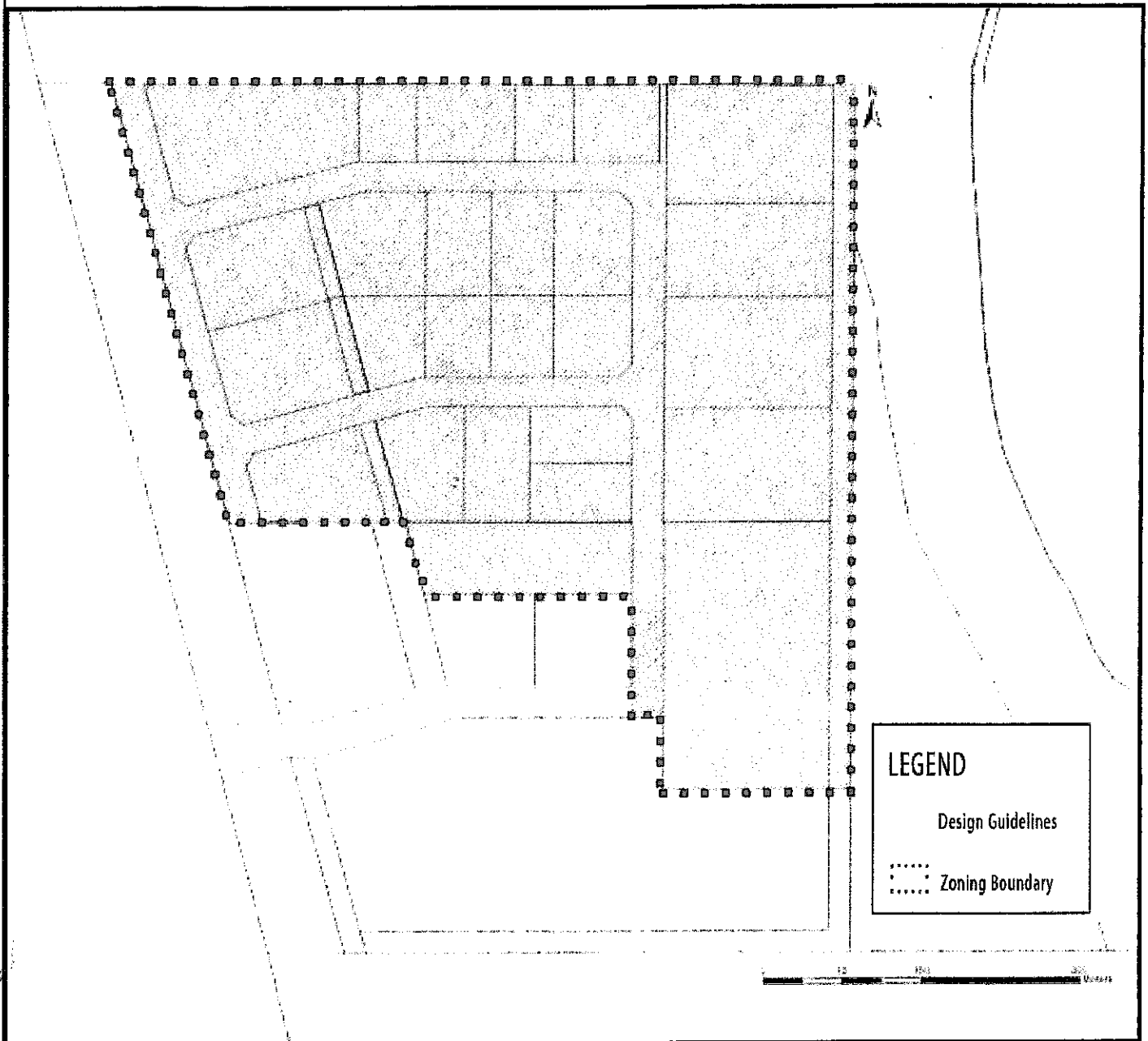
- Description of opportunities for coordinated heating/cooling were considered, and which, if any, were implemented.
- Statement of intent specifying the performance of fixtures and / or fittings to be used.

(b) In addition to the information required in Section 22.1, the following information shall be required to accompany the application:

- (i) Obtain existing business resource needs and waste production of operations on nearby sites from the Development Authority.

22.5. For any new development in the area shown in Figure 22.1, Schedule A-4 to this Land Use Bylaw, the Development Authority may require the following in addition to the information listed in Section 22.4:

22.2.(a) Detailed plans or studies demonstrating compliance with Section 91 of this Land Use Bylaw."



(Figure 22.1)
Highway 63 North Eco-Industrial Park site map
Part of Lot 3, Block 1, Plan 042 1905

The following regulations apply to any new development in the area shown in Figure 91.1, Schedule "P" to this Land Use Bylaw:

91. Design Guidelines for North Eco-Industrial Park.

90.1. Notwithstanding any other section in Part 5, the following regulations apply to any new development in the area shown in Figure 22.1, Schedule A-4 to this Land Use Bylaw. Developments must conform to 22 of the 43 following design guidelines, as listed below in Sections 90.1(a) - 90.1(i).

