APPROVED
Community Design, Parks
Planning & Development

K.R. Walsh, OALA, MCIP, RPP
Director

Date

Approval Stamp

CREDITVIEW CROSSING

Community Design Guidelines

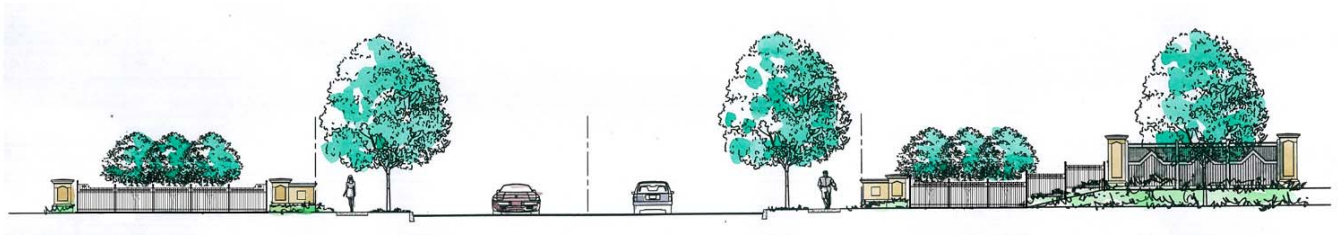
Brampton - Ontario

Prepared by:
MBTW/ Watchorn
&
Glen Schnarr & Associates Inc.

Prepared for:
Fieldgate Developments

Date: JULY 2008
City File Number: P26SB.45-5.001
Subdivision File Number: 21T-01100B

FLOWER CITY
BRAMPTON.CA



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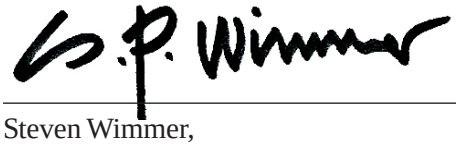
Explanatory Note:

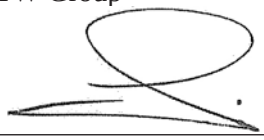
The "Creditview Crossing Community: Community Design Guidelines" are comprised of the "Open Space Guidelines" prepared by The MBTW Group and the "Architectural Guidelines" prepared by Watchorn Architect Inc. which have been developed as one comprehensive document. This document represents the approved guidelines required for Stage 2 approval of the Creditview Crossing Community Block Plan Area 5 in the Credit Valley Secondary Plan.

The text and images contained in these documents are a conceptual representation only, of the intended vision and character of the Creditview Crossing Community. In this regard, they should not be construed or interpreted literally as what will be constructed. Furthermore, this information may not, under any circumstances, be duplicated in promotional literature for the marketing of the community.

Where landscape features or elements, such as decorative landscape pillars, fencing, etc, are shown in images in the Architectural Guidelines portion of this document, they should not be construed to represent proposed treatments for such features. For details on proposed landscape elements, the reader is asked to refer to the Open Space section of these Guidelines."

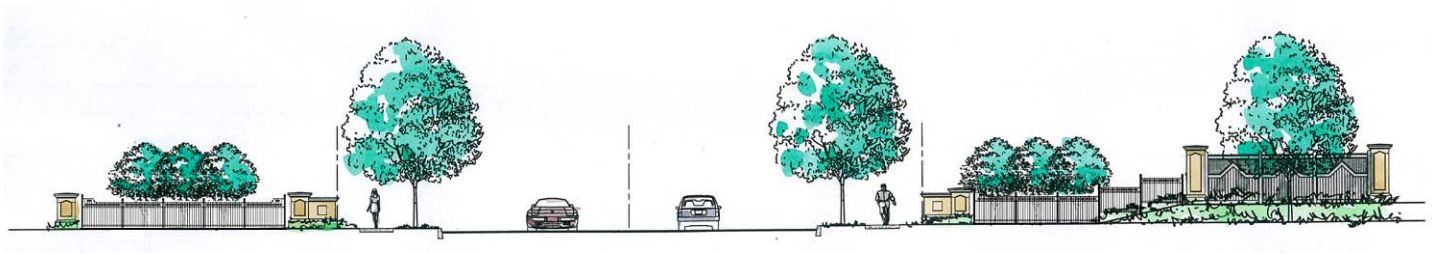


Steven Wimmer,
The MBTW Group



Colin Chung,
Glen Schnarr & Associates Inc.

Garry Watchorn,
Watchorn Architect Inc.



PART I

Introduction

General Introduction

These community design guidelines have been developed as part of the Stage Two approvals for the Credit Valley Secondary Plan Sub-Area 5 Block Plan, known as Creditview Crossing. They build upon the Block Plan Design Report prepared by The MBTW Group/Watchorn Architect Inc. and Glen Schnarr & Associates. This document establishes guidelines and principles to provide design direction for the development of lands within Creditview Crossing. It reinforces the vision for the community, established in the Block Plan Design Report, through public realm and built form elements that reinforce the site's existing natural, heritage and cultural features. These guidelines will assist in subsequent stages of development including Draft Plans of Subdivision, Conditions of Draft Plan Approval, Site Plan Approval, Zoning, and detailed design of landscape and architecture.

The following Community Design Guidelines are composed of three (3) interrelated parts:

1) Block Plan Design Guidelines, that establishes the overall community vision, Part II;
2) Open Space Design Guidelines, generally applicable to the public realm, including public streets and spaces, Part III; and
3) Architectural Design Guidelines, applicable to the private realm, including residential lots and other development blocks, Part IV.

These guidelines support the City of Brampton's design initiatives such as:

- The Gateway Beautification Program;
- Flower City Strategy;
- City's Six Pillars;
- Brampton Planting Guidelines;
- Pathways Master Plan;
- Development Design Guidelines;
- Clean and Green Strategy;
- Stormwater Management Master Plan;
- Parks, Culture, and Recreation Master Plan; and
- Streetscape Master Plan.

The design guidelines contained in this document will encourage the following objectives:

- Promote a desired urban form through the community's structure, open space system, street network, streetscape, edges and gateways, and site planning and built form;
- Highlight special features of the community and provide design direction;
- Ensure the City of Brampton's design initiatives are addressed
- Provide a strong foundation for subsequent stages of development.

Through the planning and design process for this block, one will see an evolution of concepts and design solutions as more information becomes available to guide decision making. This will be ongoing through the detail design and construction stages of the block as well.

In addition to the three interrelated Community Design Guidelines parts, the Appendix also includes:

- A proposed pathways plan for Block 5;
- A matrix which summarizes the considerations undertaken to guide detailed engineering, landscape and site planning design along the Creditview Road edge to enable the survival and continued health of the significant existing trees; and
- An overview inventory of existing vegetation of the entire block (less portions controlled by non-participating landowners).

These guidelines are for the use of the original residential builder; subsequent homeowners are not bound by this document and are free to alter the dwelling provided the design and construction are in compliance with all other authorities having jurisdiction. Homeowners are encouraged to maintain the design standards set out in this document in any subsequent work they undertake to their properties.

Barrier free access to services and amenities is essential to achieving a truly vibrant City. The City has established the Accessibility Advisory Committee, and implemented the Accessibility Technical Standards to ensure that all residents of Brampton can live in a barrier free environment, including full access to all City buildings. With the public sector taking the lead, the City shall promote barrier free access to private sector buildings and facilities as well as enforce the Ontario Building Code related to the provision of barrier free access.

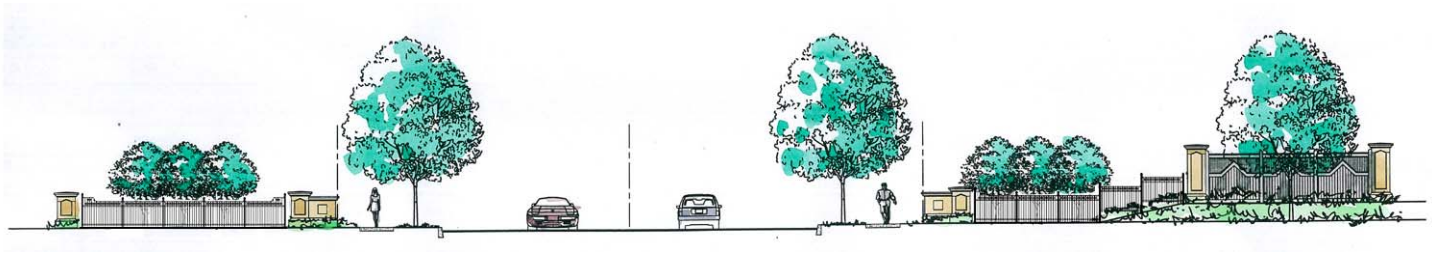
All City of Brampton facilities shall be designed and improved in accordance with the City of Brampton Accessibility Technical Standards, including but not limited to fire stations and public recreation facilities.

The City shall ensure that all new public buildings are accessible to persons with disabilities and ensure that existing public and private buildings are adapted to be accessible, in accordance with the Ontario Building Code and the City of Brampton Accessibility Technical Standards.

The City shall encourage the use of the International Symbol of Access for all institutional and public buildings and structures to identify them as buildings that are accessible to persons with disabilities.

The City shall encourage the use of the City of Brampton Accessibility Technical Standards in the design and improvement of health care facilities, places of worship, libraries, day care centres, and police stations.

The Builders within the Creditview Crossing Community are committed to offering accessible housing as an option in their sales portfolio. Sale information will be made available to prospective home purchasers informing them that accessible features and design are available.



PART II

Block Plan Design

1.0 Introduction

The following section of the Community Design Guidelines is the Block Plan Design Report which sets out the community's urban design principles.

1.1 Context

This document has been prepared to address the Community Block Plan requirements as set out in the Credit Valley Secondary Plan for the lands within Sub-area 5 as shown on **Figure 1.3a**.

The lands are bounded by Creditview Road on the west, Queen Street West on the north, Chinguacousy Road on the east and the Orangeville-Brampton railway on the south-east.

The Community Block Plan for Sub-area 5 is the result of a comprehensive and iterative process with the City of Brampton involving a multidisciplinary consulting team whose inputs, together with that of the landowners, has guided the evolution of the plan.

1.2 The Consulting Team

Glen Schnarr & Associates Inc.
Block Plan Design/Community Planning

The MBTW Group
Urban Design & Landscape Architecture

Watchorn Architect Inc.
Architectural Design Guidelines & Design Control

Terraprobe Ltd.
Geology/Hydrogeology

Stantec Consulting Ltd.
Stormwater, Servicing, Environment

Read, Voorhees & Associates Limited
Transportation

Stoneybrook Consulting Inc.
EIR Coordination

This document, entitled "**Creditview Crossing, Block Plan Design Report Sub-area 5, Credit Valley Secondary Plan**" was prepared by The MBTW Group with input by Glen Schnarr & Associates and Watchorn Architect Inc. The **Community Block Plan** consists of this document, and the Environmental Implementation Report (separate document).

The "**Environmental Implementation Report**" incorporates the reports and recommendations of all the other consultants and has been coordinated by Stantec Consulting Ltd. and Stoneybrook Consulting Inc.

1.3 Secondary Plan

Schedule SP45(a) to the Credit Valley Secondary Plan establishes the basic pattern of land uses and provides the general direction guiding the urban structure of this community. Schedule SP 45(a) is attached as **Figure 1.3a**.

Sections 11.1.1 and 11.1.2 of the Credit Valley Secondary Plan provide the overall guidance and direction of matters to be addressed in the Community Block Plan, as follows:

11.1.1 The Community Block Plan establishes a vision for the community and shall consist of the following components:

i) Community Structure;
ii) Open Space System;
iii) Street Network;
iv) Streetscapes;
v) Edges and Gateways; and
vi) Site Planning and Built Form.

11.1.2 The Community Block Plan includes, but is not necessarily limited to the following:

i) An accurate layout of the arterial and collector roads, development blocks, buffers, open space and stormwater management facilities;
ii) Schematically indicating residential lot sizes and lot density mixes in the various development blocks where applicable;
iii) Overlaying the existing property ownership and any current draft plans of subdivision;
iv) Highlighting the special community features that have been incorporated; and
v) Providing additional text and graphics as necessary to explain how the Block Plan conforms to the community vision.

1.4 OP93-282

OP93-282 to the Official Plan shall be referred to as it amends the Official Plan and Chapter 45 of the Credit Valley Secondary Plan. It contains Sub Area 5 Block Plan design principles and development policies that implement the findings of a number of background component studies that address environmental, servicing, transportation, urban design, and growth management considerations.

1.0 Introduction

The Community Block Plan has been designed to ensure that the various components of the Block Plan reinforce one another and achieve the design objectives. This document has been structured to correspond to the components established in Section 11.1.1 of the Secondary Plan and to elaborate on the following components as necessary:

- Community Structure;
- Open Space System;
- Street Network;
- Streetscape;
- Edges and Gateways; and
- Site Plan and Built Form.

Land uses have been organized to:

i) Promote integration and compatibility between and among uses;
ii) Provide smooth transition between uses and buffers, where required adjacent to the Railway Lands, hydro corridor and major roads; and
iii) Incorporate existing natural and cultural features.

SUB-AREA 5
BLOCK PLAN

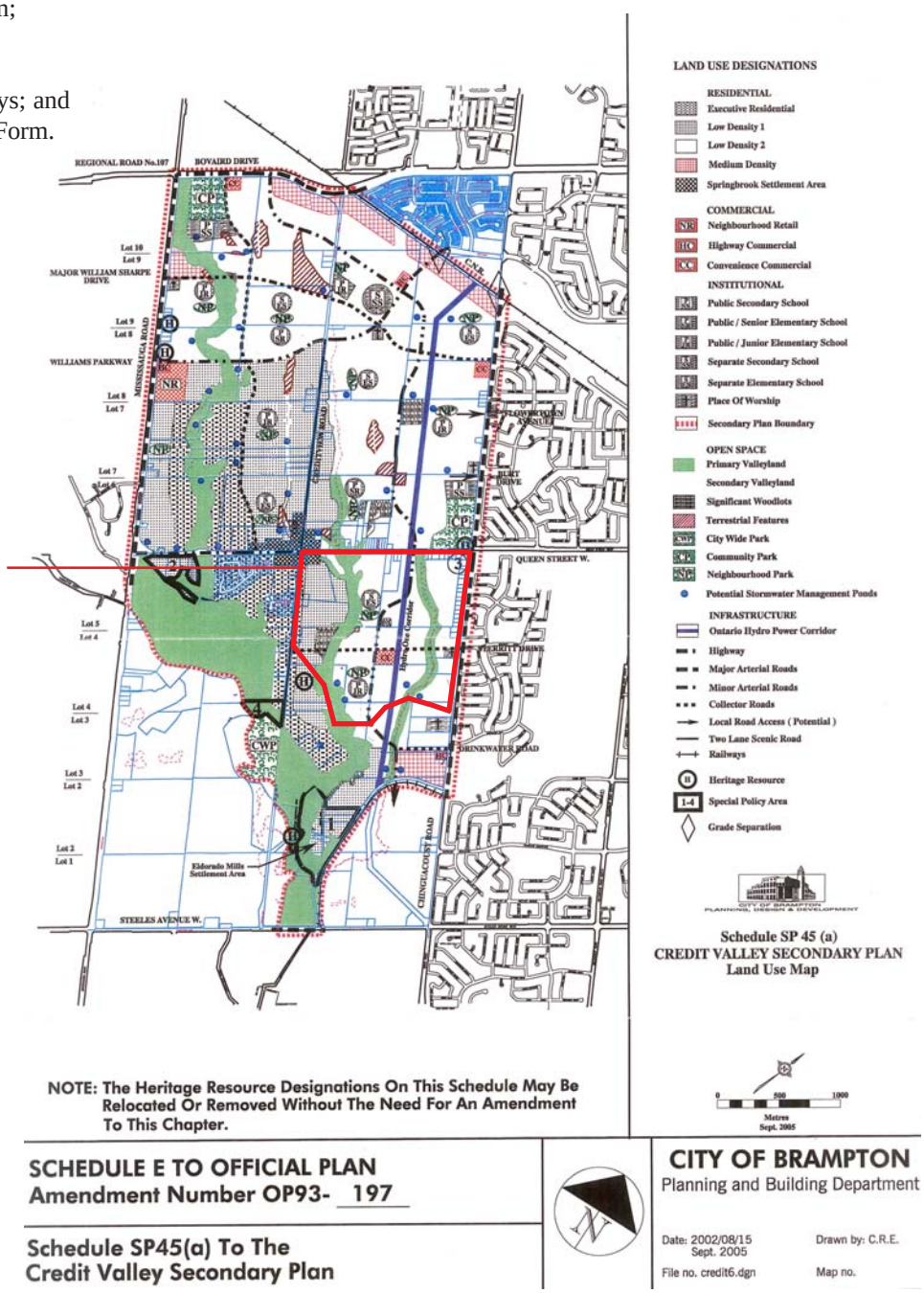


Figure 1.3a: Credit Valley Secondary Plan

1.5 City Initiatives

Notwithstanding the information within these guidelines, the following City of Brampton initiatives shall be implemented as applicable:

- Gateway Beautification Program;
- Flower City Strategy;
- City's Six Pillars;
- Pathways Master Plan;
- Development Design Guidelines;
- Clean and Green Strategy;
- Stormwater Management Master Plan;
- Parks, Culture & Recreation Master Plan;
- Streetscape Master Plan;
- Brampton's Upscale Executive Special Policy Areas Workbook; and
- Brampton's Accessibility Advisory Committee and Technical standards.

Figure 1.5a

Figure 1.5b

1.5.1 Flower City Strategy

The City of Brampton has initiated a Flower City Strategy intended to reclaim its heritage as Canada's Flowertown. New residential communities have been identified as potential partners for implementing the Flower City Strategy. When implemented, a community will be created which enjoys:

- A beautiful and protected environment;
- An improved quality of life;
- Increased civic pride; and
- Strong City/community partnership.

Arterial buffers, entry features, parks and storm water management ponds (SWMP) offer opportunities for incorporating highly visible flower planting beds to meet the City's initiatives as follows:

- Arterial buffers will contain perennial beds, flowering bulbs and a significant flowering shrub content;
- Entry features will have a significant amount of flowering bulbs, perennials and shrubs;
- The edges of stormwater management ponds, where visible from adjacent roads, will incorporate flowering bulbs and perennials; and
- Park entries will incorporate perennial and bulb plantings.

Figure 1.5a & 1.5b: Prominent flower beds incorporated into community and neighbourhood gateway features help promote the City of Brampton's Flower City Strategy.

2.0 Community Vision

The vision for Creditview Crossing builds upon the special characteristics of the existing natural and cultural resources in the area, which result from its geographic and topographic relationship to the Credit River valley and tributaries, as well as from the patterns of human activity over the last century. These characteristics can be used as an interpretive guide in the design of new elements of the urban design, landscape and built form of Creditview Crossing. Key characteristics include:

Characteristic

- Natural features including valleys, mature high quality woodlots and linear vegetation along Creditview Road and near the Bonnie Braes heritage house;
- Rural character including agricultural history and country residences; and
- Mix of eras, houses, and styles along Creditview Road, Queen Street West, Chinguacousy Road, and in the Springbrook Settlement Area which have developed over time.

Potential Interpretation

- Maintain features in natural state, provide views and access to them within the community;
- Enhance natural landscape in stormwater facilities;
- Maintain rural character to Creditview Road cross section;
- Maintain Bonnie Braes and William Copeland heritage farmsteads and heritage landscapes; see Figure 3.1b
- Utilize style elements from Bonnie Braes Farmstead to inspire the design of new homes and landscape elements;
- Provide cultural/heritage landscape-inspired planting elements such as allées, hedgerows, bosque/orchard groupings;
- Create mixed streetscapes through varied lot size, massing, materials and colour; and
- Provide opportunity for a neighbourhood centre to evolve over time.

2.0 Community Vision

These elements of the vision can be implemented through a coordinated and consistent approach to the design of the community components, including the Community Structure, Open Space, Streetscapes, Site Planning and Built Form. Design principles for the new community include:

- Integrating the Creditview Crossing community into the City of Brampton's urban fabric;
- Incorporating and celebrating the existing natural site features and provide positive views to them;
- Linking natural features within a comprehensive community open space system together with parks, view vistas and storm water management ponds;
- Creating a safe, attractive and pedestrian-oriented community offering a range of housing choices;
- Creating a distinct and attractive character which will reinforce a positive visual image within the City of Brampton;
- Developing a distinct centre for the community that provides a mix of uses, amenities and destinations;
- Creating interconnected neighbourhoods, each having its own local identity and focal area within a naturally enclaved block with separation created by existing natural features and open space elements;
- Developing a street network and block pattern that promotes pedestrian accessibility to parks, open space areas and community sites such as schools, places of worship and commercial areas;
- Encouraging pedestrian activity with well-designed streetscapes, built form and public spaces that contribute to an identifiable sense of place;
- Ensuring a high standard of quality in the design of housing, public buildings and public spaces;
- Promoting Creditview Road as an upscale, heritage-inspired character area which reflects its rural heritage characteristics;
- Incorporating design principles for new development within the Springbrook Settlement Area;
- Implementing the City of Brampton's Flower City Strategy through provision of civic design elements within public areas which promote its objectives;
- Implementing the Design Workbook for Brampton's Upscale Executive Special Policy Areas Manual; and
- Implementing the Brampton Accessibility Advisory Committee, Accessibility Technical Standards to ensure barrier free access to services and amenities.


Figure 2.0a


Figure 2.0b


Figure 2.0c


Figure 2.0d

Figure 2.0a to 2.0d:
Photos identifying the cultural characteristics and natural landscape within Creditview Crossing.

3.0 Community Structure

The community structure of Creditview Crossing is defined by both natural and man-made features found within and adjacent to the subject lands. Since community structure is driven largely by existing site features, a brief review of these features is included. This review is based upon a review of ecological data with site analysis and review of available topographic mapping and aerial photography.

3.1 Existing Site Features

Existing site features are shown on **Figure 3.1b**.

The majority of the land is currently used for agriculture purposes, which includes several remnant farmsteads, cultivated land and some pasture areas.

There are a number of scattered rural residential lots along Queen Street, Chinguacousy Road and Creditview Road with a concentration of lots at the northeast corner of the subject lands.

The site topography is relatively unique in Brampton (see **Figure 3.2a**). Areas to the north and east are flat Peel Plain but areas west and south, the land dips significantly to the south with elevation changes of 15 to 20m affording expansive overland views to the west. The watercourses include a small tributary adjacent to Chinguacousy Road known as Channel 8B and Springbrook Creek (east of Creditview Road). In the north half of the block a topographic high point occurs in the same alignment as the hydro corridor.

Springbrook Creek is the most significant natural feature within this sub-area. It has a well-defined valley typography through the lower reaches of this area, portions of which are wooded. The northerly portion of Springbrook Creek valleylands are not as well developed having lesser depth, shallower valley walls and sporadic pasture like vegetation.

Channel 8B is generally shallower than Springbrook Creek and has less woody vegetation.

Figure 3.1a: Existing valleylands in the north west and north east areas of the block are comprised of non-native, invasive plant species.

The Creditview Crossing community is divided into thirds by the two valleys, and, further divided by the existing hydro corridor also on a north-south axis. Within this ribboned block, the location of woodlots and future stormwater management ponds create additional enclaving. The proposed Pathways Plan (see Appendix 1) responds to the challenge of creating east-west pedestrian connectivity, to link urban pockets and to provide access to schools, parks, the community centre and public transit.

The community is characterized by extensive open spaces, created by the pattern of the proposed development fabric and its relationship to valleys, the hydro corridor, ponds, woodlots and parks. The valleyland woody vegetation, especially in the south half of the site, is mature and of high visual quality. The woodlot and valley vegetation will tower over the residential-scale buildings, thus remaining very visible following full community build out. The wooded areas contain coniferous species also.

There is currently one designated heritage property on site, known as the Bonnie Braes house. It is Victorian, with wood beadboard siding and ornate woodworked facia. The house can be maintained within the fabric of the community and enhanced with a prominent view corridor and preservation of large existing trees. A second residence of potential historic interest known as the William Copeland Farmhouse is located on Chinguacousy Road, just south of Bonnie Braes Drive. It is a brick Ontario farm house and could be maintained within the community fabric and with a view corridor. It is subject to further heritage assessment. A third building at 1225 Queen Street West is also of potential heritage interest, and is presently subject to further heritage assesment. View corridors into these houses are encouraged.

Bonnie Braes Drive provides the opportunity to create a unique street as it climbs from Creditview Road on the west (elevation 196m), crosses Springbrook Creek, then climbs to 210m at James Potter Road. The view to the Bonnie Braes heritage house, the heritage trees, the park at the corner of Bonnie Braes Drive and Creditview Road, and the proposed homes along the street and adjacent local roads, provide the opportunity for a Victorian heritage-inspired streetscape. See Part III, section 5.1 for proposed landscape elements inspired by existing heritage forms.

The Bonnie Braes Farmstead located along the east side of Creditview Road contributes to Creditview Crossing's cultural heritage. The dwelling and heritage landscape presents opportunities to inspire the landscape design and architectural character for the community. Gateway elements and architectural details can be heritage inspired, or inspired by elements of the Bonnie Braes House. Refer to Part II, section 4.2.1 of the Block Plan Design Guidelines, and Part III, section 5.1 of the Open Space Design Guidelines for character images of the heritage house and surrounding landscape.

3.0 Community Structure

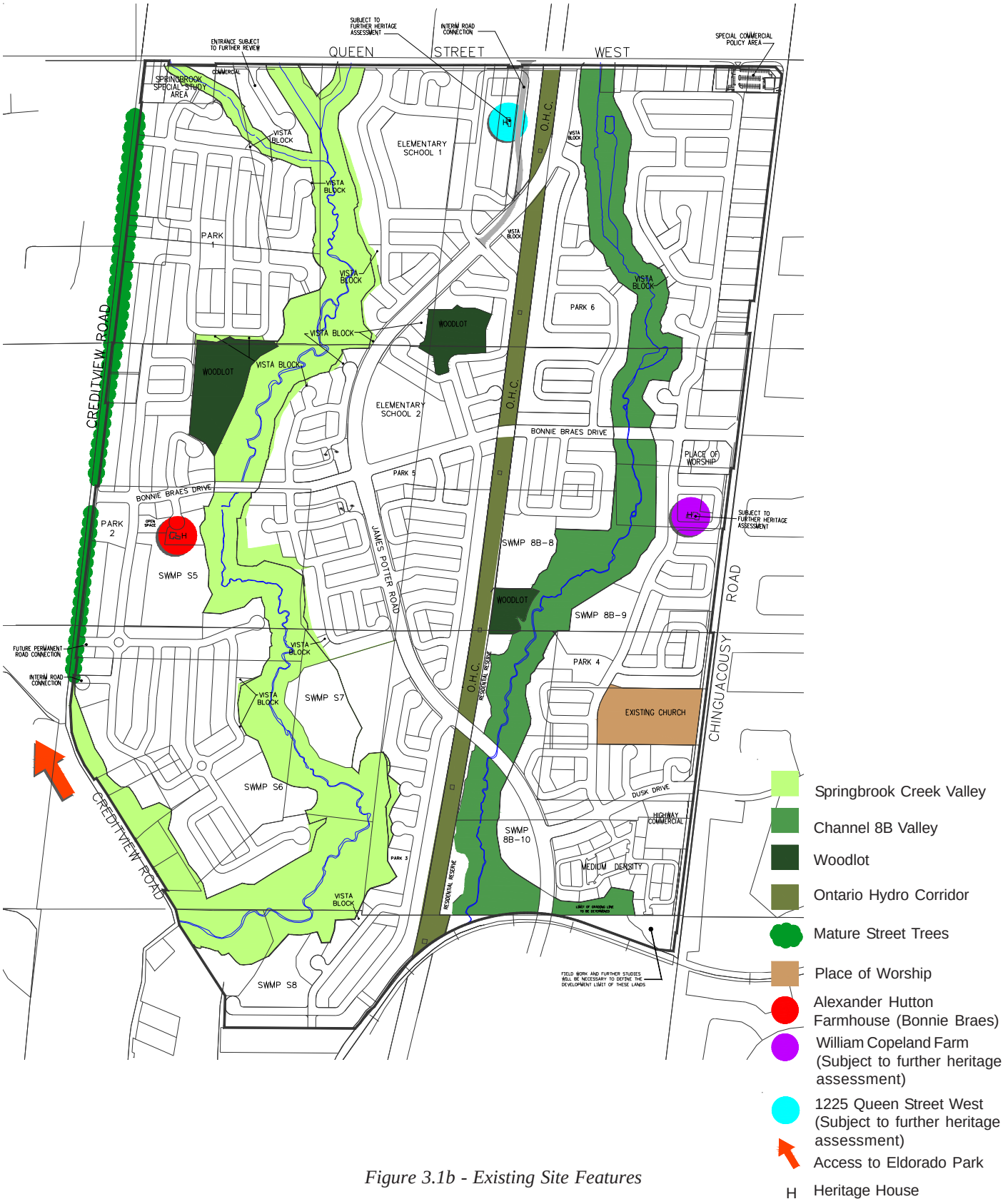


Figure 3.1b - Existing Site Features

3.0 Community Structure

3.2 Vegetation Analysis

The subject area as a whole is composed primarily of abandoned and active agricultural lands. The majority of the subject area is largely influenced by anthropogenic activities including agriculture, sparse residential and commercial development and the Orangeville Rail Development Corporation (ORDC) rail line. Naturally occurring habitats, fully or partially devoid of anthropogenic influences, are found within the immediate vicinity of the watercourses and in woodlots throughout the subject area.

Significant woodlots and valleylands have been identified and surveyed in consultation with the CVC and City staff.

Springbrook Creek Vegetation Assessment

Habitats found along the Springbrook Creek watercourse contain the highest level of ecological integrity found within the subject area. The level of ecological integrity unfortunately is partially compromised by the presence of non-native, invasive species and past incidents of localized dumping.

The Springbrook Creek section is composed of three main woodlots and various natural and cultural habitats. The type of vegetation community found within each reach is listed below.

Upper Reaches
The upper reaches of the Springbrook Creek section is composed of five distinct vegetation communities.
- Dry-Moist Old Field Meadow Type (CUM1-1)
- Reed-canary Grass Mineral Meadow Marsh (MAM2-2)
- Mineral Cultural Thicket Type (CUT1)
- Dry-Fresh Sugar Maple Deciduous Forest Type (FOD5)
- Fresh-Moist Black Maple Lowland Deciduous Type (FOD7-5) (inclusion: White Pine Coniferous Woodland)

Middle Reaches
The middle reaches of the Springbrook Creek section is composed of four main vegetation communities.
- Reed-canary Grass Mineral Meadow Marsh (MAM2-2)
- Dry-Moist Old Field Meadow Type (CUM1-1)
- Mineral Cultural Thicket (CUT1)
- Deciduous Forest (FOD)

Lower Reaches
The lower reaches of the Springbrook Creek section is composed of two main vegetation communities.
- Deciduous Forest (FOD)
- Mineral Cultural Woodland (CUW1)

Channel 8B Vegetation Assessment

Habitats found along the Channel 8B watercourse contain the lowest level of ecological integrity found within the subject area. This section is heavily compromised by the presence of non-native, invasive species, fragmentation and local dumping.

Channel 8B is composed of fragmented woodlots and various natural and cultural habitats. The type of vegetation community found within each reach is listed below.

Upper Reaches
The upper reaches of Channel 8B is composed of four distinct vegetation communities.
- Dry-Moist Old Field Meadow Type (CUM1-1)
- Reed-canary Grass Mineral Meadow Marsh (MAM2-2)
- Mineral Cultural Thicket Type (CUT1)
- Mineral Cultural Woodland (CUW1)

Middle Reaches
The middle reaches of Channel 8B is composed of four vegetation communities.
- Dry-Moist Old Field Meadow Type (CUM1-1)
- Reed-canary Grass Mineral Meadow Marsh (MAM2-2)
- Mineral Cultural Thicket Type (CUT1)
- Mineral Cultural Woodland (CUW1)

Lower Reaches
The lower reaches of Channel 8B is composed of three vegetation communities.
- Dry-Moist Old Field Meadow Type (CUM1-1)
- Reed-canary Grass Mineral Meadow Marsh (MAM2-2)
- Mineral Cultural Thicket Type (CUT1)

Vegetation Summary

The study area exhibits conditions characteristic of urban encroachment such as ecological degradation and fragmentation. The overall vegetative structure and function is heavily compromised in many portions of the subject property by the extensive disturbance the site receives from the surrounding agricultural land and residential and commercial development. This has led to negative effects such as the presence of non-native, invasive plant species and a decrease in wildlife habitat. See **Figure 3.2a**.

3.0 Community Structure

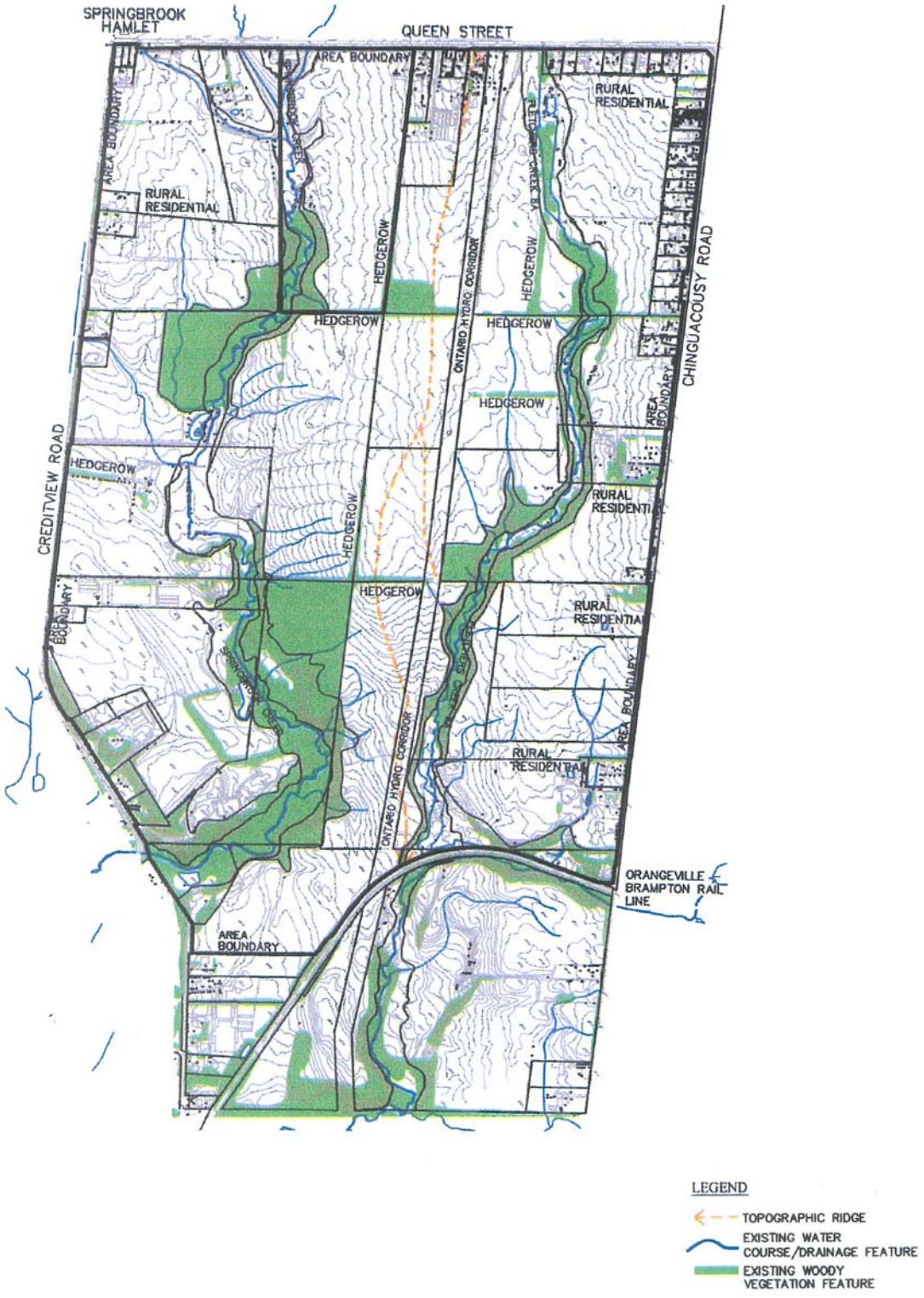


Figure 3.2a - Vegetation Plan

3.0 Community Structure

3.3 Visual Analysis

A visual analysis of the site reveals a number of challenges and opportunities that are listed as follows and graphically illustrated in **Figure 3.3a**.

1) Springbrook Creek and valley corridor are natural site features with good potential for integration into the Open Space network of this community and provide a continuous link from Queen Street West to lower portions of Creditview Road. This corridor will provide a significant, continuous Open Space linkage with potential for incorporating a north south trail;

2) Creditview Road, listed as a heritage resource, is a country lane with high scenic qualities that make it a landscape landmark. The road affords an excellent vista at the southwest corner of the site and provides views into Springbrook Creek. The road is lined with mature street trees, mostly maples;

3) Queen Street West is a major arterial road with some scenic qualities created by the existing schoolhouse on the north side of Queen Street West, rural residential lots, mature vegetation and intermittent views into the stream corridors. The new development will be denser and have a less mature landscape than the north side of Queen Street West. Sensitive architectural and landscape design will be required to create a coherent streetscape. Gateways, window streets and built form should be respectful of the existing character;

4) Chinguacousy Road is a major arterial road and a physical barrier along the east limit of the community. Noise and visual buffers along with windows and gateways into the community should be complimentary to the context. The character of Chinguacousy Road at present is in transition with newer subdivision to the east and edge-of-town residential/business land uses to the west;

5) The existing Hydro Corridor presents challenges and opportunities in the design of this community. It will require softening through the use of planting and a variety of landscape edge treatments where the corridor intersects streets and public spaces. Despite the visual impact of the hydro towers, this corridor has good potential as a continuous Open Space spine through the community. While it may have the potential to contain a pedestrian walkway, the Hyrdo Corridor will not be considered at this time since there is no agreement on its use with the current owner;

6) The ORDC Rail Line at the southeastern limit of the subject lands is a significant physical barrier. It will require physical buffering through the use of a safety berm;

7) Significant woodlots are vertical landmarks; they are features of the natural landscape and should be integrated as part of the Open Space System;

8) The Bonnie Braes house and an allee of trees is located along Creditview Road. With the valley and stormwater management pond in close proximity, the house has potential scenic qualities. The house itself presents challenges in allowing for an adaptive re-use opportunity;

9) The William Copeland Farm is located along Chinguacousy Road, south of Bonnie Braes Drive. It is a brick Ontario farm house and is subject to potential historic interest; and

10) Existing house along 1225 Queen Street West, is currently listed and rated as Class B on the City's Heritage Resource Inventory.

3.0 Community Structure

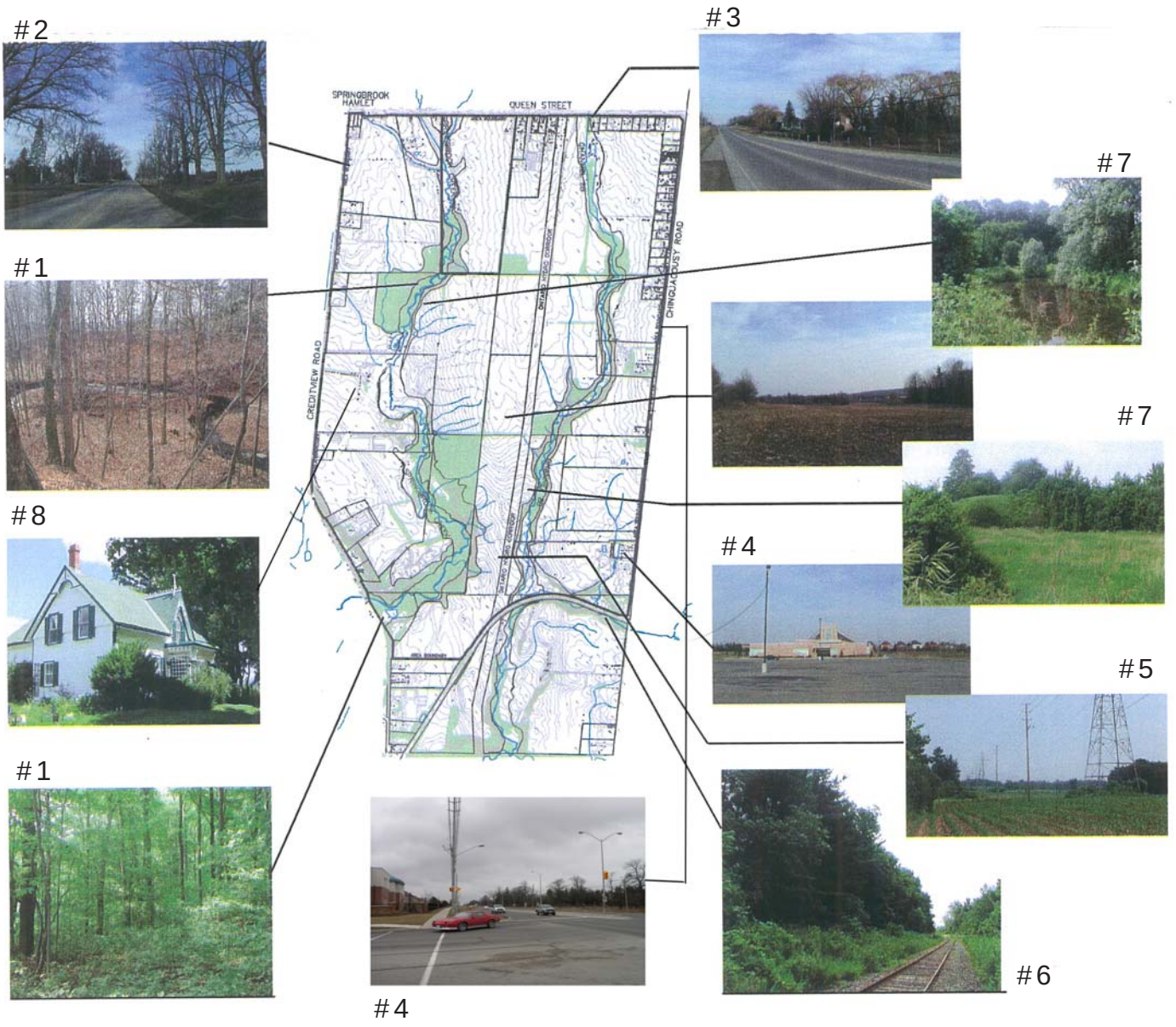


Figure 3.3a - Visual Analysis of Existing Site Condition

3.0 Community Structure

3.4 Summary of Findings

The existing site features analysis resulted in a comprehensive visual analysis of the site and a vegetation assessment of the Springbrook Creek and Channel 8B Valley. The site consists of three significant open space corridors combined with existing woodlots and heritage dwellings. In addition to Creditview Road and Chinguacousy Road contributing to the overall structure of the plan, the configuration of road patterns, distribution of land uses and the allocation of parkland and stormwater management ponds should provide maximum view vistas into the valleys with a sensitive treatment to the existing site features to create an appropriate block plan for the Credit Valley Secondary Plan Sub-Area 5.

3.5 The Block Plan

The Community Block Plan (see **Figure 3.5a**) has been structured to achieve the design objectives of the City in creating an attractive, safe, pedestrian friendly environment. The community structure of Creditview Crossing is largely driven by the linear north-south Open Space corridors created by Springbrook Creek, the hydro corridor and Channel 8B watercourse.

At the cross roads of Bonnie Braes Drive and James Potter Road, a new neighbourhood centre is proposed. This will form the nucleus for the emerging community.

The western Open Space corridor is defined by Springbrook Creek which is especially visually attractive in the southern half of the block. Along the valleyland spine a number of stormwater management ponds are proposed which together with an existing table land woodlot and proposed park, create an extensive integrated open space system.

The middle Open Space corridor is defined by the hydro corridor and forms a continuous link through the community from Queen Street, and the Sub-area to the north of Queen Street, to the south and the development below the railway lands. This Open Space corridor crosses James Potter at two locations and is contiguous with the Channel 8B lands in the south providing several connections between Open Space and residential lands. The introduction of James Potter as a new arterial road to replace the function of Creditview Road, strengthens this linear north-south system.

The eastern Open Space corridor is located along the Channel 8B watercourse.

These north-south linear systems serve to both define the edges of neighbourhoods and provide amenities for residents.

The street pattern is genrally characterized by short blocks, and frequent linkages to neighbourhood connector streets, providing access to schools, parks, open space systems and potential transit stops. Street linkages to the new arterial road, James Potter Road, are much less frequent.

Public spaces are visibly accessible with generous street frontage to promote a safe public realm environment full of landmarks for orientation. The relationship of streets and public Open Spaces has been designed so that homes generally face onto the Open Space providing community surveillance and also providing opportunities for the creation of views and vistas into them. Public spaces such as schools, parks, woodlots and stormwater ponds have been located along primary public streets (neighbourhood connectors) to maximize their accessibility.

James Potter Road has been offset from the hydro corridor in a curvilinear alignment to facilitate the corridor's inobstrusive integration into the new community. It will provide a public edge to a variety of Open Space features in the plan. These features include significant public land uses such as: schools, stormwater management facilities, woodlots, parks and the valley corridors. It's curvilinear alignment will provide views and vistas into the adjoining Open Spaces and public spaces adding interest and orientation for motorists and pedestrians using this roadway.

Schools, places of worship and other public uses have been sited to reinforce their importance and to allow favourable orientation of these buildings to the street.

Table land parks are equitably and prominently located throughout the community.

Development of the existing Creditview Road edge will draw upon characteristics of the present land use pattern of larger lot executive homes with front drive access. Preservation of as many of the large mature street trees on the east side of Creditview Road, which are in good condition, is required.

The pattern of development and the densities contained in the Secondary Plan have been designed to ensure that the development proposed in this area is compatible with adjacent and neighbouring developments.

3.0 Community Structure

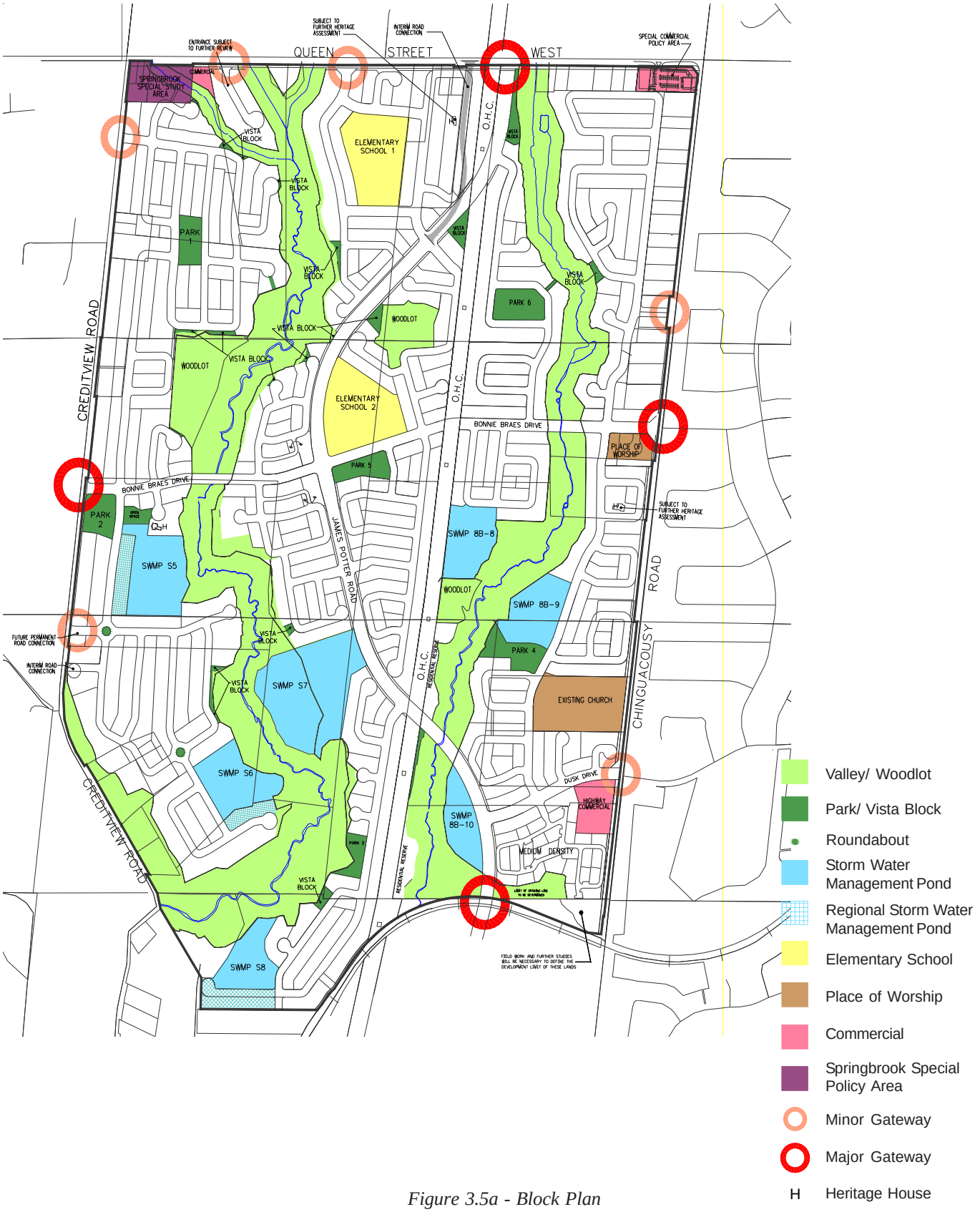


Figure 3.5a - Block Plan

3.0 Community Structure

3.6 Neighbourhood Structure

Within the Community Structure previously described are eight neighbourhoods (see **Figure 3.6a**) frequently bordered by major roads or physical features in the landscape that provide a natural edge.

Each neighbourhood either contains a park or is in close proximity to a park or open space feature. The parks are strategically located within the plan to create small cohesive neighbourhoods and provide direct neighbourhood access to the Open Space.

The three existing woodlots form strong vertical landmarks and are important features of the Open Space systems. They are valuable existing natural features, which will be enhanced by the addition of storm water management ponds and connections to parks, school and valleyland corridors.

Neighbourhoods are connected to one another and to the arterial road network by a series of local and collector roads and pedestrian systems that provide safe and convenient access throughout the area and to local amenities.

There are eight neighbourhoods that define the Creditview Crossing Community. Each neighbourhood contains one or more significant features with exposure to one of the valleys.

Neighbourhood 1 (N1)
- Located at the southeast corner of Creditview Road and Queen Street West;
- Contains a central park;
- Defined by the Springbrook Creek Valley along its eastern edge;
- Contains a woodlot as a natural extension of the Springbrook Creek Valley;
- Contains existing commercial development at the southeast corner of Queen Street and Creditview Road; and
- Will contain upscale executive housing fronting to Creditview Road.

Neighbourhood 2 (N2)
- Southeast of Creditview Road and Bonnie Braes Drive;
- Defined by the Springbrook Creek Valley along its eastern edge;
- Contains a park at the northwest corner;
- Contains two stormwater management ponds as a natural extension of the Springbrook Creek Valley;
- Contains the Bonnie Braes House;
- Will contain upscale executive housing fronting to Creditivew Road, along the open space paralleling Creditview Road and in the south end of the N2 neighbourhood; and
- Will contain two roundabouts.

Neighbourhod 3 (N3)
- Lower reaches of the community;
- Bounded by the Springbrook Creek Valley to the west, the O.R.D.C. Rail Line to the south, and the Channel 8B Valley to the east;
- Contains a central park and one stormwater management ponds at the south end; and
- A portion of the hydro corridor.

Neighbourhood 4 (N4)
- Centrally located within the community;
- Where the community center exists;
- Contains a school, woodlot, park, and stormwater management pond; and
- Bounded on the east by the hydro corridor.

Neighbourhood 5 (N5)
- Bounded by Queen Street West to the north, the O.H.C. to the east, and the Springbrook Creek Valley to the west; and
- Contains a school.

Neighbourhood 6 (N6)
- Located east of the O.H.C.;
- Defined by the Channel 8B valley along its eastern edge; and
- Contains a central park, woodlot, and a stormwater management pond at the southern end as a natural extension of the valley.

Neighbourhood 7 (N7)
- Located at the southwest corner of Chinguacousy Road and Queen Street West;
- Defined by the Channel 8B Valley along the west edge; and
- Characterized by the special commercial policy area at its north east corner.

Neighbourhood 8 (N8)
- Located at the northwest corner of Chinguacousy Road and the O.R.D.C. Rail Line;
- Defined by the Channel 8B valley along its western edge; and
- Contains 2 blocks for place of worship, a highway commercial block, a park, and two stormwater management ponds.

3.0 Community Structure

Figure 3.6a - Neighbourhoods Plan

3.0 Community Structure

3.7 Opportunities and Constraints

As outlined in this section, the existing site features, the vegetation analysis, the visual analysis, the block plan, and the neighbourhood structure, generate the opportunities and constraints of the community. Existing and planned features generate opportunities, including:

- Views, and potential for access to natural features and constructed open spaces;
- Preservation of the existing mature trees along Creditview Road as natural heritage features;
- An executive residential area along Creditview Road and nestled between valleys in the southwest;
- The creation of small mixed use core to the community, at the geographic centre where James Potter Road and Bonnie Braes Drive intersect;
- Providing linkages within the community to destinations and amenities through road pattern and pathway network- including the neighbourhood centre, existing and propsed churches, schools, and parks;
- Providing the potential for linkages outside the community, to the City's broader pathways and parks network (for example, to Eldorado Park); and
- Creation of well-defined neighbourhoods between the valley corridors.

Potential constraints include:
- Planning for the integration of and/or sensitive interface with, existing residences;
- Ensuring the neighbourhood centre is pedestrian oriented at the intersection of two of the busier roads in the community;
- Finding appropriate and implementable locations for pathways within narrow, steep valley features; and
- Ensuring cultural and heritage features are well integrated given potential structural or vegetative health issues.

OPPORTUNITIES

Springbrook Creek Valley and Tributary 8B Valley
- Contains scenic views and provides opportunity for integration of community pathways, vista blocks, valley crossings, and scenic drives.

Creditview Road
- Mature tree lined street presents a distinct landscaped edge to the community and allows for opportunity for lots that are compatible with existing uses on the west side while providing a transition to new lots; and
- Affords scenic view vistas into Springbrook Creek at southern limits of community plan.

Woodlots and Valleyland Vegetation
- Significant high quality natural features in the landscape can generally be integrated into the Open Space system. Current size/ maturity will allow wooded areas to be very visible above rooflines.

Heritage House
- Allee of trees along Creditview Road presents scenic and cultural heritage opportunities. Offers opportunity to create a special neighbourhood park;
- View corridor to Bonnie Braes Heritage Farmstead and integration of house into new lot fabric possible;
- Potential heritage house along Chinguacousy Road and Bonnie Braes Road subject to further assessment; and
- Retention of Brampton's culture and heritage/celebration.

Topography
- Table land falls in significant slope down to Springbrook Creek Valley affording long vistas to the west. Views west from middle sections of James Potter Road are significant.

CONSTRAINTS

Chinguacousy Road
- Major arterial road and a physical barrier forming the eastern edge to community; and
- Noise and visual buffers will be required.

Hydro Corridor
- Requires landscape edge treatment to soften hydro towers at key locations and views down corridor to be intercepted at road crossings.

Orangeville Railway Development Corporation (ORDC) Rail Line
- Physical safety buffering required; and
- Limits connectivity to the south.

Heritage Dwellings
- Although presents heritage character to the community, they offer challenges in allowing for a restoration opportunity.

Queen Street West
- Development to the north is less dense and has a more mature landscape. Architecture and landscape design will need to create a coherent streetscape.

Existing Development
- Rear lots backing onto Chinguacousy Road and Queen Street West will require screening. Numerous operating green houses will require screening and integration with the community if they continue operational.

3.0 Community Structure

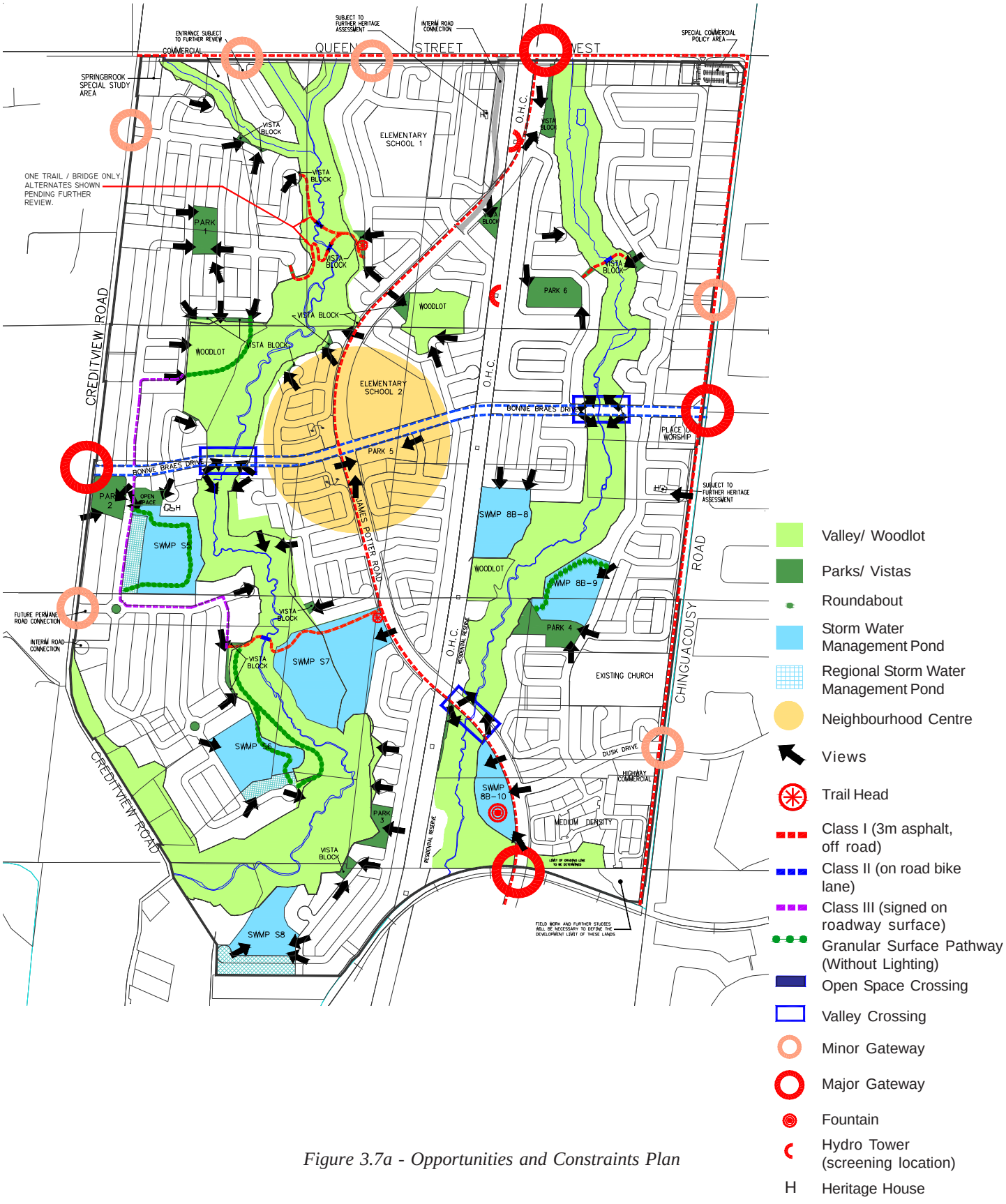


Figure 3.7a - Opportunities and Constraints Plan

3.0 Community Structure

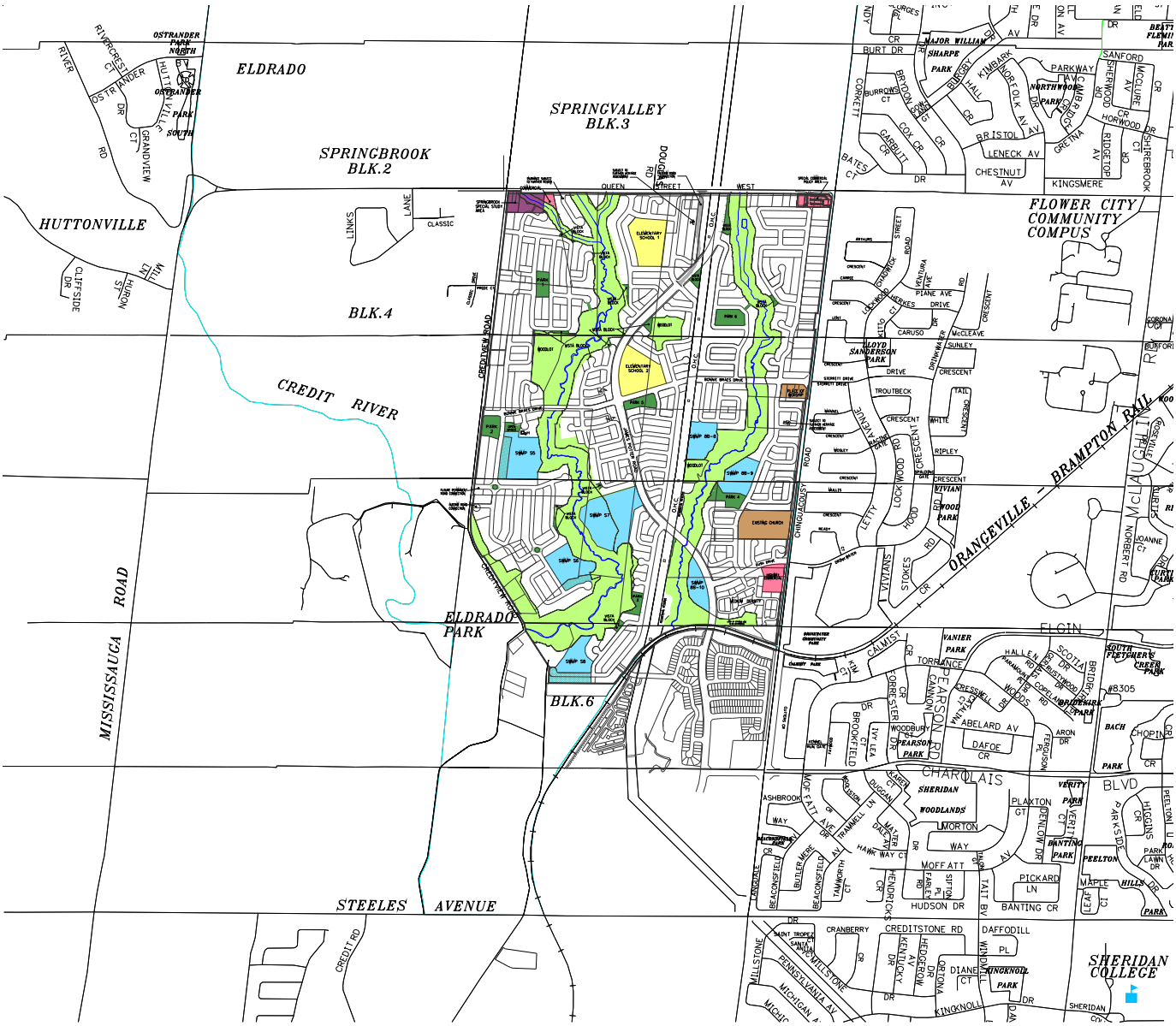


Figure 3.7b - Creditview Crossing Surrounding Context

4.0 Special Community Features

Three special areas within the community will be "landmarks" that create a unique character and sense of identity for Creditview Crossing (see **Figure 4.0a**). These are the Neighbourhood Centre, the Special Neighbourhood Park (Bonnie Braes Heritage Farmstead) and the Creditview Road corridor. This section sets out additional principles that apply to these areas beyond the general principles in the Block Plan.

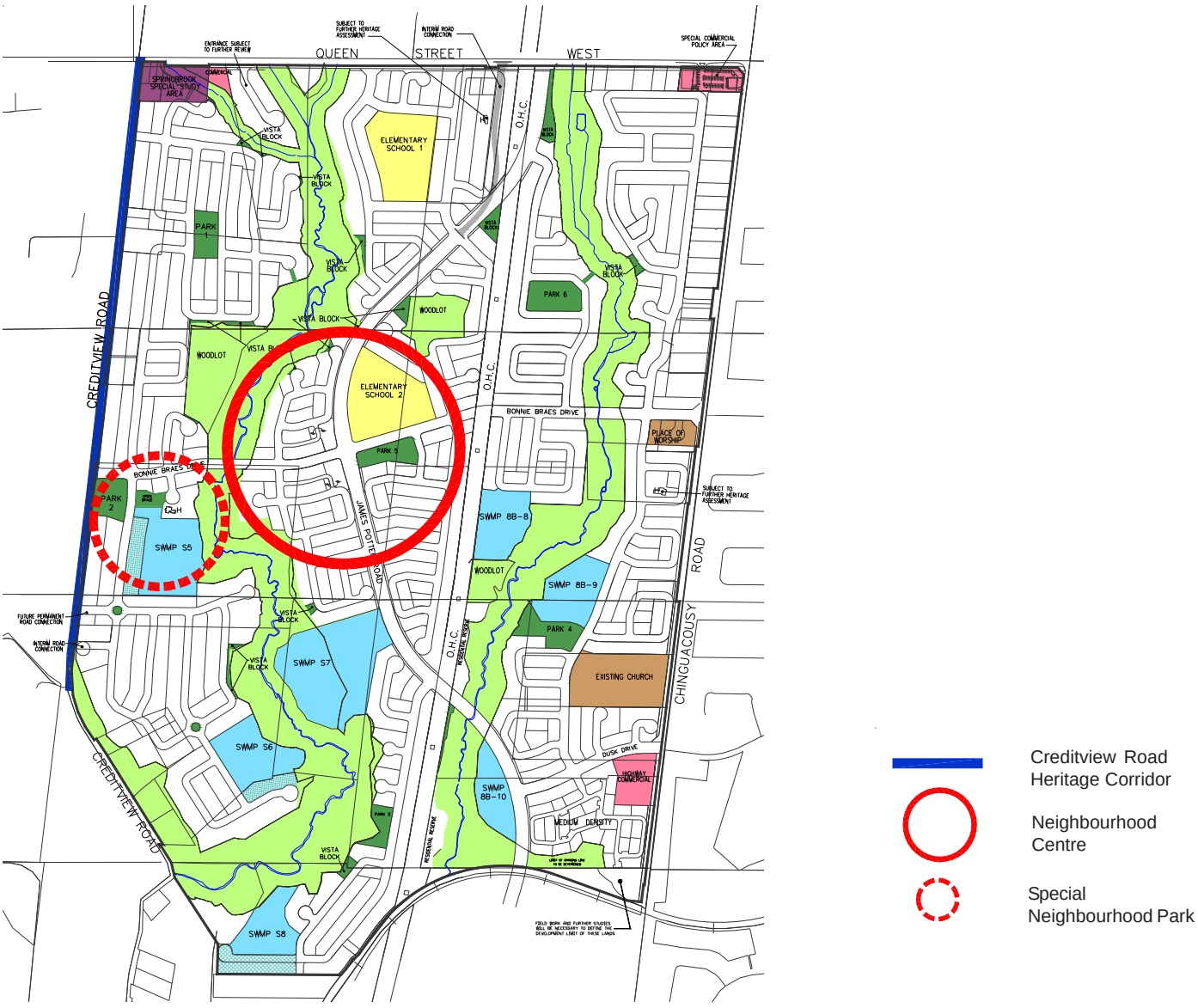


Figure 4.0a: Key Plan identifying the location of the special features within Creditview Crossing.

4.1 Neighbourhood Centre

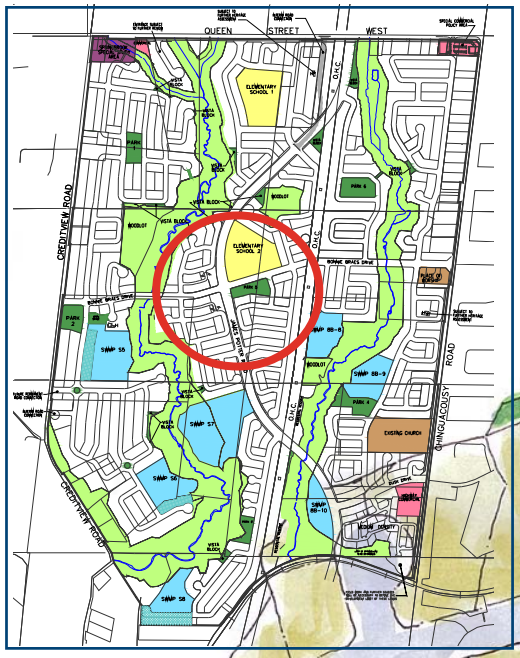


Figure 4.1a - Key Plan

Figure 4.1b: Neighbourhood Centre Concept Plan

4.1 Neighbourhood Centre

Figure 4.1c: Bonnie Braes Drive is envisioned to be a vibrant streetscape with village-like characteristics.

The neighbourhood centre will be a vibrant and active gathering place, the functional and symbolic heart of the community. It is located at the intersection of James Potter Road and Bonnie Braes Drive, at the geographic centre of the community (see **Figure 4.1b**). It contains a variety of uses mixed in close proximity to help foster interaction:

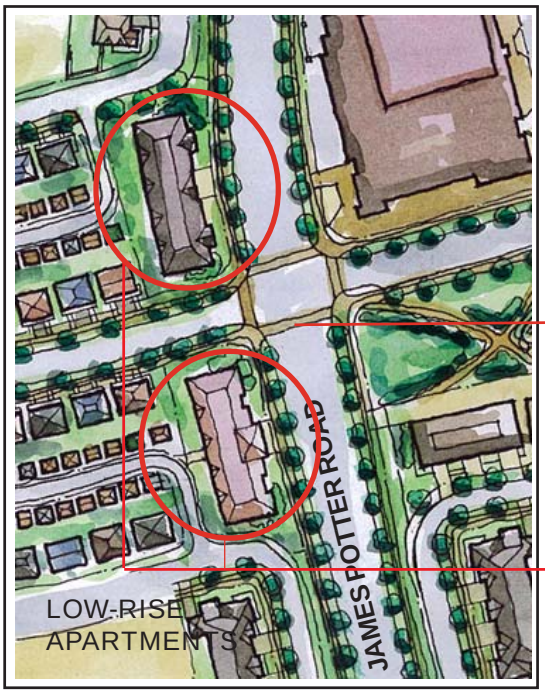
- More compact and intense residential housing forms;
- Provision for a local, community-focused commercial core comprised of live-work units;
- A public park as a gathering and recreational amenity;
- A school; and
- Street linkages to the valleys and hydro corridor, as part of the larger, comprehensive pathways and open space network.

All aspects of the public and private realms need to be comprehensively coordinated (see **Figure 4.1c**) to ensure that a viable neighbourhood centre can be created and sustained, including:

- The land use distribution;
- Street designs (road and laneway details);
- Bonnie Braes Drive to include Class II bike lanes on road surface and curb side and layby parking at the neighbourhood centre;
- Park and pathway system design; and
- Built form for the commercial (live-work) and variety of residential forms.

4.1.1 Neighbourhood Centre - Residential Apartments

More intense residential housing at the neighbourhood centre (see **Figure 4.1.1a**) allows a greater number of people to benefit from the amenities (park and commercial), and, helps those amenities remain active and vibrant. Low-rise apartments have a higher density, but will be designed to be compatible in scale and architecture with the surrounding residential community and the neighbourhood centre.



Crosswalks help to create a pedestrian environment and link all uses at the intersection.

Low-rise apartments sited at the intersection of James Potter Road and Bonnie Braes Drive to define the core intersection (see **Figures 4.1.1c & 4.1.1d**).

Figure 4.1.1a:
Concept Plan illustrating the location of residential apartments.

SITE PLAN:

- Locating apartments close to the James Potter/Bonnie Braes Drive intersection, and to live-work units;
- Locating apartments to help define public streets and spaces by siting them parallel and close to the street edge;
- Ensuring entrances are directly connected to public sidewalks by walkways supported by landscaping;
- Ensuring parking is generally at the side, rear or below the building;
- Ensuring service, garbage and/or utility areas are located away from public view and screened if necessary; and
- Providing convenient curb side parking on primary streets where possible.

ARCHITECTURE:

- Ensuring the massing, height, scale, roofline and materials of the apartment are compatible with adjacent built forms – generally, these apartments are intended to be between three and five storeys;
- Articulating all elevations facing public streets with windows, doors, fenestration and other architectural elements (see **Figure 4.1.1b**);
- Providing clearly visible entrances articulated by architectural elements; and
- Encouraging access to individual units at grade and promote a "front garden" appearance.

4.1.1 Neighbourhood Centre - Residential Apartments

Figure 4.1.1b:
Example of a 3 to 5-storey residential apartment building that defines the core intersection through articulated facades and appropriate site planning.

Figure 4.1.1c:
4-storey walk-up apartments that feature a half level raised parking under the building.

Figure 4.1.1d:
3-storey walk-up apartments that feature a half level raised parking under the building.

4.1.2 Neighbourhood Centre - Residential Grade Related

Housing with rear laneways is compact and benefits the streetscape by ensuring a garage-less front elevation.

Design principles include:

- Locating laneway housing along Bonnie Braes Drive (see **Figure 4.1.2a**);
- Locating buildings to help define public streets and spaces by siting them parallel and close to the street edge (see **Figure 4.1.2b & 4.1.2c**);
- Providing front entry treatments and walkway connections to public sidewalks (see **Figure 4.1.2d & 4.1.2e**);
- Mixing unit types, styles and details along the street; and
- Providing convenient curb side parallel parking on Bonnie Braes Drive.

Figure 4.1.2a:
Concept Plan illustrating the location of laneway apartment blocks and semi-detached houses.

Figure 4.1.2b:
Locate buildings parallel and close to the street edge.

Figure 4.1.2c:
Locate buildings parallel and close to the street edge.

Figure 4.1.2d:
Walkway connections to the public sidewalk.

Figure 4.1.2e:
Walkway connections to the public sidewalk.

4.1.2 Neighbourhood Centre - Residential Grade Related

Front-driveway street townhouses also provide compact and denser housing forms in the neighbourhood centre. The exterior end units of townhouse blocks (at street corners) can have a rear garage accessed from the flankage street, thereby providing the same benefits of laneway housing. These types of units should be encouraged through appropriate zoning provisions, (see **Figures 4.1.2f**).

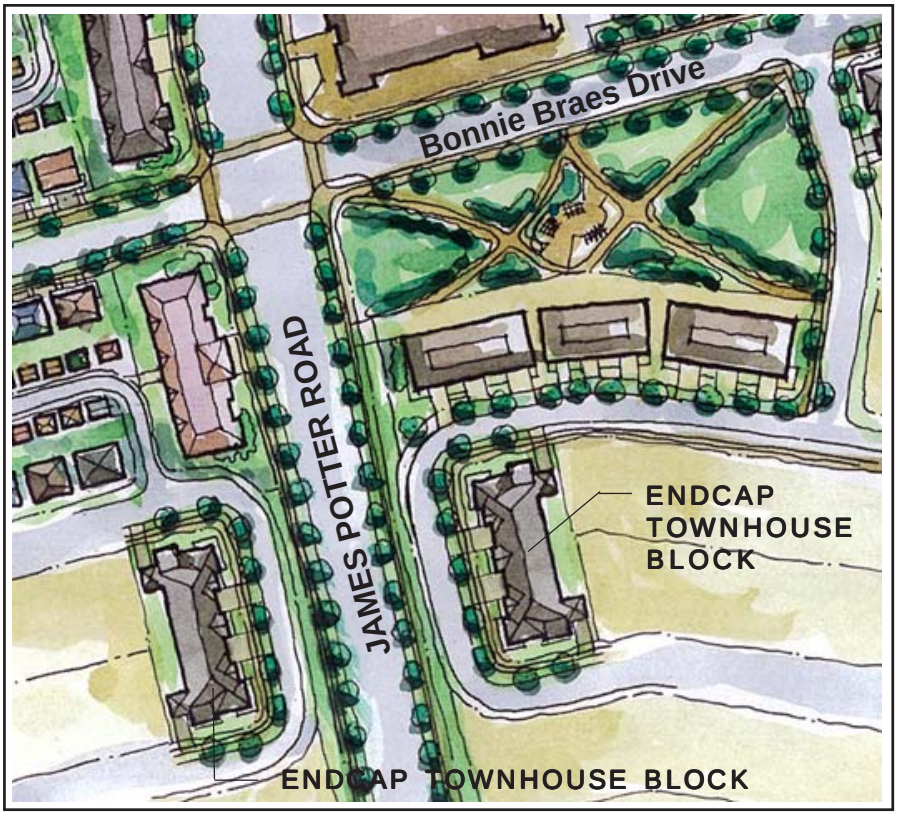


Figure 4.1.2f:
Concept plan illustrating the location of special endcap townhouse blocks.

4.1.3 Neighbourhood Centre - Residential Live/Work

Live-work units (see **Figure 4.1.3a**) provide the opportunity for small-scale retail, business, service and/or home occupation uses to locate at the ground level of a mixed-use building, with residential above (see **Figure 4.1.3b**). The work component helps to animate the streetscape, and can provide amenities for local residents within the community, encouraging walking and pedestrian activity.

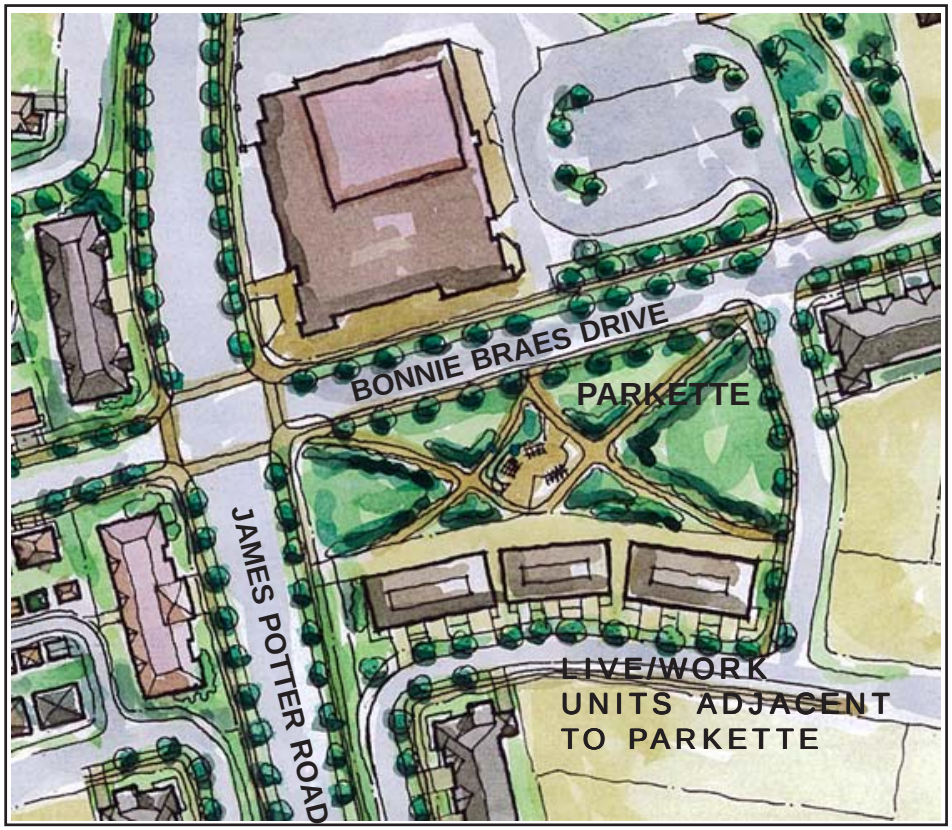


Figure 4.1.3a:
Concept plan illustrating the location of live/work units.

- Locating the work component facing public streets (Bonnie Braes Drive) and spaces (public parkette);
- Allowing a wide range of small-scale uses through appropriate zoning;
- Ensuring there is immediate, convenient lay-by visitor parking for customers nearby;
- Providing at grade, a storefront appearance to the work-side, including display windows, doors with glass, and opportunities for signage and lighting (see **Figure 4.1.3c**);
- Providing a wide (3 metres +) walkway in close proximity to the work-side entrances (preferably contiguous to the building façade) and ensure frequent and convenient linkages to all public streets, sidewalks and spaces;
- Encouraging outdoor use of the walkway and park (for example, patios and outdoor display of goods); and
- Ensuring the residential access and parking (the "live-side" of the unit) supports the residential street edge with a frontal appearance and is compatible with the residential units across the street (see **Figure 4.1.3d**).

4.1.3 Neighbourhood Centre - Residential Live/Work

Live-work units help animate the streetscape by encouraging pedestrian activities.

Figure 4.1.3b:
Example of ground level retail with residential above.

Figure 4.1.3c:
Potential commercial facade of live-work units.

Figure 4.1.3d: Potential residential facade of live-work units.

4.1.4 Neighbourhood Centre - Elementary School

The school site (**Figure 4.1.4a**) provides a destination that is community-oriented and active daily. As a public use, the building will be located prominently and have high-quality elevations that address the streets.

Design principles include:

Site Plan

- Locating the building close to the James Potter/Bonnie Braes intersection;
- Providing a main entrance addressing the James Potter and/or Bonnie Braes intersection;
- Ensuring other entrances have walkways or hard surface areas that link to public sidewalks;
- Locating parking and bus drop-off areas to the side of the building (not between the building and the street);
- Providing pathway linkages to adjacent residential streets and open spaces; and
- Locating play areas away from the street edge and parking areas as possible.

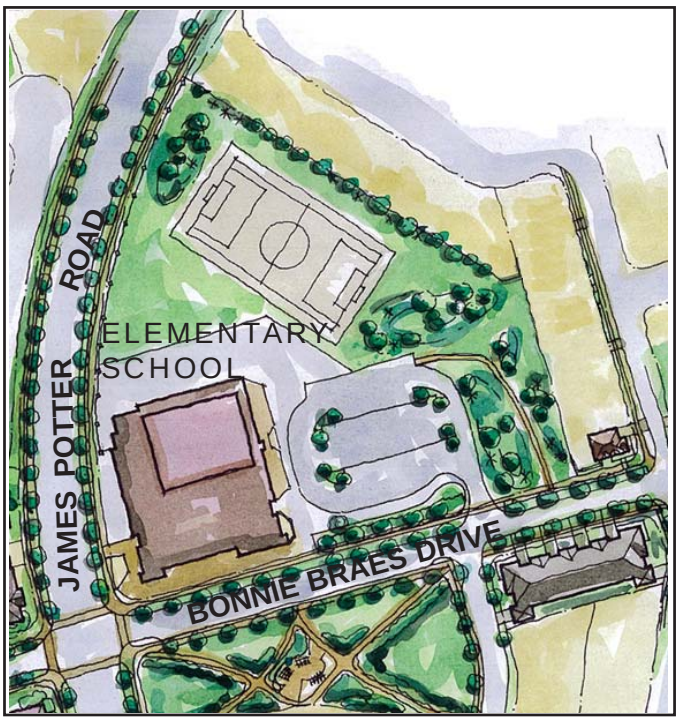


Figure 4.1.4a:
Concept plan illustrating the location of the elementary school.

Architecture

- Articulating all elevations facing public streets with windows, doors, fenestration and other architectural elements (**Figure 4.1.4b**);
- Providing a landmark architectural element such as a tower or prominent entrance canopy (**Figure 4.1.4c**); and
- Providing clearly visible entrances articulated by architectural elements (**Figure 4.1.4d**).

Figure 4.1.4b: Articulated Front Facade

Figure 4.1.4c: Landmark Architectural Feature

Figure 4.1.4d: Well-Defined Front Entrance

4.1.5 Neighbourhood Centre - Neighbourhood Parkette

The neighbourhood parkette will be the key focal element within the community core, and will take on the role of the symbolic heart of the community. The design character will be civic in nature, with a focus on community meeting and gathering facilities.

Design principles include:

- Ensuring continuous pedestrian linkages (**Figure 4.1.5a**) within the parkette and to surrounding public sidewalks including:
  - The James Potter Road/Bonnie Braes intersection;
  - Other intersections along James Potter Road and Bonnie Braes Drive;
  - The lay-by visitor parking along Bonnie Braes Drive;
  - The live-work units and walkway;
- Providing a focal element with a landmark appearance, such as a gazebo;
- Providing a community notice board;
- Providing group seating areas that can provide both shaded areas in the summer and sunny areas in other seasons (**Figure 4.1.5b**); and
- Providing a hard surface gathering area that may be used for small community events.

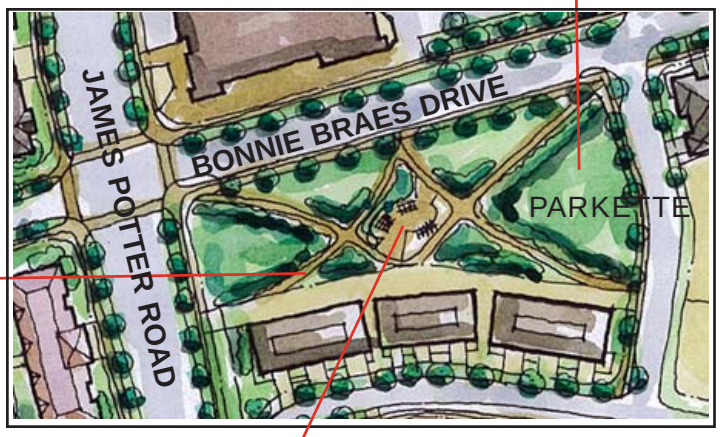


Figure 4.1.5a: Concept plan illustrating the location of the neighbourhood parkette.

Figure 4.1.5b: Group Seating in Shaded Areas

Note: Parkette program review and facility fit design to be completed for Stage 2 approval.

4.1.6 Neighbourhood Centre - Right of Ways

The width and design of the right of ways is a critical component of achieving the goals of the community centre. In general, right of ways and pavement widths will be as narrow as possible, to help create an intimate character. The intersection of James Potter Road and Bonnie Braes Drive will have wide, well-marked pedestrian crosswalks.

Other design principles include:

- Widening sidewalks and walkways within the community centre to 2 metres+; and
- Providing traffic calming devices such as curb bump-outs at intersections and in conjunction with on-street parking.

James Potter Road

- Considering on-street parking within the community centre, particularly adjacent to the park and the apartments during non-peak traffic periods.

Bonnie Braes Drive

- Providing on-street parking on both sides, with an emphasis to the live-work units;
- Locating the sidewalk immediately adjacent to the on-street parking, to allow convenient pedestrian access to vehicles; and
- Providing 1.5m wide on-road bike lanes on both sides of the street.

Public Laneways

Laneways will accommodate the needs of emergency and service vehicles, but be designed to appear narrow and pedestrian in character, to promote slow vehicle speeds.

- Providing a 4.5m wide surface in the centre of the right of way, with flush or rolled curbs adjacent to 1.5m wide concrete aprons on each side or equivalent approved ADS standard;
- Ensuring corner radii are adequate for emergency vehicles;
- Ensuring the garage is set back from the laneway sufficiently to ensure eaves, lighting or other projections do not encroach beyond private property; and
- Providing opportunities for occasional planting on private property adjacent to the laneway to soften the appearance of the streetscape.

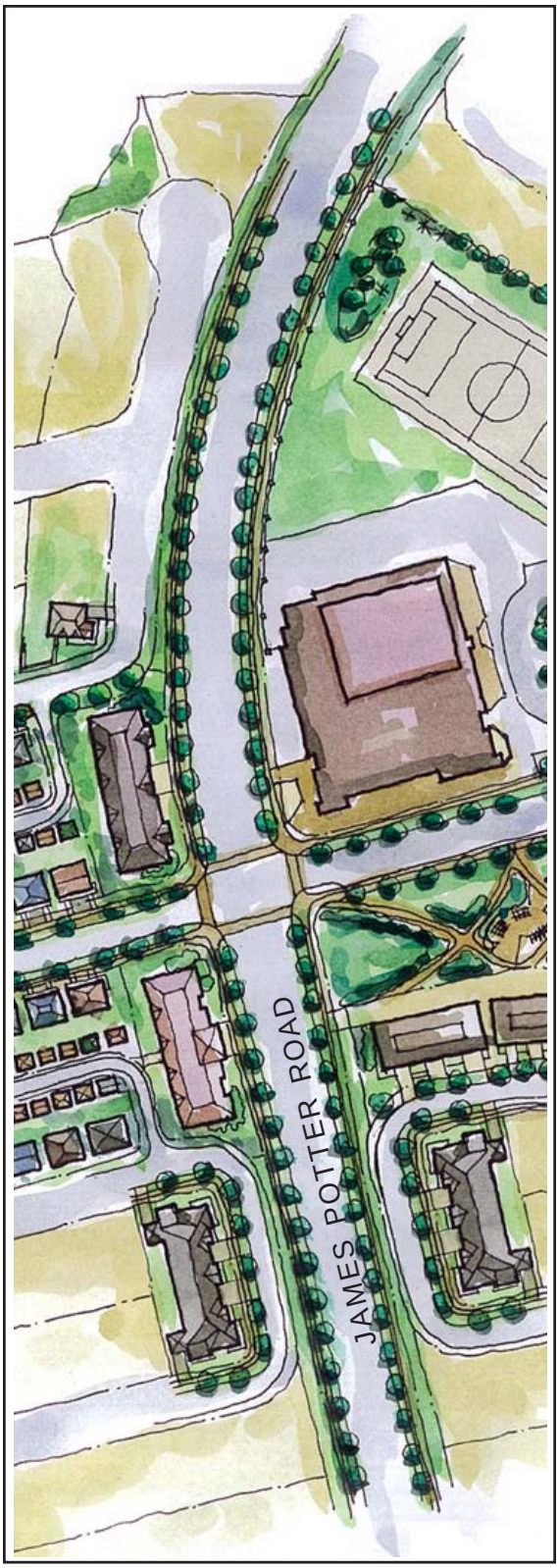
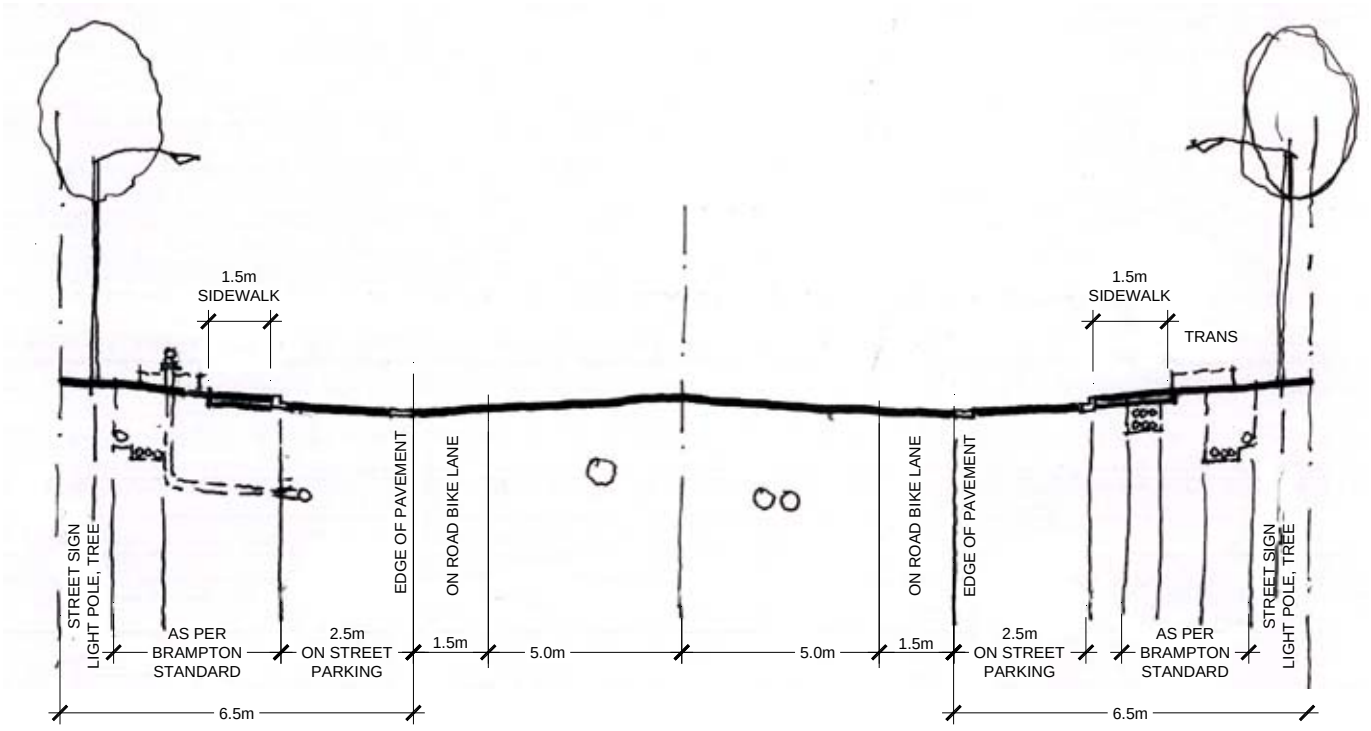


Figure 4.1.6a:
Concept Plan illustrating James Potter Road..

4.1.6 Neighbourhood Centre - Right of Ways

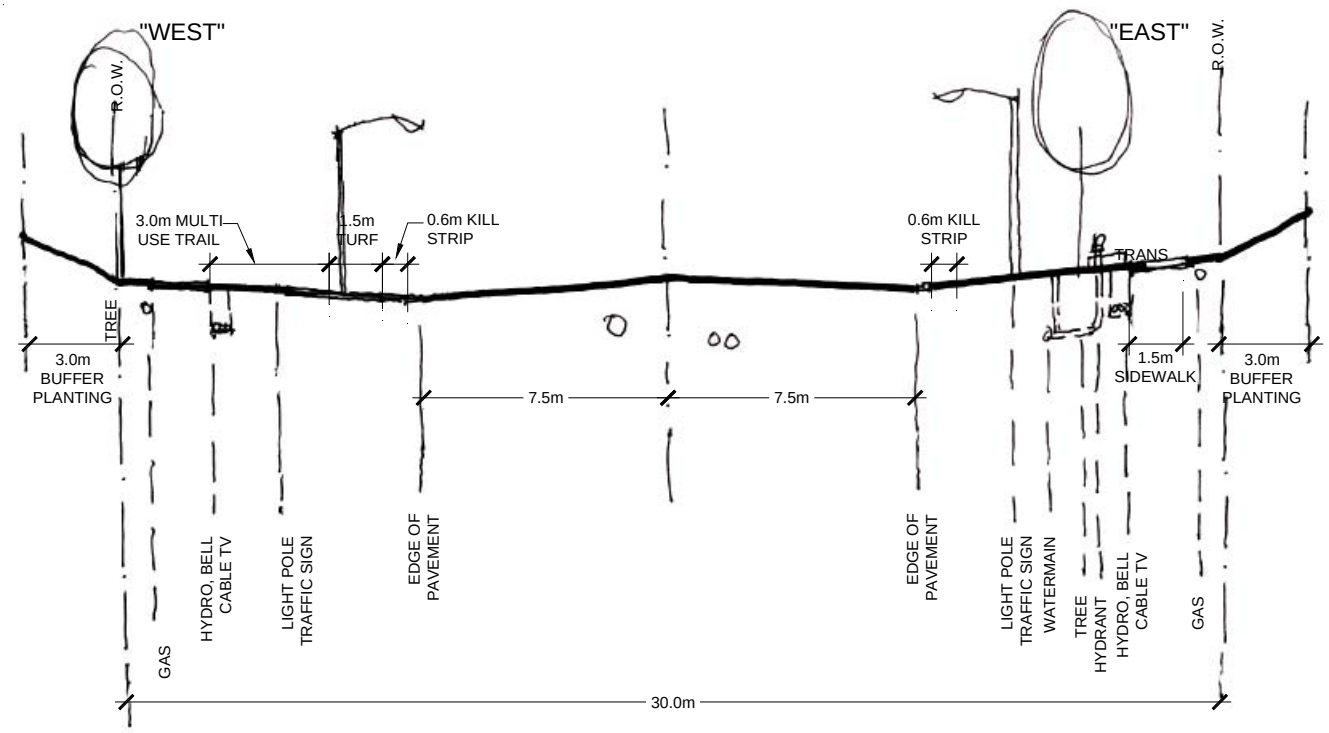
Figure 4.1.6b:
Concept plan illustrating Bonnie Braes Drive.

Figure 4.1.6c:
Concept Plan illustrating the location of rear laneways within the neighbourhood centre.



MODIFIED 26.0m R.O.W. WITH ON-STREET PARKING

Figure 4.1.6d: Modified 26m R.O.W. along Bonnie Braes Drive..



MODIFIED 30.0m R.O.W.

Figure 4.1.6e: Modified 30m R.O.W. along James Potter Road.

4.2 Neighbourhood Park - Concept

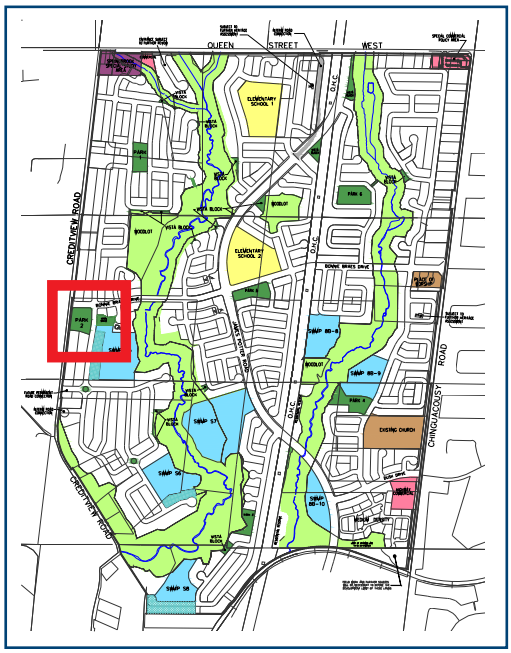


Figure 4.2a - Key Plan

Figure 4.2b: Concept plan illustrating the special neighbourhood park concept.

4.2 .1 Neighbourhood Park - Existing Features

The historic Bonnie Braes farmstead dwelling and the eastern portion of the entry drive allée of trees contribute to Creditview Crossing's cultural heritage (**Figure 4.2c**). With the potential to preserve the allée of trees (**Figure 4.2d**) and the retention of the heritage house (**Figure 4.2e**) within its existing setting, these features have been integrated to preserve the viewshed from Creditview Road and to create a positive relationship with its neighbouring stormwater management pond and Springbrook Creek.

The Bonnie Bráes Heritage house and surrounding landscape including the allee of trees shall remain in context.

Figure 4.2c: Concept Plan illustrating the relationship of the existing site features with one another.

EXISTING FEATURES

REFER TO MAJOR GATEWAYS IN THE OPEN SPACE DESIGN GUIDELINES (PART III, SECTION 2.3)

Figure 4.2d: Existing allée leading to heritage house.

Figure 4.2e: Existing heritage house.

4.2.2 Neighbourhood Park - Principles

HERITAGE HOUSE:

- Ideally locating the house in a prominent location;
- Appropriately integrating the house with its neighbouring land uses; and
- Creating a restoration and reuse of the building in-situ, where possible.

SPECIAL NEIGHBOURHOOD PARK:

- Locating the park with frontage to Bonnie Braes Drive and to adjacent residential streets;
- Providing walkways from adjacent sidewalks and intersections to the park's amenities (**Figure 4.2f)**;
- Providing a pedestrian walkway along the allée and link it to public streets at each end, providing that natural functions such as hydrology can be addressed to ensure the health of the trees;
- Ensuring the landscape of the park, pond, and where possible the heritage dwelling, are designed comprehensively to be continuous or compatible;
- Providing a children's play area linked to the pathway network;
- Providing shaded seating areas;
- Establishing a connective park and Open Space node that functionally integrates with the existing allée, and offer both passive and active recreation opportunities (**Figure 4.2h & 4.2i**);
- Establishing a design for the stormwater management pond so it serves as an amenity feature and an aesthetic asset to the neighbourhood;
- Locating the park where natural features such as the allée can be integrated with the Open Space features;
- Preserving natural features as an effective means to provide visual relief and establish a unique character to the area; and
- Design the park / pond area to ensure views of the allée and heritage house from Creditview Road are maintained.

4.2.3 Neighbourhood Park - Precedents

Figure 4.2g Connective trails to pond & valley from public sidewalks.

Figure 4.2h: Providing active recreation opportunities.

Figure 4.2i: Providing passive recreation opportunities.

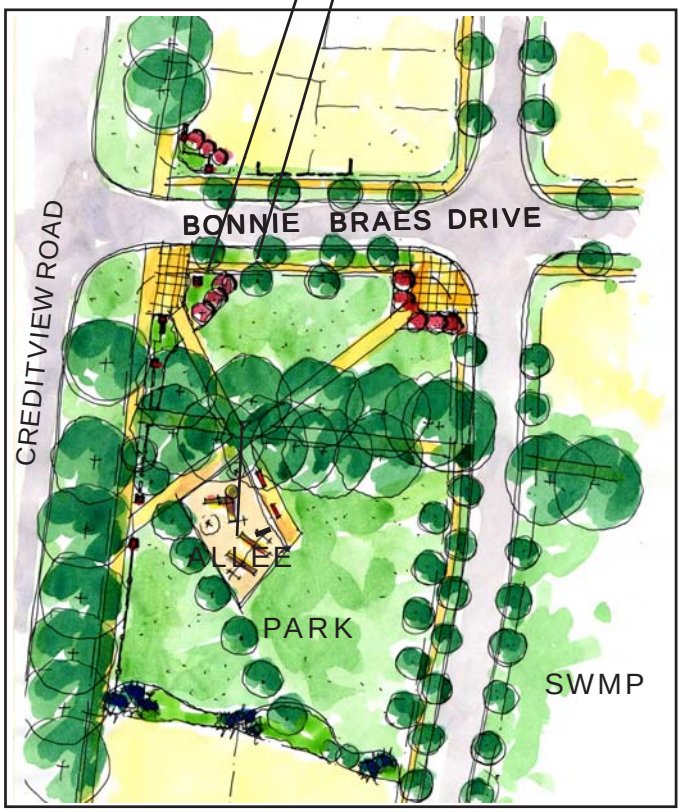
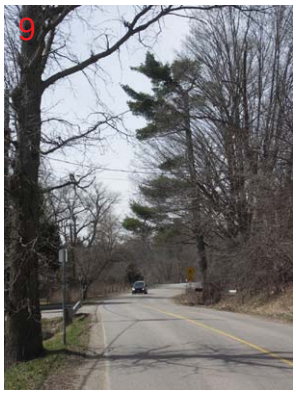


Figure 4.2f:
Concept plan illustrating the park concept and some of its design principles.

4.3 Creditview Corridor

4.3.1 Creditview Road - Existing Character



KEY PLAN

Figure 4.3a: Photographs illustrating the existing site character west of Creditview Road.

4.3.1 CREDITVIEW CORRIDOR - EXISTING CHARACTER

KEY PLAN

Figure 4.3a: Photographs illustrating the existing site character east of Creditview Road.

4.3.2 Creditview Corridor - Principles

Figure 4.3b: Existing Creditview Road streetscape.

Figure 4.3c: Existing Creditview Road dwelling.

Creditview Road has a unique and precious character as a result of its geographic and topographic relationship to the Credit River valley and tributaries, and from the patterns of human activity over the last century (**Figure 4.3a**). It is a resource worthy of preserving, and enhancing through the development of the Creditview Crossing community.

Existing Character

Landscape (**Figure 4.3b**)

- Old, mature, high-crowned deciduous trees closely planted along the road side;
- Mature coniferous trees;
- Vegetated areas in the valleys in their natural state;
- Farmstead/plantations (e.g. allée of trees on Bonnie Braes site, orchard);
- Some moderately mature trees on more recent (post WWII) rural residential lots;
- Rural road with relatively narrow asphalt road, two-lanes, with minimal shoulder/verge, and road side swales;
- Large lots with private septic systems; and
- Driveways with culverts.

Built Form (**Figure 4.3c**)

- Ontario Victorian/Gothic Revival style Bonnie Braes farmstead dwelling set back from the street edge;
- Bungalow, 1 ½ and 2 storey dwellings built over a period of 40+ years, in a variety of styles, generally with wide frontages and set back from the road; and
- Some active agricultural operations.