(a) Pre-Development Planning

- (i) An "Integrated Design Process" is used for site and facility design, to identify and take advantage of synergies between various building systems and industrial processes.

(b) Parcel Layout and Organization

- (i) Significant building elements are oriented to take advantage of passive solar heating & cooling; and natural lighting and/or ventilation.
- (ii) Building surface area is reduced through consolidation with other buildings, to minimize heat loss. Building consolidation is achieved within the site, or by siting building(s) next to the side lot line.
- (iii) Site grading directs snowmelt and runoff away from roads and pedestrian areas to avoid icy conditions.
- (iv) Buildings are sited at the minimum front setback line.
- (v) For corner lots, buildings are sited on both setback lines adjacent to the streets.
- (vi) The overall development footprint (including building, warehousing, access roads and parking) is minimized by the use of stackable or alternative warehousing techniques, the use of joint logistics facilities, and by clustering buildings.
- (vii) Service areas are designed to be used jointly by adjacent buildings and parcels. e.g. for waste collection & sorting, shipping and receiving, parking, or outdoor lunch areas.
- (viii) Site layout is designed to provide for future expansion and development in a manner which maintains and enhances the essential integrity of the original development.
- (ix) Site is designed to facilitate snow removal & accommodate snow removal equipment.
- (x) Snow storage is located in areas that maximize sunlight & melt, or other characteristics such as increased solar reflectivity.

(c) Access and Movement

- (i) Design the parcel to accommodate access into/from the site for a range of transportation modes in a manner that minimizes environmental impact and conflict between modal types.
- (ii) The size of parking and loading areas are minimized.

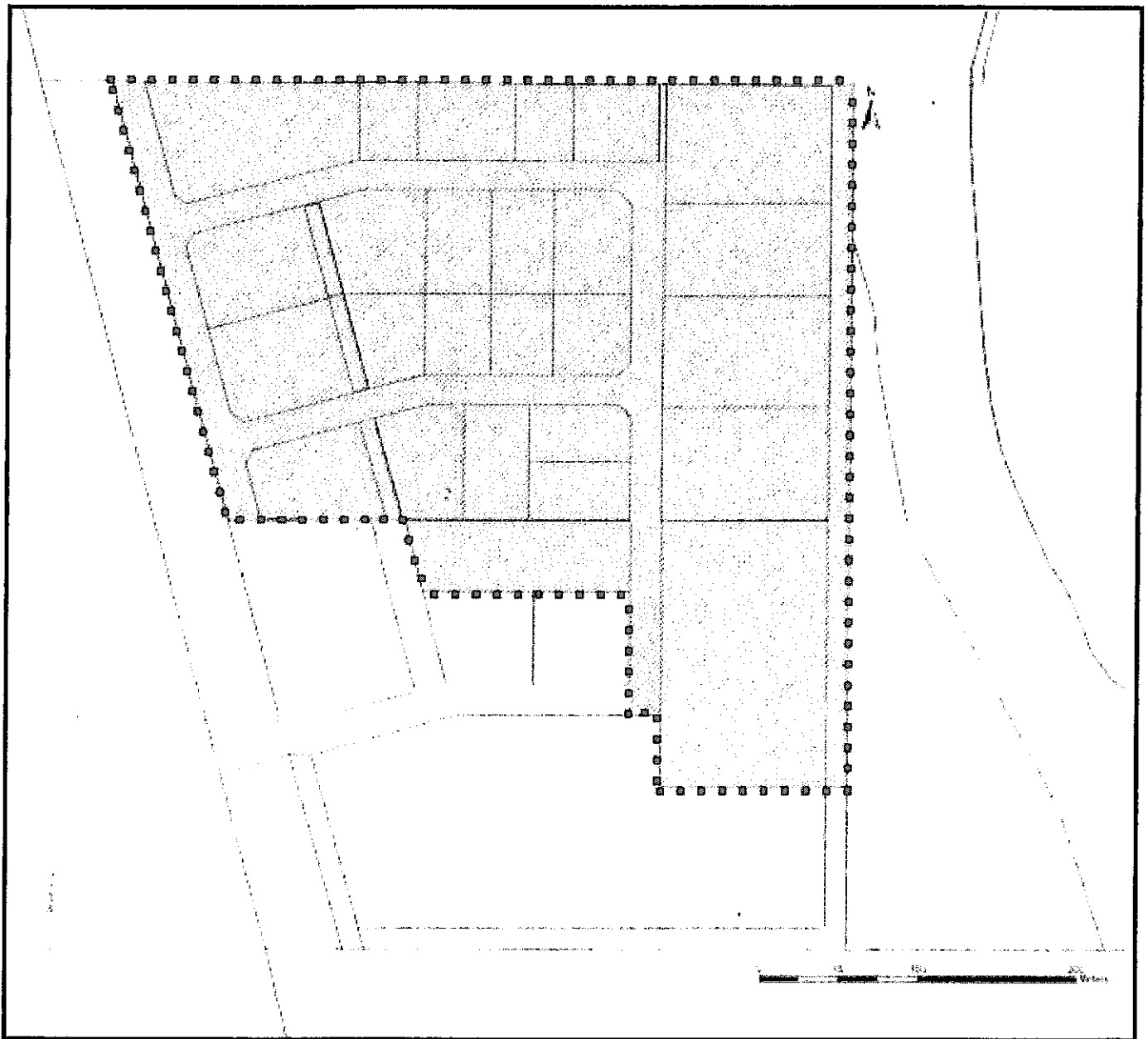
- (iii) Continuous, direct, safe pedestrian routes through parking areas are provided through the use of safe barriers between areas for pedestrian and vehicle movement. Barriers may include, but are not limited to landscaping, separated walkways, raised crosswalks, curbs and bumpers.
 - (iv) Trees and shrubs are planted throughout the parking area to intercept precipitation, reduce surface heating, enhance appearance and protect pedestrians from the elements.
 - (v) No parking is located between the principal building and the adjacent public roadway.
 - (vi) Parking facilities are connected to those of an adjacent parcel.
 - (vii) A shared / combined parking agreement meeting the requirements of section 134.1 and approved by the Development Authority is in place with one or more other property owners.
 - (viii) All paving materials are recycled.
 - (ix) End-of-trip facilities such as showers and lockers for staff and secure bicycle and ski storage are provided.
 - (x) Provide outdoor amenities such as benches, and meeting and/or recreation areas.
 - (xi) Permeable paving materials are used for pedestrian, cycling and dedicated emergency access routes.
- (d) **Landscape and Open Space**
- (i) Trees are planted to the west and north of buildings to protect them from prevailing winter winds.
 - (ii) Significant landscaped roofs and walls incorporating appropriate native vegetation are included in the building design.
 - (iii) Well-designed outdoor areas for eating, meeting and /or recreation that are protected from the elements and include comfortable amenities such as benches.
 - (iv) Parks and pedestrian paths and areas are located and landscaped to maximize winter solar exposure and minimize exposure to wind. Where wind barriers are used, they must be integrated with the overall landscape design.
- (e) **Energy Efficiency**
- (i) Natural lighting is a significant part of the building illumination strategy, while minimizing any associated heat loss.
 - (ii) At least 10% of energy needed by the development is produced on-site from renewable sources (solar, geexchange [earth energy], wind, biomass) or via co-generation.
 - (iii) A binding agreement signed by the developer or owner committing to purchasing Green Certificates for more than 50% of the building's energy requirements.
 - (iv) Buildings are plumbed to be retrofit-ready for solar hot water heating systems.