4.3 .2 Creditview Corridor - Principles

Proposed Character

Creditview Road frontage is designated Executive Residential. The City's "Design Workbook for Brampton's Upscale Executive Special Policy Areas" applies. The lot sizes along Creditview Road will permit a variety of creative landscape and built form configurations to enhance the streetscape.

General principles for the streetscape include:

- Creditview Road will be developed as a "heritage character corridor" integrating the existing hedgerow with the proposed street right-of-way;
- Road surface width will be maintained;
- Asphalt path will be on the east side;
- Hydro and street lighting infrastructure will limit impacts to existing trees and street light poles and luminaires will be compatible with the heritage character of Creditview Road;
- Maximizing the potential for preservation of existing vegetation, including natural areas, street trees, hedgerows, allees, orchards, and plantations;
- Providing a varied appearance to the landscape and built form;
- Utilizing rural-inspired architectural styles and elements, for example, Gothic Revival, and Georgian; and
- Maintaining road side swale.

Site Plan

- Establishing lot-specific setbacks, based on objectives of preserving existing trees;
- Where lots are not encumbered by existing trees, allow a 6m front yard setback for dwellings with a rear garage, or, a garage set 6m back from the front façade and a 9m front yard setback for dwellings with an attached garage facing the street that is at or near the front façade;
- Consolidating deep services, utilities and driveways to avoid disturbance to tree roots;
- Encouraging shared/mutual driveways;
- Providing driveways that are narrow (2.5 to 3m) where they cross the root zone of trees;
- Utilizing lot mixing and siting to minimize disturbance to existing trees; and
- Providing a continuous row of closely spaced, mature high-crown deciduous trees in a straight line where there are no existing trees adjacent to new development.

Vegetation Inventory/ Analysis

A more detailed analysis of the existing vegetation along Creditview Road has been completed. See Appendix 3.

Step 1 – Inventory and assess trees, and make decisions with respect to:
- Preserving them
- Hazards and potential aboriculture remediation, and
- Removing them.

This step will assess the likelihood of trees surviving the development process.

Step 2 – Tree preservation through careful planning of lot layout, and best management strategies such as:
- Underplanting
- Filling gaps where trees are removed, and
- Mixing species.

Step 3 – Develop guidelines for grading, utilities, driveways, and tree maintenance and remediation.

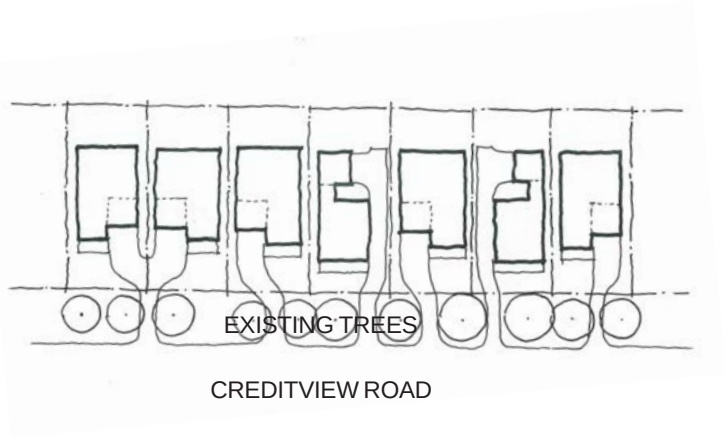


Figure 4.3d: Conceptual diagram illustrating 50' lots along Creditview Road

5.0 Open Space

Creditview Crossing contains significant areas of natural Open Space (See **Figure 5.0c** - Open Space Plan). Three parallel, green corridors with a north-south orientation, make Open Space and the multi-use pathway system accessible to each individual neighbourhood. In addition, each neighbourhood provides direct views to the valley with the majority of neighbourhoods containing one or more Open Space features, generally a park but also a stormwater pond, woodlot, and/or school.

Care has been taken in the placement of Open Space and design of the road pattern to ensure that they are highly visible, prominent features within each neighbourhood. The Creditview Crossing block plan yields a total of 5.3 ha (13.1 acres) of parkland. All proposed parks will be 0.6 to 1.3 ha (1.5 to 3.0 acres) in size, have dual street frontages (but preferably three) and may be located at the end of view terminus corridors under special circumstances. In achieving the City's required parkland service standards, a percentage of yield has been allocated against the parks planned for future reference. A breakdown of the projected supply of parks is as follows:

Approximate Proposed Development = 2600 units
Parkland Dedication Assumption = 1ha/ 300 units
Resulting Required Parkland = 21.4 ac
Parkland Required Based on 56% Provided = 12 ac
Actual Parkland Provided = 13.1 ac (61%)

The neighbourhoods are linked by three major north-south Open Space corridors. The western Open Space corridor is Springbrook Creek, the middle corridor is the Hydro Corridor and the eastern corridor is the Channel 8B valley. The Springbrook Creek corridor continues southerly and converges with the Credit River Valley in proximity to "Eldorado Park" to the west. The middle and eastern Open Space corridors can also be continued into the future residential communities to the south. The corridors are linked to the neighbourhood through the use of the sidewalk network to provide safe pedestrian circulation throughout the community and by multi-use pathways along the major arterial roads.

It is important to provide east-west pathway linkages across the valleys, linking to the adjacent street pattern. This will facilitate pedestrian movement betweeen transit opportunities, neighbourhoods and destinations such as schools, parks and the community centre.

Figure 5.0a: Existing pond within Creditview Crossing.

Figure 5.0b: Existing valley within Creditview Crossing.

5.0 Open Space

Refer to Appendix 1 for details on the pathways plan.

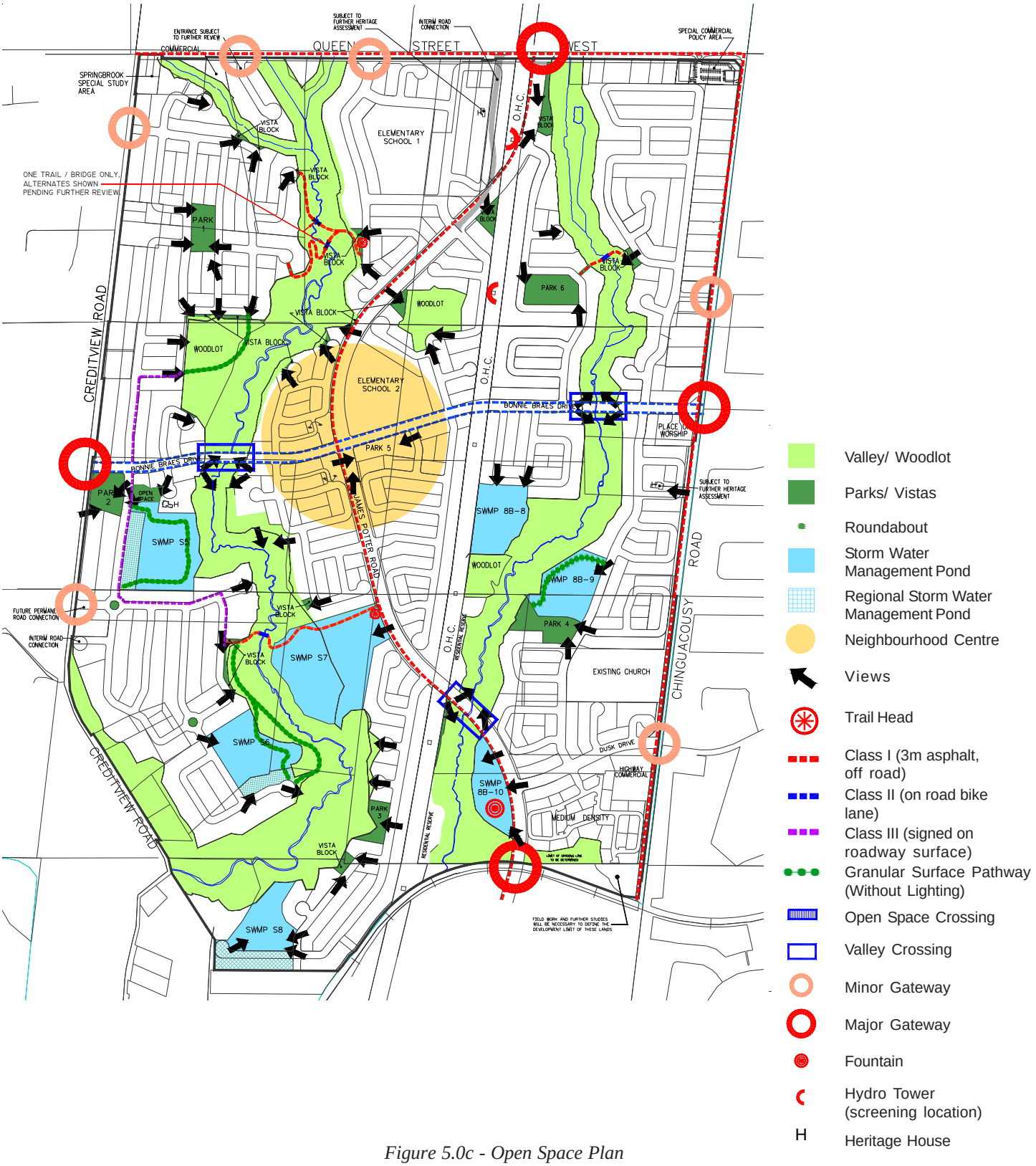


Figure 5.0c - Open Space Plan

5.0 Open Space

Figure 5.1a: Neighbourhood park with opportunties for active and passive amenity use.

Figure 5.1b: Opportunity for children's play area.

5.1 Parks

Parks are between 0.6 to 1.3ha (1.5-3 acres) in size. They are intended to function as local neighbourhood amenities, offer a variety of active and passive uses for residents to meet, play and relax (**Figure 5.1a**). General principles for parks may include:

- Conveniently located within or in close proximity to each neighbourhood.
- Located along key community streets with open street frontages.
- Well-defined and publicly visible.
- Located next to complementary land uses.
- Can provide connection between the street network and the Open Space system.
- Identify park entrances with the placement of low stone columns, park signage, decorative paving and accent planting. Locate bulb and perennial floral displays at park entrances in accordance with the City of Brampton Flower City Strategy.
- Provide opportunities for a children's play area (**Figure 5.1b**).
- Define focal areas with gazebos, decorative paving, seating or other elements.
- Provide lighted and paved pedestrian pathways connection to sidewalks.
- Provide an urban park edge to the street R.O.W. including canopy street trees at 15m O.C.

5.0 Open Space

5.2 Stormwater Management Ponds

Stormwater management ponds (SWMP) are distributed throughout the south half of the community as dictated by hydraulic conditions. These are visual features providing accessible gateways and lookouts into the Open Space network.

- Designed with formal urban edges, where adjacent to roads, to complement the streetscape transitioning to naturalized plantings beyond the street frontage zone.
- SWMPs will require a strong daffodil/perennial flowers presence in the visible areas of the pond block in accordance with the City of Brampton Flower City Strategy. The most desirable locations are on the upper slopes and tablelands of the pond embankment, particularly close to pathways and sidewalks.
- SWMPs located beyond the urban edge will include asymmetrical, freely arranged plantings (**Figure 5.2a**).
- All planting within the SWMP will be native. The SWMPs will be mowed periodically through the season above the extended detention elevation.
- All ponds shall have an organic, curvilinear form with naturalized planting design to blend functionally and visually into the adjacent valleyland.
- The Storm Water Management Ponds also provide inter-neighbourhood pathway linkage opportunities, as well as access to valleyland pathways.
- It shall be noted that stormwater managment ponds would potentially increase in size should they be required to contain the Regional storm flows. Refer to figure 5.0c for details.

Figure 5.2a:
Example of freely arranged plantings.

5.3 Naturalized Windows (Look-Outs)

Pedestrian Lookouts will be integrated at locations where valleylands, naturalized channels and storm water management ponds intersect streets. They are an integral part of the streetscape and Open Space experience providing viewing, seating and interpretive opportunities where significant natural amenities occur. The design of these areas begins at the street edge with an urban character. Materials may include decorative paving, natural stone walls and formalized planting of native plant material.

5.4 Pedestrian Network

Pathways for pedestrians and cyclists will be provided for the recreational and practical enjoyment of residents (**Figure 5.0c**). The intent is to create a comprehensive pedestrian network through the Creditview Crossing community, with linkage opportunities off-site to other communities and resources. Within the community, the pedestrian network will include public sidewalks, on-road pathways, and pathways within parks, stormwater management blocks, and the valleys where feasible, employing multiple classes of Brampton pathway standards.

The recommended pathways of the Pathways Master Plan (see Appendix 1) will be implemented where feasible:

- A Class 1 (off road) pathway within the rights of way of Queen Street West and Chinguacousy Road;
- A Class 1 (off road) pathway within the right of way of James Potter Road;
- Pending City of Brampton negotiations with the hydro corridor owners now or in the future, if feasible, a pathway within the corridor; and
- A Class 2 (on road) pathway, 1.5m width on both sides of Bonnie Braes Drive.

Individual neighbourhoods within Creditview Crossing tend to be long and linear pockets oriented in a north-south direction. The road network promotes pedestrian connectivity along sidewalks or pathways within the right of way in a north-south direction. A pathway is proposed within the Bonnie Braes Drive right of way to promote east-west connectivity and access to the community centre. Other opportunities for east-west connectivity across the valley corridors will be examined. This is important, for example, to provide access to transit, schools and neighbourhood parks, between neighbourhood pockets, and to provide convenient access between neighbourhoods and community resources.

5.4.1 Valley Pathways

The valleys tend to be steep sided, partially or completely wooded, with watercourses meandering across the bottom of the valleys. Given the various pathway performance standards and setbacks of the CVC, opportunities for long lengths of pathways within the valley are limited. The proposed pathway system has been walked with CVC and City staff to determine the feasibility of valleyland pathways. Further, long lengths of pathways in the buffer at the top of the bank, immediately behind rear yards, is also not desirable. Therefore a key role of pathways in the valley is to make east-west linkages across the valleys. Figure 5.0c illustrates the conceptual location of pathways. Field review has determined the feasibility of linkage.

Principles for valley pathways include:

- Provide linkages between neighbourhood pockets;
- Link with pathways in adjacent parks, vista blocks, woodlots and stormwater management facilities where possible;
- Link vista blocks or open spaces from one neighbourhood across the valley to a vista block or open space of another neighbourhood;
- Link with street sidewalks to facilitate pedestrian movement to destinations including the village centre, transit, school sites, neighbourhood parks, and churches;
- Minimize the length of top of bank pathways in the rear of lots, and minimize the impact of any pedestrian lighting on adjacent residences;
- Locate pathways to minimize environmental impact, to allow for economical construction and maintenance, and where they can be implemented providing safety and accessibility for pedestrians and cyclists;
- Provide bridge crossings where grading and disturbance to natural features can be minimized;
- Enhance trail head locations at street sidewalks which may include decorative paving, signage or entry markers, seating, lookout areas, and/or enhanced landscaping (refer to section 4.5 of the Open Space Design Guidelines);
- Ensure trail heads, bridges, materials, and lighting have a design theme consistent throughout the community; and
- Provide a minimum setback from the rear property line to the edge of the valley pathway.

5.0 Open Space

Figures 5.3a & b:
Photo and conceptual illustration of pedestrian bridges that provide linkages and visual interest.

Figure 5.5a:
View opportunity out into the Open Space landscape.

5.5 Views and Vistas

The Block Plan for Creditview Crossing provides many opportunities for views and vistas to Open Spaces as indicated on **Figure 5.0c** - Open Space Plan. Views and vistas enhance the visual quality of the community, create landmarks and are orientation devices within the community.

Vistas occur at points in the community that allow long or panoramic views along streets to Open Space features or from the street edge into the landscape (**Figure 5.5a**).

Views west from the topographic high point paralleling the hydro corridor could provide overview opportunities to Springbrook Creek valley.

View opportunities within the community include:

- Along key roads including James Potter Road, Bonnie Braes Drive and neighbourhood connector streets. As important community routes, the open views along them will help foster a green and open image for the community. Additionally, it provides many opportunities for pedestrian access to the open space system;
- Along edge streets, particularly Queen Street West and Creditview Road; and
- Periodically through neighbourhoods.

5.6 Woodlots

There are several existing woodlots in Creditview Crossing. Two smaller woodlots form natural extensions of the tributary 8B valley corridor, one woodlot occurs on the Springbrook Creek valley corridor, while a larger woodlot is located north of Bonnie Braes Drive between the Springbrook Creek and Tributary 8B Valleys. Refer to the Streetscape Design Guidelines section for additional information.

General Principles Include:

- Woodlots should be recognized as significant open space features and preserved and incorporated into the design of the community;
- The configuration of road patterns should be designed to allow public exposure to woodlots;
- Where woodlots are publicly exposed along a community spine or connector road, a formalized row of street trees should be planted to create an urban street edge;
- The design of woodlots shall comply with the City of Brampton's Woodlot Development Guidelines.

6.0 Street Network

The street network (see **Figure 6.0 - Street Network Plan**) is designed to ensure that the public realm provides ease of movement to destinations, orientation to special features and short block lengths.

Edge Arterial roads include Chinguacousy Road and Queen Street West.

- These roads define and delineate the 'edges' of the community and generally arterial roads have high traffic and noise levels;
- Require acoustic buffering for flankage lots and any rear lots;
- Flankage lots are proposed at entry roads into the community and these lots will provide locations for entry features combined with buffer planting to create distinctive gateways, community identity and character.

Spine Roads of the community are Bonnie Braes Drive and James Potter Road.

- Flankage lots abutting spine road require acoustic buffering;
- A good location for the multi-use pathway system;
- Allowance for on-street parking and biking; and
- Major gateways are located where spine roads meet boundary (arterial) roads.

Neighbourhood Connector Road/Green Connector Road

- Collector and/or local roads which connect neighbourhoods and Open Space blocks;
- They will focus on pedestrian comfort and visibility, and encourage walking through the community;
- Minor gateways will define the intersection of neighbourhood connector roads with the boundary roads; and
- Side lots abutting Neighbourhood Connector road require acoustic buffering.

Scenic Drives

- Roads that are adjacent to open spaces, including valleys, woodlots, view vistas, parks and stormwater ponds, designed for the viewing and enjoyment of the community's natural features and 'green' spaces;
- James Potter Road has views of open space at both the northern and southern major gateways to the community, as well as periodic open space views along it;
- Bonnie Braes Drive crosses both major valleys in the community;
- Various local roads provide views of open space at the end of the street, or along their edges;
- Parks have good exposure to roads within the community;
- Creditview Road characterized by a continuous row of mature street trees (Refer to Appendix 4 for details on the Creditview Road Study).

Local roads throughout the community will include the City's standard 17m, 20m and 23m road allowances. A boulevard tree planting hierarchy will be developed to reflect the hierarchy of local roads. In accordance with City requirements, light duty acoustic fencing will be provided for all flankage lots abutting 23m (or greater) road allowances. The design of privacy fencing will be coordinated with community mailbox screens and acoustic barriers to maintain continuity and reinforce visual identity and character.

6.1 Open Space Crossings

Road crossings are proposed for Channel 8B, Springbrook Creek and the Hydro corridor. It is expected that pedestrians and cyclists will utilize these locations as part of the Open Space experience. The community experience for vehicular traffic is also enhanced by the view from these crossings. These locations warrant an upgraded urban design treatment, which will be developed as part of the Community Design Guidelines.

6.2 Public Transit

James Potter Road and Bonnie Braes Drive will likely be the key transit routes providing neighbourhood linkages in the community. Convenient transit stop locations coupled with an efficient transit supportive street network assist in creating more intimate pedestrian-friendly streetscapes within the community.

- Road network which facilitates transit along the spine roads and along connector roads meeting Brampton Transit policies that provide linkages through each neighbourhood;
- A mix of uses along key transit routes including institutional, live/work, and higher density residential;
- Ensure effective integration with adjacent transit services;
- Pedestrian amenities should be considered at transit shelter locations, such as benches, trash receptacles, newspaper boxes, street trees and lighting;
- Signage should clearly identify the location of transit stops and comply with the City of Brampton design standards;
- Transit stops and transfer locations should be strategically located to minimize walking distances to destinations and facilitate convenient neighbourhood access;
- Transit routes should support transit connectivity and promote neighbourhood ridership;
- Continuous sidewalks shall be provided along all transit-supportive roads (t.b.d. on Creditview Road);
- Transit stops should be located within the public right-of-way and allow direct pedestrian accessibility, including for persons with disabilities;
- Consider incorporating a waiting area to building entrances in non-residential buildings directly abutting transit stops;
- Ensure community center is well-served by transit stops;
- There should not be on-street parking along the bus stopping area; and
- Ensure bike routes are marked appropriately for rider safety at transit stops.

6.0 Street Network

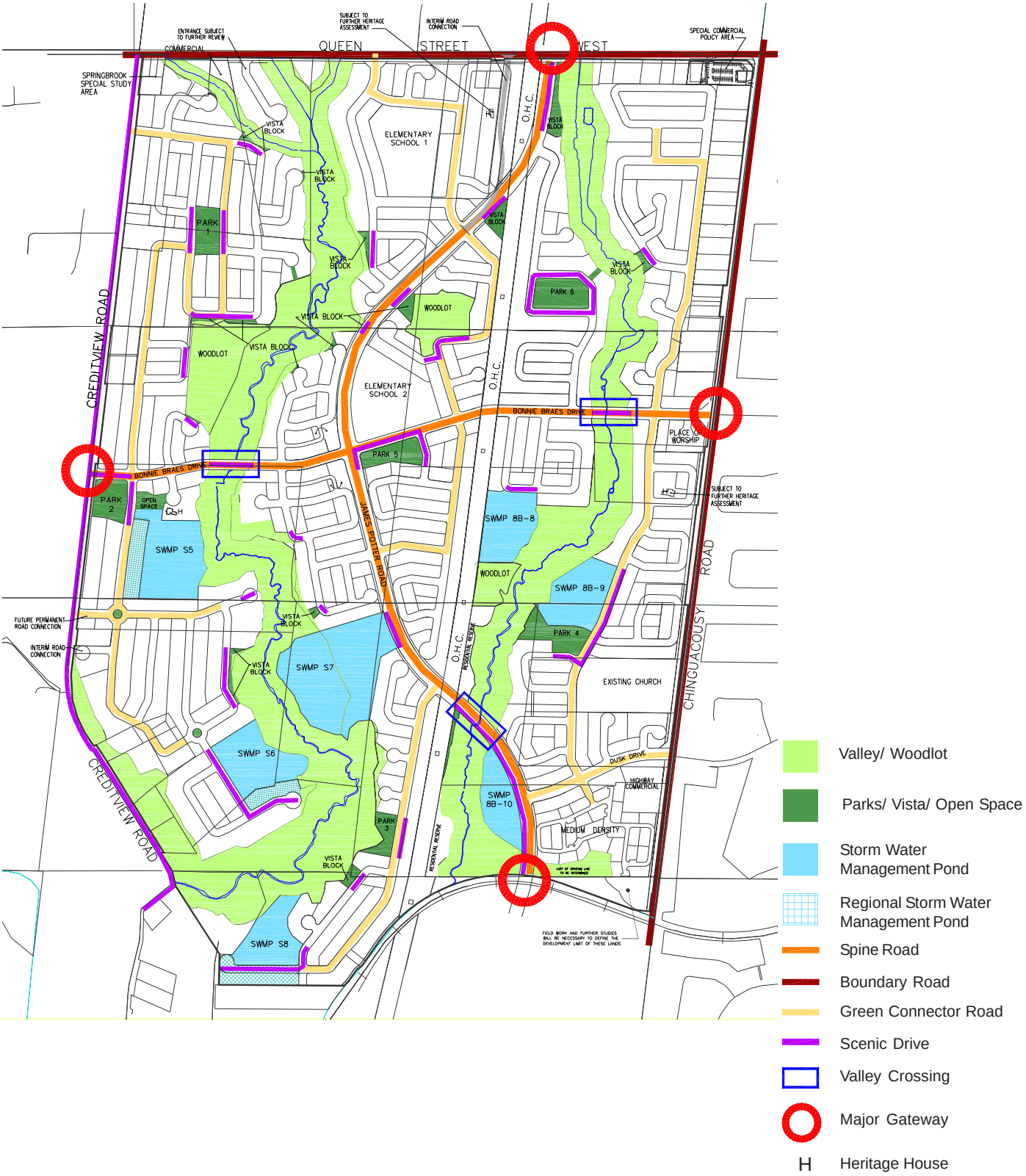


Figure 6.0 - Street Network Plan

7.0 Streetscapes

Streetscape includes the integration of architectural elements with street furniture such as lighting, fencing, mailboxes, etc. as well as landscape elements such as boulevard trees and other plantings (**Figure 7.0a**). The arrangement of streetscape elements must conform to the City of Brampton Streetscape Master Plan. The combination of streetscape elements serves to:

- Provide a unifying element to the community while providing visual interest and variety;
- Provide shade and create a comfortable environment for pedestrians;
- Contribute to the character of the community and neighbourhoods; and
- Aid in wayfinding that delineates street hierarchy.

The design and specification of streetscape elements will be developed in more detail during the preparation of the Community Design Guidelines, which will include Streetscape Design Guidelines and Architectural Control Guidelines. Street profiles will address the emerging standards for regional and local roads.

Figure 7.0a:
Appropriate integration of street elements and architectural elements create an attractive, well-defined streetscape.

8.0 Edges and Gateways

Community edges provide the interface with adjacent land uses and adjacent communities. Landscape Elements are combined along Community Edges in various ways to define the extent of the community. These edges act as visual screening and acoustic protection for the residential lots, as well as screening and softening architectural elements as viewed from the road. The Community Edge also provides the initial aesthetic definition of the community and should demonstrate continuity of design, and visual image. Refer to Part III, section 2.0 for design details.

Figure 8.2a - Major Gateway Feature

8.1 Window Street Buffers

Window street buffers are required where local service roads are parallel to major arterial roads, such as along Chinguacousy Road and Queen Street West. These buffers provide physical and visual separation between the two streets while affording views into the community (refer to Part III, section 2.2 for details).

A 1.2m high black vinyl chain link fence is to be provided between the local street and the arterial road and between local streets and James Potter Rd. with periodic openings for sidewalk access. Pillars will be provided to flank the sidewalk openings. Planting shall be a mix of coniferous and deciduous trees and shrubs in continuous mulched beds. Shrub planting should occur on both sides of the chain link fence. The buffer will exhibit a strong presence of flowering shrubs in accordance with the City of Brampton Flower City Strategy. Also, these buffers are to contain floral displays consisting of bulbs and perennials, in front of shrub plantings or between shrub clusters. Ornamental grasses may also be included in buffer blocks.

Figure 8.2b - Major Gateway Feature

8.2 Gateway Features

Gateways identify the community at its major entrances from the arterial boundary roads, which are: Queen Street West, Chinguacousy Road and Creditview Road. The design of gateway features is intended to provide visual interest and identity for the community.

(a) Major gateway features will be provided where boundary roads and spine roads intersect. This occurs at four locations **Figure 6.0**. These locations will be identified by significant planting and built landscape features.

(b) Minor gateway features may be provided where other roads intersect with boundary or spine roads. They will be smaller in scale than the major gateway features but will incorporate the same materials and similar design.

Gateways should coordinate the design materials and colour of the built form landscape and built elements. Gateway feature design and hierarchy will be developed as part of the Streetscape Design Guidelines and may incorporate pillars, walls, decorative metal fencing, natural stone and planting. The design of gateway features shall incorporate the City of Brampton's "signature" coping and provide a space for the City's "rose" logo along with the "City of Brampton" shown below the "Creditview Crossing" name.

The planting at gateway features is to contain a significant amount of flowering bulbs, perennials and grasses to augment the woody plants in accordance with the City of Brampton Flower City Strategy. A 25mm copper water supply and irrigation system is also required for each gateway feature. The control box for this irrigation system is to be located in a grass covered area to facilitate maintenance access.

Figure 8.2c - Major Gateway Feature

9.0 Site Planning and Built Form

Built form within Creditview Crossing will play a vital role in establishing a positive overall community image. The design and siting of new buildings which help create interesting streetscapes and demonstrate a high standard of quality is essential in generating an active and comfortable living environment. Objectives for site planning and built form within the community are:

- To establish and maintain a consistently high level of architectural design quality for new buildings in the community;
- To establish the image and identity of the community through building architecture;
- To create pedestrian-scaled, visually appealing and varied streetscapes and public spaces through the appropriate design and siting of new buildings (see **Figure 9.0a**);
- To reinforce the structure of the community and emphasize the importance of landmark buildings at focal locations; and
- To ensure compatible interfaces between neighbouring and adjacent development/built form.

Figure 9.0a:
Appropriate integration of streetscape elements and built form create a pedestrian friendly private and public interface.

9.1 Design Principles for Residential Development

The predominant residential built form throughout the Creditview Crossing community will be single detached dwellings. Other residential forms will include semi-detached dwellings, street townhouses and condominium townhousing. Special housing opportunities also exist in the Community Centre including low-rise apartments, laneway townhouses, special townhouses, and live-work townhouses. Design principles for these special housing types can be referred to in Part IV Architectural Design Guidelines. The following design principles will apply for the balance of the community:

- A variety of lot sizes, building types and architectural styles will be required to contribute to attractive streetscapes and to avoid visual monotony and repetition. These shall be mixed within streetscapes;
- The relationship between buildings and the street shall result in a well-defined street edge which reflects the scale of the street while providing diversity of built form and architectural expression;
- Individual buildings within a street block shall combine to create visual harmony. This can be reinforced through the use of complementary materials, colours and architectural elements;
- Variety among housing forms, including massing, façade and roof line, is encouraged within each neighbourhood and streetscape;
- Neighbourhoods within the community will be encouraged to develop individual identities in order to create a sense of place for residents and visitors. This can be achieved through the co-ordinated use of distinctive architectural styles;
- Building designs shall respond to their location, site orientation, grading conditions and view;
- Corner buildings shall respond to both street frontages with a frontal appearance;
- High quality facades will be provided where exposed to public realm areas, such as parks, open spaces, schools and storm water management facilities;
- Garages shall have a reduced visual presence to ensure dwelling facades and landscaping, rather than garages and driveways, dominate the streetscape;
- Large, usable front porches are encouraged to provide a pedestrian-friendly interface between the private and public realms;
- Intensified residential densities shall occur at focal nodes within the community to promote active street life; and
- Appropriate transitions in the scale, form and architectural style of adjacent buildings shall be provided.

9.0 Site Planning and Built Form

9.1.1 Creditview Road

Creditview Road Dwellings front onto Creditview Road and will require special design consideration to reinforce Creditview Road as a 'scenic country lane'. All dwellings within this area are designated as Executive Residential and should have generous lot frontages and front yard setbacks. Dwellings should promote a distinct, high quality rural heritage character compatible with development envisioned within the Springbrook Settlement Area and with the proposed residential development along Creditview Road north of Queen Street West within the Springbrook Community (CVSP Sub Area 2). Architectural styles, materials and colours appropriate for dwellings on Creditview Road should be derived from Old Ontario rural vernacular influences such as Gothic Revival, Georgian and Victorian (see **Figures 9.1a, 9.1b, 9.1c**).

Figure 9.1a

Figure 9.1b

Figure 9.1c

Figure 9.1a, 9.1b, 9.1c: Dwellings sited along Creditview Road will have a high quality rural heritage character compatible with the Springbrook Settlement Area.

9.0 Site Planning and Built Form

9.1.2 Housing Character

The Housing Character Areas noted below provide general guidance for housing densities, lot sizes and built form characteristics within the community. The limits of these areas are conceptual only and are intended to be flexible. See **Figure 9** - Residential Typology and Land Uses Plan for locations of housing character areas with the Creditview Crossing Community.

Character Area 1
Executive Residential

Housing along the western edge of the community is designated Executive Residential (see **Figure 9** - Residential Typologies and Land Uses Plan). The requirements stated within the "Design Workbook for Brampton's Upscale Executive Special Policy Areas" shall apply. This area should contain single detached dwellings on lots having minimum frontages of 50', whereas lots fronting to Creditview Road shall have 60' frontages minimum. Most dwellings will have 2-car garages, with 3-car garages permitted on 60'+ lots. The natural beauty of the Springbrook Creek ravine, coupled with the existing 'country lane' character of Creditview Road make this an ideal setting for upscale executive housing. The character of housing in this area should present a distinct image. The use of traditional architectural styles derived from the classical period of architecture (Georgian, Tudor, Victorian) will be encouraged. For housing fronting onto Creditview Road, refer to design objectives noted in Part IV, Section 9.1.1 - Priority Lot Dwellings.

Character Area 2
High Quality Housing (Low Density 1 Residential)

Housing located between the Executive Residential and Springbrook Creek / O.R.D.C. rail line in the western and southern portions of the community is designated Low Density Residential 1 (see **Figure 9** - Residential Typologies and Land Uses Plan). This area is suitable for single detached dwellings on lots having minimum frontages of 30' and where adjacent to executive residential areas minimum 50' frontages, and where adjacent to primary valleys 40' minimum frontage as set out by OPA 93-282. Most dwellings will have 2-car garages. The character of housing in this area should reflect similar design criteria to that of the neighbouring Executive Residential in Area 1 to ensure visual compatibility. Housing in Area 2 will act as a transition between the Executive Residential and other areas of the community.

Character Area 3
Mixed Housing Types (Low Density 2 Residential)

The majority of housing within the community is designated within the City of Brampton's Official Plan as Low Density Residential 2 (see Figure 9 - Residential Typologies and Land Uses Plan). These lands lie east of the Springbrook Creek and will contain a mix of single-detached, semi-detached and street townhouse dwelling types on a range of smaller lot sizes. Architectural design variety and enhanced building facades will contribute to the goal of achieving attractive and safe streetscapes within the community. Narrow frontage single-detached dwellings, townhouses and semi-detached dwellings should have single-car garages. Wider single-detached dwellings on wider lots within this area may have 2-car garages. Where lots abut primary valleyland, minimum lot frontage shall be 40' as set out by OPA 93-282.

Character Area 4
Medium Density Housing (Low Density 2 Residential)

Medium density residential uses add to the housing options provided within the community. Medium Density housing shall be permitted within Character Area 4 (see **Figure 9** - Residential Typologies and Land Uses Plan). Within this area, residential typologies may include townhouse dwellings. Intensified residential development areas should occur along major roads within the community (such as the intersection of James Potter Road and Bonnie Braes Drive) or along Chinguacousy Road to take advantage of the proximity to public transit. At the intersection of James Potter Road and Bonnie Braes Drive, medium density housing in the form of live/work, apartments, and laneway based semi-detached housing may be permitted. The emphasized scale, massing and height of medium density housing shall contribute to the diversity of streetscape character and built form within the community.

9.0 Site Planning and Built Form

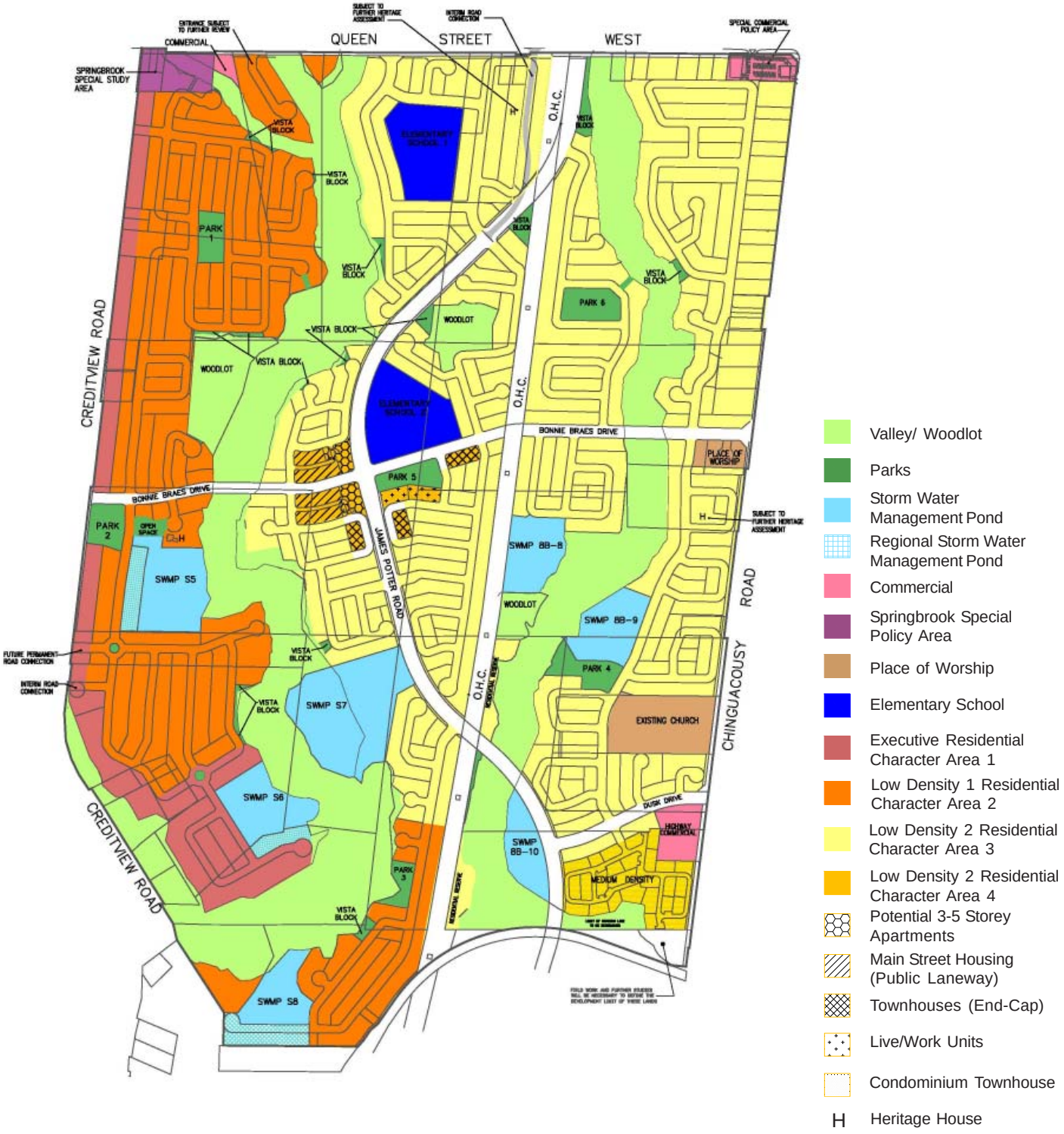


Figure 9 - Residential Typologies and Land Uses Plan

9.1.3 Priority Locations

Priority locations are streets, lots, buildings, elevations and private yards for all land uses that are located in positions of high public exposure or form the terminus of a view corridor. Given their prominence within the community, buildings sited on priority lot locations shall be designed to ensure that the strong character of the community is expressed.

Special consideration shall be given to a variety of design elements including building siting, unit and garage design, façade treatment, materials and colours, and opportunities for landscape elements. Refer to the Figure 9B Priority Locations Plan.

The architecture design principles associated with each of these priority lots will be further defined in Part IV of the Architectural Control Guidelines. This includes further definition of priority lots based on their location within the community, for instance, differentiating major and minor gateways, and establishing important streetscapes. Interpretation and application of these guidelines will occur through a privately administered Design Review Process.

Gateway Houses
Buildings located at the entrance(s) of a community represent special opportunities to emphasize the "sense of entry or arrival". This can be achieved with special designs that address the high level of public exposure, which reflect the architectural character of the community.

The design of Gateway Houses should be coordinated with any adjacent community gateway landscape design and treatment, in terms of main entry location and design, placement of windows, vernacular, exterior materials and colours. Gateway Houses are to feature distinctive architectural elements, such as turrets or tower features, prominent gables, and projecting bays.

Corner Lot Houses
Corner Lot Houses are characterized by their exposure to two street frontages, which permits a variety of main entry and garage access configurations.

Special unit designs for corner lots are encouraged to take advantage of the opportunities for the plan and the level of exposure. The design of Corner Lot Houses is to provide a consistent level of detailing on all publicly exposed elevations. The flankage and rear elevations should provide sufficient fenestration. The use of wrap-around porches is encouraged.

'T' intersection Houses
'T' intersections occur where one road terminates at right angle to another. At these locations, the buildings at the top of the 'T' intersection are framed by the two corner lots flanking the terminated road, and form the end of a view corridor.

Careful considerations should be given to the selection of houses that de-emphasize the presence of the garage, and driveway locations that favour a larger area for landscaped treatment in the front yard.

Elbows Street and Cul-de-Sacs
On elbowed or cul-de-sac streets, special opportunities exist on the outside or visually highlighted side of the road-bend to create a special grouping of buildings. The grouping of buildings occurring at the end of a view corridor should consider the selection of houses that de-emphasize the presence of the garage.

Houses Adjacent to Open Spaces or Public Thoroughfare
Buildings adjacent to open spaces or a public thoroughfare shall present a consistent level of architectural detailing and fenestration, in the design of all publicly exposed elevations.

These publicly exposed elevations should introduce sufficient fenestration and consider design elements such as proportion, wall plane, roofline, materials and massing.

9.0 Site Planning and Built Form

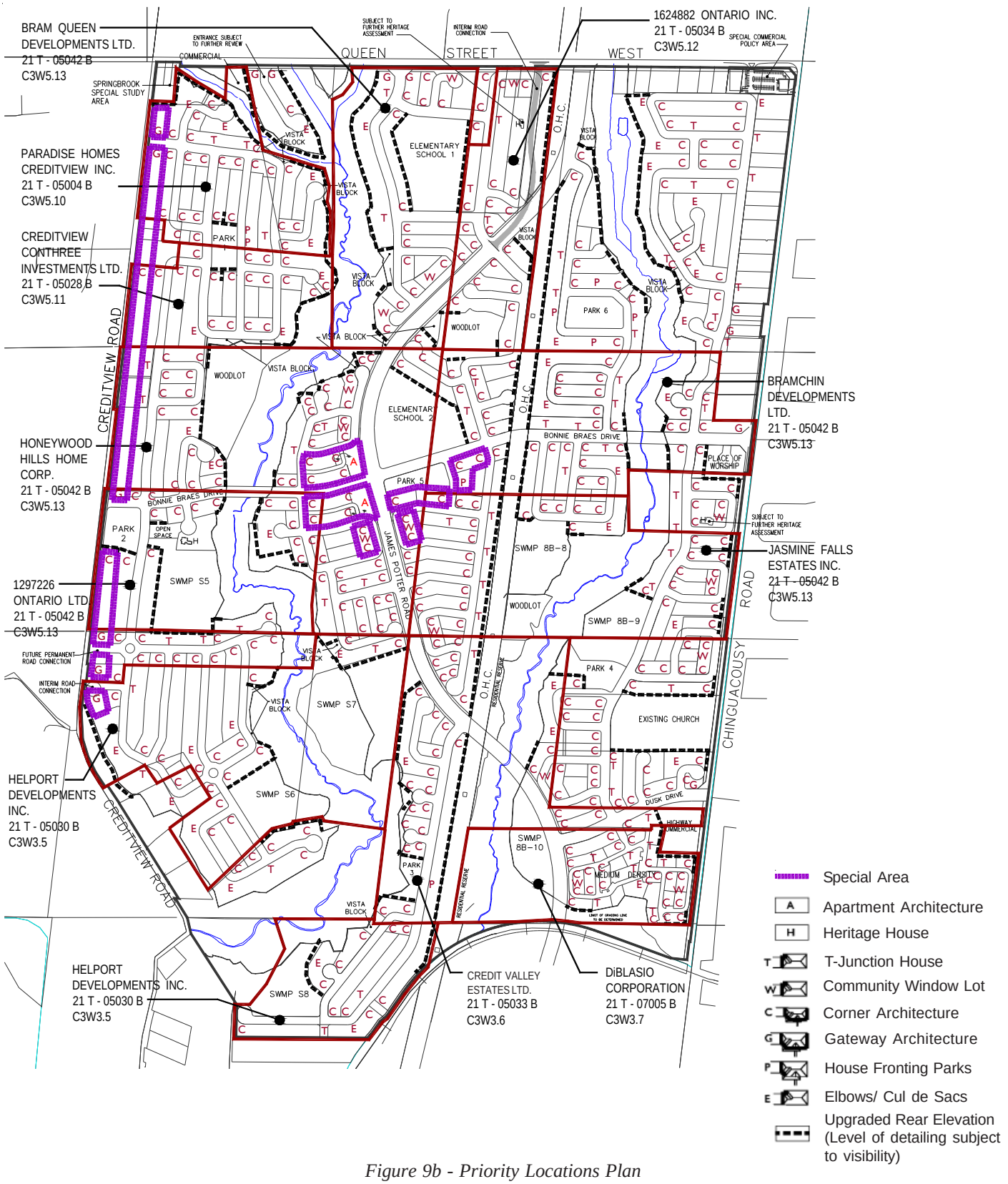


Figure 9b - Priority Locations Plan

9.2 DESIGN PRINCIPLES FOR NON-RESIDENTIAL

Non-residential buildings, such as schools, places of worship and commercial buildings, play an important role within the community by functioning as landmark buildings. The following design principles will apply for non-residential buildings within the community:

- Non-residential development should occur in strategic locations within the community on appropriately scaled development blocks;
- To maintain architectural unity throughout the community, non-residential buildings should incorporate design elements and materials compatible with the dwellings;
- Non-residential buildings should reflect high quality designs and durable materials compatible with the character of the community;
- Buildings should be set close to the street with the primary façade parallel to the roadway to appropriately address, define and relate to the adjacent street frontages;
- Scale, height, massing and roof form should be compatible with the importance of the adjacent street while retaining a human scale to encourage pedestrian activity;
- Intersections should be emphasized as focal points through the placement of buildings and other built elements to 'frame' the intersection. Corner buildings should be massed toward the intersection and address both street frontages;
- Visually stimulating design features should terminate a view corridor. This may be achieved through building location, landscaping or architectural treatment;
- Main entrances should be oriented to the street and serve as focal points for the building;
- A variety of building materials, textures and colours, compatible with neighbouring residential buildings, should be provided to add visual interest to the streetscape;
- Parking areas should be located away from the street and be appropriately screened;
- Service areas and mechanical equipment should be located away from public view and screened;
- Distinctive roofscapes are required through the appropriate use of gables, parapets or pitched roofs, where appropriate; and
- Buildings should be designed and sited to allow for pedestrian permeability by avoiding large, uninterrupted and impenetrable walls.

9.3 Architectual Control

The "Architectural Control Guidelines for Creditview Crossing community (CVSP Sub-Area 5)" are provided with the Community Design Guidelines as one comprehensive document (see Part IV). The Architectural Control Guidelines provide detailed design criteria which builds upon the principles and concepts established within this Block Plan.

A privately-administered architectural control process will be undertaken for all land uses including residential, commercial, and institutional within the community prior to sales and building permit approvals. Non-residential, multiple-family and mixed-use developments will also be subject to a site plan approval process administered by the City.

10.0 Summary

The community described as Creditview Crossing is part of the Credit Valley Secondary Plan area, which is a new development area within the City of Brampton. These lands are to be developed as a comprehensively planned and coordinated residential community. Since this community is composed of numerous independent landowners, adherence to these guidelines is critical to ensuring design continuity and visual coherence.

The community structure is established primarily by the linear north-south Open Space corridors created by Springbrook Creek, Channel 8B watercourse and the hydro corridor. James Potter Road strengthens this linear north-south system. These north-south linear systems tend to define neighbourhood edges. The distribution of Open Space nodes within neighbourhoods provides accessibility to open space at the local level while the location of community features at highly visible intersections and along arterial routes provides a focus for community activities.

Design Objectives Include:

- To generate a consistent high quality streetscape image through appropriate lotting, road configuration, and housing type;
- To provide a successful mix of housing opportunities through innovative housing types;
- To maximize and enhance view vistas and corridors in the community;
- To integrate Open Space features as community amenities;
- To preserve and enhance natural features where possible; and
- To create special features in the community by appropriately siting a variety of uses that foster a unique identity.

Figure 10a: Parks are focal points within neighbourhoods.

Figure 10b: Natural features are preserved and enhanced as community amenities.

Figure 10c: Pedestrian friendly streetscapes will have varied architecture.

10.0 Summary

A neighbourhood centre is created by a mix of open space, commercial, institutional and higher density residential land uses to generate a unique core to the community. This will be the physical and symbolic heart of the community. The vibrant and active core is supported by a variety of uses that have a positive relationship with each other. Buildings are located to reinforce the pedestrian nature of the community to allow maximum accessibility to local community services and interconnected Open Spaces.

Development around the Bonnie Braes heritage precinct, and the Creditview Road heritage corridor builds upon and enhances existing historic landscape and built form characteristics to create special locations in the community. Built form along Creditview Road will complement the Springbrook Settlement Area through architecture that is characteristic of Old Ontario rural vernacular. Additionally, the character of each of these areas will inform the broader community around them.

This Block Plan design document has been prepared to comply with the requirements and design principles as set out in the Official Plan and the Credit Valley Secondary Plan. The Plan for Creditview Crossing is the result of a comprehensive and iterative process involving all stakeholders. This document is to be read in conjunction with the Environmental Implementation Report, which incorporates technical reports and recommendations of all other consultants involved with the Block Planning Process.

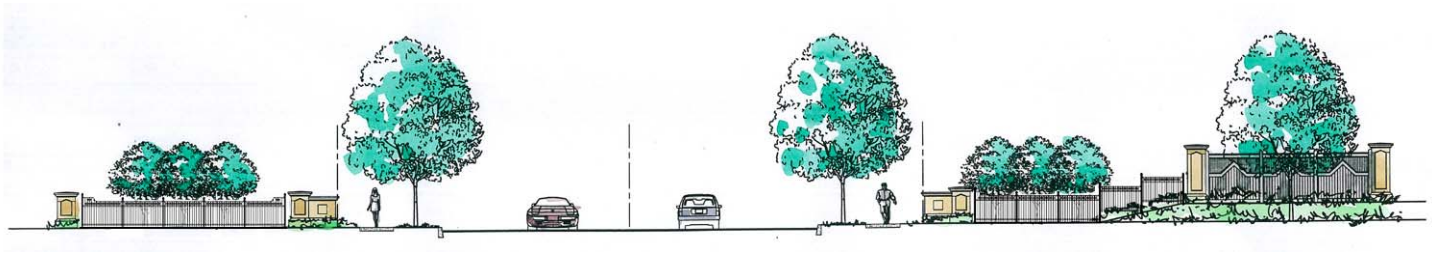
The design of streetscape elements, the Open Space network and the built form is developed in more detail in the Open Space Design Guidelines Part III and Architectural Design Guidelines Part IV as one, comprehensive document. As indicated in the Secondary Plan, the Community Design Guidelines are required prior to Draft Plan Approval of the individual Plans of Subdivision within the Block Plan area.

Figure 10d, 10e, 10f: Examples of proposed neighbourhood centre is created with mixed residential, institutional, and live-work units.

Figure 10d

Figure 10e

Figure 10f



PART III

Open Space Design

1.0 Introduction

These open space design guidelines have been developed for Creditview Crossing as part of the Stage Two approvals for the Credit Valley Secondary Plan Sub-Area 5 Block Plan. They build upon the Block Plan Design Report. This part of the document establishes a design language and images for hard elements and direction for design of the community's soft landscaping. It reinforces the vision for the community, through public realm and built form elements that respect the site's existing natural, heritage and cultural features. These guidelines will assist in subsequent stages of development including Draft Plans of Subdivision, Conditions of Draft Plan Approval, Site Plan Approval, and detailed design of engineering, landscape and architecture. These guidelines should be read in conjunction with the Block Plan Design Report, and applicable municipal regulations and policies.

This is one of the three interrelated parts to the Community Design Guidelines:

1) Block Plan Design Guidelines, that establishes the overall community vision (Part II);
2) Open Space Design Guidelines, generally applicable to the public realm, including public streets and spaces (Part III); and
3) Architectural Design Guidelines, applicable to the private realm, including residential lots and other development blocks (Part IV).

This part of the guideline supports the City of Brampton's design initiatives such as:

- The Gateway Beautification Program;
- Flower City Strategy;
- City's Six Pillars;
- Brampton Planting Guidelines;
- Pathways Master Plan;
- Development Design Guidelines;
- Clean and Green Strategy;
- Stormwater Management Master Plan;
- Parks, Culture, and Recreation Master Plan;
- Street Corridor Master Plan;
- Brampton's Upscale Executive Special Policy Areas Workbook; and
- Brampton's Accessibility Technical Standards.

Design guidelines contained in this document will reinforce the following objectives:

- A desired urban form throughout the community, open space system, street network, streetscape, edges and gateways, site planning and built form;
- Highlighting special features of the community and providing design direction for each component;
- Illustrating the City of Brampton's design initiatives;
- Providing a strong foundation for subsequent stages of design and development approvals; and
- Ensuring that all residents of Brampton can live in a barrier free environment, including full access to all City buildings and shall promote barrier free access to private buildings and facilities and enforce provisions of the Ontario Building Code related to barrier free access.

1.0 Introduction

* Trails Classification
Class I - 3m wide asphalt pathway, off road with night lighting
Class II - on road designated bike lanes
Class III - signed route on roadway surface

Figure 1.0a Community Structure Plan

2.1 Arterials (Boundary Roads)

The arterials that form a part of the community's edges are Queen Street West to the north, Chinguacousy Road to east, and Creditview Road to the west. These boundary roads should be designed to reflect the local character of the community. The design of landscape elements are drawn from the existing characteristics of the Bonnie Braes Farmstead by using simple precast columns and piers combined with heritage inspired decorative metal fencing, see Figure 5.1a.

Characteristics:

- Tall precast concrete piers integrated with acoustic and decorative fencing where appropriate;
- A minimum 4.5m buffer provided at rear lot and flankage lot locations along arterial roads and 3.0m buffer provided at window streets;
- Provide larger street trees in accordance with the City's requirements;
- Arterial street buffers to exhibit strong presence of floral displays in accordance with City of Brampton's Flower City Strategy;
- Effective visual screening and acoustic protection for residential lots.

The existing nature of the surrounding arterials is quite varied. Creditview Road is lined with large mature shade trees and areas on the west side exhibit a quiet country atmosphere.

Creditview Road has been designated as a heritage preservation corridor to preserve and enhance its rural character. Its principal attribute is an existing hedgerow of large deciduous trees on the east boulevard. The hedgerow species, condition and sizes are quite varied, see Arborist's Report Appendix 3E.

To maintain the heritage corridor, Creditview Road will retain its rural ditched profile, without curbs and sidewalks and conventional street lighting. Driveway culverts, a narrow road surface, an asphalt trail, and traffic calming solutions incorporating raised intersections, stop signs, and road narrowings will be implemented. A new City of Brampton heritage street light and post will also be implemented on the west side of Creditview Road. Refer to Appendix 4 for additional information.

Extensive deliberations and discussions have occurred with the Region, City, and franchise utility providers to service lots fronting to Creditview Road and yet maintain the trees. Similar discussions have occurred with home builders to develop processes and construction practices to preserve the existing trees.

Queen Street West is quite varied. The Springbrook settlement area includes highway commercial uses, convenience commercial and residential. The south side of Queen Street West includes a variety of residential lots and houses of varied vintage, scale and aesthetics, as well as greenhouse/ farm gate sales operations.

The east side of Chinguacousy Road is relatively recent (15 to 20 years old), rear lotted and suburban residential in character. The west side transitions from mixed residential/ commercial uses at the north, recent institutional (church) development in the middle, to transitional agricultural uses in the south.

Much of Queen Street West and Chinguacousy Road frontages of this block are currently developed. Careful integration of proposed community edge treatment and existing development is needed.

2.0 Edges and Gateways

2.2 Street Buffers

- Arterial buffers to provide visual screening and acoustic protection for residential lots;
- Exhibit strong presence of flowering shrubs, perennials and bulbs in accordance with City of Brampton's Flower City Strategy; and
- Direct frontage lots are feasible along Creditview Road, building setbacks shall include the existing trees in their entirety. Tree protection zones, as established by arborists, shall be established, fenced, and protected throughout the construction phases.

Window Street Buffers

- Deciduous and coniferous planting along street buffer;
- Flowering shrubs to support City's Flower City Strategy;
- Minimum one walkway connection provided for pedestrian access to public sidewalk along arterial road;
- One low precast column to flank either side of pedestrian walkway connection; and
- 1.2m high black vinyl chain link fence to separate local street and arterial road.

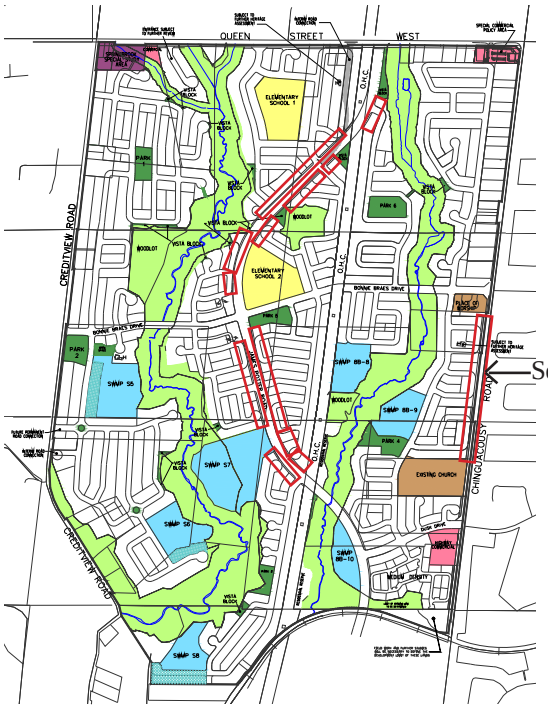


Figure 2.2a - Key Plan (Window Street & Flankage Lot Buffers)

Flankage Lot Buffers

- Acoustic fence along flankage lot lines and one tall masonry pier at each end of acoustic fencing; and
- Deciduous and coniferous planting and bulbs, perennials and flowering shrubs per current City initiatives along buffer edge.

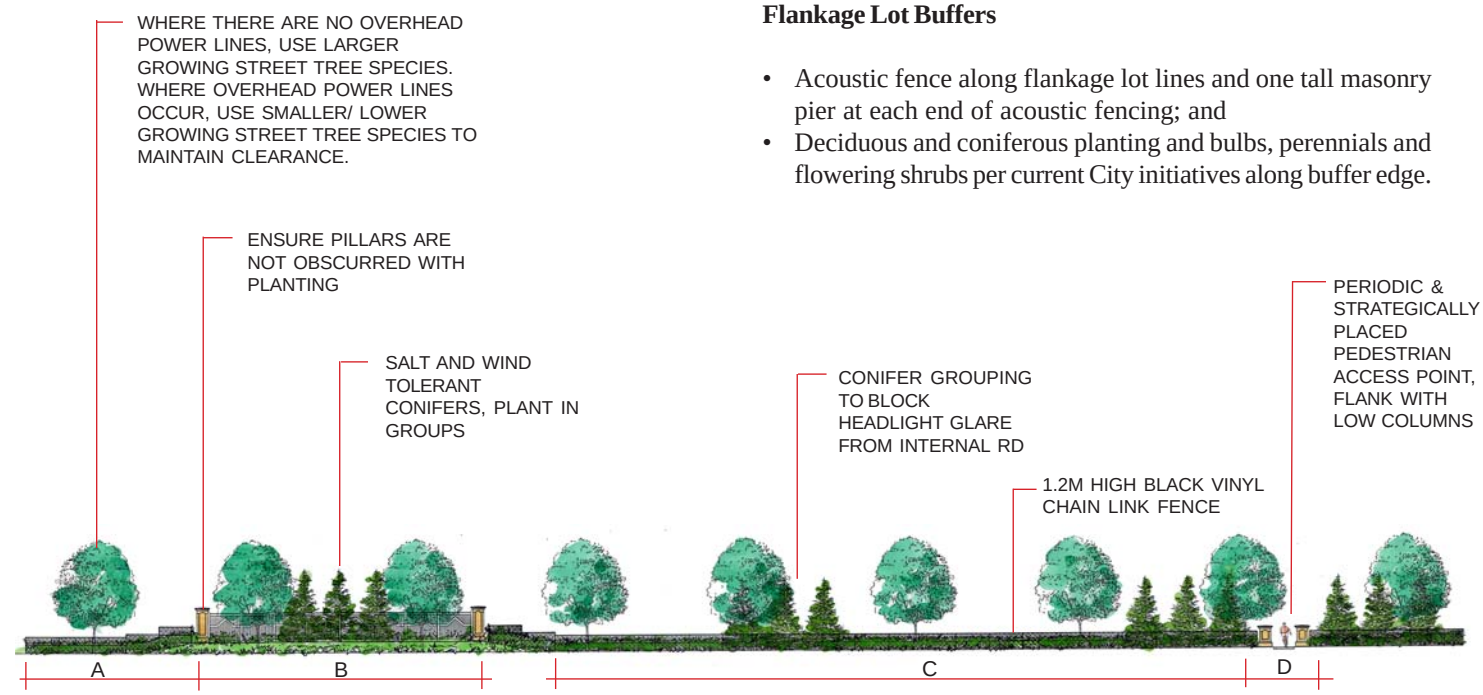


Figure 2.2b - Street Buffers Elevation
(see Appendix 6 for larger scale elevation)

2.2 Street Buffers

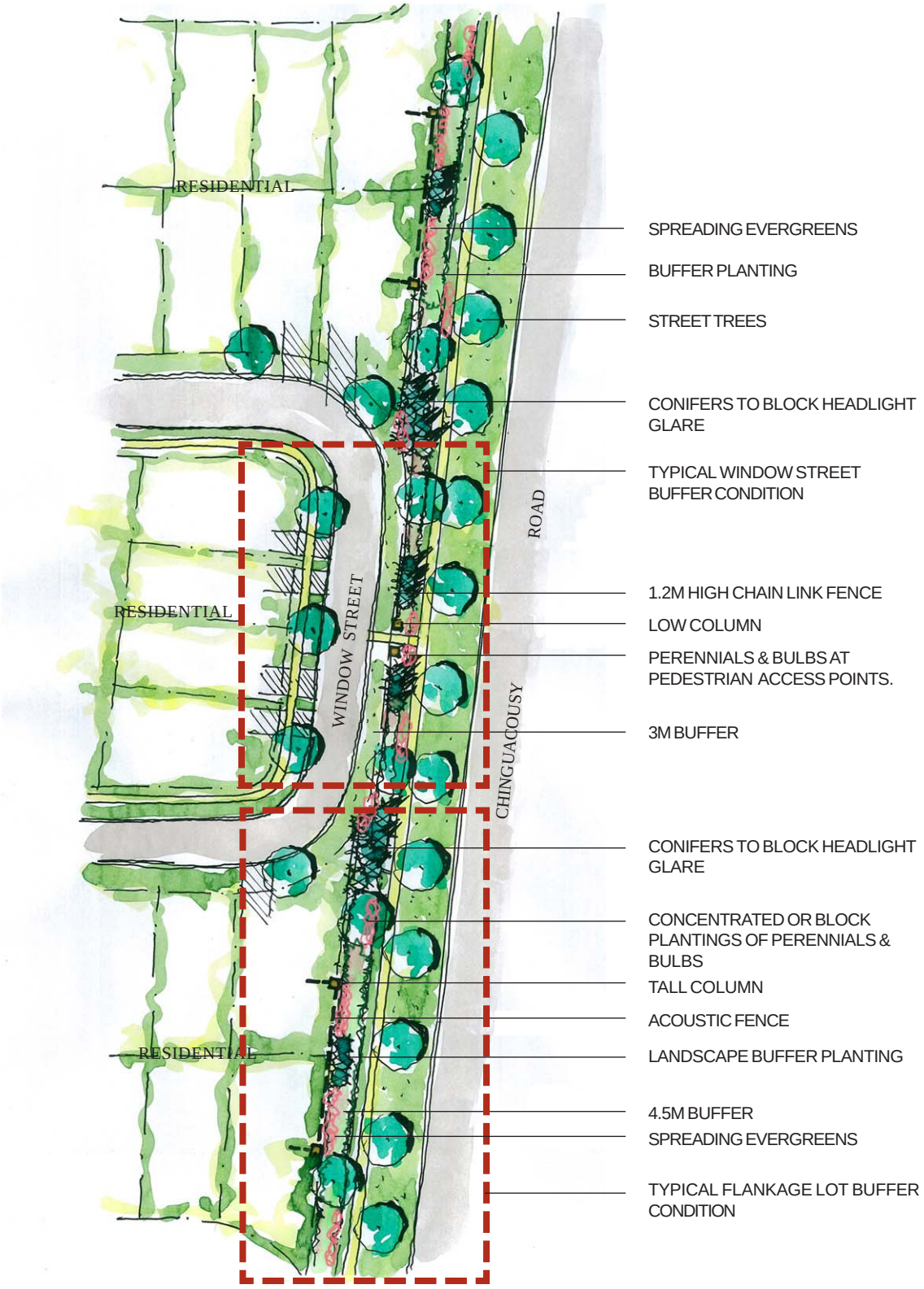


Figure 2.2c:
Community window street buffer concept plan.

2.0 Edges and Gateways

2.3 Major Gateways

Primary community gateways provide a first impression of the community by establishing a community character through form, material, and colour that establishes a language of elements for the entire neighbourhood. There are four major gateways within the community: at the intersection of Creditview Road/ Bonnie Braes Drive, James Potter Road/ Queen Street West, Chinguacousy Road/ Bonnie Braes Drive, and James Potter Road/ Railway. Elements of design include built form, fencing, hard elements and soft landscaping that reflect a heritage inspired character. The City of Brampton's signature coping will be exclusive to major gateway entry features.

Characteristics Include:

- Effective during all seasons with hard elements and vegetation with winter interest;
- High-quality, stately image achieved through decorative columns and fencing;
- Defined sense of arrival for vehicles and pedestrians;
- Lush plantings, varied heights, textures and colour;
- Low columns with wing wall at entry features allow for the incorporation of the City of Brampton's 'signature' coping and provide space for the City's 'rose' logo and imprint of 'Brampton';
- The location of street trees should conform with traffic safety issues with respect to vehicular and train sight lines at the gateway of James Potter Road and the ORDC rail line;
- Designed to promote the City of Brampton's image as a Floral City;
- Full irrigation will be provided in association with planting;
- Each of the four gateways is quite varied in context and scale;
- Creditview Road/ Bonnie Braes Drive gateway is in a rural context with mature shade trees and park block at the south corner;
- Queen Street West and James Potter Road gateway area is dominated by 100m+ of open space, including the Hydro corridor;
- Bonnie Braes Drive and Chinguacousy Road is smaller in scale and flanked by new development with a future church;
- James Potter Road and the railway gateway occurs at the rail line and existing valley;
- Each gateway must be designed to address the unique context, scale and design issues utilizing the hard and soft landscape elements identified in this section; and
- Entry feature blocks to be conveyed to the City.

Other principles of design to be highlighted by plan and section:

- Columns/ piers;
- Decorative metal fencing;
- Acoustic wood privacy fencing and tall columns;
- Flowering trees underplanted with ornamental shrubs, perennials, bulbs, and grasses;
- Column/ fence treatment on sides of entrance reinforces gateway;
- Vehicular gateway;
- Pedestrian gateway; and
- Planting defines walkways.

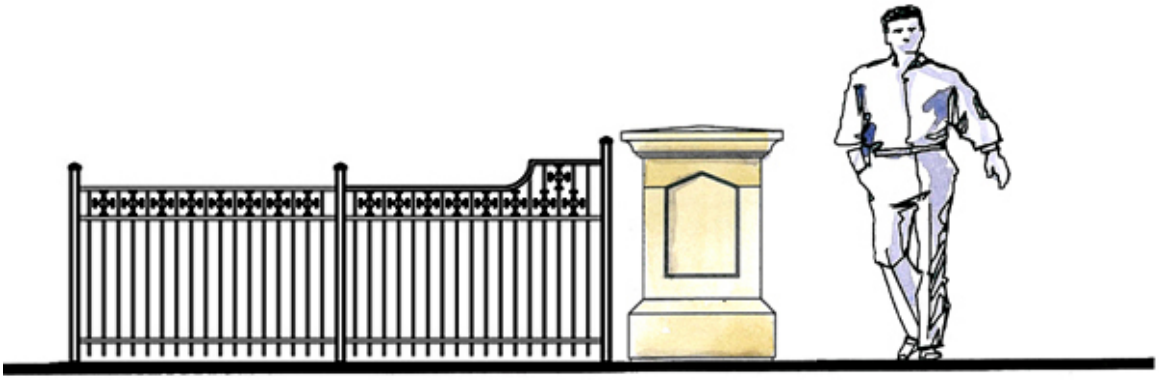


Figure 2.3a:
Decorative metal fence used along major gateway locations.

2.3 Major Gateways

Figure 2.3b - Major gateway location plan.

Major Gateway

2.0 Edges and Gateways

2.3 Major Gateways

One of four major gateways within the community, this gateway is located along the eastern edge of the community. It occurs at the intersection of an arterial road and one of the community spine roads. Design elements for the following gateway feature conveys a community image and identity that reflects a heritage inspired character. It reinforces the sense of arrival and entry.

Characteristics:

- Located at the intersection of Chinguacousy Road and Bonnie Braes Drive;
- Announces entry into the eastern edge of the community;
- Bounded by an existing church block to the south and residential lots along the north;
- Designed to create an integral component of the streetscape;
- Low column with wing wall with opportunity to incorporate the City of Brampton signature coping;
- Ties in with acoustic fencing;
- Decorative metal fence; and
- Refer to the City of Brampton planting guidelines for planting requirements.

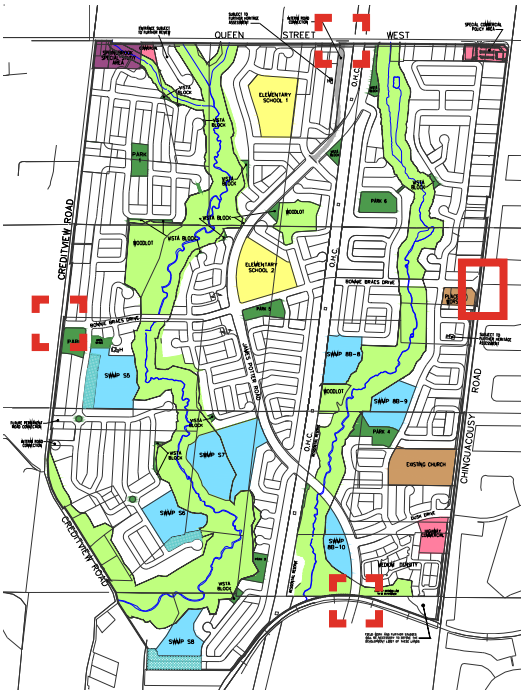


Figure 2.3a - Key Plan Major Gateways

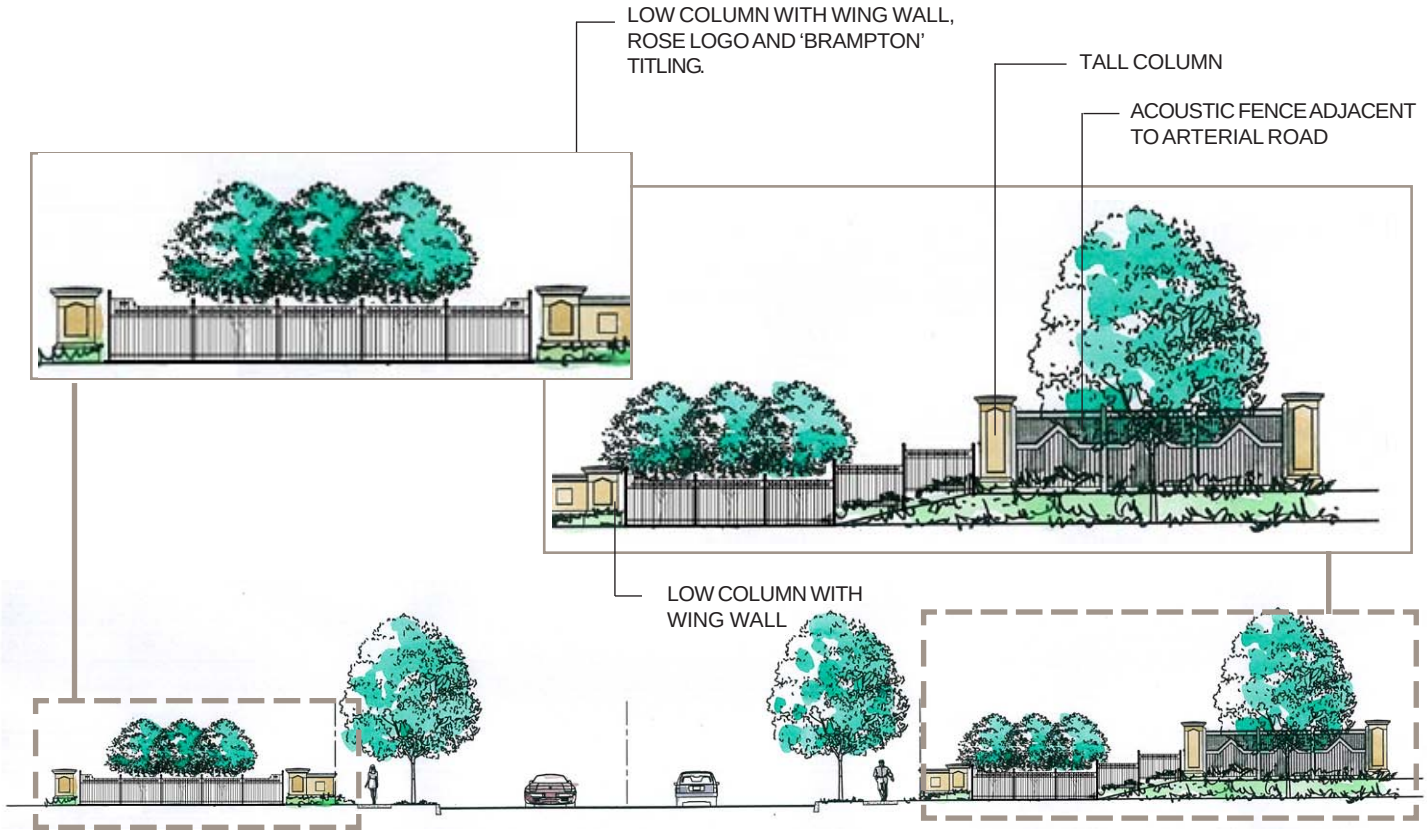
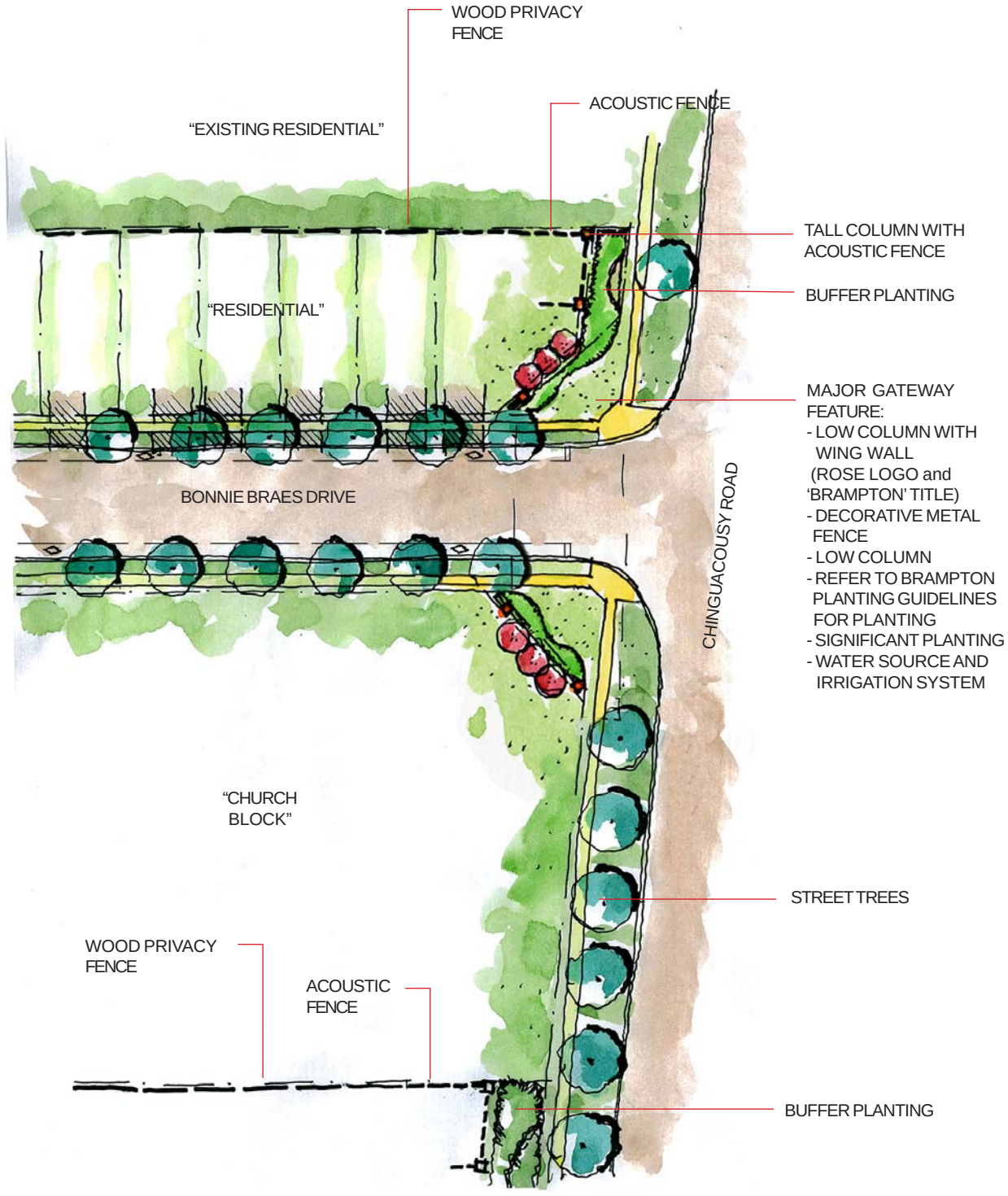


Figure 2.3b:
Chinguacousy Road and Bonnie Braes Drive - conceptual street elevation.

2.3 Major Gateways



Note: Dimensions subject to site plan stage.

Figure 2.3c:
Chinguacousy Road and Bonnie Braes Drive - gateway concept plan.

2.0 Edges and Gateways

2.3 Major Gateways

One of four major gateways within the community, this gateway is located along the western edge of the community. It occurs at the intersection of an arterial road and one of the community spine roads. Design elements for the following gateway feature form a natural extension to residential buildings and creates a unified relationship with the adjacent neighbourhood park to the south. Together, they form the major gateway feature that expresses a heritage inspired character built upon elements of the Bonnie Braes Heritage Farmstead.

Characteristics:

- Located at the intersection of Creditview Road and Bonnie Braes Drive;
- Announces entry into the western edge of the community;
- Bounded by residential to the north and a neighbourhood park to the south;
- Designed to create an integral component of the streetscape;
- Low column with wing wall;
- Opportunity for signature coping; and
- Refer to City of Brampton planting guidelines for planting.

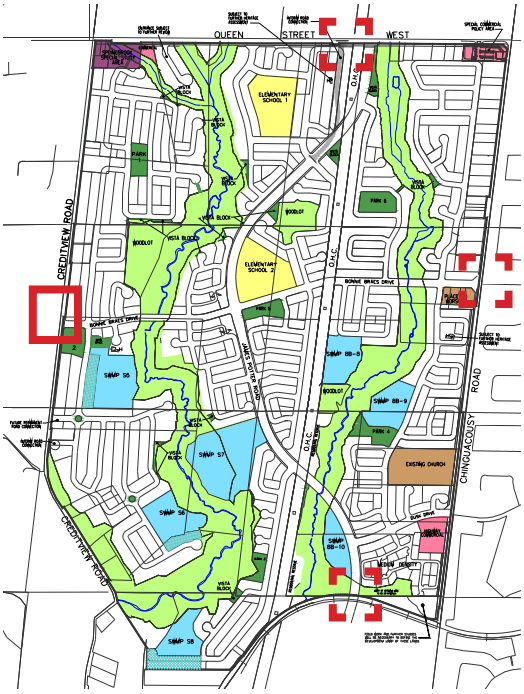


Figure 2.3d - Key Plan Major Gateway

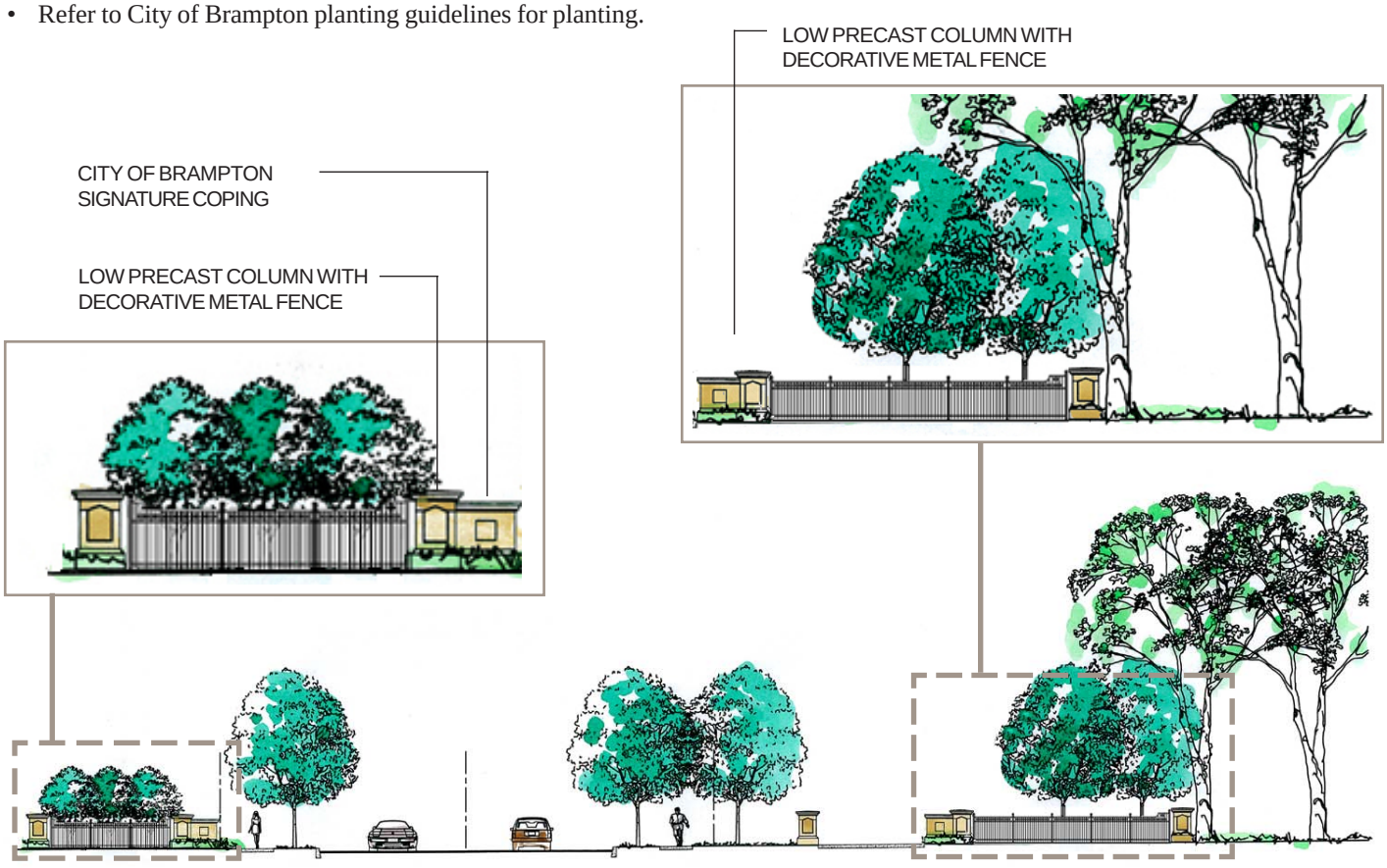
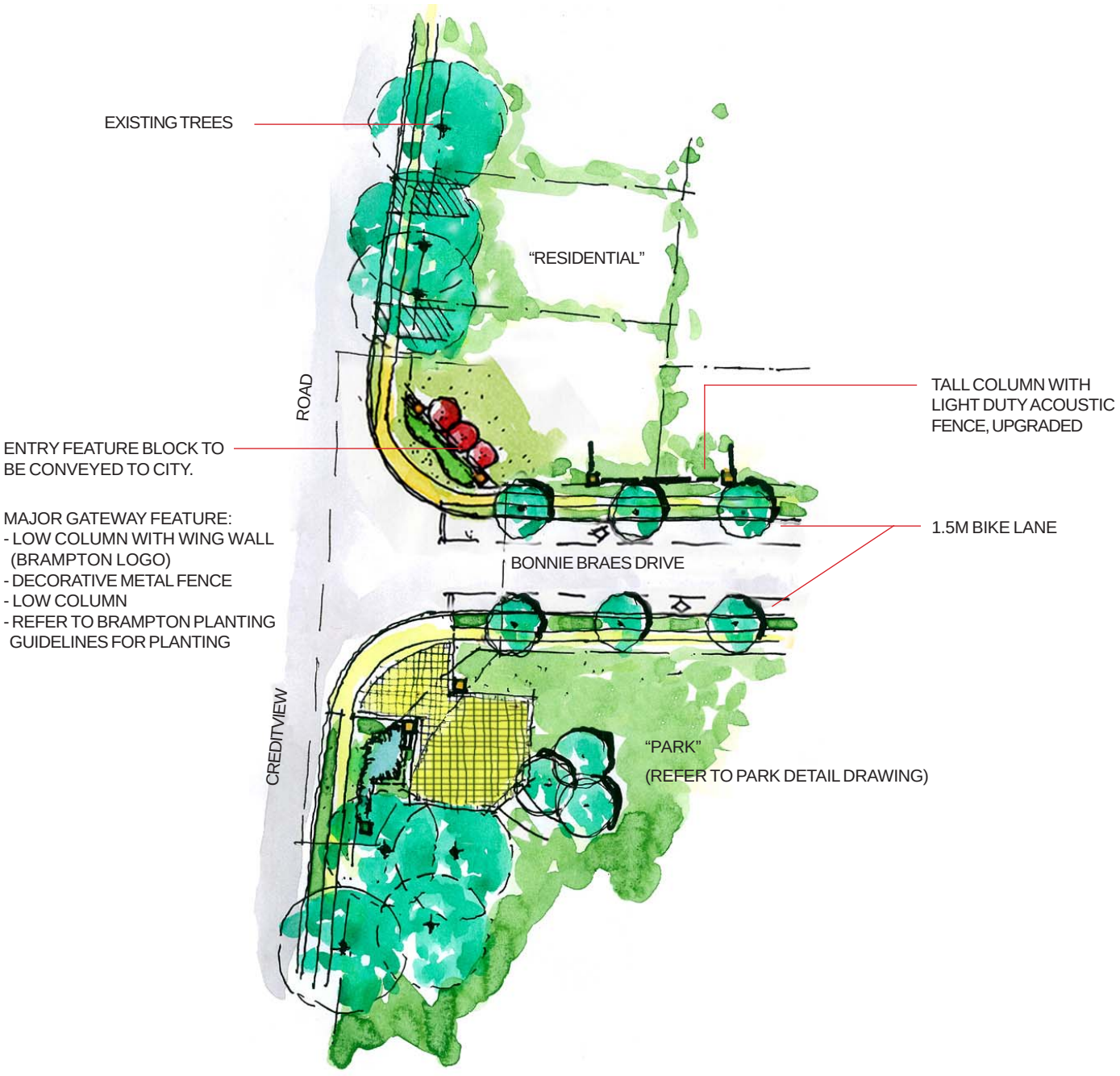


Figure 2.3e:
Creditview Road and Bonnie Braes Drive - conceptual street elevation.

2.3 Major Gateways



Note: Illustration shown is conceptual only. Subject to site plan stage.

Figure 2.3f:
Creditview Road and Bonnie Braes Drive - gateway concept plan.

2.0 Edges and Gateways

2.3 Major Gateways

One of four major gateways within the community, the following gateway is located along the southern edge. It occurs at the intersection of one of the spine roads and the Orangeville Rail Line at the southeastern limit of the community. Elements of design are inclusive of naturalized planting to complement the existing landscape condition at the rail line. Together with columns and decorative fencing, it announces entry into the southern edge of the community with an informal character that is characteristic of the heritage inspired theme for all major gateways.

Characteristics:

- Located at the intersection of James Potter Road and the O.R.D.C. Rail Line;
- Announces entry into the southern edge of the community;
- Bounded by the Tributary 8B Valley to the west and residential and open space to the east;
- Designed to create an integral component of the streetscape;
- Low column with wing wall on each side of the street;
- The location of street trees should conform with traffic safety issues with respect to vehicular and train sight lines.

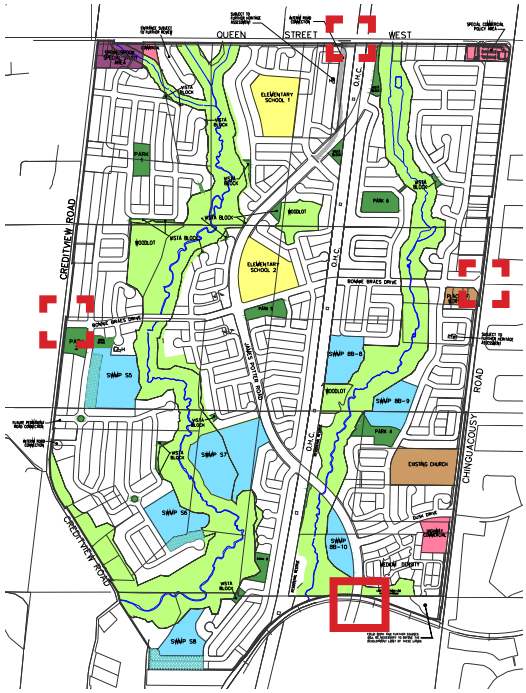


Figure 2.3g - Key Plan Major Gateway

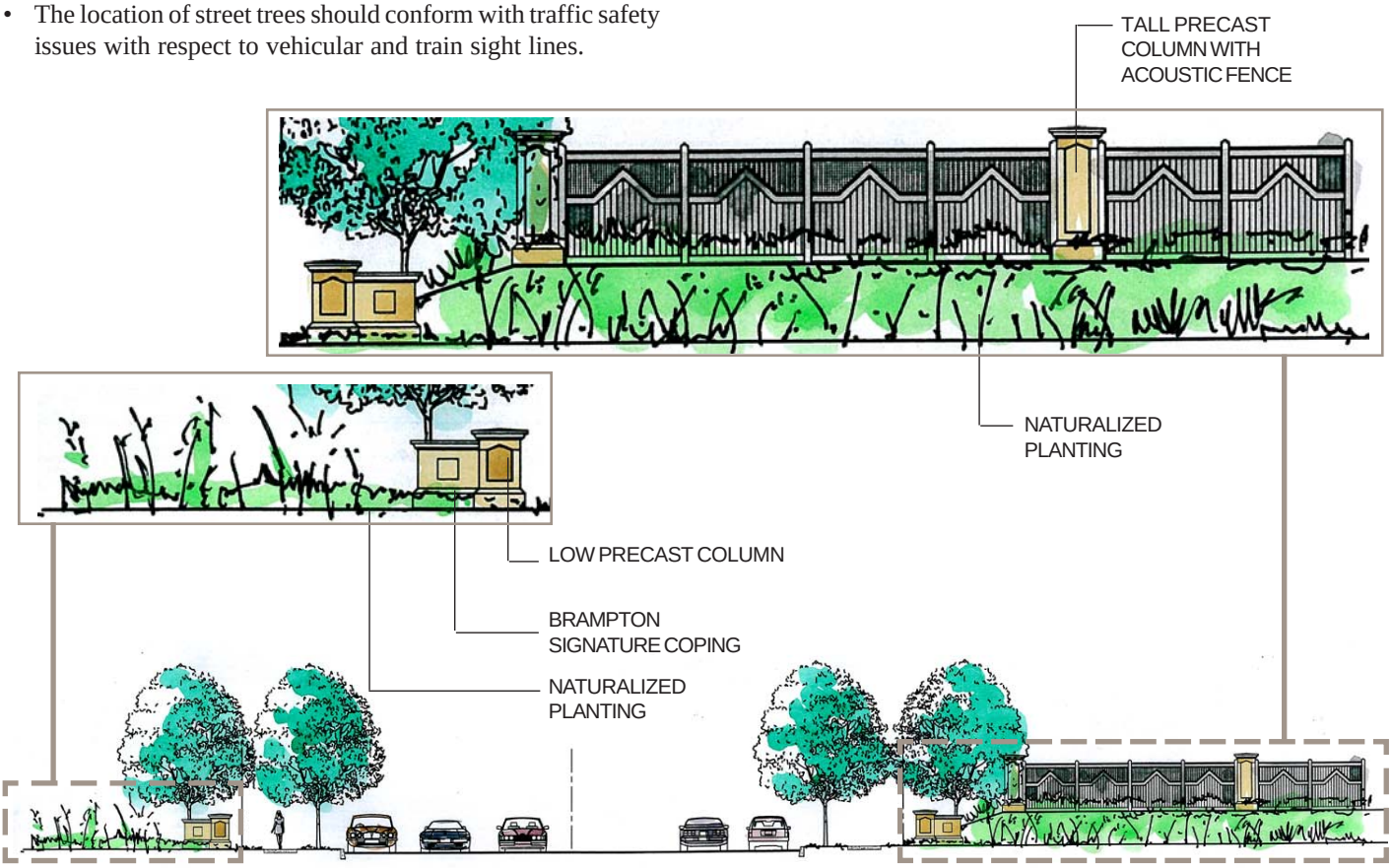


Figure 2.3h:
James Potter Road and Orangeville railway - conceptual street elevation.

2.3 Major Gateways

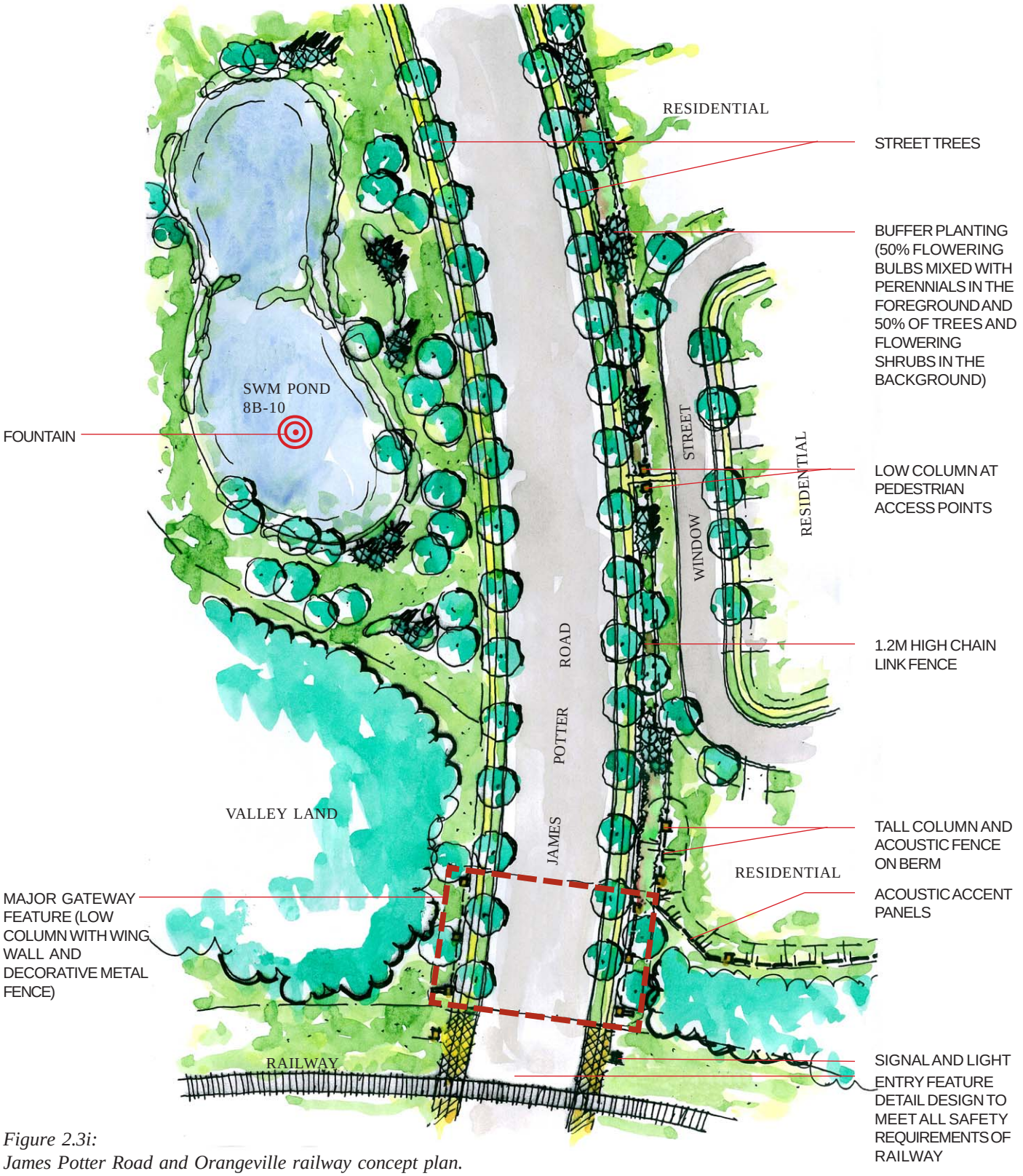


Figure 2.3i:
James Potter Road and Orangeville railway concept plan.

2.0 Edges and Gateways

2.3 Major Gateways

This gateway feature is located along the northern edge of the community. It occurs at the intersection of Queen Street West and James Potter Road. To its west is the Ontario Hydro Corridor (O.H.C.) and to its east is the Tributary 8B Valley. Design features include allowance for maintenance access into the O.H.C. and utilizing soft landscaping to create natural extensions to the valley.

Characteristics:

- Located at the intersection of Queen Street and James Potter Road;
- Announces entry into the northern edge of the community;
- Bounded by the O.H.C. to the west and the Tributary 8B Valley to the east;
- Designed to create an integral component of the streetscape;
- Shrubs and perennials to form a separation between the O.H.C. and the public sidewalk;
- Soft landscaping to form a natural extension to the valley;
- Low column with wing wall;
- Decorative metal fence with low column;
- Entry feature detail design to meet all requirements of O.H.C;
- Refer to the City of Brampton planting guidelines for planting.

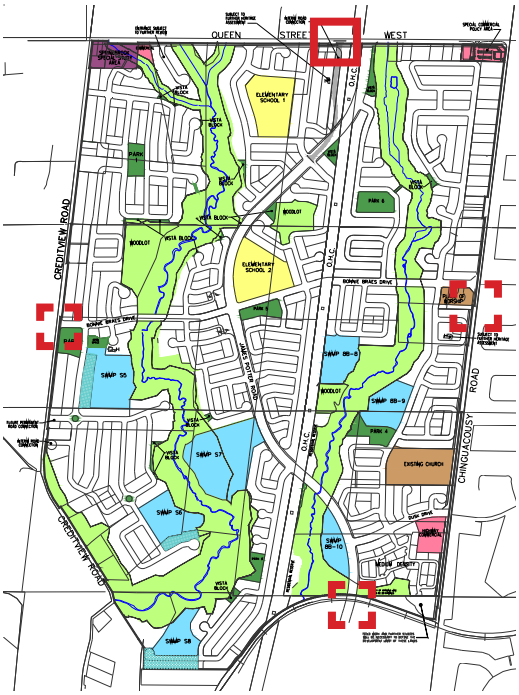


Figure 2.3j - Key Plan Major Gateway

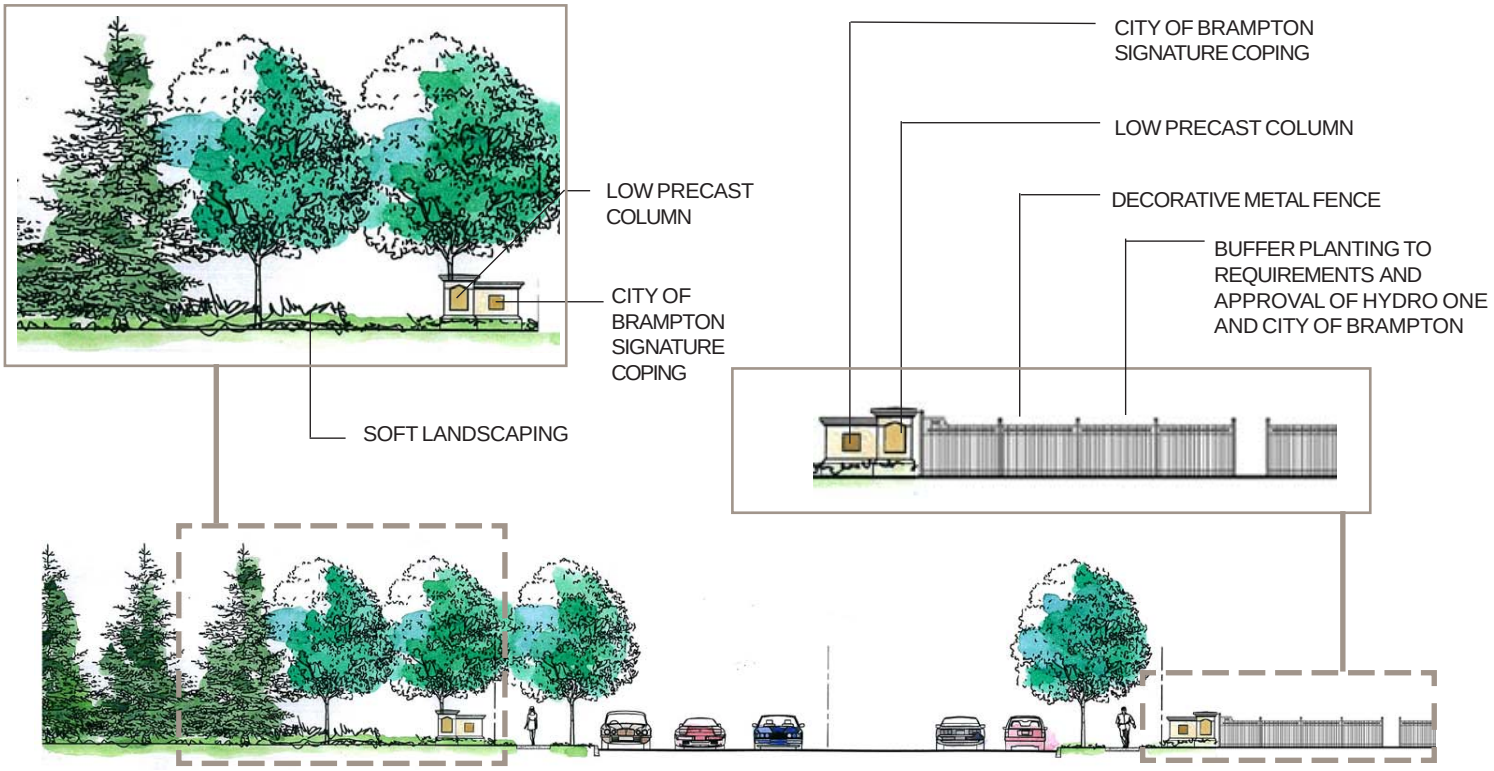


Figure 2.3k:
Queen Street and James Potter Road - conceptual street elevation.