- (v) Seasonal and/or user-controlled shading techniques are used to take advantage of winter sunlight while minimizing unwanted heat gain in the summer.
 - (vi) Lighting energy demand minimized by minimizing lighting, using high-efficiency luminaries and bulbs, and maximizing user control.
 - (vii) Recover and reuse heat for outdoor amenities. Strategies can include, but are not limited to the following:
 - a) Melting snow on pedestrian paths, sidewalks, etc.
 - b) Outdoor heated spaces, shelters, etc.
- (f) Water, Wastewater and Stormwater**
- (i) Stormwater Best Management Practices applicable to cold climate Sites are used.
 - (ii) Surface runoff management is integrated into landscape design. Strategies can include, but are not limited to the following:
 - a) Direct roof runoff to infiltration basins
 - b) Capture roof runoff for irrigation.
 - c) Develop green roofs to help reduce stormwater runoff.
 - d) Incorporate dry-wells and percolation swales to help manage stormwater.
 - (iii) Parking and other paved areas are designed to minimize negative impacts on surface runoff volume and quality. Strategies can include, but are not limited to the following:
 - a) Install oil/water separators for high traffic areas.
 - b) Install sediment traps onsite where aggregate or material storage is required.
 - (iv) Buildings are plumbed to provide a cost-effective opportunity to retrofit with non-potable systems.
 - (v) A report evaluating the availability of reclaimed stormwater or wastewater that could be used to displace potable water in your operations, and the potential for your operations, and the potential for operations to offer reclaimed stormwater or wastewater to other businesses for their use, has been prepared by a professional engineer.
- (g) Building Design and Materials**
- (i) Recycling and composting stations are incorporated into staff & kitchen spaces.
 - (ii) All lighting installations which are visible from the exterior of the development are designed to enhance the appearance and presentation of both building and property.
 - (iii) Outdoor lighting is designed to minimize the amount of light produced. Light-coloured or reflective edges are used along driveways or walkways to help delineate them at night.
- (h) Construction**

(i) The landscape plan includes plants salvaged prior to site clearing activities, and describes how they will be salvaged, stored and planted to ensure a high survival rate.

(i) Signage

(i) Signage is integrated with the building itself to keep the number of signs to a minimum and to maintain as clean and natural an environment as possible."



(Figure 91.1)
Highway 63 North Eco-Industrial Park site map
Part of Lot 3, Block 1, Plan 042 1905