2.0 Edges and Gateways

2.3 MAJOR GATEWAYS

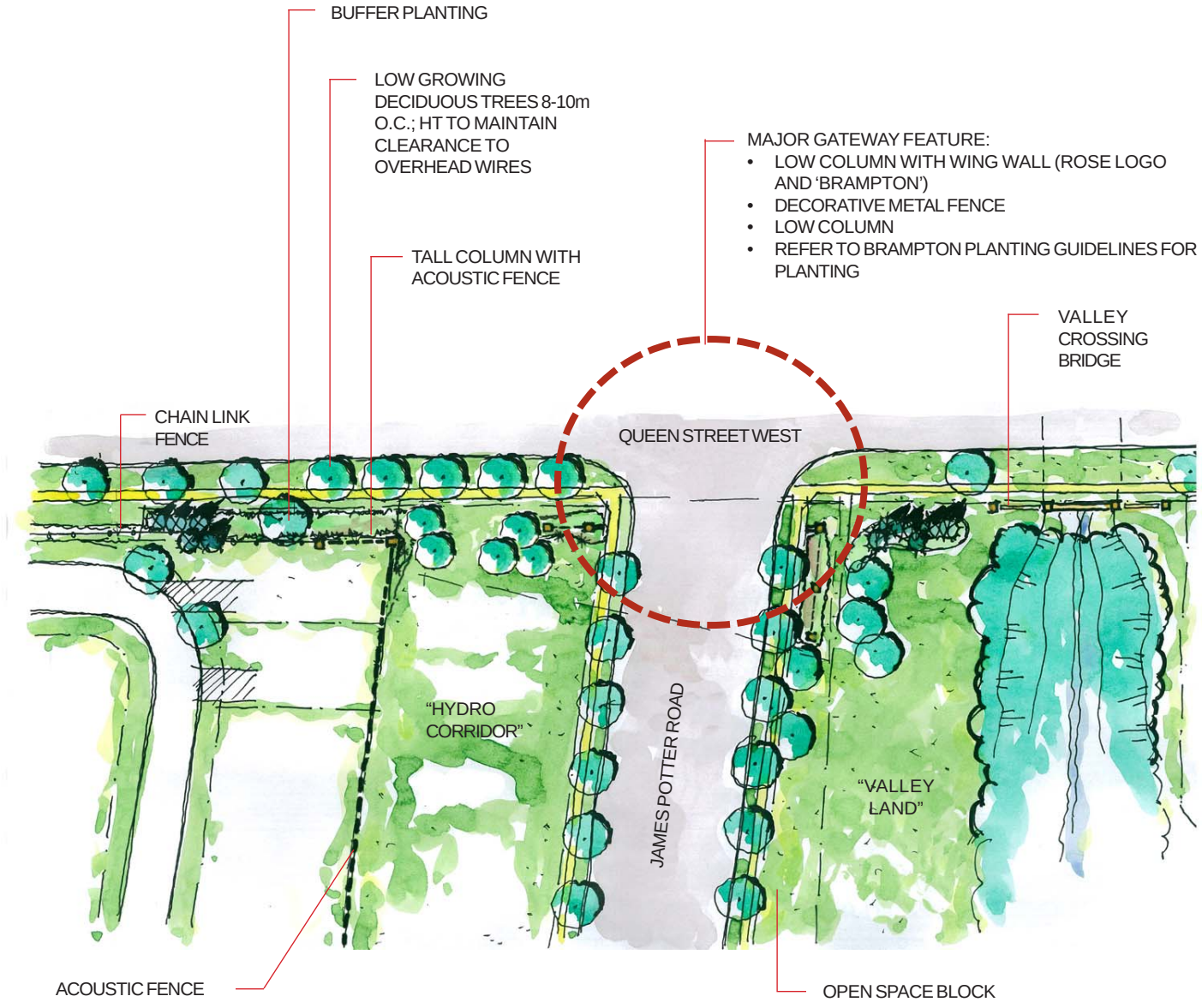


Figure 2.3l:
Queen Street and James Potter Road - gateway concept plan.

2.0 Edges and Gateways

2.4 Minor Gateways

Minor gateways also provide a first impression of the community and establish a community character through form, material and colour consistent with the major gateways. There are seven minor gateways located where neighbourhood connector roads intersect with boundary roads within the community. Its elements are similar to those of the major gateway but smaller in scale. Minor gateways will not be designed to allow for the City of Brampton's signature coping. They will also differ from major gateways by the use of decorative metal fencing. Elements include piers and columns, decorative metal fencing and soft landscaping.

Characteristics Include:

- Low columns with decorative metal fencing on either side;
- Vehicular gateways;
- Soft landscaping supported by accent planting;
- Full irrigation will be provided in association with planting;
- Tall column with acoustic fence along residential lot lines.

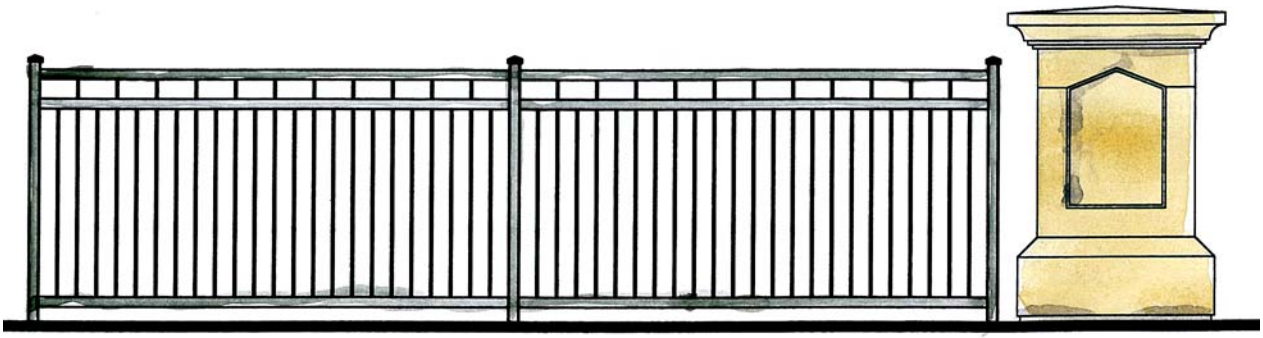


Figure 2.4a:
Minor gateway decorative metal fence.

2.4 Minor Gateways

Figure 2.4b:
Minor gateway location plan.

Minor Gateway

2.0 Edges and Gateways

2.4 Minor Gateways

There are six minor gateways located throughout the community. Minor gateway landscape elements are inspired by the architectural character of the existing Bonnie Braes Heritage Farmstead to create a heritage inspired character for the community. Low columns with decorative metal fencing will announce entry and arrival.

Characteristics:

- Located at the intersection of Creditview Road and connector roads;
- Announces neighbourhood entry into the southwestern edge of the community;
- Bounded by proposed residential to the north and south;
- Designed to create an integral component of the streetscape;
- Low column with decorative metal fence;
- Planting co-ordinated with the City of Brampton's 'Gateway Beautification Program' to promote the Floral City Strategy;
- Refer to the City of Brampton's planting guidelines for planting details;
- Entry feature blocks - conveyance to the City; and
- Irrigation required.

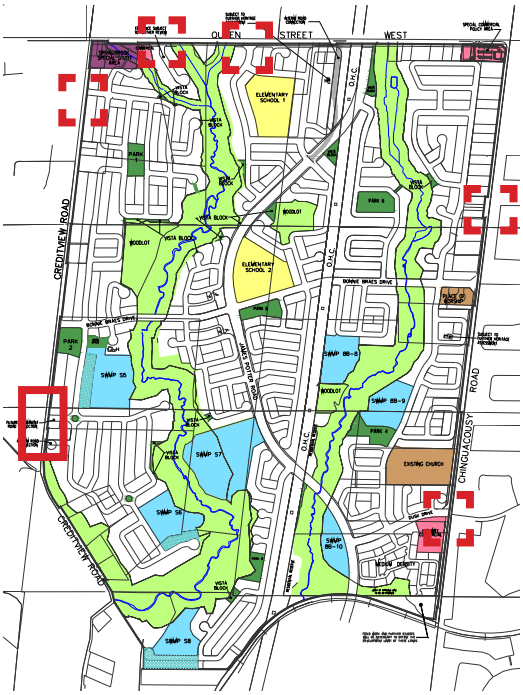


Figure 2.4c - Key Plan Minor Gateway

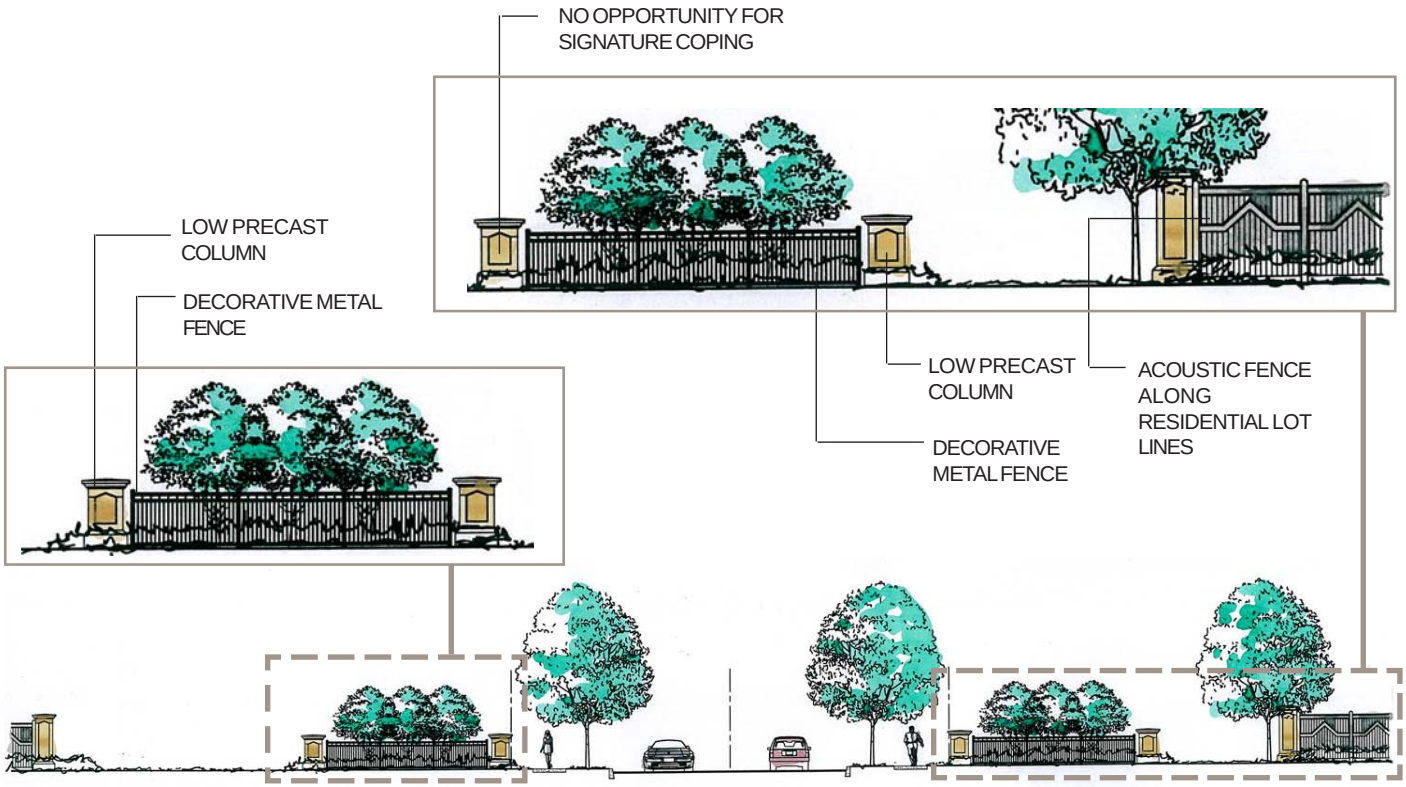


Figure 2.4d:
Creditview Road and Connector Road - conceptual street elevation.

2.4 Minor Gateways

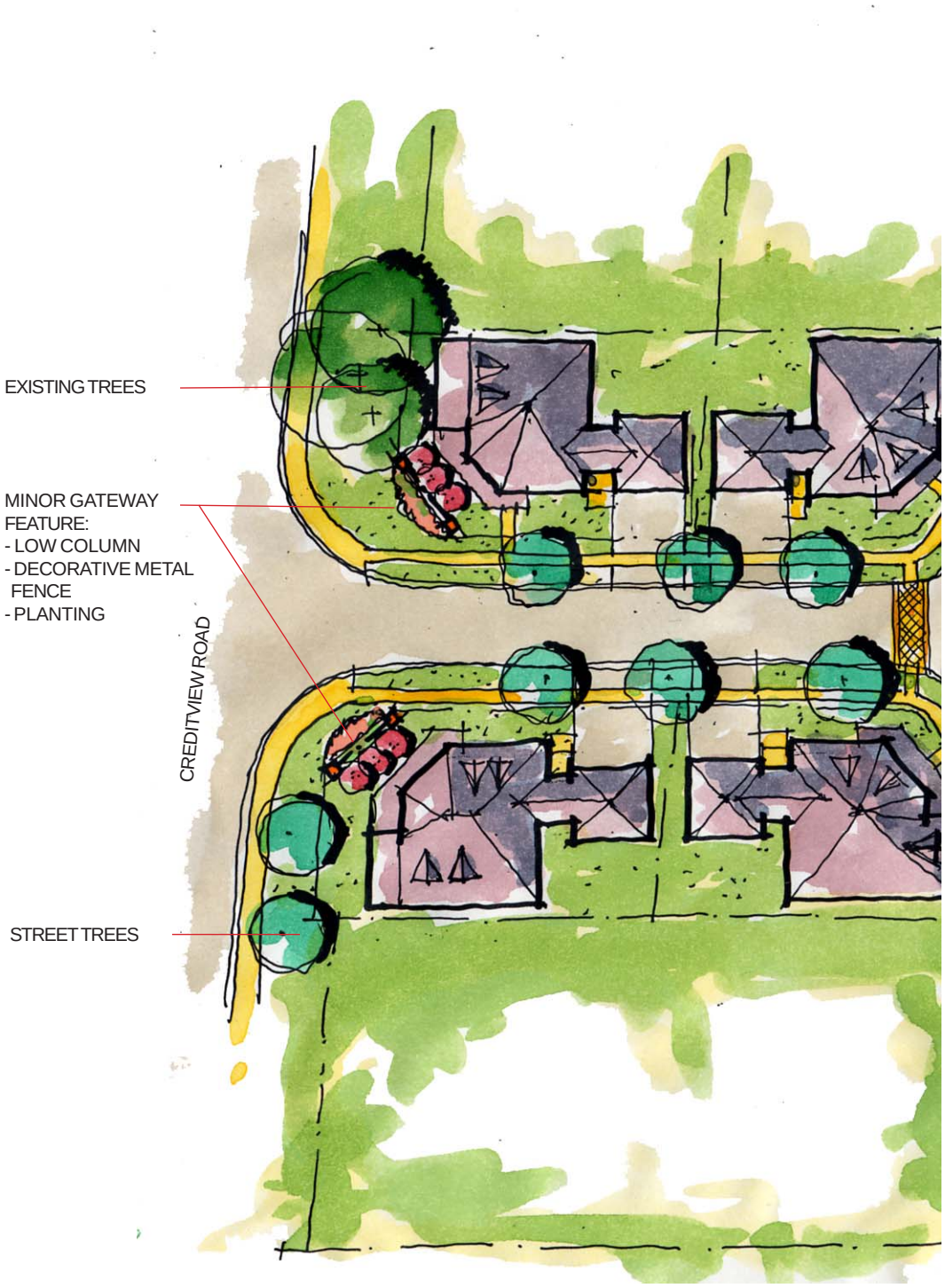


Figure 2.4d:
Creditview Road and Connector Road gateway concept plan.

3.0 Internal Roads

3.1 JAMES POTTER ROAD

James Potter Road is one of the spine roads that run through the central portion of the site in a north south direction from Queen Street West to the O.R.D.C. Rail Line. It is where the community centre is located at its intersection with Bonnie Braes Drive.

Characteristics:

- 3m landscape buffer requirement;
- 6 lane road, a major transportation corridor;
- Tree species selection (ie. narrow, or vase shaped, or high crown canopy) subject to adjacent residential lotting;
- One of the primary transit routes in the community;
- Convenient transit stop locations within the public right-of-way with pedestrian linkages;
- Mix of uses to support an efficient transit system;
- Class 1 - 3m wide multi-use trail on west side and;
- Accent trees and shrubs provided at the intersections of James Potter Road and connector roads, see Figure 3.7a and 3.7b Enclave Entries Locations.

3.2 BONNIE BRAES DRIVE

Bonnie Braes Drive is one of the spine roads of the community and runs east west through the central portion of the site from Chinguacousy Road to Creditview Road. It is special and unique in character and should reflect some existing characteristics found along Creditview Road. It is where the neighbourhood centre is located as it bisects James Potter Road. It is also characterized by a variety of land uses such as a school, church, parks, valleys, residential and the O.H.C.

Characteristics:

- No landscape buffer requirement;
- 4 lane road with less traffic than James Potter Road;
- Class II on-road bicycle lanes;
- Location of one O.H.C. crossing and two valley crossings;
- Tree species selection along the entire road should emulate the character of Creditview Road;
- One of the primary transit routes in the community;
- Convenient transit stop locations within the public right-of-way with pedestrian connectivity.

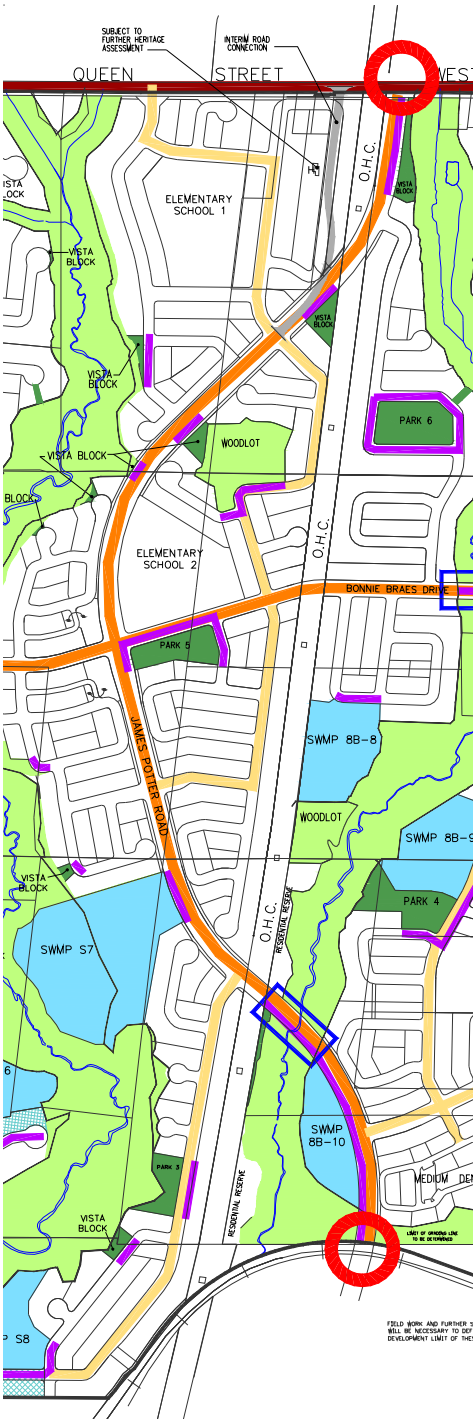


Figure 3.1a - James Potter Road

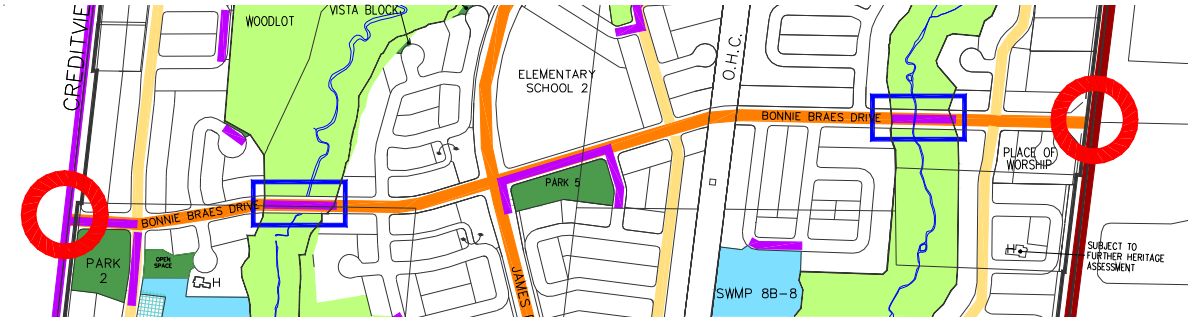


Figure 3.1b - Bonnie Braes Drive

3.3 CONNECTOR ROADS

Connector roads located throughout the community occur at significant locations within the plan. They facilitate movement between neighbourhoods and to significant features within the community. It is also where minor gateway entries occur at intersections with community boundary roads.

Characteristics:

- Establish visually consistent street trees on both sides of connector roads;
- The selection and placement of street tree species shall visually distinguish connector roads from local roads and;
- Accent trees and shrubs provided at the intersection of James Potter and connector roads, See Figure 3.7a and 3.7b Enclave Entries Locations.

3.4 SCENIC DRIVES

Scenic drives as indicated on the community structure plan abut open space features including neighbourhood parks, woodlots, stormwater management ponds, and view vistas. These edges shall be designed to enhance the streetscape experience and suggest an urban character.

Characteristics:

- Maintain and encourage scenic views that enhance pedestrian experiences;
- Pedestrian pathways should be connected to open space trails within the open space feature;
- A row of street trees should be planted along the open space edge;
- Select tree species that will not obscure views from the road and adjacent sidewalks;
- Planting within the pedestrian path zone shall be formal in character and conform with the City of Brampton design requirements.

3.0 Internal Roads

3.5 ROUNDABOUTS / O.H.C. ROAD CROSSINGS

Two roundabouts are proposed as landmarks in the executive housing areas and to create a sense of enclaving.

Roundabouts will be constructed to City Standards. A unit paved hard landscape apron on the perimeter of the island will facilitate maneuvering of large vehicles.

The centre of the roundabout will provide increased planting medium by mounding the centre and excavation in the island. Low spreading evergreen shrubs and mass plantings of perennials and bulbs beneath small ornamental flowering trees are proposed. Sight lines between 1m and 2m above street grade will be free of obstructions.

Window Street at O.H.C.

Two instances of a window street along the west edge of the hydro corridor occur in the plan.

Street trees species, spacing and location to City of Brampton standards and this design guideline will be planted along the hydro corridor and maintain required clearances to overhead transmission lines.

Road Crossings of OHC

James Potter Road crosses the hydro corridor in two locations and Bonnie Brae Drive in one location. Significant planting at these crossings is required to mitigate views down/up the corridor. Plant material, height, clearance to overhead power lines and access for maintenance equipment per Ontario Hydro requirements.

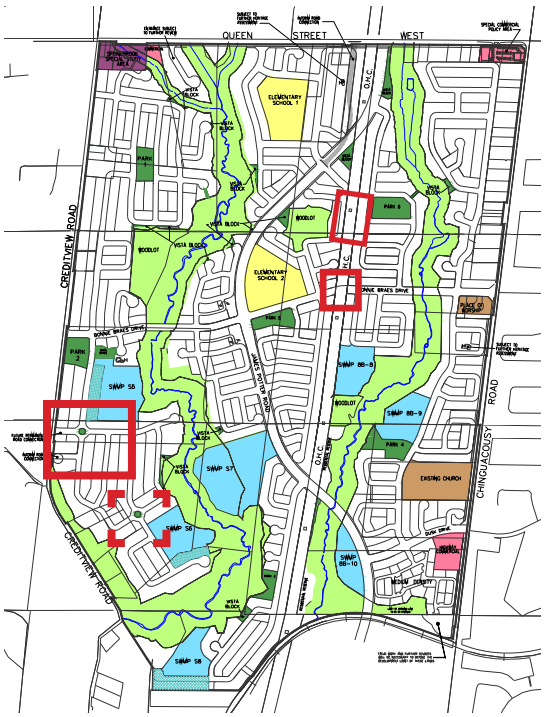


Figure 3.5a - Key Map
(Roundabouts & O.H.C. Window Streets)

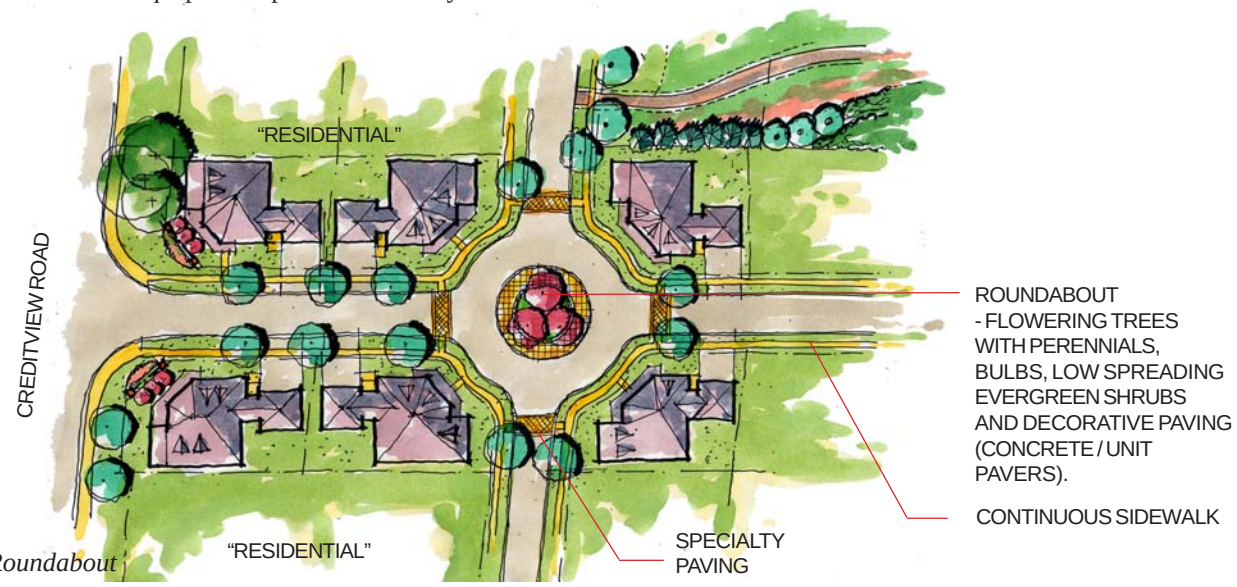


Figure 3.5b - Roundabout

3.0 Internal Roads

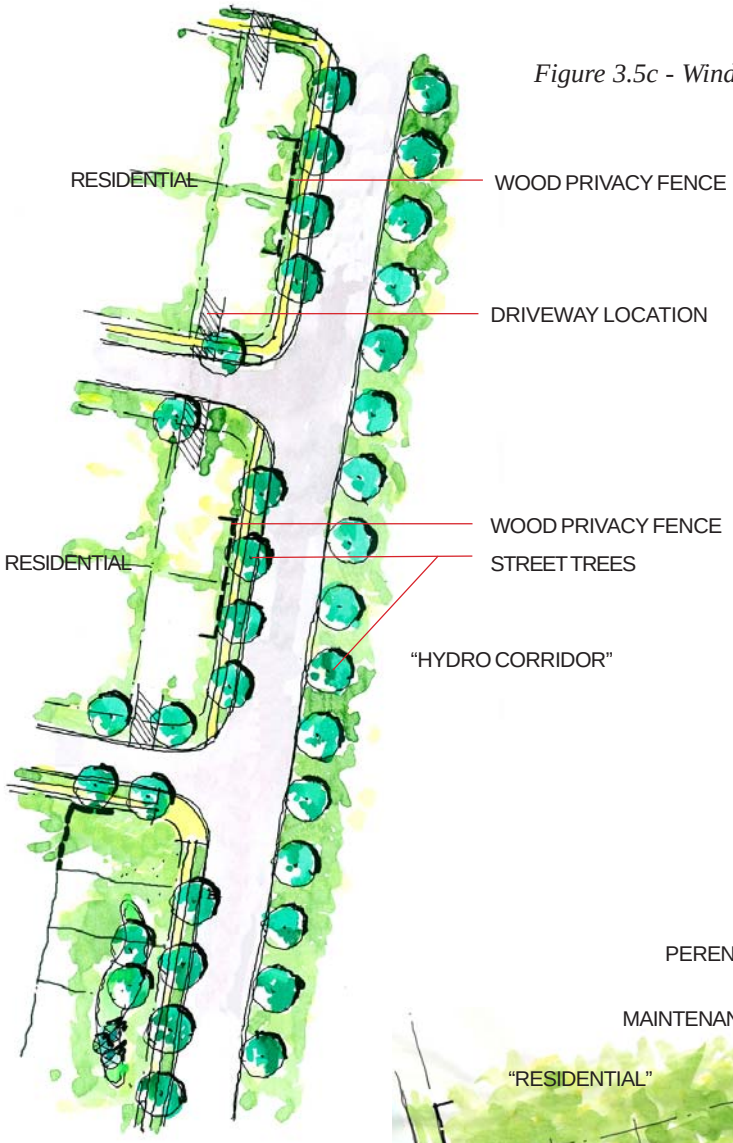


Figure 3.5c - Window Street at Hydro Corridor

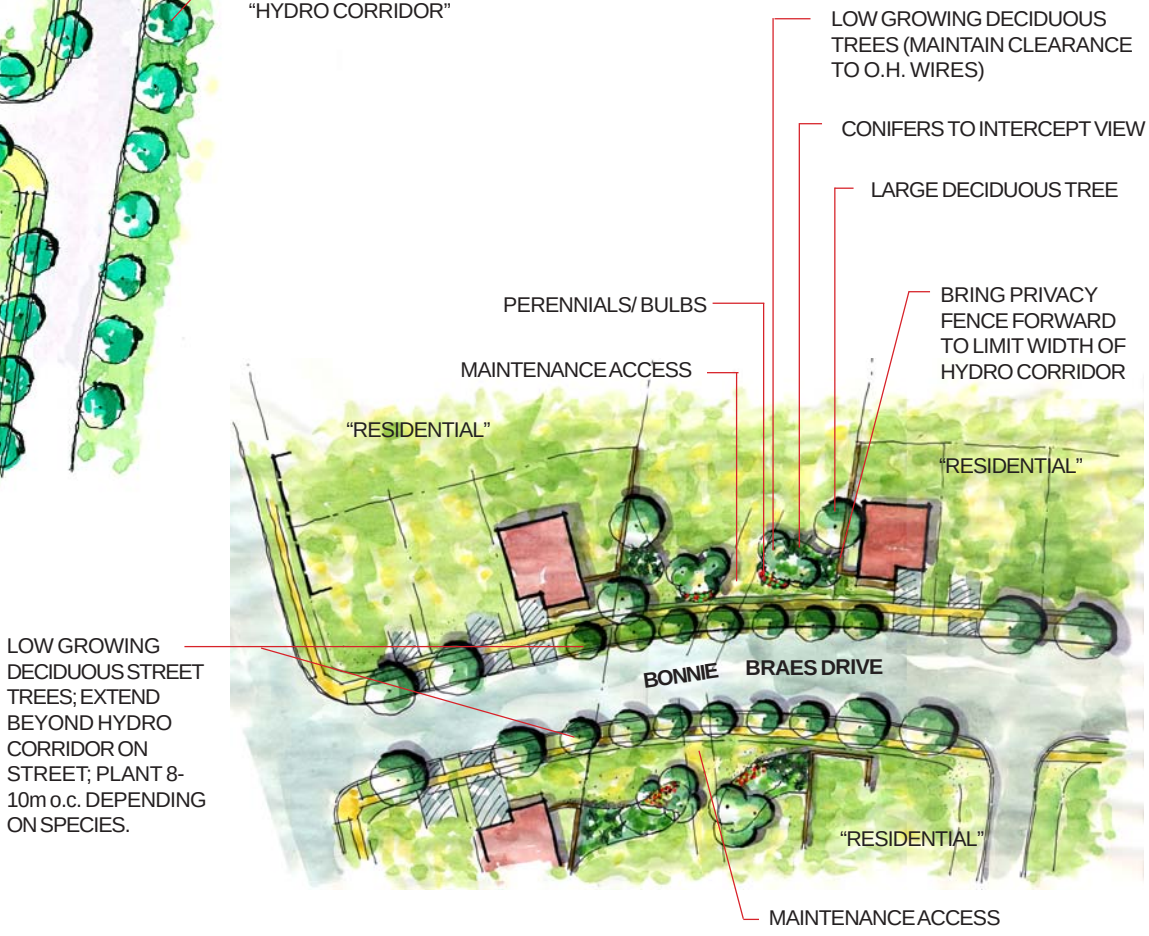


Figure 3.5d - Hydro Corridor Crossing at Bonnie Braes Drive

3.0 Internal Roads

3.6 STREET BUFFERS

Window Street Buffers

Internal window street buffers occur where a local road is parallel to a spine road or where cul-de-sacs terminate at a spine road. These locations present a framed view into the community and create a first impression to passersby. Window street buffers should exhibit a strong presence of flowering shrubs in accordance with the City of Brampton's Flower City Strategy.

Characteristics:

- Similar in design to arterial window street buffers;
- Buffer planting inclusive of 50% flowering materials, bulbs mixed with perennials in the foreground and trees and flowering shrubs in the background;
- Low masonry columns with 1.2m high chain link fence.

Flankage Lot Buffers

Internal flankage lot buffers occur where the side yards of residential lots directly abut a spine road. Flankage lot landscape buffers shall be incorporated with the design and location of acoustic fence to create a unified streetscape.

Characteristics:

- Coniferous and deciduous low shrub planting combined with flowering shrubs;
- Acoustic fence if necessary with tall columns.

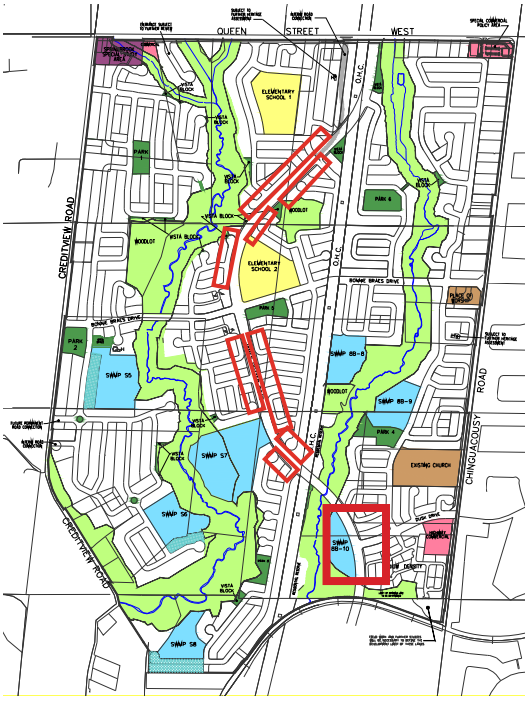


Figure 3.6a - Street Buffer Key Plan

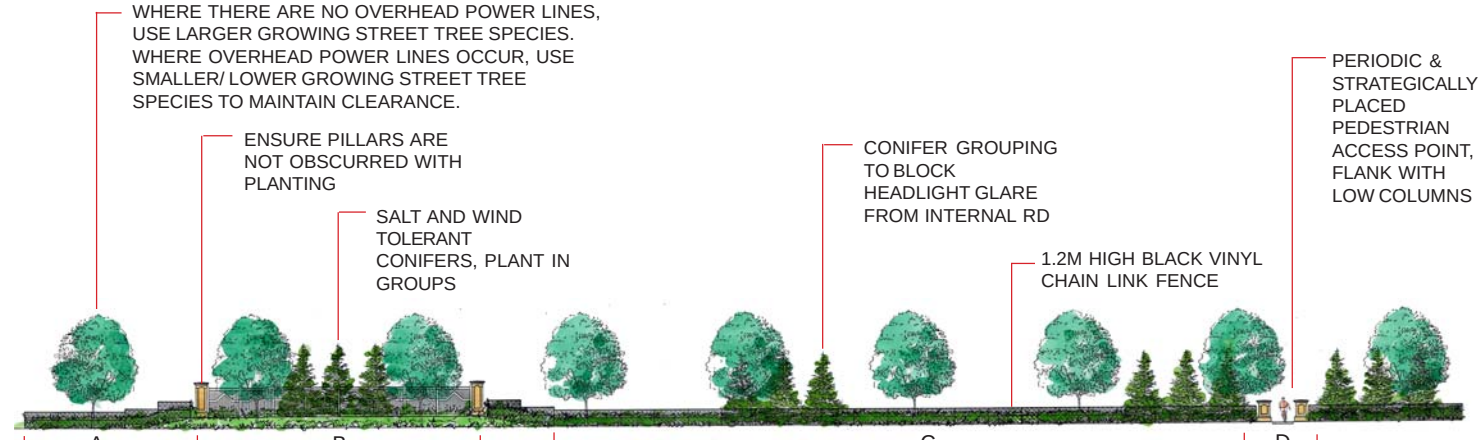


Figure 3.6b - Street Buffer Elevation
(see Appendix 6 for larger scale drawing)

3.0 Internal Roads

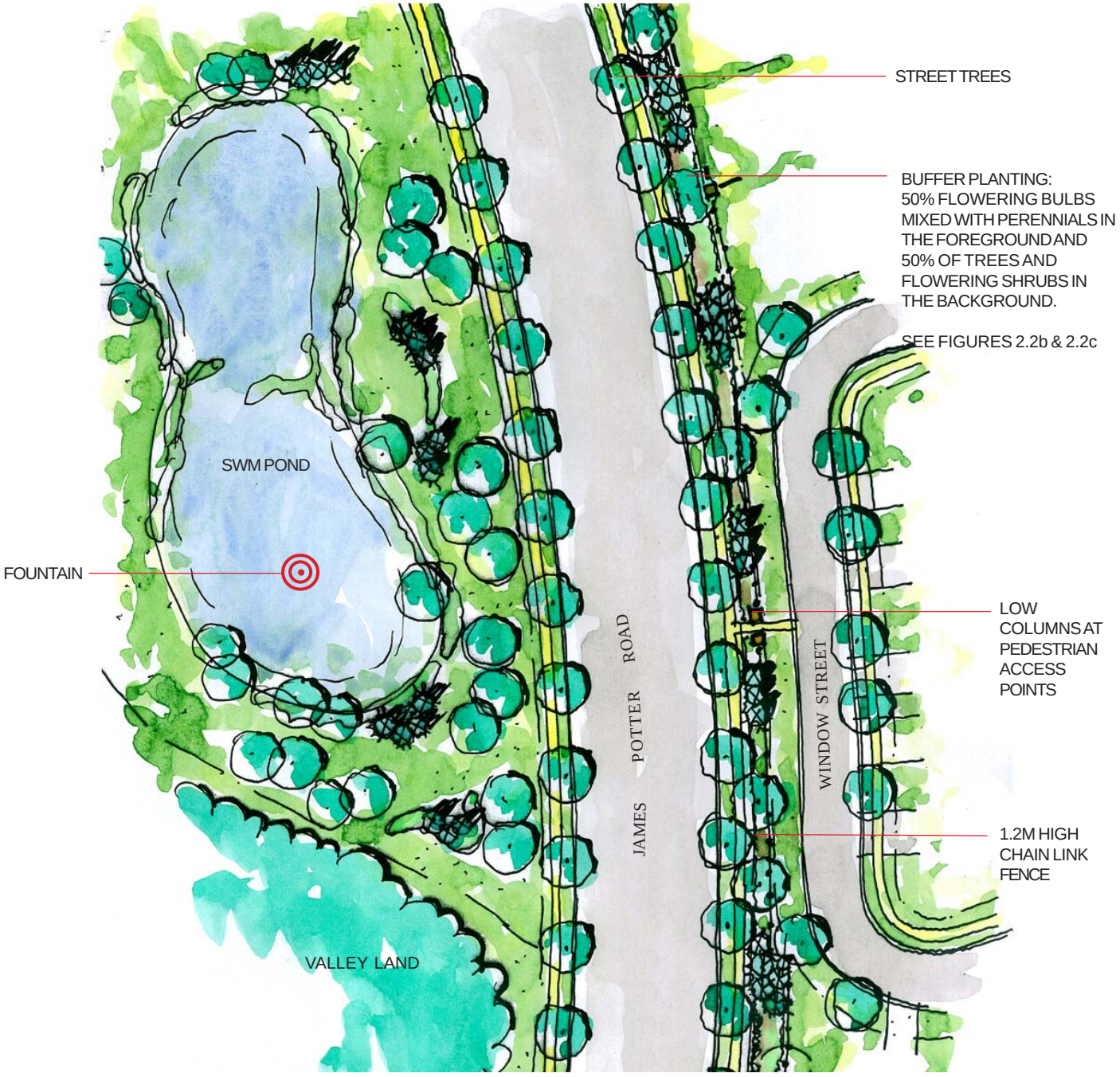


Figure 3.6c - Window Street Buffers

3.0 Internal Roads

3.7 ENCLAVE ENTRIES

Enclave entries announce entry into significant enclave neighbourhoods within the plan and provide landmarks for orientation to key intersections. Landscaping shall be coordinated at all enclave entry locations and combined with the use of appropriate trees and shrub plantings that support the City's Flower City Strategy inititiatives.

Characteristics Include:

- Coordinated and complementary plantings adjacent to street corners;
- Defined by a combination of selected trees/shrubs and perennial plantings; and
- Include columnar form trees and shrubs.

Enhanced Enclave Entry at James Potter Road

Figure 3.7a - Enclave Entries Location

3.0 Internal Roads

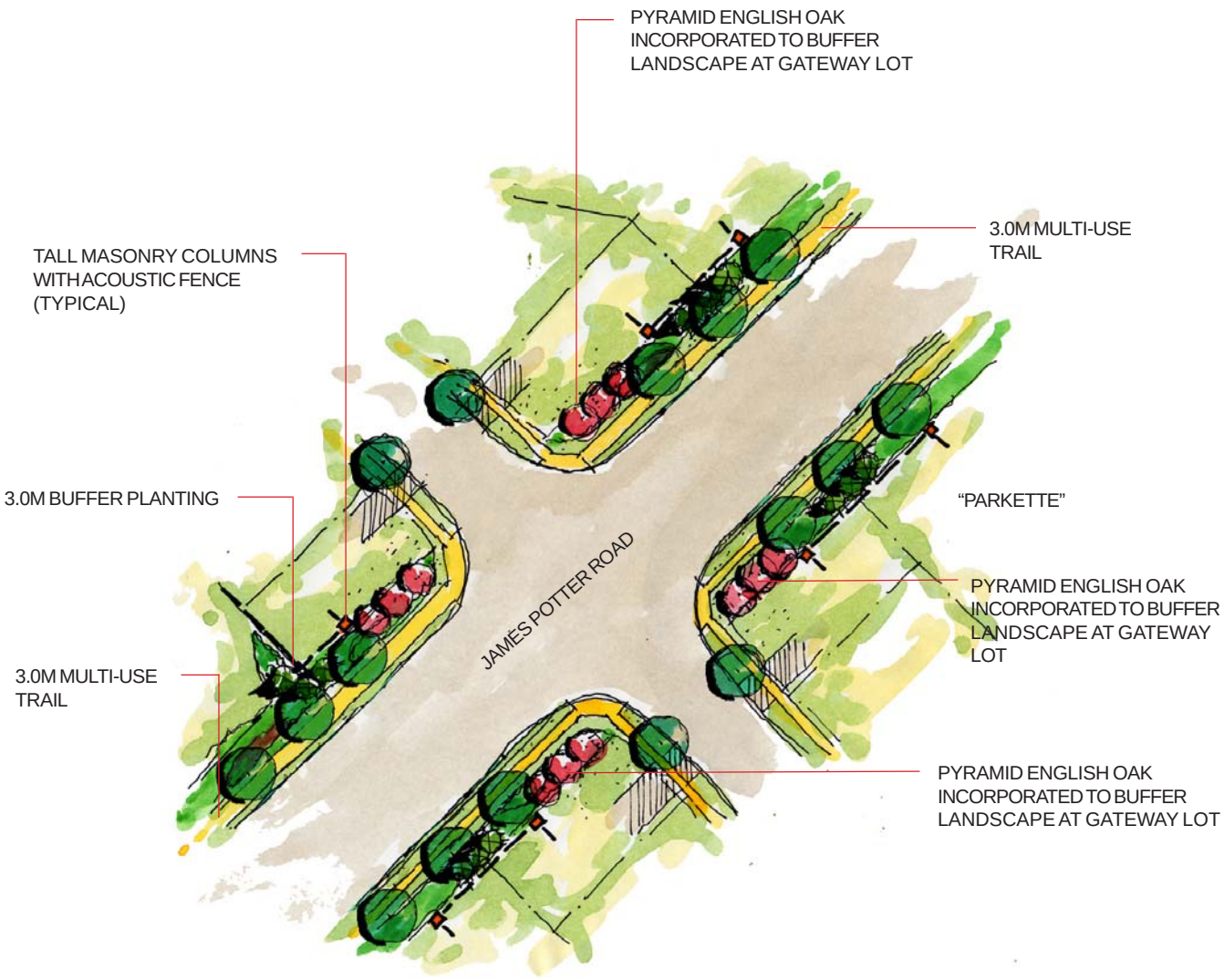


Figure 3.7b - Enclave Entry - James Potter Road

3.0 Internal Roads

3.8 STREET TREES AND PLANTING

Street trees – main roads (arterials and collectors) use coarse textured tree species, and where adjacent to open space, valleylands, and stormwater ponds use non invasive ornamentals or native species.

The City should consider adding walnut and hickory to the street tree palette. In the Community Centre traditional/heritage inspired architecture and streetscape detailing is proposed and plant materials selection should be consistent with context.

The southwest stormwater pond along James Potter Road has a significant topographic drop, ensure street tree planting and pond planting does not impede long distance views.

For streets crossing the hydro corridor, select tree species for required clearance to overhead lines.

Provide flowering plant material per City of Brampton Flower City strategy/policies, but select less colourful flowering species as transition to the south west of the site and in the community centre. Concentrate flower colours to whites and pale pinks.

In executive residential areas, both sides of the street are to be planted with 100mm cal. street trees. The east side of Creditview Road will have a double row of street trees. In the road right-of-way, maintenance of existing trees will occur and where there are gaps, they will be replanted with the largest trees available as per the Arborist's recommendations. A second row of smaller trees is to be planted on private property. This second row of trees is to ensure the rural character of Creditview Road is maintained in perpetuity, acting as replacements for the mature street trees in the road right-of-way.

3.0 Internal Roads

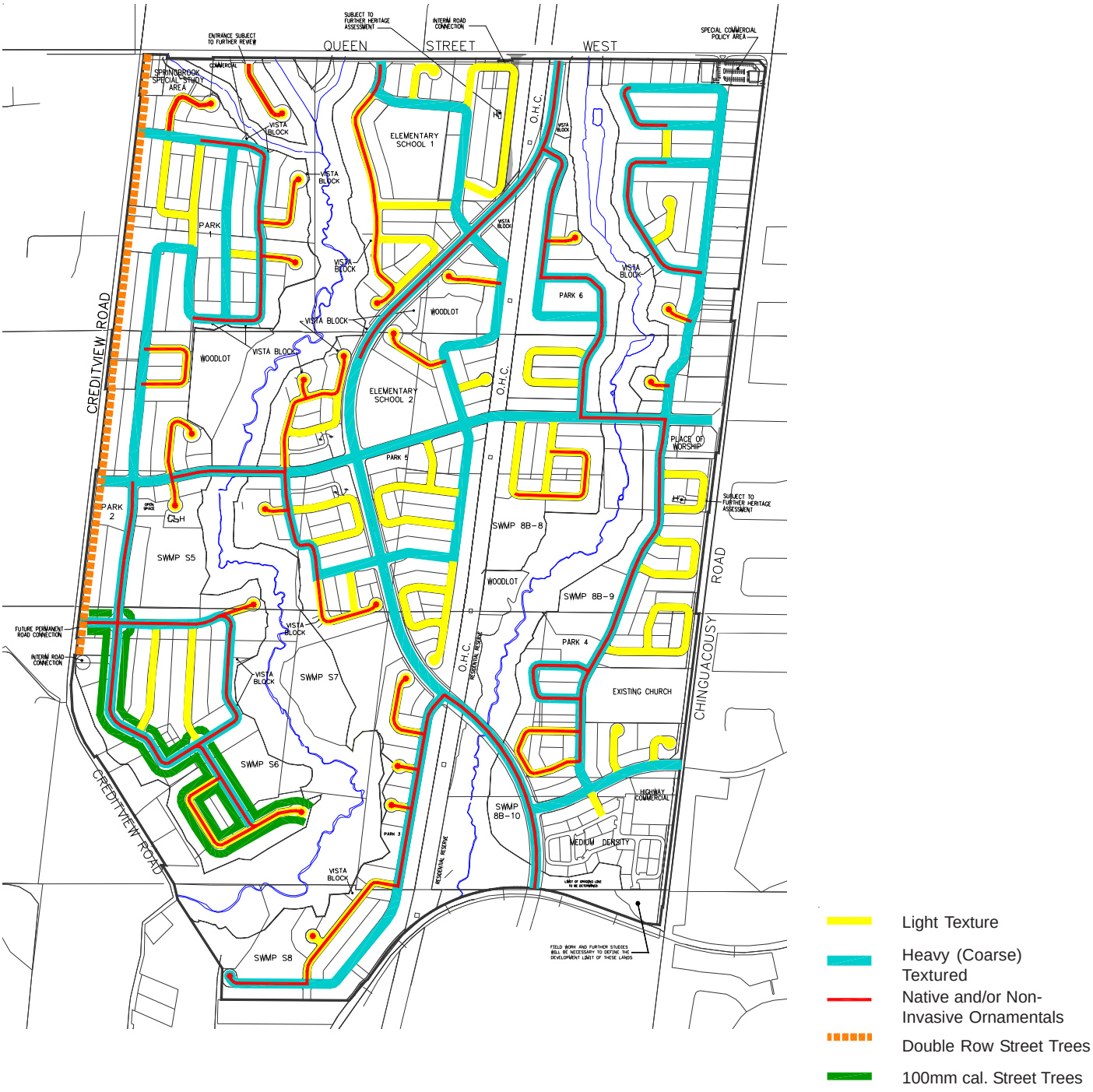


Figure 3.8a - Street Trees and Planting

4.0 Open Space System

4.1 Parks

Parks are neighbourhood amenities that provide opportunity for both active and passive activities for residents. The major parks in Creditview Crossing include the Neighbourhood Centre Parkette located at the intersection of James Potter Road and Bonnie Braes Drive, and the Bonnie Braes Special Neighbourhood Park. Other parks are distributed throughout the community with at least dual street frontages. They serve neighbourhoods by providing opportunities for recreational activities and offer views to open space features such as the Springbrook Creek Valley, Tributary 8B Valley, stormwater management ponds and woodlots.

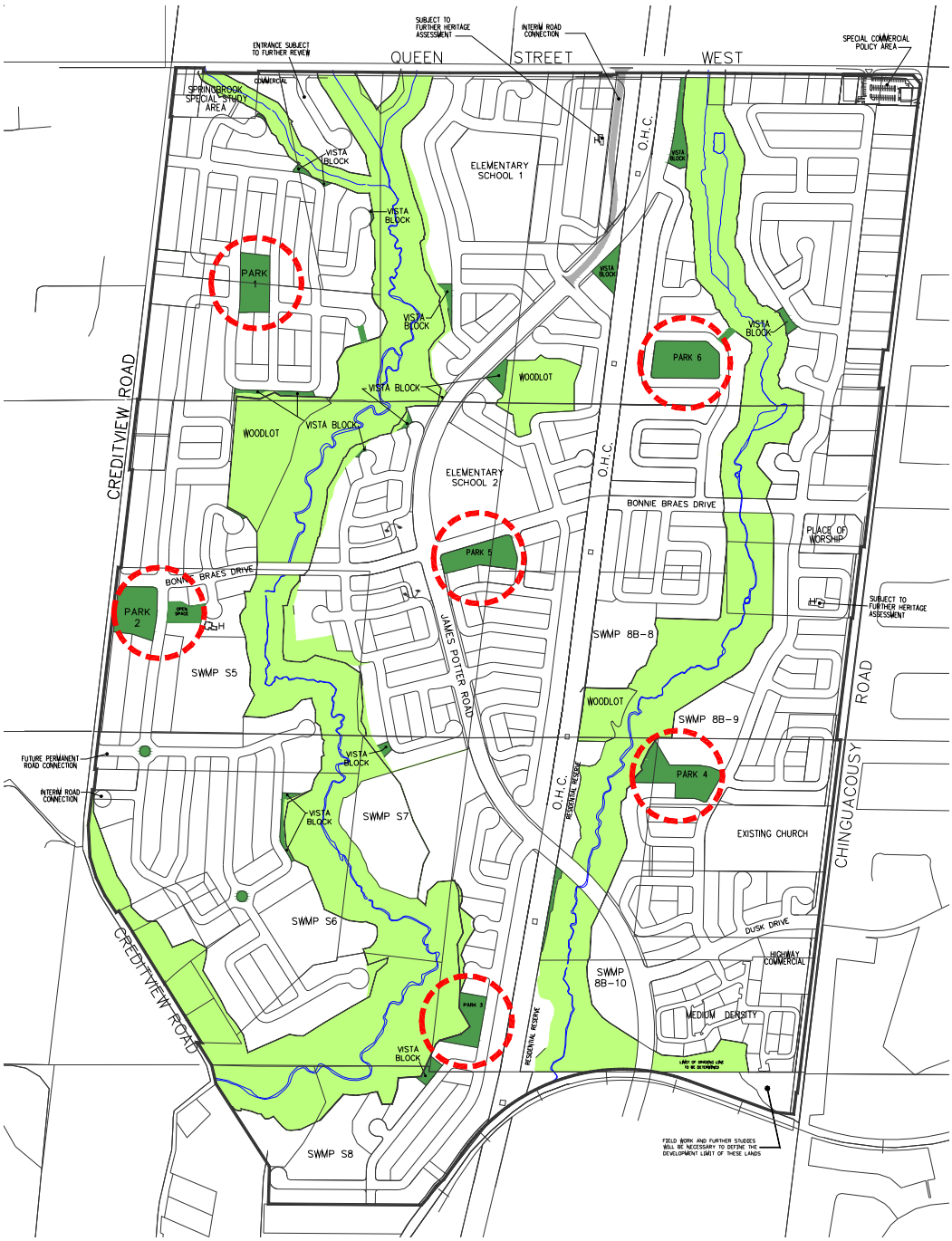
Characteristics:

- Contains trails within them that link to the larger trail network and to adjacent amenities (such as the school, sidewalks and woodlot);
- Trails/ pathways, where possible, lead to public sidewalks, neighbouring school, adjacent woodlots, and include opportunity to connect with surrounding neighbourhoods;
- Opportunity for free play, children's play structure, and a gazebo, trellis, planting or other elements to provide shade and seating areas;
- Landscaping supports street edges, provides screening to adjacent residential rear yards, or extends the experience of the natural features, as appropriate;
- Other areas are primarily sod for free use and play;
- Park features located closer to open space features such as the valley, stormwater pond, or woodlot to create lookout opportunities;
- Where dwellings back or flank onto a park, provide a 1.2m high chain link fence along public lands from the edge of the privacy fence to the end of the lot line;
- Some parks will retain existing large and high quality trees, where playground size setback standards and hard element standards may require flexibility to ensure survival and continued health of trees;
- Where parks are adjacent to residential dwellings, provide a coniferous buffer to screen visibility of rear yards;
- Provide lighting along pathways within parks;
- Ensure park entries and edges implement the City's Flower City Strategy by planting flowering shrubs and perennials consistent with the community theme;
- Provide concrete access pads at park entries between the curb and sidewalk to allow for maintenance access;
- Pathways within parks should be 3m wide, paved with asphalt, and treelined;
- Hard surface seating areas;
- Optional structural elements provided at the discretion of the City should be located at the end of a view terminus, connected by trails to the public sidewalk and offer lookout opportunities;
- Benches and trash receptacles located within parks shall be in conformity with the City's design standards;
- Provide appropriate fencing for protecting existing vegetation;
- Provide park identification signage in compliance with the City's design standards;
- Carry community hard landscape elements into parks as appropriate to context and design, (see pages 114 and 115) for hard landscape elements; and
- Implement tree planting approach as outlined for stormwater ponds (see pages 106 and 107) and street trees (see pages 90 and 91).

Figure 4.1a:
Trails and pathways for walking and cycling.

Figure 4.1b:
Trails and pathways that lead to gazebos and seating areas.

4.0 Open Space System



Parks

Figure 4.1c:
Parks Location Plan

NOTE: PARK #3 AND #4 CONFIGURATION ADJUSTMENTS REQUIRED PRIOR TO DRAFT PLAN APPROVAL.

4.0 Open Space System

4.1 Parks (#1)

The following park is located near the north western limit of the plan. It serves as a neighbourhood park for the north western portion of the neighbourhood by providing active and passive recreational opportunities.

Characteristics:

- Located centrally within Neighbourhood 1;
- 0.6 ha (1.5 ac);
- Bounded by flankage residential lots to the north and south;
- Dual street frontages.

- Pedestrian pathways with night lighting should be provided and made connective to public sidewalks linking to both streets across the park;
- Street trees should be planted along the park edge to create an urban park edge;
- Children's play facility should be designed as a focal element within the park;
- A shade structure is to be included in this park;
- Provide a 1.2m high chain link fence along residential lot lines within public lands;
- Landscaping will appropriately buffer adjacent residential land uses;
- Lighting is an integral component of the park and will be located and designed in accordance with the City of Brampton standards;
- Park benches and trash receptacles will be provided and shall be located and designed in conformity with the City of Brampton's design standards;
- Create large open free play space;
- Park signage will incorporate civic design theming that are reflective of the City's Floral City Strategy; and
- All signage and interpretive signage for parks, pathways, stormwater management ponds, valleylands, etc. shall conform to the City's Wayfinding Program and will be subject to review and approval by the City.

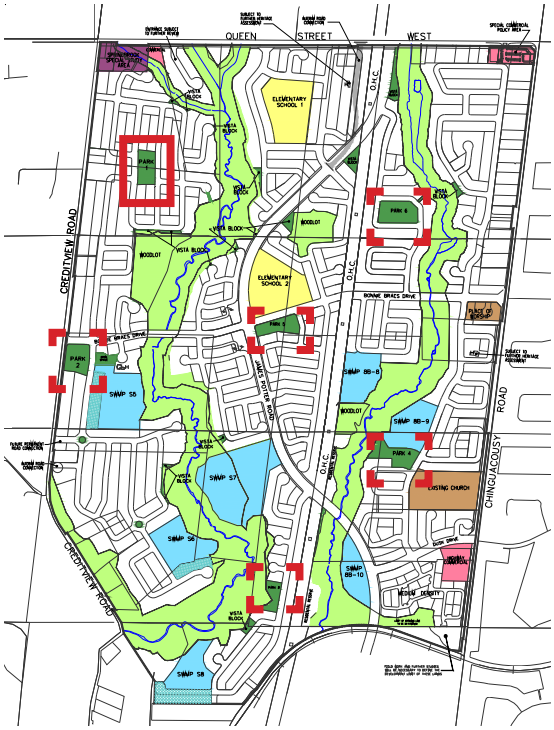


Figure 4.1d:
Park #1 Key Plan.

4.0 Open Space System

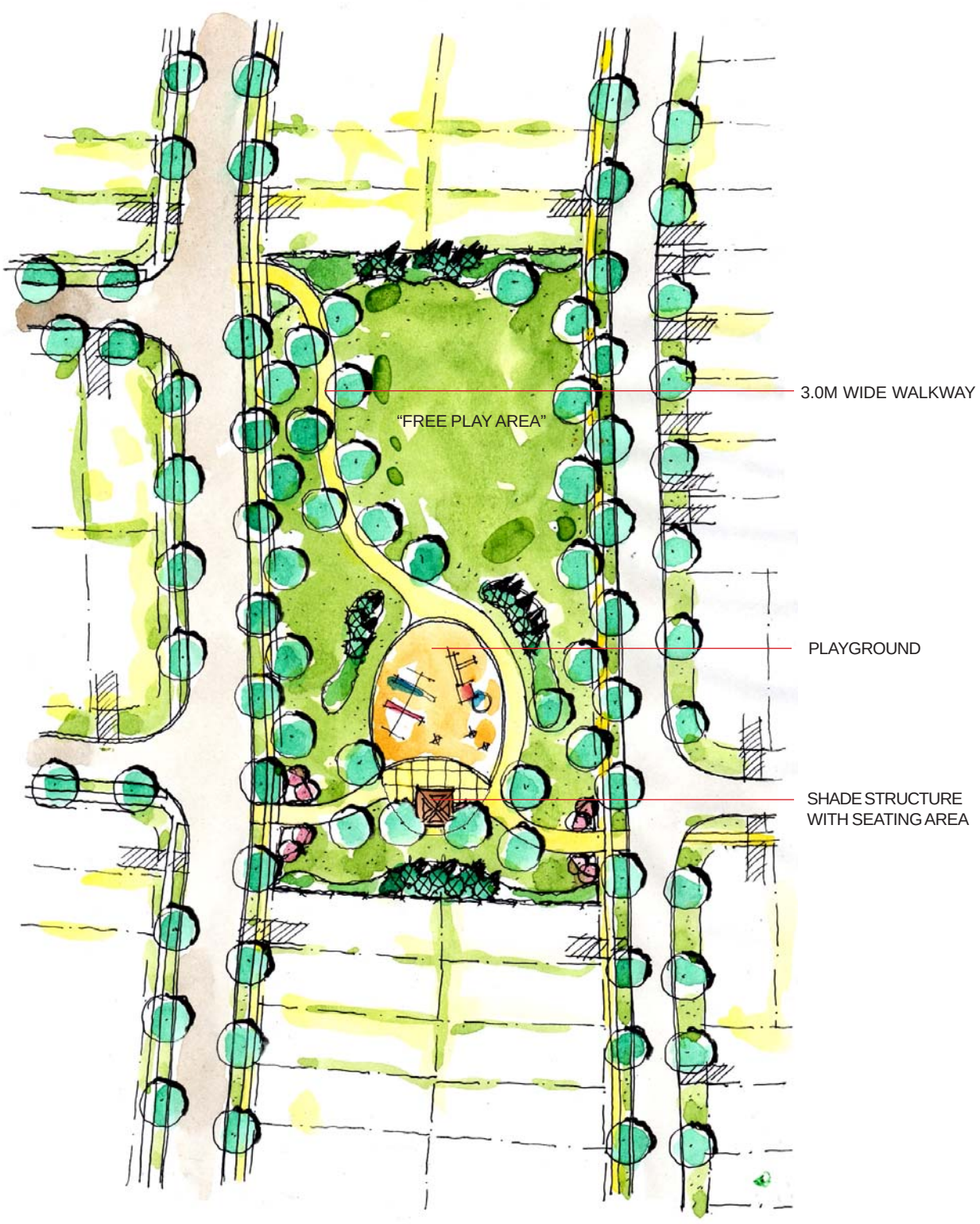


Figure 4.1e:
Park #1 Concept Plan.

4.0 Open Space System

4.1 Parks (#2)

One of six neighbourhood parks, the following park is located along the western edge of the community at the south east corner of Creditview Road and Bonnie Braes Drive. This park includes large mature shade trees along Creditview Road and a tree lined allée which focuses views to the Bonnie Braes house. Park circulation should lead from the intersection to the tree allée and play area beyond.

Characteristics:

- Located at the south east corner of Creditview Road and Bonnie Braes Drive;
- Approximately 0.8 ha (2.0 ac);
- A natural extension of the major gateway feature;
- Abuts residential to the south;
- Street frontage on three sides;
- Within close proximity to a stormwater management pond;
- Pedestrian pathways should be provided and made connective to public sidewalks;
- Incorporate the existing allee of trees into the design of the park through siting, drainage, and other factors contributing to the health of the trees;
- Street trees should be planted along the park edge to create an urban park edge;
- Children's play facility should be designed as a focal element within the park;
- Detail design and construction to respect and ensure continued health and survival of significant mature trees;
- Provide a 1.2m high decorative metal fence with supplemental planting along residential lot lines within public lands;
- Provide decorative fencing along Creditview Road edge to provide added security for park patrons, as required to satisfy playground setback requirements;
- Landscaping will appropriately buffer adjacent residential land uses;
- Lighting is an integral component of the park and will be located and designed in accordance with the City of Brampton standards;
- Park benches and trash receptacles will be provided and shall be located and designed in conformity with the City of Brampton's design standards, lighting and trenching of cabling to preserve existing large tree;
- Park signage will incorporate civic design theming that is reflective of the City's Floral City Strategy; and
- All signage and interpretive signage for parks, pathways, stormwater management ponds, valleylands, etc. shall conform to the City's Wayfinding Program and will be subject to review and approval by the City.

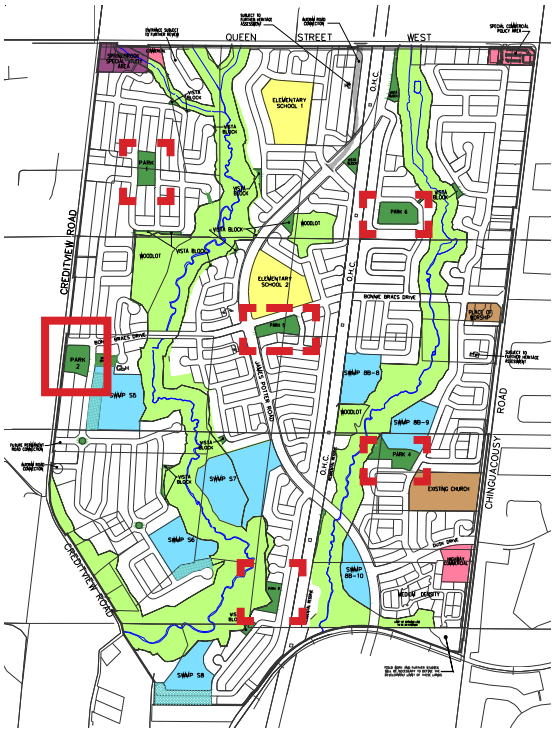


Figure 4.1f:
Parks #2 Key Plan

4.0 Open Space System

- PRUNE EXISTING TREES ALONG CREDITVIEW ROAD TO PROVIDE STREET LEVEL VIEW.
- ENSURE PLANTING, GRADING, AND LOCATION OF PARK ELEMENTS DOES NOT OBSCURE OR INTERFERE WITH VIEW.

Figure 4.1g:
Parks #2 Concept Plan.

4.0 Open Space System

4.1 Parks (#3)

The following park is located near the southern limits of the community abutting the Springbrook Creek Valley. It is the smallest park in the community and should be designed to allow for both passive and active recreational opportunities.

Characteristics:

- Located in the south part of the community, opposite the Ontario Hydro Corridor;
- Abuts the Springbrook Creek Valley and residential lots;
- 0.4 ha (1.0 ac);
- Street frontages on three side;
- Provide a seamless integration with the adjacent valley;
- Pedestrian trails should be provided and made connective to public sidewalks;
- Street trees should be planted along the park edge to create an urban park edge;
- Children's play facility should be centrally located as a focal element within the park and promote public street visibility;
- Provide a 1.2m high chain link fence along residential lot lines within public lands;
- Landscaping will appropriately buffer adjacent residential land uses;
- Lighting is an integral component of the park and will be located and designed in accordance with the City of Brampton standards;
- Park benches and trash receptacles will be provided and shall be located and designed in conformity with the City of Brampton's design standards;
- Park signage will incorporate civic design theming that are reflective of the City's Floral City Strategy; and
- All signage and interpretive signage for parks, pathways, stormwater management ponds, valleylands, etc. shall conform to the City's Wayfinding Program and will be subject to review and approval by the City.

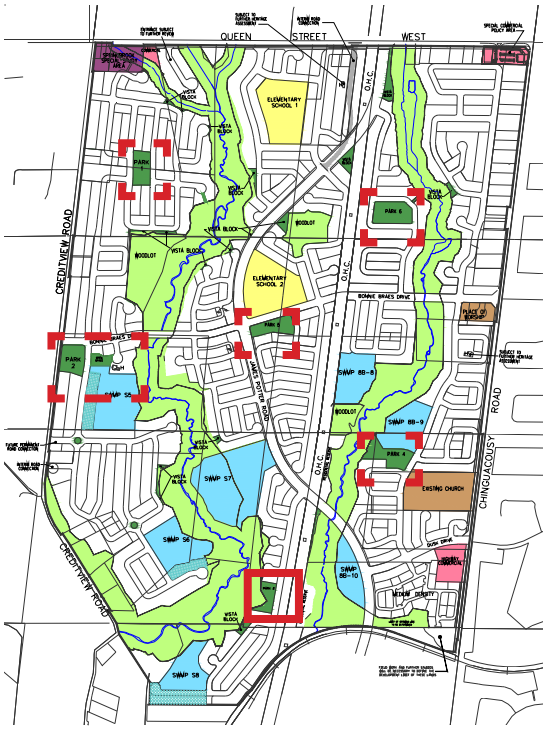


Figure 4.1h:
Parks #3 Key Plan.

4.0 Open Space System

NOTE: PARK CONFIGURATION ADJUSTMENTS REQUIRED PRIOR TO DRAFT PLAN APPROVAL

Figure 4.1i:
Parks #3 Concept Plan.

4.0 Open Space System

4.1 Parks (#4)

This park abuts the Tributary 8B Valley and stormwater management pond near the eastern portion of the community. It is the only park in the community that abuts a stormwater management pond.

Characteristics:

- Located off a connector road along the eastern edge of the community;
- 0.8 ha (2.0 ac);
- Bounded by a stormwater management pond to the north, connector road to the east, residential to the south and the Tributary 8B Valley to the west;
- Single street frontage;
- Provide seamless integration with the adjacent stormwater pond through grading and planting;
- Pedestrian trails should be provided and made connective to public sidewalks;
- Street trees should be planted along the park edge to create an urban park edge;
- Children's play facility should be designed as a focal element within the park and located to maximize public street visibility;
- Provide a 1.2m high chain link fence along residential lot lines within public lands;
- Landscaping will appropriately buffer adjacent residential land uses;
- Lighting is an integral component of the park and will be located and designed in accordance with the City of Brampton standards;
- Park benches and trash receptacles will be provided and shall be located and designed in conformity with the City of Brampton's design standards;
- Park signage will incorporate civic design theming that are reflective of the City's Floral City Strategy;
- Provide a valleyland seating/view area; focus views to valley and adjacent stormwater pond; and
- All signage and interpretive signage for parks, pathways, stormwater management ponds, valleylands, etc. shall conform to the City's Wayfinding Program and will be subject to review and approval by the City.

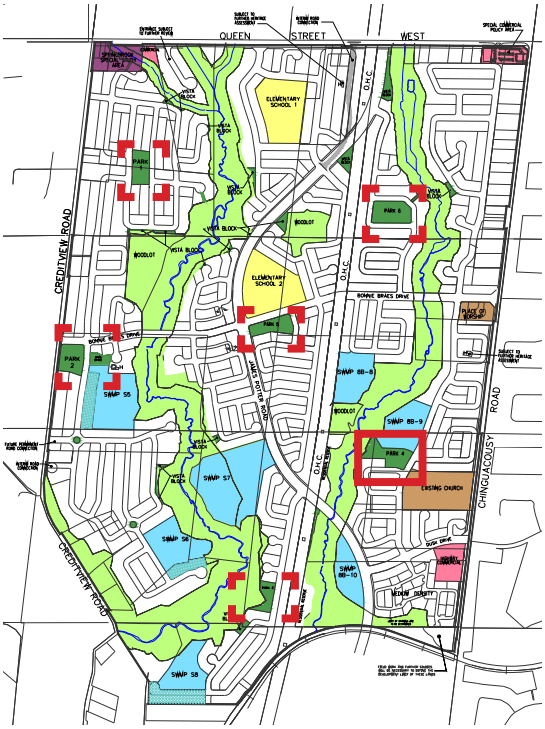


Figure 4.1j:
Parks #4 Key Plan

NOTE: PARK CONFIGURATION ADJUSTMENTS REQUIRED PRIOR TO DRAFT PLAN APPROVAL

Figure 4.1k: Parks #4 Concept Plan

4.0 Open Space System

4.1 Parks (#5)

The following park is centrally located within the community, in the Community Centre.

Characteristics:

- Located at the south east corner of James Potter Road and Bonnie Braes Drive;
- 0.61 ha (1.5ac);
- A special component of the Community Centre;
- Adjacent to an elementary school to the north;
- Abuts live/work units to the south;
- Street frontages on three sides;
- Provide walkway connections along the front elevation of live/work units to pedestrian trails within the park;
- Street trees should be planted along the park edge to create an urban park edge; select high crowned trees to allow views through to live/work edge;
- Children's play facility should be designed as a focal element within the park;
- Include a focal architectural element (gazebo) for the "cross-roads" area of this park; the design of this structure should be complementary to the architectural style, form, and colours of the adjacent live/work units;
- Lighting is an integral component of the park and will be located and designed in accordance with the City of Brampton standards;
- Park benches and trash receptacles will be provided and shall be located and designed in conformity with the City of Brampton's design standards;
- Park signage will incorporate civic design theming that is reflective of the City's Floral City Strategy;
- Formalize park planting at corner entries and within the park;
- Create a central meeting space/cross roads for informal meeting and gatherings; and
- All signage and interpretive signage for parks, pathways, stormwater management ponds, valleylands, etc. shall conform to the City's Wayfinding Program and will be subject to review and approval by the City.

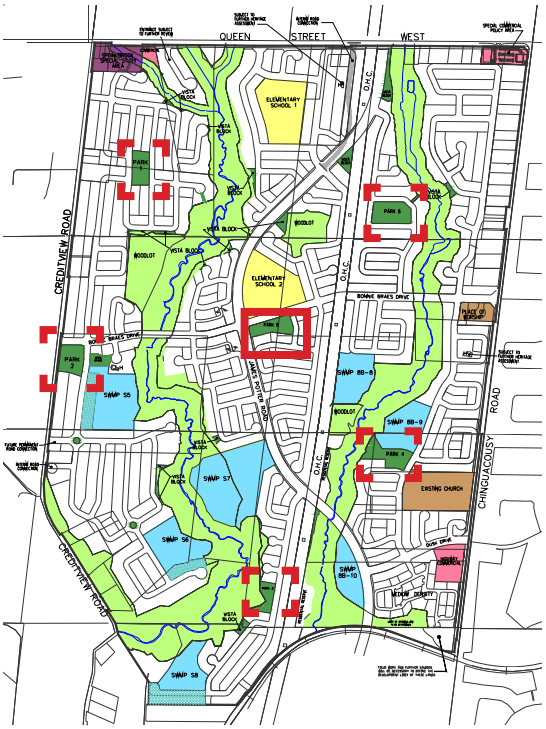


Figure 4.1l:
Parks #5 Key Plan

4.0 Open Space System

Figure 4.1m:
Parks #5 Concept Plan

4.0 Open Space System

4.1 Parks (#6)

The following park is located west of the Tributary 8B Valley near the north eastern portion of the community.

Characteristics:

- Located at the north eastern end of the community;
- 0.8 ha (2.0ac);
- Occurs at street elbow bends;
- Bounded by roads on all sides;
- Within close proximity to the Tributary 8B Valley;
- Pedestrian trails will be provided and made connective to public sidewalks;
- Street trees will be planted along the park edge to create an urban park edge;
- Incorporate a free play opportunity;
- Playground will be located in a more prominent location and designed as a focal element within the park;
- A shade structure will be implemented for this neighbourhood park;
- Lighting is an integral component of the park and will be located and designed in accordance with the City of Brampton standards;
- Park benches and trash receptacles will be provided and shall be located and designed in conformity with the City of Brampton's design standards;
- Park signage will incorporate civic design theming that are reflective of the City's Floral City Strategy;
- All signage and interpretive signage for parks, pathways, stormwater management ponds, valleylands, etc. shall conform to the City's Wayfinding Program and will be subject to review and approval by the City; and
- This park will service area to NE across valley. A valleyland connection via a bridge will be required to provide access.

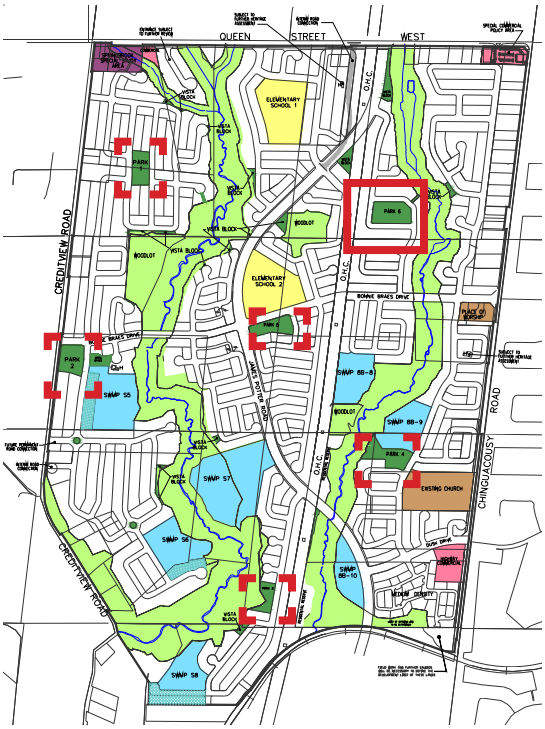


Figure 4.1n:
Parks #6 Key Plan

4.0 Open Space System

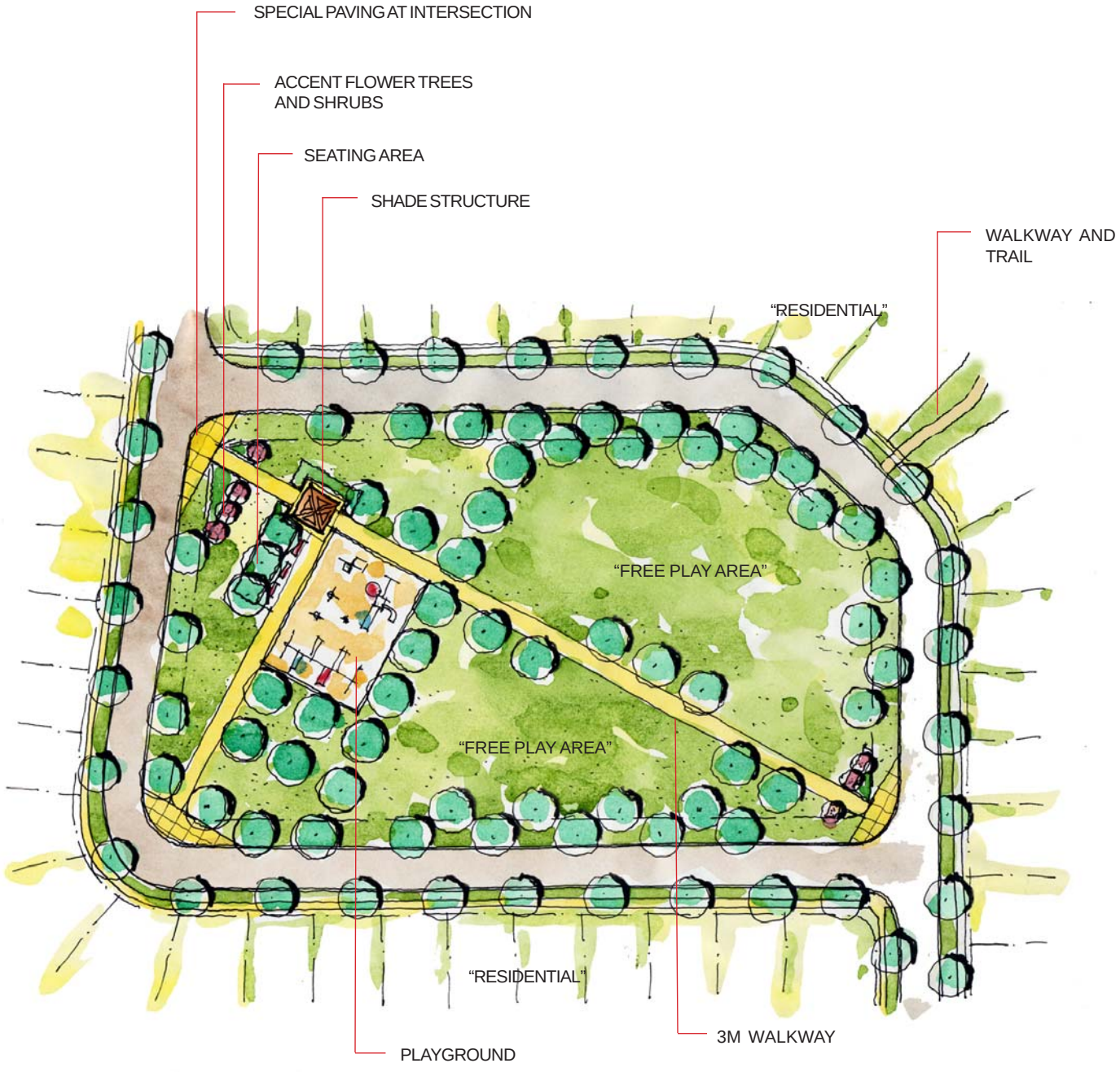


Figure 4.1o:
Parks #6 Concept Plan

4.0 Open Space System

4.2 Stormwater Managment Ponds

Stormwater ponds are integrated into the community as visual and recreational amenities. They extend adjacent natural features through landform and planting, and are a potential source of biodiversity and wildlife habitat.

Characteristics Include:

- May include an integrated trail system with trail heads;
- May include a lookout feature overlooking the pond with a plaza seating area;
- Design and planting conforms with Conservation Authority and City of Brampton guidelines for site design;
- Slopes are graded at a maximum of 3:1, but vary to create interest;
- Maintenance access roads are gravel surfaces below top soil and seed, and are located to minimize their visual impact on the pond area, trails, lookouts, and the adjacent public streets;
- Seven stormwater management ponds will be constructed in the south half of Block 5. All abut valleylands, most have extensive street frontage (except ponds S7, 8B-8) and 8B-9 is also adjacent to a park and pond 8B-8 is also adjacent to a woodlot.

Where pond blocks abutt valleylands and woodlots, restore/ replant interface to recreate a forested edge that is seamlessly integrated with abutting natural landscapes. Focus planting to fast growing, pioneering species, smaller quantities and sizes of local hardwoods and reintroduction of white pine.

Throughout pond blocks planting and where appropriate integrate burr oak, black walnut, and sugar maples, Block 5 signature species.

All ponds provide viewing opportunities but ponds S5, S6, and S7 provide superior vistas or focii. Accordingly well positioned and detailed lookouts are proposed in these ponds.

Pond S5 provides vistas to Springbrook Creek Valley and the Bonnie Braes heritage property, pond S7 from James Potter Road provides a vista to Springbrook Creek Valley below and long distance vistas to the southwest and pond S6 provides local vistas to Springbrook Creek and valley pond below. Ponds S5, S6 and 8B-9 also provide recreational trail opportunities and linkages.

Lookouts will be positioned to maximize public invitation and to capitalize on view/ vista opportunities. Unit paved lookout areas including seating, ornamental planting, armourstone retaining walls (above H.W.L.) and decorative metal fence guards as required are proposed (see Figure 4.2c - Stormwater pond concept plan).

Figure 4.2a:
Stormwater Pond Key Plan

✱ Ponds with a lookout feature.
Pond with a fountain.

Pond 8B-10 will include a fountain with a jet pattern and height to be visible from James Potter Rd. Do not locate fountain in siltation forebay of pond.

Where ponds interface with streets, provide a staggered double row of street trees. Concentrate bulb and perennial planting adjacent to street edges so they are visible to the street. Use larger flowering shrubs, ornamental trees, and species with good fall colour across from streets. At street edges define mow limit line with flowing, curvi linear form.

At pond edge, plant fast growing wetland species of trees and shrubs to encourage rapid naturalization, ie., black willow, silver and red maples, alder, gray dogwood, etc.

Pond block planting will respond to City and Conservation authority species mix, sizing, and spacing requirements.

Figure 4.2b:
Stormwater Pond Design.

Figure 4.2c:
Stormwater Pond Concept Plan (SWM S5).

4.0 Open Space System

4.3 Road Crossings

Valley crossings celebrate the crossing of the watercourse by Bonnie Brae Drive. They create a defined sense of place at the valley crossing and create experiences for vehicular occupants, pedestrians, and cyclists upon entry and arrival into the community.

Characteristics Include:

- Create opportunity for overlook and trail linkages;
- Use same language of materials and details as throughout community;
- Low columns, decorative fencing and precast walls to define the edge of the crossing experience;
- Sidewalks approaching from each side enter a wider decorative paved area;
- Shrub planting adjacent to crossings seamlessly complement natural plantings along watercourse;
- Small planting beds add greenery to streetscape;
- Minimize impediments to the free movement of water and debris; and
- Detail design of road crossing bridges will incorporate standard Brampton design treatments: end piers, logo, rail types, colours, and parapet wall finishes and treatments.

Figure 4.3a - Key Plan

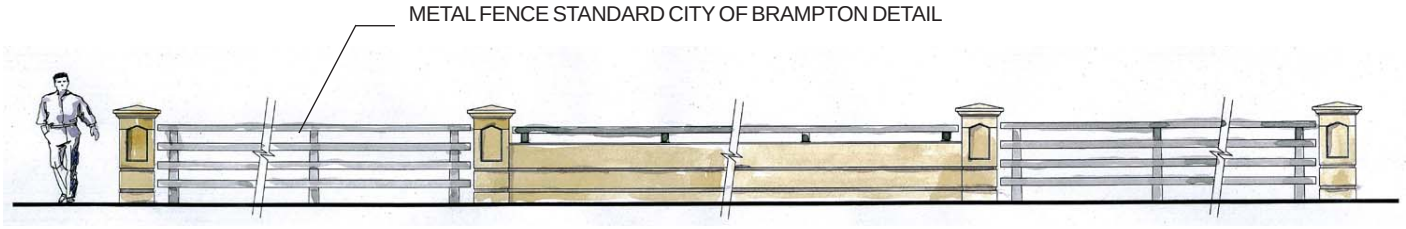


Figure 4.3b - Bonnie Braes Drive - valley crossing street elevation.

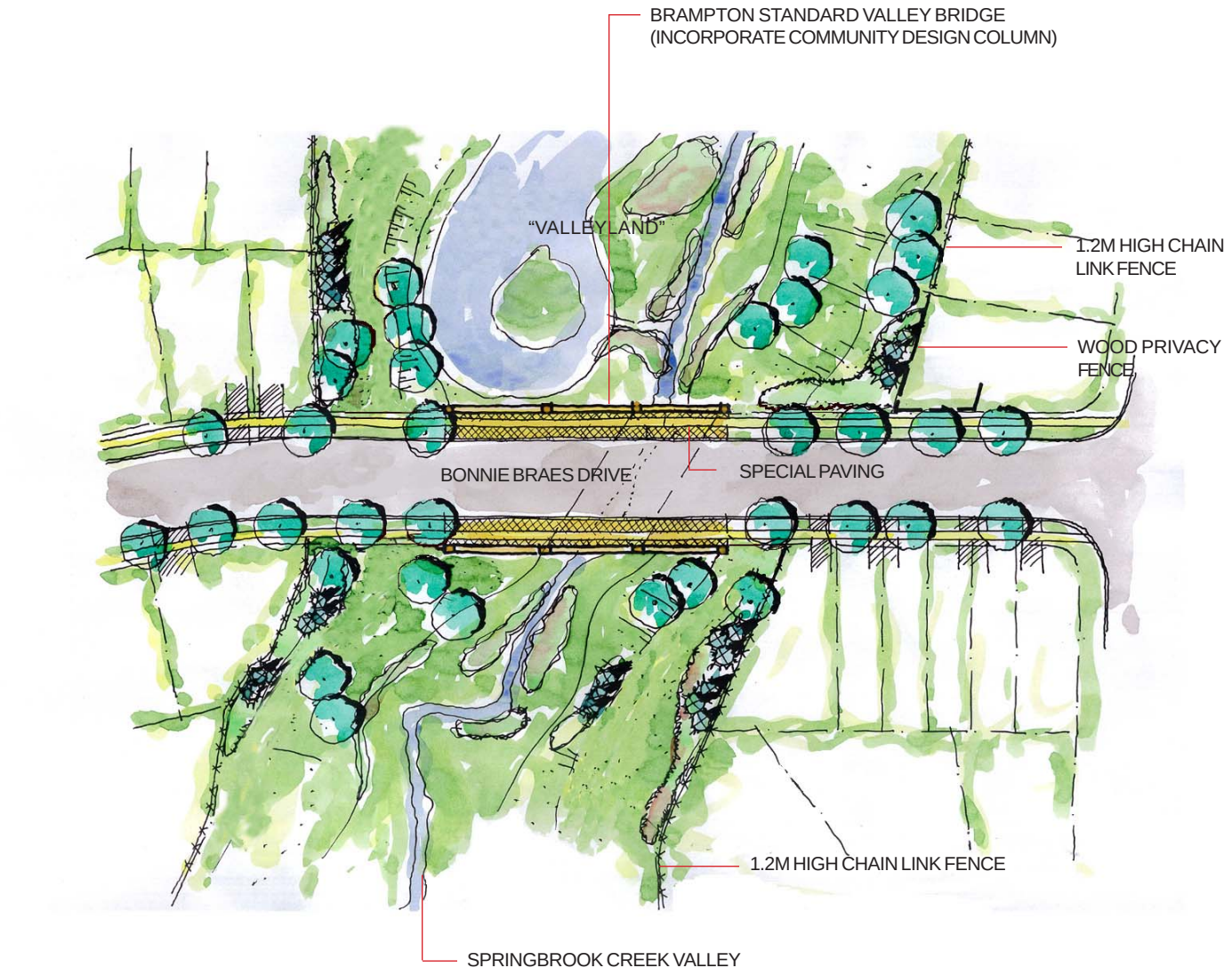


Figure 4.3c - Bonnie Braes Drive - valley crossing plan view

4.0 Open Space System

4.4 Vista Blocks

Vista blocks are located throughout the community with significant vista blocks clustered around the Springbrook Creek Valley. Between three to five vista blocks will be designed to incorporate opportunities for seating and viewing and will be selected on the basis of view quality and distribution throughout the community. Seating areas are subject to grading, the size of the vista block and the presence of significant open space views. All seating design shall be in accordance with the City of Brampton's design standards.

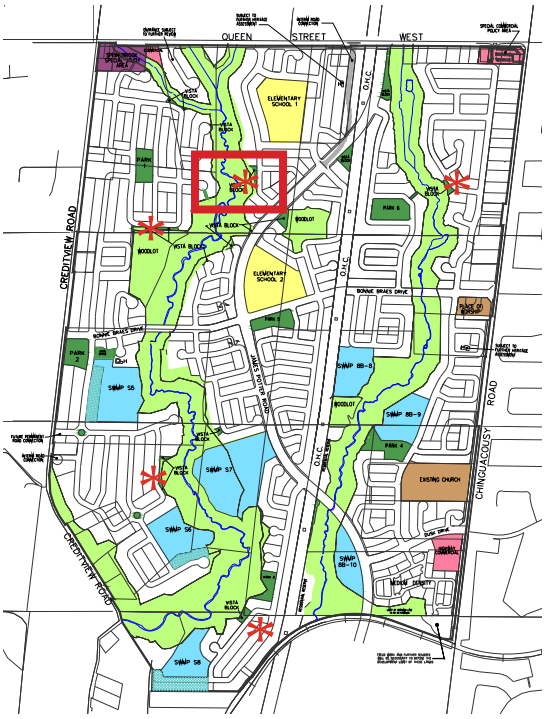


Figure 4.4a -Key Plan.

* Vista Blocks Incorporating Seating and Viewing Opportunities.

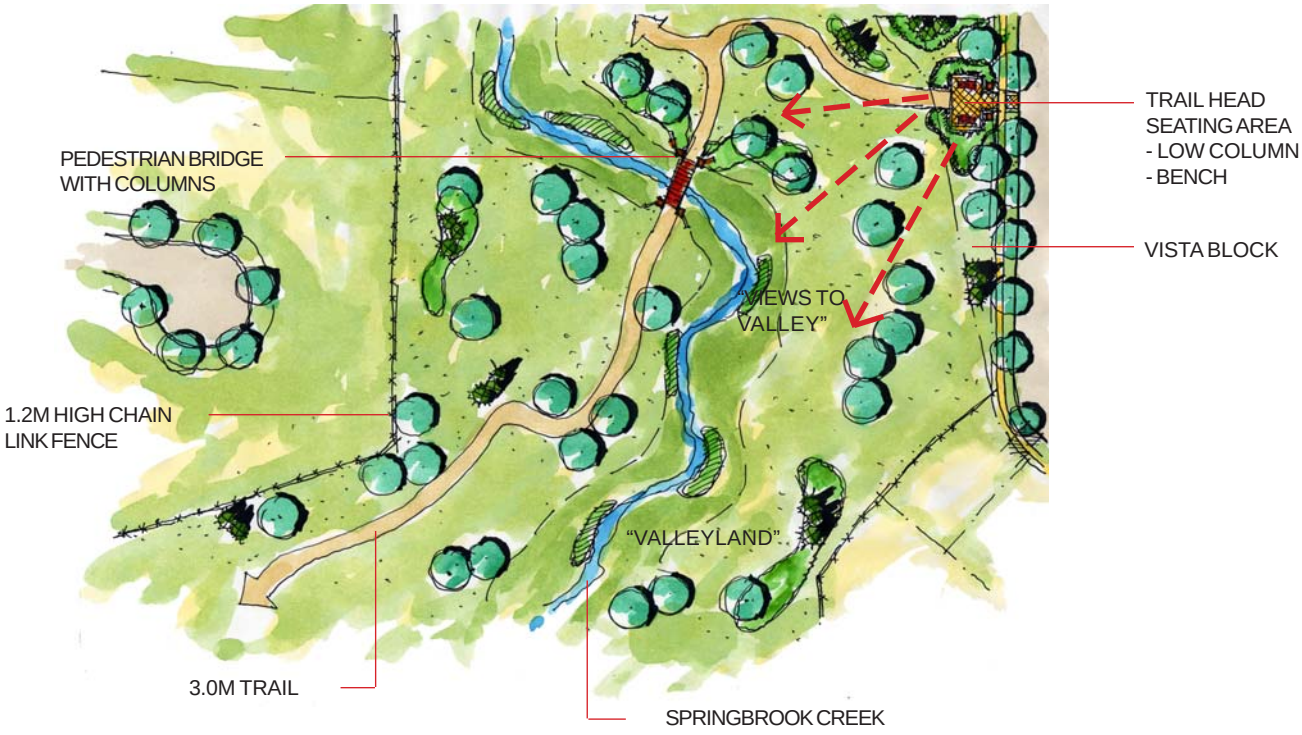


Figure 4.4b - Typical vista block concept plan.

4.5 Trail Heads/ Trails/ Pedestrian Open Space Crossings

Creditview Crossing provides many views of and access to its natural features, including trail network through parks, the ponds, woodlots and valley lands with trail heads that act as small nodes to celebrate access points. The continuous trail network traverses the natural features, with many linkages to the community and provides opportunity for future connections to conservation lands beyond Creditview Crossing. Refer to Appendix 1 - Pathways System Plan.

Trail Characteristics Include:

- Trail is 3m wide asphalt with night lighting where designated as Class I;
- Sited to create minimal disturbance or grading;
- Possible occasional small culverts are provided under the trail for drainage;
- Tie in with other trails and sidewalks;
- Utilize maintenance access driveways to stormwater management ponds (minimizes the intrusiveness of two parallel corridors); and
- Final trail location to be determined by a field walk with City of Brampton, CVC and landowner team.

Trail Head Characteristics Include:

- Columns, decorative hard-surfaced area and seating where they are 'stand-alone' trail heads;
- Low columns where they are part of or in close proximity to other key trail head features (such as lookout feature at the stormwater pond);
- Two columns flanking trail; and
- Decorative hard-surfaced area with benches, sited to provide overlook of natural areas.

Open Space Crossing Characteristics Include:

- Metal bridge with low columns at ends; and
- Conform with typical City of Brampton standards.

Figure 4.5a - Example of a pedestrian bridge crossing.

Figure 4.5b - Example of a pedestrian bridge crossing.

4.0 Open Space System

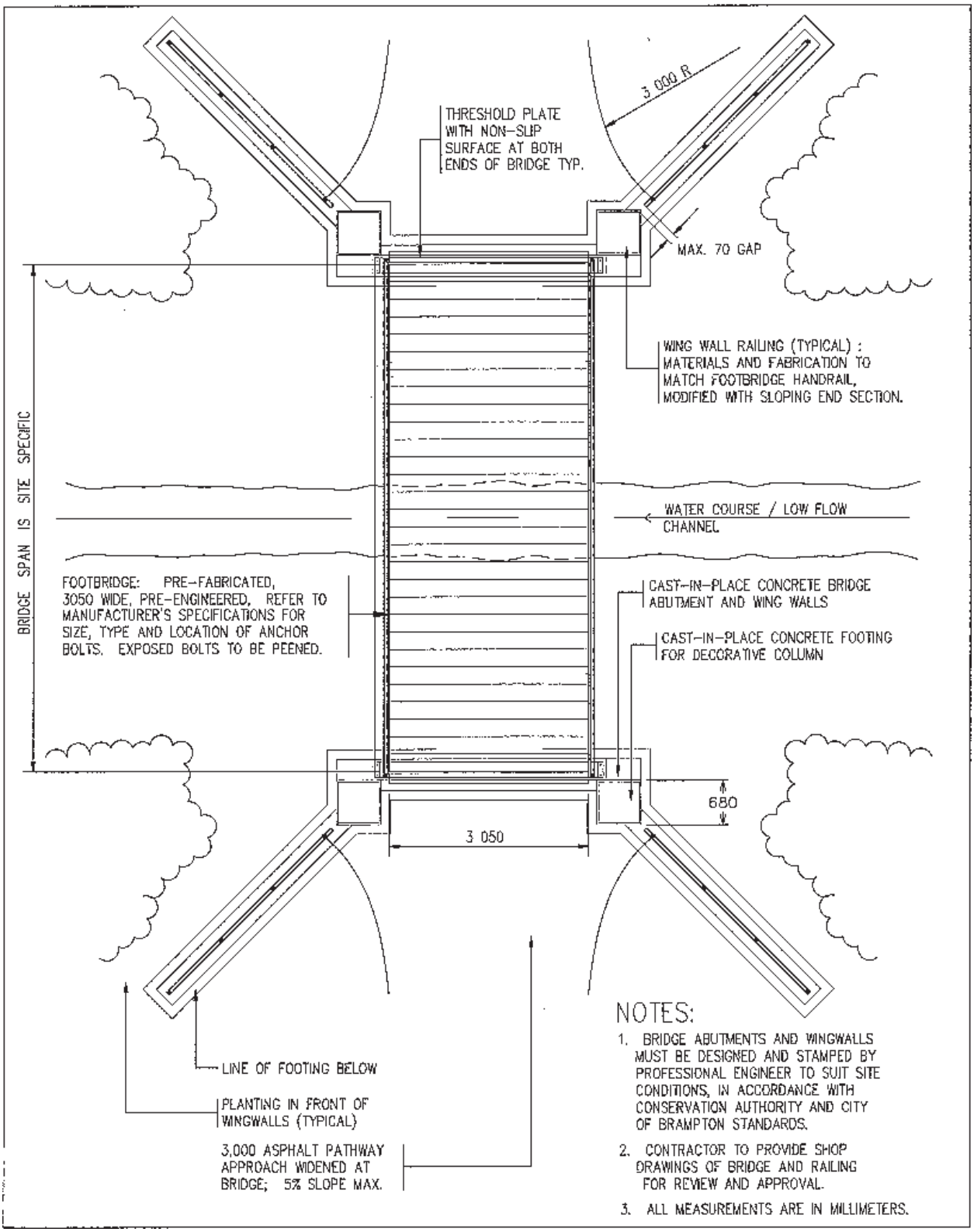


Figure 4.5c - City of Brampton open space crossing design standard..

4.6 Woodlots Restoration

Tableland woodlots within the community shall have an edge management plan prepared for them, which shall identify:

- Areas where re-planting of the edge is necessary in consultation with City of Brampton urban foresters;
- Identify trees that are hazardous and undertake their removal as necessary; and
- Areas where invasive species should be removed and replaced with other species.

Figure 4.6a:
Photograph of a mature woodlot.

5.0 Streetscape Elements

5.1 Heritage Inspired Landscape Elements - Bonnie Braes Farmstead

Refer to Figure 3.1a - Existing Structuring Elements Plan of the Block Plan Design Guidelines for the location of the Bonnie Braes Farmstead. The proposed landscape elements illustrated below are reflected in the major and minor gateway landscape design details. Refer to sections 2.3 and 2.4 of the Open Space Design Guidelines.

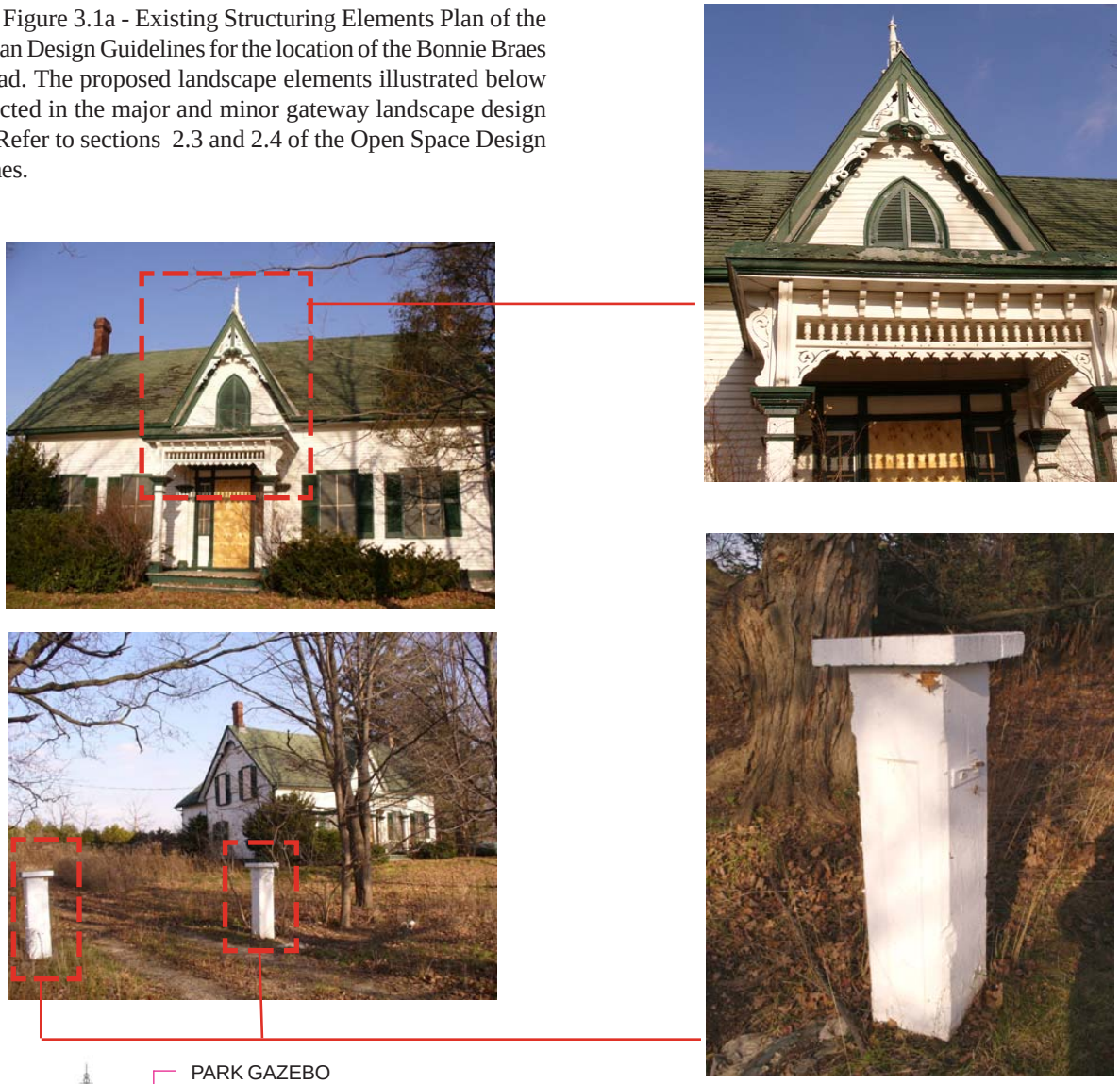


Figure 5.1a - Proposed landscape elements inspired by Bonnie Braes heritage forms.

5.2 Fencing

Corner lot and flankage lot fencing is provided for lots with rear yards that are adjacent to public streets or open spaces, and includes both privacy and acoustic fencing. Their location and design should be in conformity with the City of Brampton standards.

- The fence screens rear yard amenity spaces, and, provides a unifying element throughout the community that reinforces the community image;
- 1.8m high stained wood fence; and
- Decorative metal fencing and decorative rail fencing are provided as an accent at special feature areas. Decorative fence designs are compatible with the wood fences.

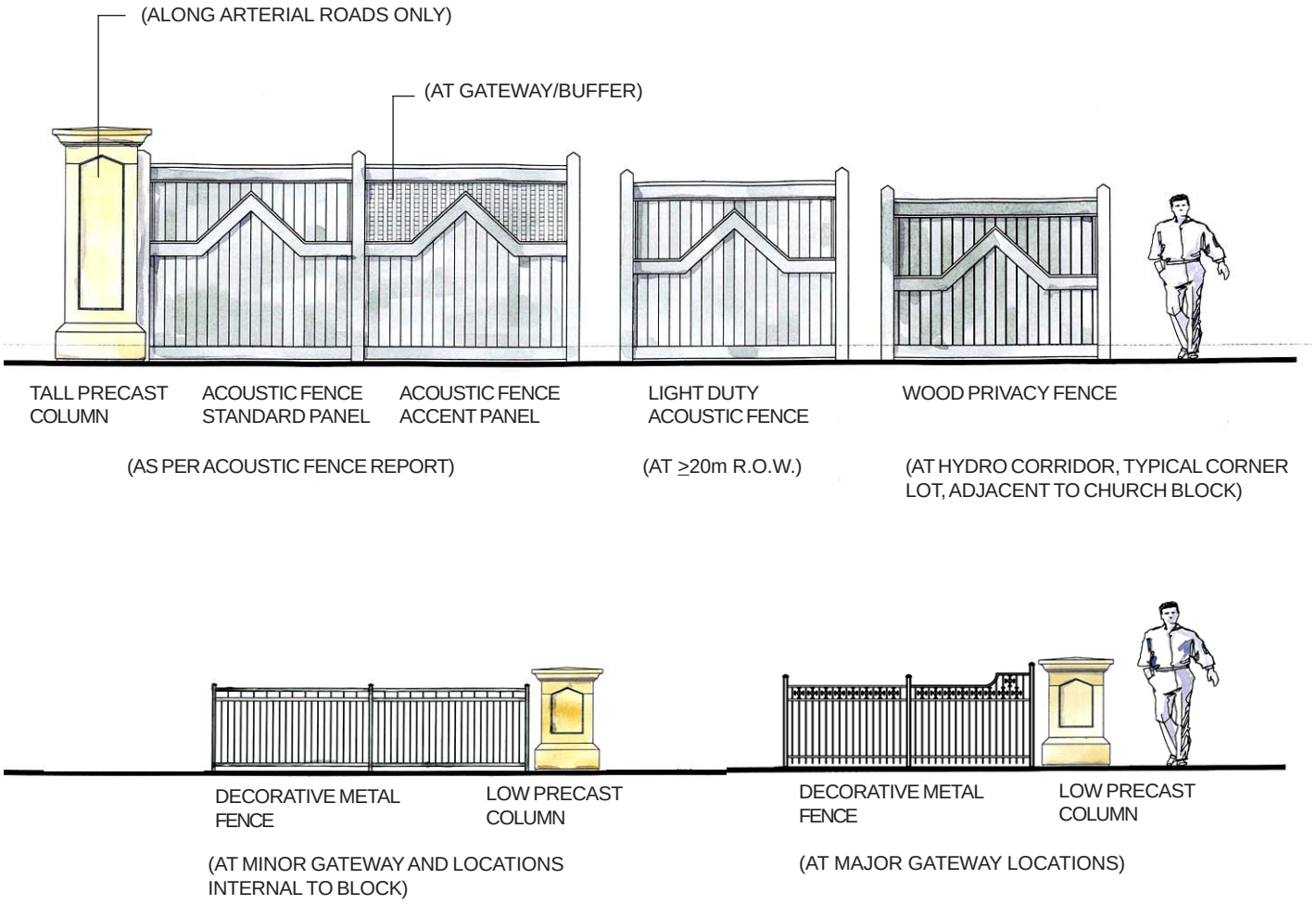


Figure 5.2a - Conceptual fence designs.

5.0 Streetscape Elements

5.3 Street Trees

Street trees contribute significantly to the perceived quality and desirability of a community. They should be appropriately selected and located to define special roads and areas. Tree species should relate to the scale and role of roads and provide for seasonal streetscape interest. Tree planting will respect current City of Brampton standards with respect to location, spacing, species and mix.

Design Guidelines Include:

- Street trees selection should be from the City of Brampton's current Recommended List of Street Trees with possible species augmentation to include oak, hickory, chestnut species due to soil conditions;
- Canopy street trees should provide shade for high pedestrian circulation streets;
- Same species of trees may be planted on either side of the street for short lengths and at specific areas such as the Bonnie Braes gateway from Creditview Road and also in front of the neighbourhood park, etc.; and
- A double row of street trees will be required along Creditview Road.
- 100mm caliper street trees will be provided on both sides of the street in executive housing areas. See Figure 3.8a.

5.4 Street Lighting

A new lighting standard for communication poles will be implemented. Street lighting within the community shall be located and designed in accordance with the City of Brampton standards. They should generally be consistently designed and provide for appropriate function.

Design Guidelines Include:

The location of street lights should be coordinated with the location of streetscape elements such as street trees to avoid conflicts and to establish a balanced streetscape. Lights should be positioned to light trail and park entries, transit stops and areas of pedestrian congregation.

5.5 Community Mailboxes

Community mailboxes will be located according to Canada Post and the City of Brampton. They will be conveniently located in areas that provide high visibility and convenient access to residents. Their design and location should be appropriately integrated into the overall streetscape.

Design Guidelines Include:

- Community mailboxes should be located along publicly exposed side yards of residential dwellings;
- Where possible, integrate pedestrian access by connecting walkways to the community centre, schools, transit stops, etc.;
- In executive housing areas upgrade concrete surfaces by saw cut pattern and finish and add canopy structure and ornamental planting to create setting for mailboxes and to reduce side view. See Figure 5.5a - Conceptual mailbox plan for executive areas. Also, refer to the City of Brampton's Design Workbook for Brampton's upscale executive special policy areas.

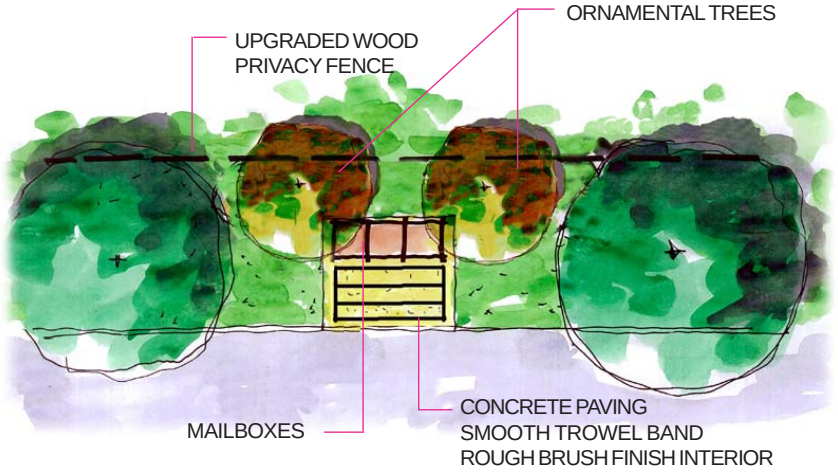


Figure 5.5a - Conceptual mailbox plan for executive areas.

5.6 Transit

Transit routes should be coordinated with the street network to ensure adequate coverage. Transit stops shall be designed in compliance with the City of Brampton standards.

Design Guidelines Include:

- Locate transit stops in highly visible and convenient locations with pedestrian connections;
- Amenities such as trash receptacles, benches, mail boxes and newspaper boxes should be considered at transit stops; and
- Locate street trees to provide shade and plant adjoining buffer areas to provide detailed visual interest.

5.7 Utilities

Utility structures such as hydro, telecommunication and cable boxes within residential neighbourhoods should be addressed in the beginning stages of development to avoid negative streetscapes. Prior to approval of development within a Secondary Plan area, all interested utilities and telecommunication providers shall be consulted to determine appropriate locations for large utility equipment and utility cluster sites, as required. The location of all utility structures shall be coordinated and located per road R.O.W cross-sections with the City of Brampton and/or may also be located on other lands within easements. Alternative methods of containing utility services on or within streetscape features, such as street light poles that accommodate multiple utilities will be encouraged to reduce street clutter.

Design Guidelines Include:

- Utilities should be located away from highly visible areas; and
- Locate traffic light control boxes so not to interfere with entry features.

5.8 Site Furniture

Site furniture include elements within the streetscape such as street lighting, benches, trash receptacles, bicycle racks, and open space signage. They shall be consistent with the City of Brampton design standards.

All of the streetscape elements described and illustrated in this section will help to establish a distinctive community. The character and design of the streetscape elements are derived from the details of the Bonnie Brae's House - reserved, well-executed and of subdued colour.

5.9 Executive Area Upgrades

The City of Brampton requires upgraded open space elements to help define executive communities. Visible upgrades to street furnishings, paving, planting, and the addition of community features help to distinguish executive areas.

Executive areas in Creditview Crossing are depicted on Figure 5.9a (next page). As illustrated by this figure, the executive areas are not easily enclaved; therefore, some judgement must be exercised when determining the application of the executive area upgrades in the detailed design stage of the various subdivisions.

Executive area upgrades include features shown on Figure 5.9a (next page). These include:

1. Roundabout (shown below);

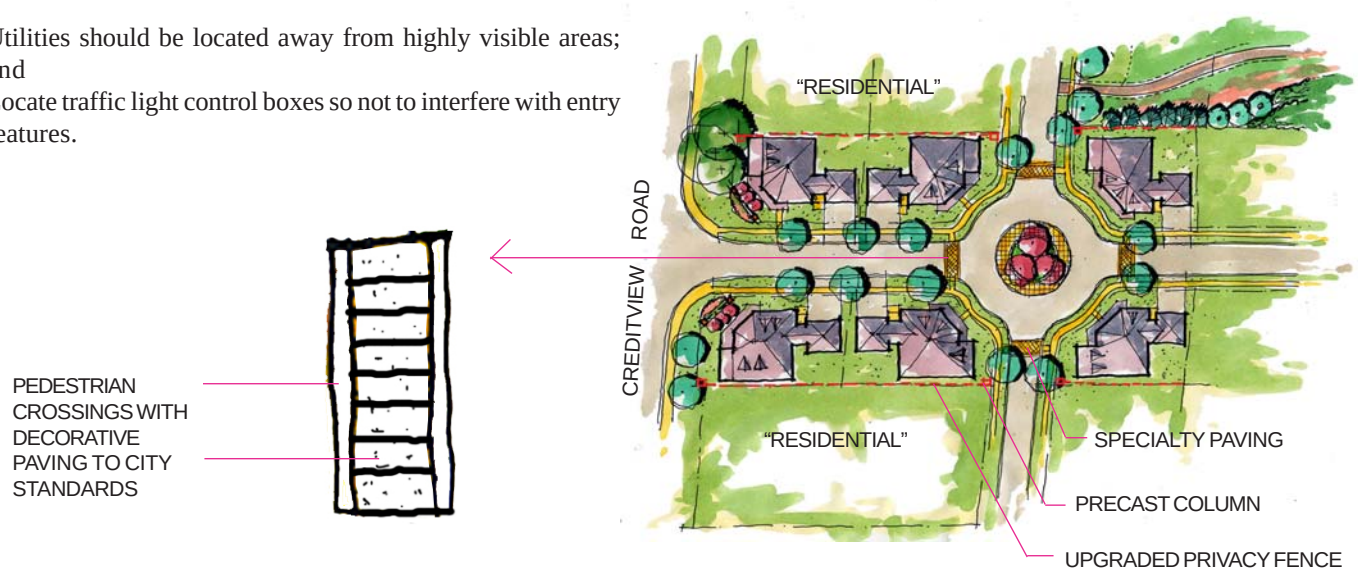


Figure 5.9b - Executive Area Upgrade (Roundabout)

5.0 Streetscape Elements

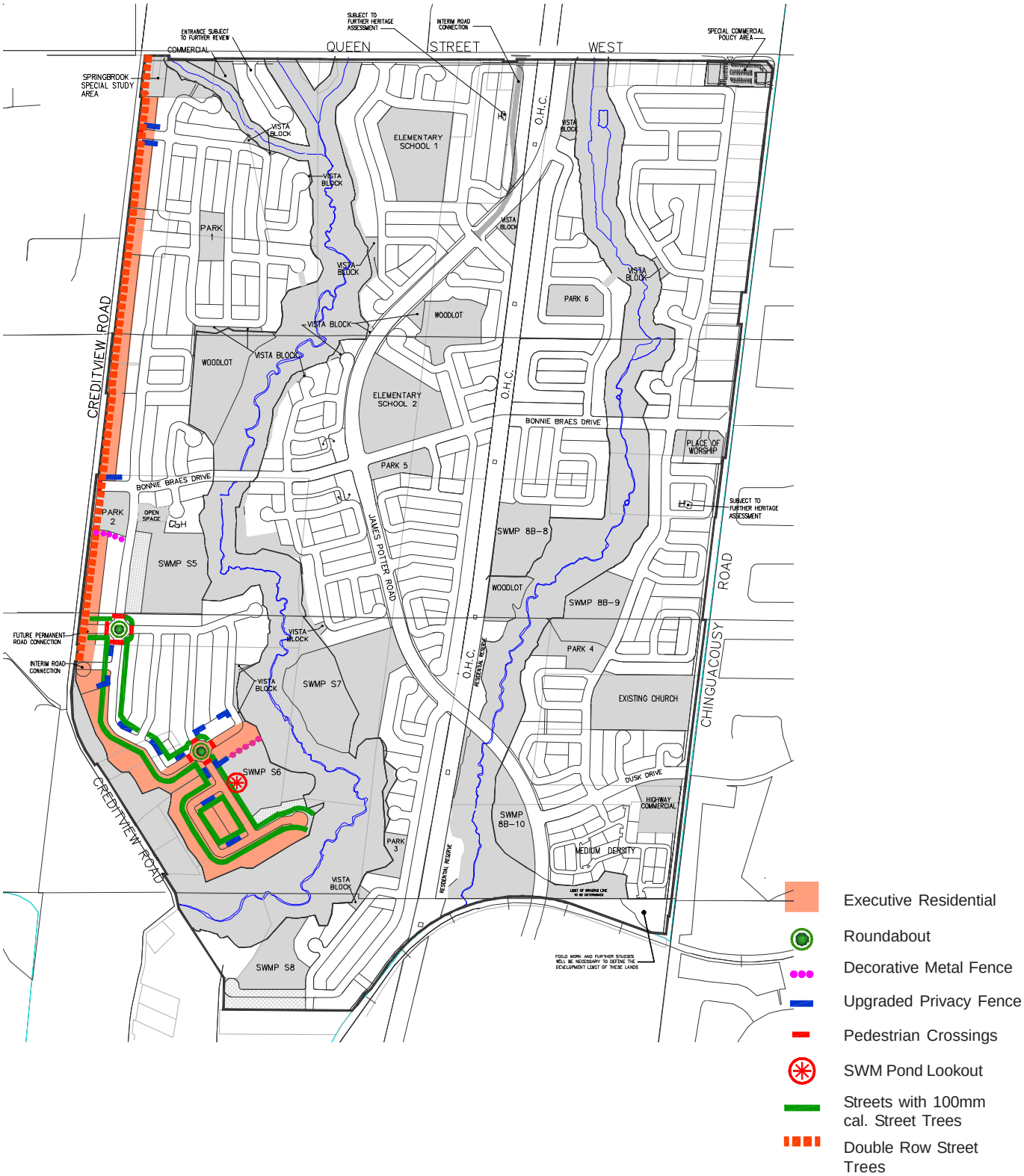


Figure 5.9a - Executive Area Upgrades Plan

2. Upgraded privacy fence at key intersections (shown right); see Figure 5.9a for location;

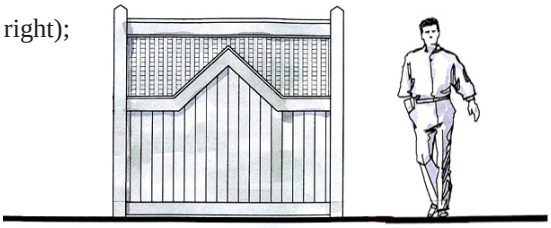


Figure 5.9c - Executive Privacy Fence

3. Decorative metal fence at Park #2 flankage (shown right); see Figure 5.9a for location;

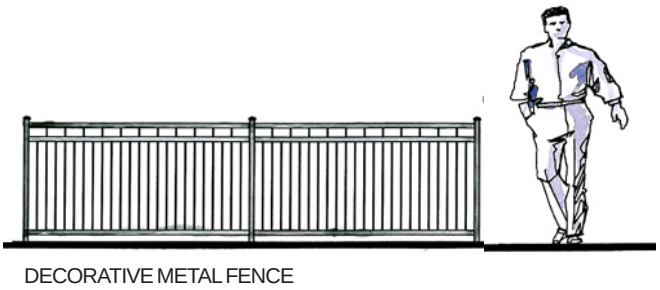


Figure 5.9d - Executive Park Flankage Fencing

4. Pedestrian crossing specialty concrete paving to City of Brampton Standards;

5. Upgraded community mailbox areas (shown below);

Community mail boxes may be located in local vista blocks or stormwater ponds and may include enhanced landscape treatment such as decorative canopy and soft landscaping.

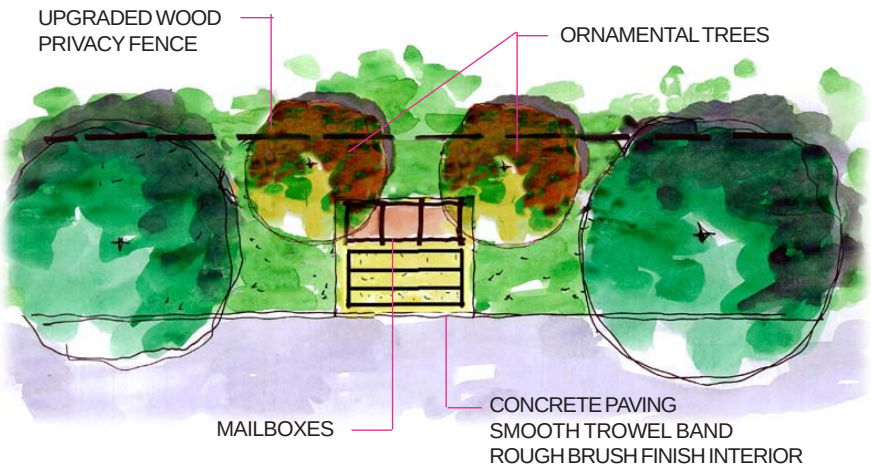


Figure 5.9e - Executive Mailboxes

6. SWM pond lookouts as shown in Figure 5.9a;

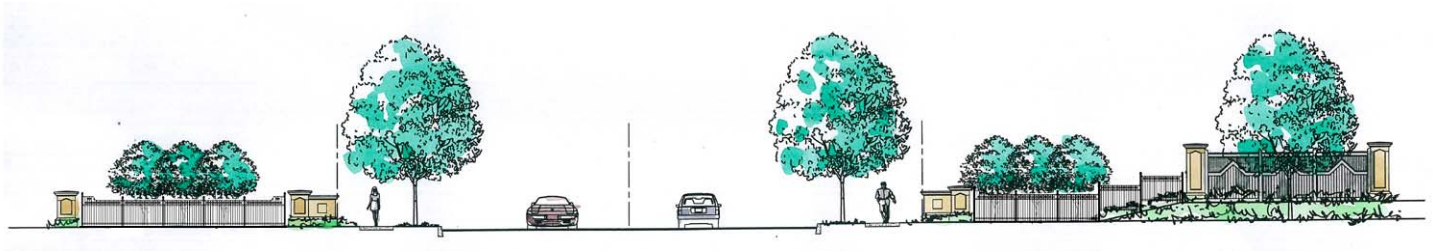
7. Decorative street signs per City of Brampton wayfinding and signage study.

6.0 Summary

6.0 Summary

The Creditview Crossing community's sense of scale is very large and expansive where hard landscape elements are important but appropriate planting design and species selection will in the mid-term create a unique, cohesive neighbourhood. The many existing and proposed high quality attributes of this block, ie, quality mature vegetation and woodlots, valleylands, expansive open spaces, and the naturally occurring enclaving and proposed community centre already define the Creditview Crossing community as distinctly different from others.

As well, the naturally occurring enclaving in this community creates freedom for designers to interpret streetscape elements in so far as to encourage land marking and distinctiveness within the stated and illustrated guidelines.



PART IV

Architecture Design

1.0 INTRODUCTION

Built form within Creditview Crossing will play a vital role in establishing a positive overall community image. The design and siting of new buildings which help create interesting streetscapes is essential in generating an active and comfortable living environment. Objectives for site planning and built form within the community are:

- To establish and maintain a consistently high level of architectural design quality for new buildings in the community, as shown in these photographs;
- To establish the image and identity of the community through building architecture;
- To create pedestrian-scaled, visually appealing and varied streetscapes and public spaces through the appropriate design and siting of new buildings;
- To reinforce the structure of the community and emphasize the importance of landmark buildings at focal locations; and
- To ensure compatible interfaces between neighbouring and adjacent development/built form.

Figure 1.1 - Examples of high quality architectural design.

2.0 Character Areas

There are four distinct areas in Creditview Crossing as shown on Part II Figure 9 - page 55. The character of these areas is varied and require design guidelines to address the specific conditions of each. These specific requirements are in addition to general residential guidelines outlined further in this document.

2.1 CHARACTER AREA 1
Executive Residential

The executive residential area consists of the dwellings fronting onto Creditview Road and to the South, the enclave bordering onto Creditview Road. The natural landscape of the Springbrook Creek ravine, coupled with the existing 'country lane' character of Creditview Road made this an ideal setting for upscale executive housing. The requirements for this area are rooted in the "Design Workbook for Brampton's Upscale Executive Special Policy Area". The executive residential areas are characterized by the mixture of larger and deeper lots, where 15m (50ft) is the minimum frontage width.

The following guidelines shall apply to executive housing areas. In addition to the following, other sections of this document shall also apply unless otherwise noted.

- The use of traditional architectural style derived from Georgian, Tudor, and Victorian architecture will be encouraged;
- Stone, brick, and stucco are the only cladding material allowed in the executive areas;
- The cladding treatment shall be consistent and faithful to the proposed style on all elevations of a dwelling;
- The roof slopes should be a minimum of 8:12 and encouraged to be greater, where commensurate with style;
- A continuous frieze board (min. 150mm wide) shall be installed under all soffits;
- Garages in the executive areas may be oriented to face the street, where the maximum allowable projection of the garage face is 1.5m forward of the main wall, but never forward of the entry element or porch;
- Builders are required to present house plans with garages detached in the rear yard and with garages in the front yard perpendicular to the street (ie. coach house style);
- The garage doors shall also reflect an upscale treatment, which is also referred to as "coach-house inspired designs". The use of low quality, high maintenance garage doors shall not be permitted. High quality garage doors shall be used and finished with demonstrated durability;
- Three-car garages are only permitted on lots with 18.0m of frontage or greater;
- Where stucco is used on corner lots and lots flanking high public visibility areas, it should extend continuously around the dwelling;
- The builder shall provide a sufficient variety of exterior colour packages;
- Rear decks at priority locations (exposed to public visibility) shall have an upgraded design.

Within executive residential areas, a higher standard of architectural detailing is expected. This includes the use of superior quality frieze boards, upscale coach lamps for entrances and garages, decorative address plaques, larger diameter porch columns, use of precast stone elements, molded cornice treatments, moulded detailing elements, decorative metal railings, good quality garage doors, overall use of high quality building materials and craftsmanship.

Frieze Boards
Superior quality, extra wide frieze boards that match the front elevation shall be used on all street facing elevations. They shall return a minimum of 1200mm along the sidewall to standard frieze boards for non-exposed side/rear elevations.

Quoining
Quoining may be used to add detail to corners of the building wall. They shall extend appropriately from the cornice line to either the sill treatment or foundation line and be evenly spaced. Quoining may be made of a variety of materials including brick/ stucco/precast stone.

Chimneys
Consider the use of chimneys at community gateway dwellings, corner lot dwellings, roundabout dwellings, and dwellings with high exposure side and/or rear elevations. Their design shall reflect the architectural style of the house and can act as a highly visible design feature.

Special design considerations are required to reinforce Creditview Road as a "scenic country lane". In addition to the executive housing designation, these dwellings should promote a distinct rural and heritage character that is compatible with the

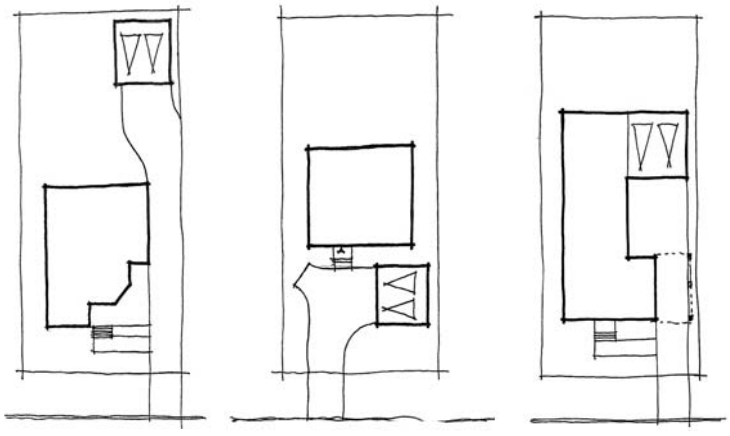


Figure 2.1 - Variety of garage locations.

envisioned Springbrook Settlement Area and the proposed residential development along Creditview, north of Queen Street West.

The following guidelines shall apply to dwellings along Creditview Road:

- The architectural styles and elements should be inspired from rural architecture found in Gothic Revival, Victorian and Georgian periods;
- Where possible, the existing vegetation along Creditview Road will be preserved, including natural areas, street trees, hedgerows, allee, orchard, and plantation;
- The driveway widths and locations have been presited;
- The driveways should have culverts along the road side swale;
- The lots will have been preserviced to avoid any disturbance to tree roots;
- For lots fronting onto Creditview Road, refer to the City of Brampton's lot specific zoning in addition to all other criteria.

2.2 CHARACTER AREA 2
High Quality Housing (Low Density 1 Residential)

This area is located between the Executive Residential and Springbrook Creek / O.R.D.C. rail line in the western, and includes southern portions of the community designated Low Density Residential 1. Area 2 acts as a transition between the Executive Residential and other areas of the community. This area is also characterized by single detached dwellings. The architecture is intended to reflect the same traditional styles proposed for the executive areas, in order to maintain a visual compatibility.

2.3 CHARACTER AREA 3

This area consists of the lands east of Springbrook Creek, excluding the area designated as "The Community Centre". There are many land uses in this area, including residential, commercial, and institutional blocks for schools and places of worship.

Mixed Housing Types (Low Density 2 Residential)

The majority of housing within the community is designated within the City of Brampton's Official Plan as Low Density Residential 2. These lands lie east of the Springbrook Creek and will contain a mix of single-detached, semi-detached and street townhouse dwelling types on a range of smaller lot sizes. Architectural design variety will contribute to the goal of achieving interesting streetscapes within the community.

The following guidelines shall apply to mixed housing types in this area:

- Narrow frontage single-detached dwellings (less than 11.0m), townhouses and semi-detached dwellings should have single-car garages; and
- Wider Single-detached dwellings on wider lots within this area may have 2-car garages.

Commercial Blocks

Refer to section 6.0.

Instutional Blocks

Refer to section 5.0.

2.4 CHARACTER AREA 4

The area around the intersection of James Potter Road and Bonnie Braes Drive is referred to as "The Neighbourhood Centre". This area is characterized by intensified housing forms, a school and a parkette.

Refer to the Block Plan Design Guidelines section 4.1 - Neighbourhood Centre for details.

Medium Density Housing (Low Density 2 Residential)

Medium density residential uses add to the housing options provided within the community. Medium Density housing should occur at focal areas within the community and should generally take the form of townhousing or semi-detached dwelling types. Intensified residential development areas should occur along major roads within the community (such as the intersection of James Potter Road and Bonnie Braes Drive) or along Chinguacousy Road to take advantage of proximity to public transit. The emphasized scale, massing and height of medium density housing will contribute to the diversity of streetscape character and built form within the community.

School Block

Refer to section 5.0.

2.0 Character Areas

Live/Work Units

Dual zoned live/work units form an appropriate transition of commercial to residential land uses. They may have ground level retail with residential above, or work/retail use along one elevation with residential use along the opposite elevation. The retail/work component helps to animate streetscapes by encouraging walking and pedestrian activities for local residents.

- Locate retail/work component facing public streets and spaces and/or commercial mixed use areas;
- Provide immediate on-street curb side parking to facilate convenient service and customer parking;
- Provide a compatible building height and massing transition with adjacent built form;
- Encourage small-scale retail, professional offices, and home occupation uses through appropriate zoning; and
- Provide signage integrated into the building face, display windows, glass doors, and accent lighting along the commercial street edge.

Figure 2.4 - Live/Work streetscapes.

3.0 Priority Locations

Priority locations are streets, lots, buildings, elevations and private yards for all land uses that are located in positions of high public exposure or form the terminus of a view corridor. Given their prominence within the community, buildings sited on priority lot locations shall be designed to ensure that the strong character of the community is expressed.

Special consideration shall be given to a variety of design elements including building siting, unit and garage design, façade treatment, materials and colours, and opportunities for landscape elements.

The architectural design principles associated with each of these priority lots will be further defined in the Architectural Design Guidelines. This includes further definition of priority lots based on their location within the community, for instance, differentiating major and minor gateways, and establishing important streetscapes. Interpretation and application of these guidelines will occur through a privately administered Design Review Process.

Generally, elevations of a given building shall be consistent in terms of architectural design and detailing, where those elevations are exposed to the public realm.

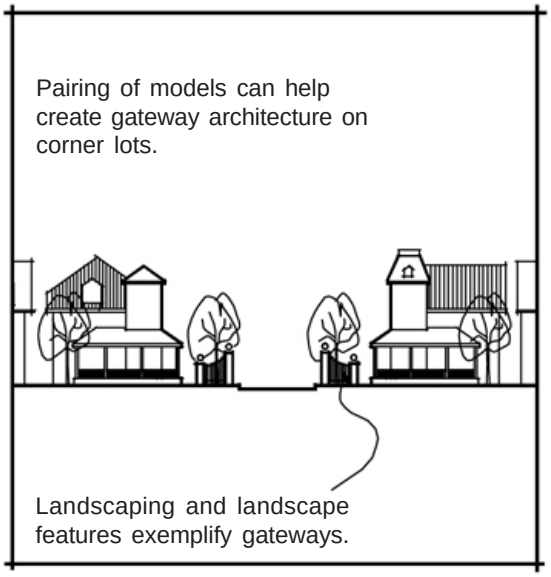


Figure 3.1 - Gateway buildings.

3.1 Gateway Houses

Buildings located at the entrance(s) of a community represent special opportunities to emphasize the "sense of entry or arrival". This can be achieved with special designs that address the high level of public exposure, which reflect the architectural character of the community.

The design of Gateway Houses should be coordinated with any adjacent community gateway landscape design and treatment, in terms of main entry location and design, placement of windows, vernacular, exterior materials and colours. Gateway Houses are to feature distinctive architectural elements, such as turrets or tower features, prominent gables, and projecting bays.

3.2 Corner Lot Houses

Corner Lot Houses are characterized by their exposure to two street frontages, which permits a variety of main entry and garage access configurations.

Special unit designs for corner lots are encouraged to take advantage of the opportunities for the plan and the level of exposure. The design of Corner Lot Houses is to provide a consistent level of detailing on all publicly exposed elevations. The flankage and rear elevations should provide sufficient fenestration. The use of wrap-around porches is encouraged. Consider the use of a masonry chimney as a design element along the flankage sidewall.

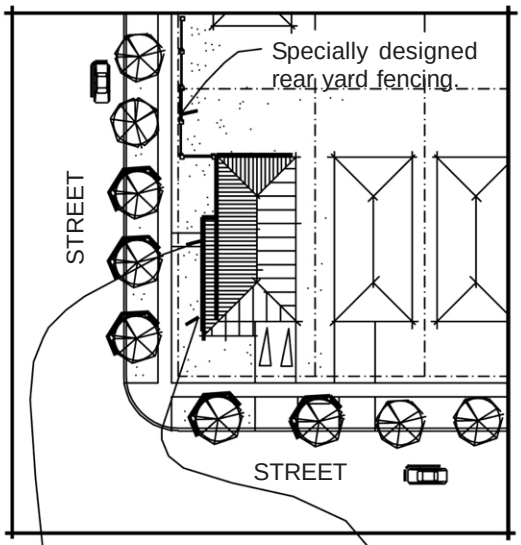


Figure 3.2 - Corner lots.

3.0 Priority Locations

3.3 'T' INTERSECTION HOUSES

'T' intersections occur where one road terminates at right angle to another. At these locations, the buildings at the top of the 'T' intersection are framed by the two corner lots flanking the terminated road, and form the end of a view corridor.

Careful considerations should be given to the selection of houses that de-emphasize the presence of the garage, and driveway locations that favour a larger area for landscaped treatment in the front yard.

3.4 ELBOW STREETS AND CUL-DE-SACS

On elbowed or cul-de-sac streets, special opportunities exist on the outside or visually highlighted side of the road-bend to create a special grouping of buildings. The grouping of buildings occurring at the end of a view corridor should consider the selection of houses that de-emphasize the presence of the garage.

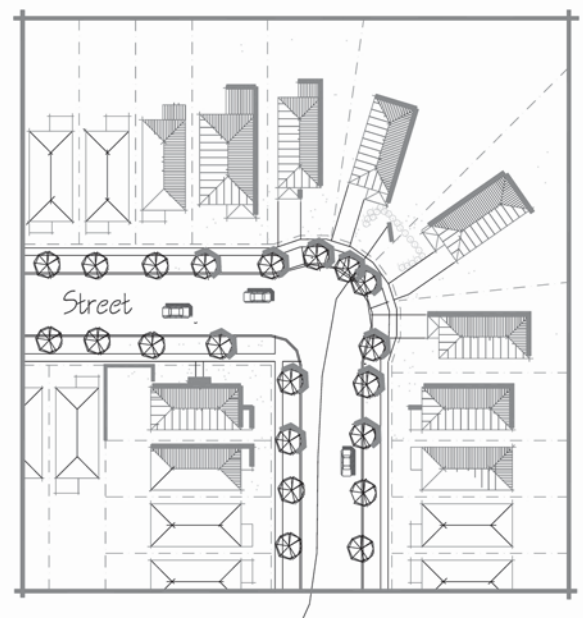
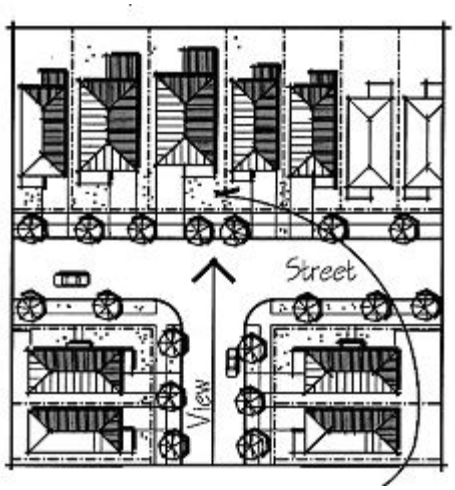


Figure 3.4 - Elbow streets and cul-de-sacs.

3.5 HOUSES ADJACENT TO OPEN SPACES OR PUBLIC THOROUGHFARE

Buildings adjacent to open spaces or a public thoroughfare shall present a consistent level of architectural detailing and fenestration, in the design of all publicly exposed elevations.

These publicly exposed elevations should introduce sufficient fenestration and consider design elements such as proportion, wall plane, roofline, materials and massing.



Driveways should be located to the outside of the lots to create a landscaped court in the front yard setback area of the house.

Quality of architecture should support the importance of these lots as visual terminus.

Figure 3.3 - 'T' road intersections.

3.6 COMMUNITY WINDOWS

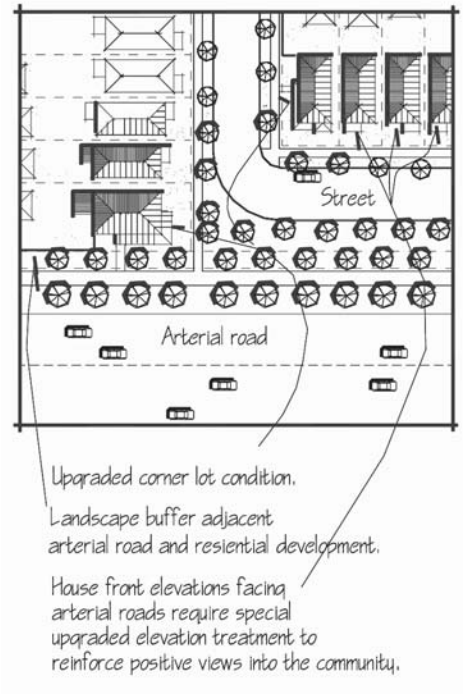


Figure 3.6 - Community window streetscape.

3.0 Priority Locations

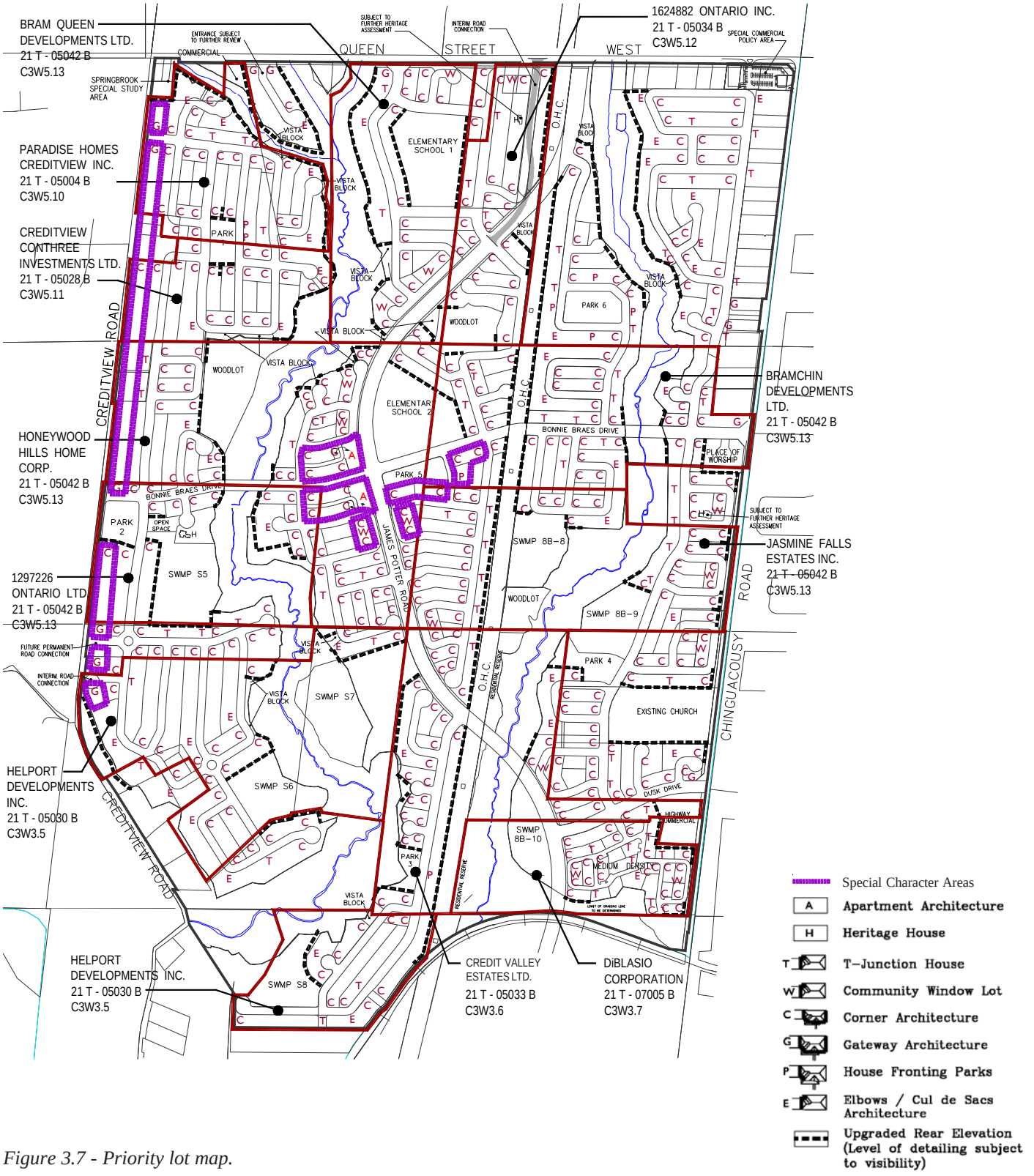


Figure 3.7 - Priority lot map.

4.0 Design Guidelines For Residential Development

The predominant residential built form throughout the Creditview Crossing community will be single detached dwellings. Other residential forms will include semi-detached dwellings, and street townhouses. Special housing opportunities also exist in the community centre including low-rise apartments, laneway townhouses, special townhouses, and live-work townhouses. The following principles represent the design goals for residential developments:

- A variety of lot sizes, building types and architectural styles will be required to contribute to attractive streetscapes and to avoid visual monotony and repetition. These shall be mixed within streetscapes;
- The relationship between buildings and the street shall result in a well-defined street edge which reflects the scale of the street which providing diversity of built form and architectural expression;
- Individual buildings within a street block shall combine to create visual harmony. This can be reinforced through the use of complementary materials, colours and architectural elements;
- Variety among housing forms, including massing, façade and roof line, is encouraged within each neighbourhood and streetscape;
- Building designs shall respond to their location, site orientation, grading conditions and view;
- Corner buildings shall respond to both street frontages;
- High quality facades will be provided where exposed to public realm areas, such as parks, open spaces, schools and storm water management facilities;
- Garages shall have a reduced visual presence to ensure dwelling facades and landscaping, rather than garages and driveways, dominate the streetscape;
- Large, usable front porches are encouraged to provide a pedestrian-friendly interface between the private and public realms;
- Intensified residential densities shall occur at focal nodes within the community to promote active street life; and
- Appropriate transitions in the scale, form and architectural style of adjacent buildings shall be provided.

Figure 4.0 - Residential built form character.

4.0 Design Guidelines For Residential Development

4.1 BUILDING MASSING, SHAPE & PROPORTIONS

- Builders are encouraged to promote house designs that are simple in terms of shape or form. The box-on-box approach to elevation design is preferred, as shown in the following photographs;
- Builders should avoid over-decorated house designs, and rely on varied massing or shapes to achieve variety;
- Semi-detached units should be designed to appear as one large dwelling;
- Semi-detached unit designs locating the garage to the outside are encouraged;
- Semi-detached units may be separated and attached only at the garage wall, provided the detailing and overall massing is consistent on both units. The detailing surrounding the main entry may differ slightly, but the architectural detailing (i.e. architectural elements, windows, materials, & colours scheme) and massing are to support the image of a larger dwelling;
- Semi-detached units may be separated above grade, should the zoning permit this condition;
- Townhouse units may be designed to appear as a series of larger dwellings, with variations in rooflines and garage treatment;
- Townhouse units may be separated and attached only at the garage wall, provided the detailing and overall massing is consistent on all units within that particular block;
- Massing/ design of each townhouse block (not individual units) will be reviewed/ approved based upon the design merits of each based on the following criteria:
  - Townhouse blocks to exhibit variety avoiding monotony. No mixing of competing architectural styles within a townhouse block;
  - Show massing/ design harmony for intersection-to-intersection streetscape block composition (provide variety);
  - Articulate walls to break up roof/wall planes (use step units/bays/gables);
  - "Bookend" (cluster) blocks or provide distinct end feature units (tower features/ bay projections/ 2nd storey balconies, etc.) to create a sense of place; and
  - Height/ massing to be same for adjacent dwelling and dwellings on other side of street.

The Design Control Architect will review the overall composition of the house designs with respect to massing, main entry, garage treatment and architectural detailing, and will assess the proportions of these elements based on traditional architectural precedents.

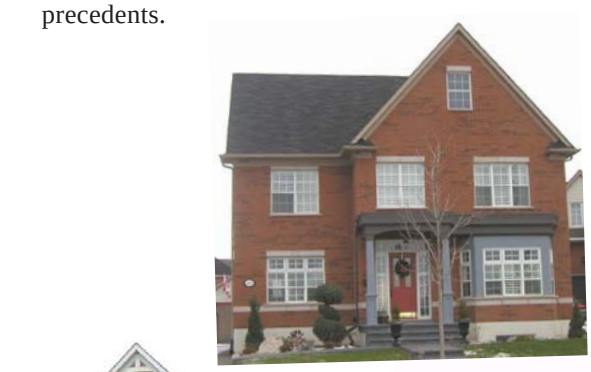


Figure 4.1 - Variety of building mass, shape and proportion.

4.0 Design Guidelines For Residential Development

4.2 ROOF

The overall shape, slopes, eaves heights and accent detailing characterize the roof. These elements help define the scale and massing of a building, as well as creating distinguishable variety on the streetscape.

- Builders shall include varied roof treatments as part of a variety of house designs;
- Roof forms shall have an appropriate transition within a streetscape;
- Main roof slopes should be a minimum of 8:12 (back to front);
- Lower roof slopes and flat main roofs shall be used at the discretion of the Control Architect on an individual basis. Such use shall be dependent upon the architectural style of the dwelling;
- Lower roof slopes may be permitted, subject to design merit of the proposed model for meeting the intent of the guidelines;
- One large and distinctive gable element is preferred to models with multiple gable-on-gable;
- Dormers are to be proportionally sized to the overall roof, trimmed and detailed not to appear as false architectural elements;
- Rainwater Downspouts – should be pulled back out of view and/or be integrated as part of the overall design in terms of location and colour;
- Skylights and roof vents should be located so they are not visible from the street; and
- All roof and gas vents shall be coloured or painted to match the roof colour.

Figure 4.2a - Examples of a flat main roof and lower roof slope dwelling.

Figure 4.2b - The composition of varied building forms should consider the roof as an integral element, which can provide articulation and visual interest on the streetscapes.

4.3 MAIN ENTRY

- The main entry should be the main focal point of the house, and covered to provide shelter from the weather;
- Builders should provide a variety of entry treatments such as porticoes, recessed entries, and porches;
- Builders should provide a variety of entry door type and design;
- Traditional porch should be a minimum depth of 1.5m to allow for seating;
- Entry elements such as porticoes and recessed entries, should be sized and proportioned to suit the architectural style;
- Builders should provide varied and distinctive entry door designs, as shown below;
- Handrails shall be provided on all porches. Exceptions may be granted for porticoes and recessed entries, subject to design merit;
- Porch steps are to be poured-in-place concrete, and finished with cladding materials on exposed sides. (Parson's precast concrete steps are permitted up to 8 risers with cladding materials on exposed sides). Regular precast allowed for one or two-riser condition;
- Where there are more than 6 risers, solutions will be evaluated on a unit by unit basis and may include: breaking up the number of risers in a single run by dispersing within the front yard landscape; insetting 1-2 risers into the front porch; providing a portico to diminish their projection; banking up landing area at the bottom of the stairs; lowering the front foyer at entrance; or in extreme circumstances, a custom design house is required; and
- Timber porches shall not be permitted for front and flanking elevations.

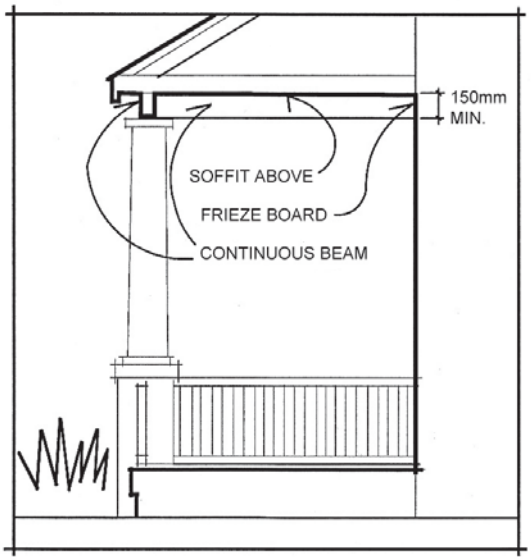


Figure 4.3a - Typical porch design.

4.4 CONSISTENCY OF DETAILING

- The detailing of each building shall remain consistent on all elevations, in terms of exterior building materials, window treatment, and architectural vernacular; and
- The amount of architectural elements may be reduced in areas of limited public exposure.

Refer to Section 4.5 – Exterior Building Materials for specific approaches dealing with acceptable exterior cladding transitions, and Section 4.6 – Fenestration.

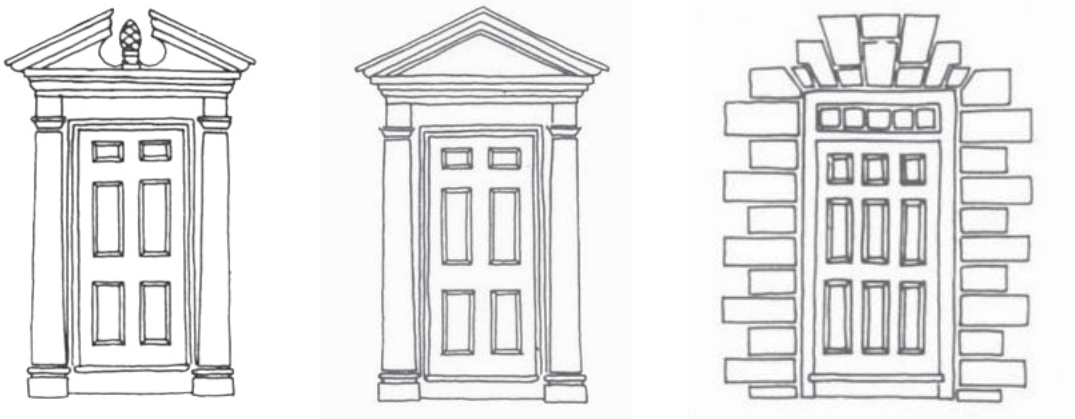


Figure 4.3b - Variety of main entry design.

4.0 Design Guidelines For Residential Development

4.5 EXTERIOR MATERIALS

This section provides design guidelines for various exterior building materials and conditions.
Builders are to provide a sufficient number of exterior colour packages appropriate to their house types and lot numbers.

- Houses are to be clad with a single dominant material, but may feature other materials as accents;
- Special care and attention shall be given to the design of elevations with material combinations, which will be reviewed on individual design merit with respect to:
  - Maintaining consistency of detail;
  - Avoiding the occurrence of false-fronting;
  - Respecting the integrity of a proposed architectural style.

Stone

- One of the three details shown below shall be used for all stone to brick transitions occurring within the same wall plane. Alternatively, stone to brick transitions may occur at a wall plane change or jog;
- Manufactured stone products will include a range of natural colours, proportions, and textures simulating the appearance of natural stone;
- Tumbled stone should use a flush motar joint. Straight cut stone should use a raked joint;
- Gateway dwellings shall be designed with high quality cladding material;
- Roundabout dwellings and primary corner lot dwellings shall be designed with stone accents appropriate to the architectural style of the dwelling.

Brick

- Brick selection, colour, and texture shall be complementary to other exterior materials and architectural style of the house;
- Builders are encouraged to provide brick details to accent door and window openings, as well as the base of the house. The introduction of traditional brick detailing such as banding, quoining, rowlock and soldier coursing, recessed and projected coursing will be encouraged.

Stucco

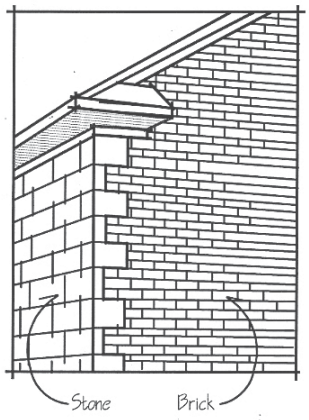
- A variety of rich stucco detailing, characteristic to the architectural style shall be used;
- It shall be used in conjunction with masonry plinth;
- Where stucco is used on the front elevation, it shall return approximately 1200mm (4'-0") along the interior side yard or logical end point;
- The use of stucco combined with stone/brick in complementary colours are encouraged;
- Stucco details/ mouldings shall have a continuous unbroken appearance. All joints shall be seamless in appearance;
- Closely blend caulking with the dwelling's stucco colour and stucco colour with flashing, or it will be pre-finished in a colour complementary to the home's exterior colour package.

Cement Fibre Siding

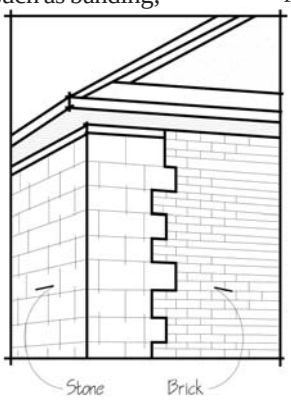
- Cement fibre siding may be used to replicate the design of rural vernacular architectural styles (ie. Victorian, Colonial);
- Where cement fibre and/or wood siding are mainly used, provide a variety of detailing, characteristic to the architectural style in a complementary contrasting colour;
- A variety of muted heritage-based tones used with horizontal shiplap or vertical board and batten profiles may be used.

Trim

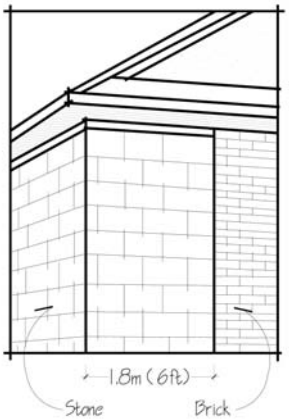
- A 150mm-frieze board shall be installed on all publicly exposed elevations, and returned to a logical break point or incorporated into a corner detail (on elevations of reduced visibility);
- Siding elevations shall always provide trim around door and window openings, and include a continuous frieze board detail under all soffits;
- Porch columns shall appear to support a continuous beam exposed (150mm deep) below the porch soffit.(refer to sketch



MASONRY FINGER - JOINT AT CORNER



MASONRY FINGER - JOINT LESS THAN 6'



MASONRY FINGER - JOINT STRAIGHT LINE

Figure 4.5 - Masonry finger joints.

on section 4.3).

Foundations
- Exposed poured or parged concrete should not extend more than 250mm above finished grade on all exposed elevations.

Roofs
- Materials – acceptable products are not limited to asphalt shingles. Other roofing materials will be reviewed for suitability and approved by the Design Control Architect, subject to design merit.

Colours
- In order to achieve a distinguishable range of colours and/or tones, the builder's exterior material and colour schedule shall comply with the pre-approved master palette for Creditview Crossing, which has been prepared by the Design Control Architect.

4.6 FENESTRATION

- Builders can use a mixture of hung windows and casement windows;
- The use of " horizontal slider-type windows" will not be permitted (exceptions granted for small basement windows);
- *Muntin bars* or *grills* are not required, but should be considered where appropriate to style;
- False windows are discouraged, but may be permitted where it utilizes a real window frame with blackened glass;
- All windows exposed to the public realm shall feature the same window type and detailing, as specified on the front elevation of the dwelling;
- Lintel and sill details should be provided to accent windows;
- The soffit shall be located to allow architectural details above the windows;
- Window shutters should be proportionally sized to the window (ie. typically half of window opening width).

The use of window shutters should not be excessive (i.e. not on all models).

4.7 GARAGE TREATMENT

It is important to design street-related housing with the presence of the car in mind. Garages play a very significant role in establishing the overall community image.

It is the responsibility of the builder to ensure that the design of all garages complies with all relevant provisions of the zoning by-law. Where there are discrepancies between the zoning by-laws and these guidelines the most restrictive applies.

Builders shall offer different garage options to the marketplace, in order to achieve a distinguishable variety of house designs.

Houses with Garages at the Front

The design of garages at the front of houses can have a major impact on the appearance of the individual house and on the collective image of the streetscape and the community. The goal for this community is to promote house designs that emphasize the architecture of the house and the front entry area and de-emphasize the appearance of the garage.

The following guidelines shall apply in determining the maximum garage projections:
- The front face of the garage may be a maximum of 1.5m forward of the *main front wall*, but shall never project forward of the entry element or porch; and
- The front face of the garage shall be a maximum of 2.5m forward from the second floor main wall over the private garage.

For lot frontages smaller than 11.6m, builders will be required to offer some models to the marketplace that have or appear to have a single car garage (i.e. either single-car garage, or garage with two cars parked in tandem).

Houses with Garages in the Rear

The plan for Creditview Crossing provides opportunities to locate garages in rear yards. Locating a detached garage in the rear yard, or an attached garage at the rear of the house automatically provides a distinct variety within the streetscape. These rear yard garages can either be accessed across the front property line with a driveway running along the depth of the lot, across the exterior lot line (for corner lots only), or from a rear laneway.

- Any garages in the rear yard (detached or attached) shall be consistent and designed to match the principal building through vernacular, massing, materials and colour;
- Builders are to offer house models with rear yard garages, where lots are large enough to accommodate these designs, and where grade conditions permit;
- In locations of high public exposure, garages shall be designed to the same level as the main dwelling, and finished with materials compatible with the front streetscape. High public exposure locations include flankage lots, lots adjacent to walkways, end lots adjacent to side lanes, and lanes adjacent to public spaces.

4.0 Design Guidelines For Residential Development

Garage Doors

The following guidelines are provided for garage doors:

- For lots with frontages greater than 12.0m, builders are encouraged to incorporate 2 single-car width doors with dividing pier, in lieu of one large double-car width door;
- A large garage door may be permitted on lots with frontages greater than 12.0m, provided the garage face is set back from the main wall and that it is partially shaded or having door pattern emulating the appearance of two doors;
- Builders will be encouraged to provide a variety of garage door designs that feature glazing in the upper door panel; and
- The use of garage doors made of pressed board or recycled materials are discouraged.

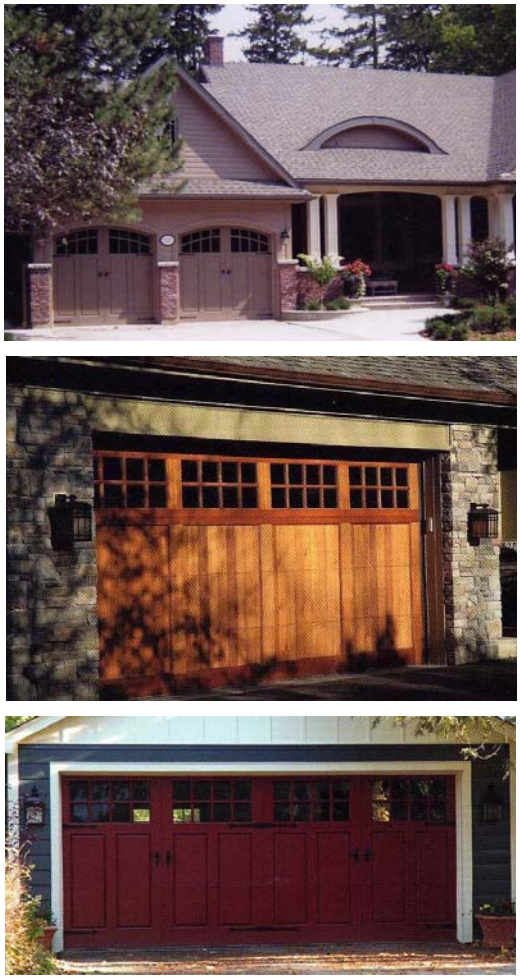


Figure 4.7 - Garage doors.

4.8 UTILITIES AND MECHANICAL EQUIPMENT

- The utility fixtures, such as, natural gas and hydro meters, connection boxes for telephone and cable, should be located away from publicly exposed views, and whenever possible, installed in the interior side yard;
- A large garage door may be permitted on lots with frontages greater than 12.0m, provided the garage face is set back from the main wall and that it is partially shaded;
- Builders shall provide screening or integrate the utility fixtures and mechanical equipment into the building design, in order to minimize their visual impact, when they cannot be located out of general public view;
- The screening or integration of the utilities must comply with the standards of the utility companies and mechanical equipment manufacturers; and
- Air conditioning units shall not be located in the exposed front yard nor in the exterior flankage yard.

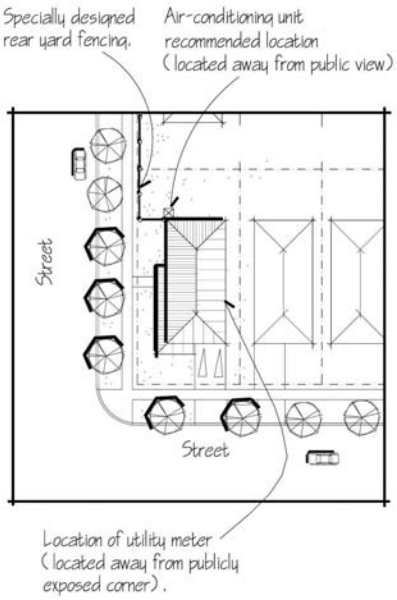


Figure 4.8 - Utility service meters/ air-conditioning unit.

4.9 SITING REQUIREMENTS FOR RESIDENTIAL DEVELOPMENT

A successful community is characterized by appealing and memorable streetscapes, which result from the careful integration of well-designed dwellings.

The following items provide design guidelines dealing with the composition of the streetscapes:

- Elevation Variety on the Streets
- Variations of Building Locations
- Exterior Colour Selections on the Street
- Building Heights Compatibility
- Grading Conditions
- Driveway
- Fencing

4.9.1 ELEVATION VARIETY ON THE STREETS

A goal of these design guidelines is to achieve variety in the streets. Alternative elevations shall be offered for each unit type, providing differences in details such as the massing, rooflines, front entry treatment, fenestration, architectural detailing, and building materials. Where certain models are particularly popular, additional elevation treatments shall be offered and sited to maintain streetscape variety.

- Two buildings should separate buildings with the same elevations;
- The same elevation should not make up more than one third of any street block;
- Buildings with the same elevation should not be located directly across the street from one another; and
- The same corner lot model and elevation may be sited diagonally across a street intersection

4.9.2 VARIATIONS OF BUILDING LOCATIONS

Buildings are generally encouraged to be located close to the street to reinforce a strong street edge, while maintaining visual variety. Visual variety should be achieved by providing controlled variety of elevation types, and/or introducing variations in the location of the main building face on the street.

These variations of building setbacks within the streetscape provide:

- Visual and spatial rhythm through gradual transitions of the building facades;
- Visual interest reducing the possible negative impact of longer streets; and
- Emphasis on varied entry treatment.

4.9.3 EXTERIOR COLOUR SELECTIONS ON THE STREET

In order to achieve variety on the streetscapes, careful attention should be given to the selection of building colour packages and the repetition of similar colours.

- Two buildings should separate buildings with the same exterior colour packages;
- Buildings with the same exterior colour package should not be located directly across the street from one another; and
- The same colour package may be sited diagonally across a street intersection, provided the dwellings are not proposing the same elevations.

4.9.4 BUILDING HEIGHTS COMPATIBILITY

The variety of massing or building form that is encouraged for this community may produce building height variations along the streetscape. In order to maintain cohesive and harmonious rooflines with gentle transitions, the following guidelines shall be observed for the siting of buildings with varied heights on the streetscapes.

- Adjacent buildings shall not have more than one-storey difference in height;
- A minimum of two buildings with the same overall massing should be sited on adjacent lots (ie. two bungalows);
- Bungalows should have 1½-storey massing and elements to make the transition to two-storey buildings on adjacent lots; and
- Three-storey buildings are encouraged to incorporate the roof design into the elevation treatment of the upper floor, in order to make the transition to two-storey buildings on adjacent lots.

4.0 Design Guidelines For Residential Development

4.9.5 GRADING CONDITIONS

Houses should be designed to reflect the grading conditions of the site, and make provisions for the grade changes to accommodate surface water drainage, proposed by the engineering consultants.

- Designers will be required to provide revised elevations on the streetscape drawings to illustrate the architectural detailing response, where grade differential is greater than 900mm or 5 risers;
- Grade differential is defined as the elevation difference between the average finished grade at the front of the house and the finished floor level at the main entry door;
- Where a roof is provided above the garage, the area between the top of the garage door(s) and soffit above should not be greater than 900 millimetres; and
- Where dropped garage conditions occur, a variety of design options shall be used such as: lowering the garage roof, providing 8' garage doors, cambering the garage headers, or providing a herring bone brick detailing above the garage.

4.9.6 DRIVEWAY

The design and width of private driveways impact the appearance and function of the streetscape. Limiting the width of private driveway:

- The width of the driveway shall always be minimized to reduce its presence on the streetscapes; and
- The exterior width of the driveway should not exceed the exterior width of the garage.

For information regarding the minimum size of exterior parking pads and maximum width of driveways, refer to the municipality zoning by-law.

4.9.7 FENCING

The developer or builder shall provide fencing on all corner lots. A consistent approach to fencing will be taken throughout the community. The consistency is achievable by using the same fence design or by a set of complimentary fence designs, colours and materials.

- Fence designs are to comply with the overall community vision in scale and character;
- Fence details, colour and materials should be pre-designed for all corner lot locations within the community; and
- Privacy fence design should be coordinated with noise attenuation fencing in terms of detail, colour and materials.

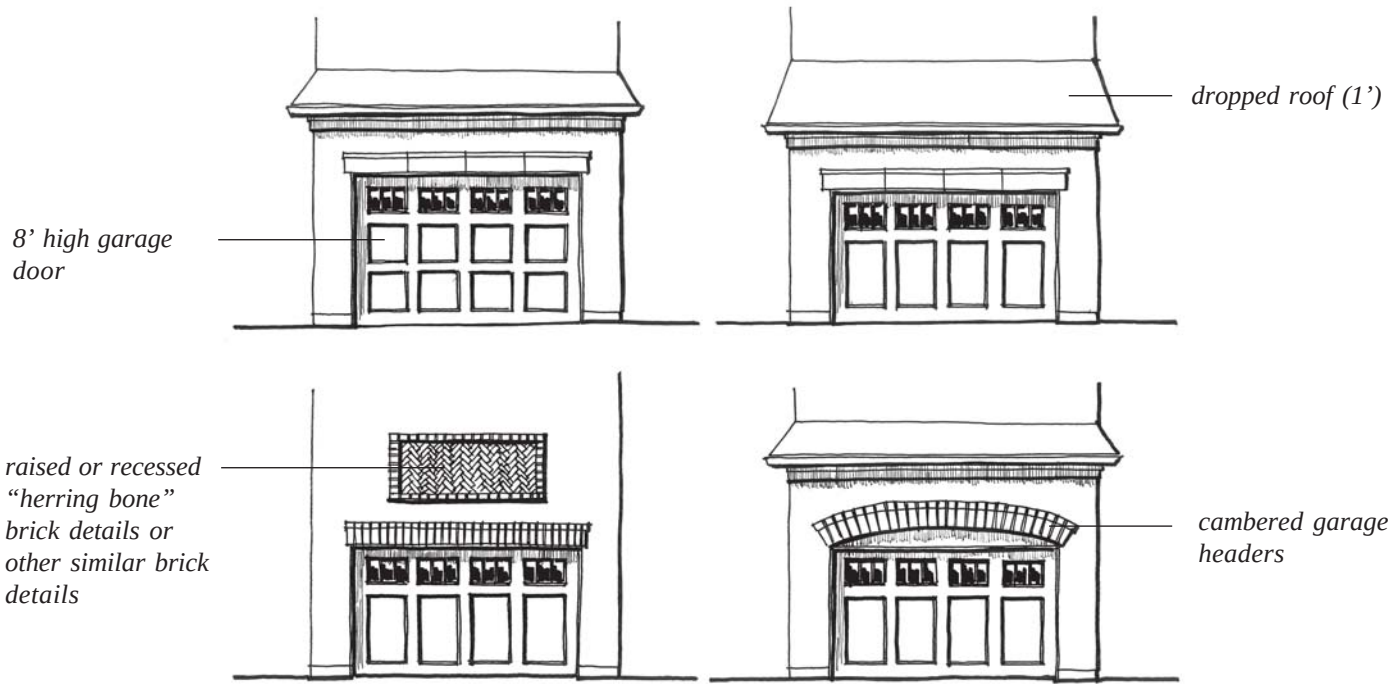


Figure 4.9.5 - Design options for dropped garage conditions.

5.0 DESIGN GUIDELINES FOR INSTITUTIONAL BUILDINGS

Institutional buildings, such as schools and places of worship play an important role within the community by functioning as landmark buildings. These developments should be submitted to the Design Control Architect for review, in coordination with the site plan application process with the City. The following design principles will apply for institutional buildings within the community:

- To maintain architectural unity throughout the community, institutional blocks should incorporate design elements and materials compatible with the dwellings;
- Buildings should be set close to the street with the primary façade parallel to the roadway to appropriately address, define and relate to the adjacent street frontages;
- Scale, height, massing and roof form should be compatible with the importance of the adjacent street while retaining a human scale to encourage pedestrian activity;
- Intersections should be emphasized as focal points through the placement of buildings and other built form elements to 'frame' the intersection. Corner buildings should be massed toward the intersection and address both street frontages;
- Visually stimulating design features should terminate a view corridor. This may be achieved through building location, landscaping or architectural treatment;
- Main entrances should be oriented to the street and serve as focal points for the building;
- A variety of high quality building materials such as brick/ stone, textures and controls, compatible with neighbouring residential buildings, should be provided to add visual interest to the streetscape;
- Parking areas should be located away from the street towards the side/ rear of the site, and be appropriately screened;
- Service areas and mechanical equipment should be located away from public view and screened;
- Distinctive roofscapes are required through the appropriate use of gables, parapets or pitched roofs, where appropriate; and
- Buildings should be designed and sited to allow for pedestrian permeability by avoiding large, uninterrupted and impenetrable walls.

The institutional block provide a destination that is community-oriented and active daily. As a public use, the building will be located prominently and have high-quality elevations that address the streets. Design principles include:

- Providing a landmark architectural element such as a tower or prominent entrance canopy;
- Articulating all elevations facing public streets with windows, doors, fenestration and other architectural elements; and
- Providing clearly visible entrances articulated by architectural elements.

Institutional buildings should maintain a strong presence on the street serving as significant civic landmarks in the community and focal points within the streetscape. The design of institutional buildings should demonstrate regard for the community through their siting, massing, architectural style, exterior colours and materials.

To ensure that the siting of these buildings is appropriate and complementary to the adjacent residential areas, the following guidelines will apply:

- The site design of Institutional blocks should reflect the desire to establish well-defined and visually pleasing streetscapes;
- Appropriate buffering of residential developments shall be provided, by way of site planning, building design and landscape elements; and
- A significant portion of the buildings should be located close to the street to reinforce the streetscape and to minimize the impact of the parking lot from the street.

5.0 Design Guidelines For Institutional Blocks

5.1 BUILDING MASSING AND ROOF LINES

- The scale of these buildings should be sensitive to the scale of adjacent residential areas;
- Long continuous roofscapes should be divided and varied to provide visual interest and variety;
- Rooflines and parapets shall be designed to facilitate the integration and screening of all roof top mechanical units.

5.2 BUILDING ELEVATIONS

The design of elevations for this building type and use should respect the following guidelines:

- Elevations viewed from public spaces should provide visual interest through their design, articulation and fenestration;
- All elevations should be clad with the same materials prominently used within the community, which are either brick, stone, stucco, or in combination;
- Elevations should contain changes in plane and relief to break-up long, continuous stretches;
- Elevations should be pedestrian friendly through appropriate scale, transparency, articulation, and use of materials;
- Building forms should be appropriately scaled, massed and detailed to relate to adjacent neighbours; and
- Canopies or other approved facade treatments should be incorporated in the design of pedestrian walkways and street elevations.

5.3 BUILDING ENTRANCES

Primary building entrances should address the street. The design principles that shall be observed in designing building entrances are as follows:

- Building entrances are encouraged to be incorporated into the overall design as distinguishable architectural elements and should be visible from the street;
- All public entries should be covered;
- All major entrances shall be handicapped accessible with at grade thresholds; and
- All major entrances should allow for ease of movement through the doors and include an overflow and waiting space for pedestrians.

5.4 PEDESTRIAN CIRCULATION

Pedestrian walkways should be designed to ensure a safe, comfortable and attractive environment for pedestrian circulation. The following guidelines are provided to achieve this objective:

- Ensure a high level of accessibility to pedestrians;
- Pedestrian walkway connections should be designed to accommodate high volumes of unencumbered movement at peak times;
- Pedestrian connections should be planned to facilitate access to future adjacent transit stops;
- Bus shelters should be provided in safe and visible locations along transit routes. The design of these structures should be compatible with the architectural styles in the community;
- Areas for meeting and gathering, which incorporate a wide range of street furniture such as seating, garbage receptacles, and vending boxes, should be provided and designed to create animated and interesting sidewalks;
- Outdoor display areas located adjacent to pedestrian walkways should be comprehensively designed and organized. These areas should incorporate common seating areas to provide appropriately located areas of activity and community focus; and
- Bicycle storage racks should be provided adjacent to main building entrances.

5.5 BUS AND PASSENGER PICK-UP/ DROP-OFF

Bus and passenger pick-up and drop-off activities are short term, intensive and potentially disruptive activities that occur a few times a day. To minimize the impact that these activities have on the adjacent residential neighbourhoods, the development of lay-by lanes is encouraged along the street, away from the front face of the recreational commercial building, where possible.

5.6 VEHICULAR ACCESS, PARKING AND SERVICING

Vehicular Access

Guidelines for vehicular access, parking, and servicing are as follows:

- Vehicular access points should be minimized in order to maintain a pedestrian orientation;
- Major vehicular and pedestrian access points and routes should be clearly identified with both vertical and horizontal hard and soft design elements. The pedestrian routes may be incorporated into landscaped parking islands where appropriate.

- Vehicular and service access for recreational commercial sites from residential streets will be avoided where possible.

Parking

The following guidelines should be considered for the design of parking areas:

- Parking should be oriented away from the street where possible;
- The scale of large parking areas should be softened through the use of landscaped parking islands wherever possible;
- Curbed, landscaped parking islands should be located at the ends of all parking isles Parking areas are to be screened from direct view from the surrounding roads, while ensuring transparency for safety;
- Vehicular traffic across sites from adjacent streets should be discouraged by entrance placement and on-site circulation design; and
- All parking areas shall be paved in a hard surface material.

Servicing

Loading and service areas should be designed using the following guidelines:

- Loading areas fronting onto public streets are discouraged;
- Loading and service areas should be screened from adjacent residential or public lands by the placement of buildings, screen walls, and landscaping;
- All garbage storage, utility structures and loading service areas should be screened from adjacent residential or public lands by placement of buildings, architectural screens or landscaping;
- Internal garbage storage is encouraged;
- Garbage storage and loading areas should be located a sufficient distance from adjacent residential areas to provide adequate buffering; and
- Adequate space for on-site snow storage shall be provided.

5.7 LIGHTING

Lighting for buildings and outdoor parking areas will be designed and sited to minimize light distribution onto adjacent properties while ensuring safe and comfortable access to these areas at night.

5.8 SIGNAGE

The following guidelines are provided for on-site signage:

- Where possible, signage should be grade related, visually attractive and carefully integrated into the site plan, entry features and architectural and landscapes design;
- All signage which is viewed in whole or in part from the public realm and places of high visibility to the public, should be appropriately designed to meet the objectives for the community vision;
- Collective street signage for multiple tenant developments is encouraged to be grade related and integrated into landscaping;
- A coordinated master signage package for ground-related signage or signage on individual buildings must be submitted for review and approval during the site plan process stage; and
- All signage must comply with City or Municipality by-law requirements.

5.9 LANDSCAPING

Incorporating and integrating landscaping, as a significant design element for this community is imperative to achieving a pedestrian-oriented community design. The community design requires that landscaping supports a cohesive framework for the street edge and provides a buffer between dissimilar and incompatible adjacent uses. The landscape design should identify, accent, complement and unify key areas of urban design including buildings, entrances, pedestrian and vehicular site access points, and circulation systems, signage, parking areas, and the street.

The guidelines that will assist in attaining these objectives are:

- Sites along collector roads should be landscaped to provide an attractive street edge;
- Where buildings fronting onto public roads sufficiently animate the streetscape and effectively incorporate the boulevard landscape zone, the landscape edge may be reduced;
- Privacy for all adjacent residential rear and side yards should be provided by screening with a fence, and landscape buffer dominated by plantings of high crowned deciduous trees and coniferous groupings, subject to proximity and exposure;
- All areas of the site not specifically landscaped nor paved for pedestrian or vehicular uses shall be sodded;
- Permanent site furnishings including tree grates, guards, bollards, benches, bus shelters, waste receptacles, lighting, street signage and other permanent site furnishings shall be

consistently designed in terms of finish, colour and materials for all public lands and throughout the community;
- Site pedestrian lighting systems and furnishings will be encouraged to be compatible with the aesthetic form and colour of the community's street furniture, signage, and pedestrian lighting system;
- Pedestrian connections should be provided to all future transit stops, public open space and sidewalks, and should be constructed of hard surface material other than asphalt;
- Landscaped areas should be used to mitigate micro-climatic conditions; and
- Landscape plans shall be prepared in accordance with the municipality site landscaping requirements.

6.0 DESIGN GUIDELINES FOR COMMERCIAL BLOCKS

Commercial blocks play an important role within the community. The following design principles will apply for commercial blocks within the community:

- To maintain architectural unity throughout the community, commercial buildings should incorporate design elements and materials compatible with the dwellings;
- Buildings should be set close to the street with the primary façade parallel to the roadway to appropriately address, define and relate to the adjacent street frontages;
- Scale, height, massing and roof form should be compatible with the importance of the adjacent street while retaining a human scale to encourage pedestrian activity;
- Intersections should be emphasized as focal points through the placement of buildings and other built elements to 'frame' the intersection. Corner buildings should be massed toward the intersection and address both street frontages;
- Visually stimulating design features should terminate a view corridor. This may be achieved through building location, landscaping or architectural treatment;
- Main entrances should be oriented to the street and serve as focal points for the building;
- A variety of building materials, textures and controls, compatible with neighbouring residential buildings, should be provided to add visual interest to the streetscape;
- Service areas and mechanical equipment should be located away from public view and screened;
- Distinctive roofscapes are required through the appropriate use of gables, parapets or pitched roofs, where appropriate.

The design goal for commercial developments in this community is to maintain the image of successful urban streetscapes defined by attractive buildings located to contain the street edge.

6.1 SITE PLANNING

To ensure that the siting of these buildings is appropriate and complementary to adjacent residential neighbourhoods, the following guidelines will apply:

- The site design of commercial blocks should reflect the desire to establish well defined, visually pleasing streetscapes;
- Buildings should contribute to the larger streetscape, where possible, and not be isolated from each other on their own sites;
- Buildings should be organized to support the streetscape by locating an appropriate proportion of the collective building mass at the street line. This will reinforce the pedestrian scale and character proposed for this community and assist in achieving compatibility with adjacent residential neighbourhoods;
- On corner sites, buildings are encouraged to be sited at the corners where possible and to architecturally address the intersection;
- Drive-thru buildings should be oriented to ensure that vehicular and pedestrian traffic are not in conflict;
- Drive-thru should not be directly exposed to the street; and
- Appropriate buffering of residential developments shall be provided, by way of site planning, building design and landscape elements.

6.2 BUILDING MASSING AND ROOF LINES

The massing and rooflines of these types and uses should observe the following guidelines:

- The scale of these buildings should be sensitive to the scale of adjacent residential buildings;
- Where an individual site is to be developed with more than one building, the collective architectural composition of the buildings must be considered in terms of the massing, roof lines, street relationship, and visual impact on adjacent grade related housing;
- Long continuous roofscapes should be divided and varied to provide visual interest and variety; and
- Rooflines and parapets shall be designed to facilitate the integration and screening of all roof top mechanical units.

6.3 BUILDING ELEVATIONS

The design of elevations for these building types and uses should respect the following guidelines:

- Elevations viewed from public spaces should provide visual interest through their design, articulation and fenestration;
- All elevations should be clad with the same prominent materials;
- Elevations should contain changes in plane and relief to break-up long, continuous stretches;
- A thematic composition of building siting, massing, architectural elements, colour and material treatment, compatible with the overall vision of the community is encouraged to create a unique streetscape for 'campus' developments;
- The siting, massing, architectural elements, colour and material treatment of individual building developments is encouraged to be compatible with the streetscape;
- Elevations should be pedestrian friendly through scale, transparency, articulation, and use of materials;
- Building forms should be appropriately scaled, massed and detailed to relate to its adjacent neighbours; and
- Canopies or other approved facade treatments should be incorporated in the design of pedestrian walkways and street elevations.

6.4 BUILDING ENTRANCES

The design principles that shall be observed in designing building entrances are as follows:

- Building entrances are encouraged to face the street and, where possible, be close to the street line;
- All public entries should be covered for weather protection;
- Architecturally pronounced feature entry points should be created for all public entries;
- All major entrances shall be handicapped accessible with at grade thresholds; and
- All major entrances should allow for ease of movement through the doors and include an overflow and waiting space for pedestrians.

6.5 PEDESTRIAN CIRCULATION

For safe, comfortable and efficient pedestrian circulation around commercial sites, the following guidelines should be respected:

- Pedestrian walkway connections between buildings, streets, and parking areas of commercial blocks should provide a safe, comfortable and attractive environment for pedestrian circulation;
- Pedestrian walkways connecting storefronts should be designed to accommodate high volumes of unencumbered movement;
- Areas for socializing, window shopping and a wide range of street furniture which create animated and interesting sidewalk life;
- Barrier-free sidewalks should be provided, where feasible, leading directly from the public street, transit stops, and parking areas to the main building entrances;
- Pedestrian and vehicular crossings should be minimized;
- Pedestrian links to adjacent neighbourhood should be provided;
- Pedestrian connections should be planned to facilitate access to transit stops;
- Bus shelters should be provided in safe and visible locations along transit routes. The design of these structures should be compatible with the architectural elements in the community;
- Bicycle storage racks should be provided adjacent to the main entrances of major commercial buildings; and
- Pedestrian seating, garbage receptacles, and vending boxes should be collectively designed and organized adjacent to pedestrian walkways and areas to provide appropriately located areas of activity and community focus.

6.6 VEHICULAR ACCESS, PARKING AND SERVICING

A vehicular circulation system should provide safe and effective vehicular movement while creating a safe and attractive pedestrian environment. The location and design of service areas should be visually and physically unobtrusive. A comprehensive vehicular circulation system should be designed to respect the following guidelines:

- Vehicular and service access to residential streets should be minimized and designed to minimize disruption to pedestrian routes;
- The location of entrances to parking lots should facilitate efficient on-site circulation, and discourage through circulation as an alternative to adjacent streets;
- The distance between site access driveways and street intersections should be maximized;

6.0 Design Guidelines For Commercial Blocks

- Primary vehicle routes through the site should be clearly defined with the use of signage, curbing, bollards, lane painting and paving material;
- Parking areas should be separated from primary vehicle routes and driveway entrances to public streets;
- Parking areas, especially barrier-free, should be located in close proximity to main building entries;
- Sufficient vehicle stacking spaces should be provided in drive through facilities;
- Stacking lanes should be located to avoid disruption to internal site circulation and access, as well as pedestrian routes;
- Raised traffic islands and knock down barriers should be used to separate vehicle-stacking lanes from main parking areas;
- Curbed, landscaped parking islands should be located at the ends of all parking isles;
- Landscaping should be provided to screen parking from streets and from adjacent developments in a manner that is in keeping with an urban and pedestrian friendly environment;
- All parking areas shall be paved in a hard surface material;
- Large parking areas should be divided through the use of landscaping, public pathway systems and the placement of free standing buildings to create smaller parking "rooms";
- Loading areas fronting onto public streets are discouraged;
- Loading and service areas should be located away from adjacent residential or public lands and from pedestrian walkways, and screened by the placement of buildings, screen walls and landscaping;
- Internal garbage storage is encouraged;
- Outdoor storage should be located and screened from public view;
- Where internal storage is not feasible, garbage areas will be screened with a combination of hard and soft landscape materials;
- Utility structures should be screened with appropriate hard and soft landscape materials; and
- Site plan provisions shall be made for snow storage.

6.7 LANDSCAPING

The objectives for the design of landscaping for commercial blocks are to:

- Integrate the development into its urban environment;
- Visually support the edge conditions and character of the arterial roads;
- Provide visual and physical support for a safe and attractive pedestrian environment;
- Integrate the commercial block into the adjoining residential neighbourhoods.

To support these objectives the following guidelines will be followed:

- A landscaped edge shall be designed along all exterior roads with planting in these areas consisting of shade trees coordinated with the street tree planting program, accent planting beds, landform, and hard landscape elements such as walls, where appropriate;
- Landscape and street edge treatments along public streets and pedestrian walkways should contribute to pedestrian safety, sight lines and access into the development;
- Abutting residential streets or residential front yards shall be screened from commercial lands by tree and shrub plantings;
- A landscape buffer is to be incorporated between the commercial and residential lots and should include a combination of masonry fencing and soft landscape elements;
- Noise attenuation measures on the commercial block adjacent to residential development should be considered;
- Large parking areas shall be physically and visually separated with landscaping to create distinct "outdoor rooms";
- Major vehicular and pedestrian access points and routes shall be clearly identified with both vertical and horizontal hard and soft design elements. These pedestrian routes may be safely incorporated into landscaped parking islands;
- Pedestrian walkways should be surfaced in a decorative paving material, other than asphalt, and be free of obstructions or barriers to movement in the path of travel;
- Plant material will incorporate permanent and seasonal colour variations;
- Tree grates, guards, bollards, benches, bus shelters, waste receptacles, lighting, street signage and other permanent site furnishings shall harmonize in finish, colour and materials within public lands. Individual site plan pedestrian lighting systems and site furnishings will be encouraged to be compatible with the aesthetic form and colour of the community's street furniture, signage, and pedestrian lighting system;
- Plant material used to screen service areas is to include evergreen species and shall be effective during all seasons;
- All areas of the site not landscaped with plant materials, nor paved for pedestrian or vehicular uses, shall be sodded; and
- Installation of underground irrigation systems for commercial sites is encouraged in high stress areas, such as landscape features and planting areas in parking lots.

6.8 LIGHTING

Lighting for the commercial blocks should meet all of the necessary commercial marketing requirements while supporting a safe pedestrian and vehicular environment, and remaining unobtrusive to its residential neighbours.

The following guidelines will be followed to support this objective:

- Lighting of parking areas across the commercial block should be coordinated with respect to scale, profile, and design;
- Parking area lighting is to be placed so as to discourage the distribution of light onto adjacent lands; and
- Lighting at the appropriate physical scale should be used to assist in providing safe pedestrian circulation.

6.9 SIGNAGE

The following guidelines are provided for on-site signage:

- Where possible, signage should be grade related, visually attractive and carefully integrated into the site plan, entry features and architectural and landscapes design;
- All signage which is viewed in whole or in part from the public realm and places of high visibility to the public, should be appropriately designed to meet the objectives for the community vision;
- Collective street signage for multiple tenant developments is encouraged to be grade related and integrated into landscaping;
- A coordinated master signage package for ground-related signage or signage on individual buildings must be submitted for review and approval during the site plan process stage;
- All signage must comply with City by-law requirements;
- Back-lit sign-boxes are discouraged; and
- Cut-out letters are the preferred type of signage.

7.0 Design Review Process

This Privately Administered Design Review Process coordinates the site planning, architecture and landscape design of the streetscapes of the community.

The City of Brampton is currently reviewing the Community Design Guidelines and Implementation Process for Creditview Crossing. The following provisions may be subject to changes based on Council approval - users of the document should consult with the Control Architect and City for the most current process.

The Design Control Architect (Watchorn Architect Inc.) will review all submissions for compliance with the intent and design standards established in these Architectural Design Guidelines, and will stamp the working drawings, exterior material and colour schedule, streetscape drawings and the final site plans confirming their compliance.

The Design Control Architect shall have the authority to make interpretations of these guidelines to provide the necessary flexibility at the implementation stage, while ensuring that the stated goals and objectives are met.

To ensure that building design and developer is consistent with the approved Vision for the Block Plan and in compliance with the approved Architectural Guidelines; provide particular attention to Special Character and Executive Areas. The process should include: orientation meetings with the Developers, Builders, and their consultants; Model design review and approval; Siting review and approval; Coordination with other consultants; Regular site monitoring for compliance.

- Coordinate addendums and Supplementary Guidelines to reflect changes and revisions (if applicable); and
- Coordinate the consultation process with the City and submit monitoring reports, if required.

7.1 SUBMISSIONS FOR APPROVAL

Building permit applications shall include drawings that have been stamped and signed by the Design Control Architect (note: stamp will confirm compliance with the guidelines, and is not a seal of practice).

The Design Review Process described in these guidelines will apply to all land uses in the community, including Lots or Blocks subject to Site Plan Approval by the Municipality.

Approvals by the Design Control Architect do not release the applicant from compliance with other approval agencies. The applicant is therefore responsible for ensuring compliance with:

- Municipal zoning requirements;
- Municipal development engineering standards;
- Ontario Building Code regulations; and
- Grading requirements, as set out by the project engineer.

7.2 RESPONSIBILITIES OF THE APPLICANT

The applicant and their designers are required to schedule an ***orientation meeting*** with the Design Control Architect, prior to commencing any designs for this community.

"*Preliminary Approvals*" of building elevations and exterior building material and colours is required prior to marketing or sales of houses.

The applicant must market and construct buildings in compliance with the approvals and guidelines requirements.

7.3 DESIGN REVIEW CONTACTS

Design Control Architect:

Watchorn Architect Inc.
255 Wicksteed Avenue
Unit 1A
Toronto, ON
M4H 1G8

Telephone: (416) 385-1996
Fax: (416) 449-1803

7.4 REVIEW PROCESS

The Design Review Process deals only with the external visual appearance of the buildings and their relationship in the streetscape.

The Design Control Architect will require the following items, in order to commence the review process:

- Draft Plan of subject development;
- Builder Unit Summary, including location, descriptions and unit count;
- Engineering Design (including Grading Plan, Servicing Plan and Driveway Location Plan for fee simple residential units); and
- Landscape Plans and Details (if available).

Step 1 – Orientation Meeting

The *Orientation Meeting* is mandatory for all designers, builders

7.0 Design Review Process

and/or developers involved in this community, prior to submitting any designs. This meeting is to be conducted by the Design Control Architect, and intended to present the participants with the architectural design guidelines and discuss the vision set for this community.

Step 2 – Preliminary Design Presentation Meeting

The applicants are encouraged to schedule a presentation meeting with the Design Control Architect. This meeting is intended to provide the designers, builders and/or developers with an opportunity to present their preliminary concepts or designs, and describe how they are addressing the requirements the requirements of these guidelines.

Step 3 –Preliminary Review

Building Design

The materials presented for preliminary review need not be highly detailed (e.g. hand-sketched drawings), but should be sufficiently representative to assess the design merit of the proposed project.

All design items outlined in these guidelines should be addressed at this preliminary review stage. This procedure will remove the possibility of design issues arising when detailed drawings are being finalized, and submitted for final approval.

The Design Control Architect will require the following to begin the preliminary review of the proposed designs:

- Building Elevations (Street Facades)
- Typical Side and Rear Elevation Treatment;
- Master Sheet of Elevations ;
- Block Configuration (Townhouses)
- Floor Plans (provided for information only and as a guide in assessing the exterior treatment);
- Designs for Priority Locations;

Two sets of Elevations shall be submitted to Design Control Architect for review and preliminary approval.

Satisfactory submissions will be stamped "Preliminary Approval".
1 cc Applicant
1 cc Design Control Architect

Exterior Building Material and Colour Schedule

The applicant shall submit an Exterior Building Material and Colour Schedule along with sample boards at the preliminary stages for review and approval.

The selections shall be based on the pre-approved master palette prepared by the Design Control Architect. Substitutions will be reviewed on design merit.

The sample boards are to be provided to supplement the review of the elevations, and to assess the overall design composition of the buildings, in terms the exterior materials and colours selected.

The Design Control Architect may comment and/or make suggestions to the applicant should the selections not comply with the intent of these guidelines.

Satisfactory schedules will be stamped "Approved" by the Design Control Architect, and returned to the applicant along with the submitted sample boards.

For residential developments, the builder shall provide the exterior colour selections of the individual lots or blocks for review and approval, prior to the approval of the final site plan by the Design Control Architect.

Site Plan Review

The applicant shall submit site plans to the Design Control Architect for preliminary review to ensure compliance with the Architectural Design guidelines, prior to submitting to the engineering consultant for grading review.

Preliminary site plans should provide the following information:
- Show proposed building location (including setbacks);
- Identify house model and elevation selected (for residential only);
- Locate driveway and dimension width; and
- Indicate the location of adjacent buildings.
- Indicate any adjacent or on-site hard landscaping, such as entry features, piers, walls, columns, privacy (corner lot), acoustical, and decorative fencing.

Two sets of site plans shall be submitted to the Design Control Architect for review and preliminary approval.

Submissions shall also include corresponding "streetscape drawings" for single and semi-detached residential units, and "block elevations" for townhouses.

"Streetscape drawings" illustrate the elevations in a row, as they are proposed on the streets, including any upgraded elevation treatment and are typically shown at 1:100 scale.

Satisfactory submissions will be stamped "Preliminary Approval".

7.0 Design Review Process

1 cc Applicant
1 cc Design Control Architect

Step 4 - Final Approvals

Building Working Drawings

Copies shall be submitted to the Design Control Architect for final review and approval. Required information includes:
- Floor Plans
- Exterior Elevations

These drawings will be stamped "Final Approval" by the Design Control Architect.
1 cc Applicant
1 cc Design Control Architect
plus the number of copies required by Municipality.

Master Sheet of Elevations
(for Single and Semi-Detached Residential Units)

After final approval of working drawings, two copies of the Master Sheet of Elevations shall be submitted for Review and Approval. These Master Sheets are to show the front and flankage elevations (for corner houses) of all approved models, and are to be arranged by lot size and unit type.
These will be required to be submitted prior to the final review and approval of Site Plans.

The Design Control Architect will stamp the satisfactory Master Sheets: "Final Approval".
1 cc Applicant
1 cc Design Control Architect

Final Site Plans

Copies are to be submitted to the Design Control Architect for review and approval. A minimum of six lots per submission is preferred for street-related housing.

Final site plans of residential units should identify the selected and approved exterior colour package.

These drawings will be stamped "Final Approval" by the Design Control Architect.
1 cc Design Control Architect
1 cc Subdivision Engineer
1 cc Applicant
plus the number of copies required by Municipality.

Builders will provide copies of the final approved site plans to the Municipality, confirming compliance with the Architectural Design Guidelines.

7.5 REVIEW AND APPROVAL OF LANDSCAPE PLANS AND DETAILS

Landscape plans and details are to comply with the vision and standards established in these design guidelines. Landscape designs are to be submitted to the Design Control Architect for review and approval for both freehold and all block developments.

Note that landscape design may be subject to review and approval by other authorities having jurisdictions over this development.

7.6 REVIEW OF ENGINEERING DESIGN

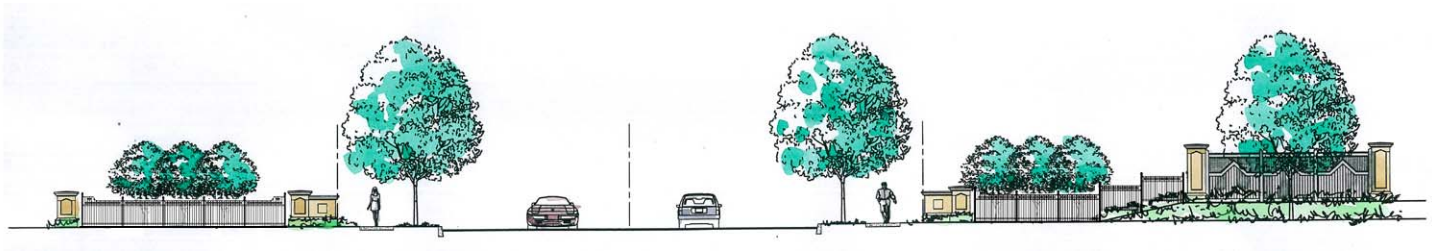
The Design Control Architect requires to review Engineeing Design, such as Grading Plan, Servicing Plan and Driveway Layout in the earlier stages of the project to foresee any issues possibly conflicting with the intent of these guidelines.

7.7 REVISIONS TO APPROVED DRAWINGS

When a Builder requires revisions, the Builder or his Designer shall review the proposed revisions with the Design Control Architect. The Builder provides the necessary drawings for re-approval as per the previous sections.

7.8 SITE VISITS

The Design Control Architect will conduct periodic site visits to ensure general compliance of the built form with the approved plans.



PART V

Appendices

APPENDIX 1
PATHWAY SYSTEM

The following figure illustrates a trail system for pedestrian movement and convenience which:

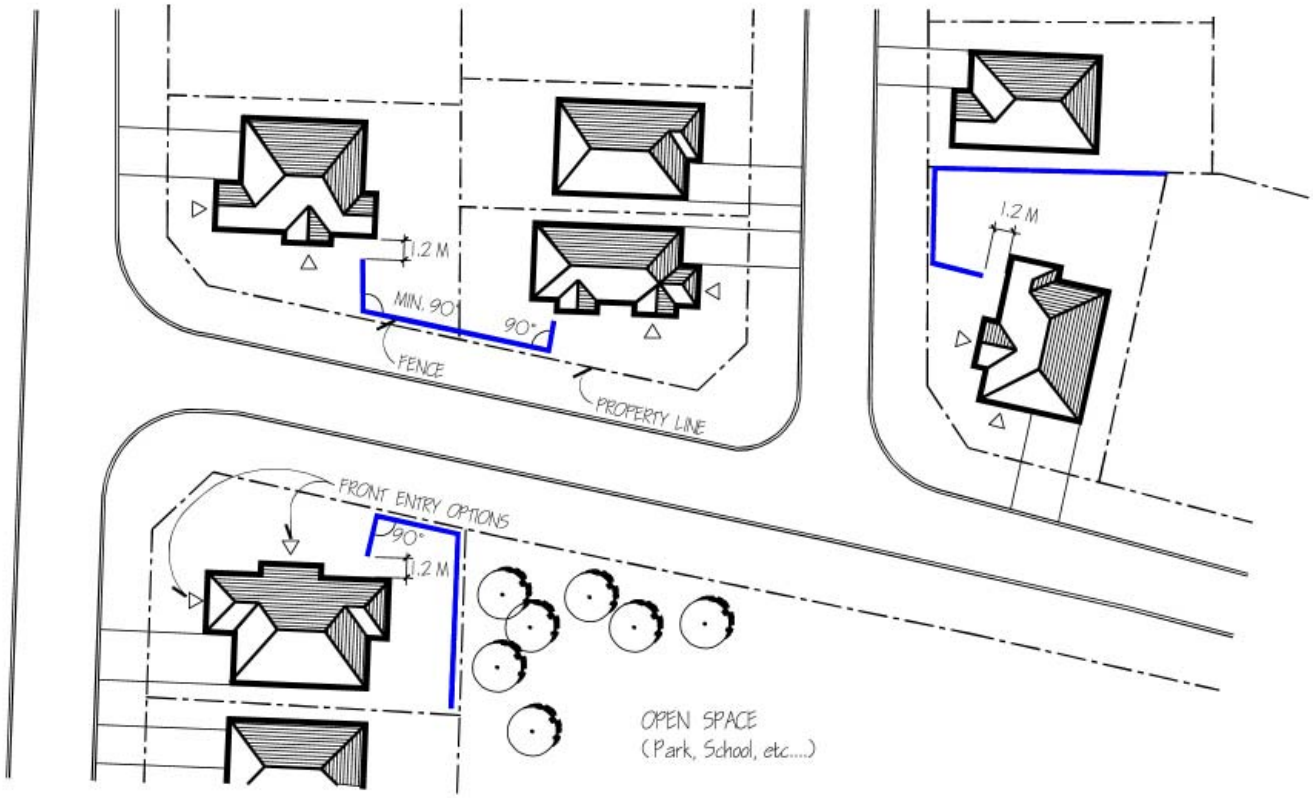
- takes into account objectives of the City of Brampton Trails Master Plan;
- incorporates proposed granular surface trails in environmentally sensitive areas such as valleylands and woodlots;
- trail routing has been reviewed in the field with City of Brampton and Credit Valley Conservation Authority representatives, additional route assessments will be required; and
- provides east-west connectivity as well as connection to Eldorado Park.

PATHWAY SYSTEM PLAN

Appendix 1

APPENDIX 2
CORNER LOT FENCING LOCATION

APPENDIX 2 - CORNER LOT FENCING LOCATION



GUIDELINES:

1. Fence is to be set entirely on private property.
2. Fence is to be set back 200mm from the exterior lot line, to allow the foundation to be located on the private property.
3. Fence is to terminate 1.2m from the face of building subject to noise attenuation requirements. Optional gate to be installed by homeowner.
4. Fence is to terminate within a desirable overlap of 2.0m from the rear corner of the house, subject to house design and acoustic requirements.
5. Fence return is to be at right angles to the street line or building face wherever possible. In all cases the interior angle of fence return is to be 90° or greater.

CORNER LOT FENCING

WATCHORN Architect Inc.

APPENDIX 3
EXISTING VEGETATION ASSESSMENT & RECOMMENDATIONS REPORT

Existing Vegetation Assessment and Recommendations Report

Overview

Beyond the ecological assessment and recommendations included in the EIS/EIR, the City of Brampton has required further assessment and recommendations regarding table land vegetation in Block 5, Creditview Crossing. The EIS/EIR report prepared by LGL Ltd., defined the limits of valuable woodlots and valley land vegetation based on ecological significance and value as habitat for wildlife. Existing individual trees, groupings and hedgerows located on the table land were deemed ecologically insignificant by this exercise.

However, the individual trees, groups and hedgerows located on the tableland may have cultural, historic and aesthetic value to the City and the proposed new community. Accordingly the City required further assessment of existing vegetation to determine valuable trees for possible preservation in the new community. Generally, species of value in an urban context of 6" dbh (150mm) and greater size are of interest.

This section deals with assessment and recommendations regarding existing table land trees by:

1. inventorying;
2. assessing and providing recommendations for removal, relocation and preservation;
3. making recommendations for management of retained vegetation through the draft plan and subdivision registration process; and
4. providing enhancement and/or mitigation recommendations.

Within Block 5, Creditview Crossing, there are two areas of specific cultural interest, the relatively continuous hedgerow of mature trees paralleling the east side of Creditview Road and the mature trees on the Bonnie Brae potential historic building/site (see figure 3c). Both are fundamental to the designation of Creditview Road as a scenic corridor within the Credit Valley Secondary Plan.

Table Land-Existing Vegetation

The existing table land vegetation inventory and assessment occurred May 2006 to January 2007, see figure 3a. This plan documents existing vegetation species, size, and condition. Figure 3b is a photographic record of table land vegetation. Illustrated on these figures is the block plan of August 2007 and hold-out lands where field work could not be completed. For additional detailed information see the arborist's report "Verification of Tableland Trees" January 26, 2007.

Block 5 contains a variety of vegetative resources:

Individual Trees
- randomly occurring large deciduous trees: bur oak, maple, walnut, elm and white ash which vary in size from 20-40" dbh and condition from poor to good;
- planted individual coniferous and deciduous trees surrounding existing residences;
- planted windrows/ hedgerows of mixed coniferous species; and
- planted hedgerow along Creditview Road of very large deciduous trees, predominately sugar maple and white ash although 20 other species also occur, ranging from 12" to 36" dbh and of very poor to good condition.

Hedgerows
- including species mostly of little urban value with randomly occurring high quality species, hawthorne/ buckthorn thickets along fencelines; and
- planted hedgerows of conifers and deciduous trees mostly of little urban value

Groupings of Trees
- ornamental varieties associated with existing residences; and
- clusters of bur oak and clusters of walnut, seeded from adjacent mature vegetation.

Creditview Road and Bonnie Braes Site

The large mature hedgerow on the east side of Creditview Road and trees paralleling the driveway and around the Bonnie Braes house are of particular cultural value. They create much of the visual value to Creditview Road's designation as a scenic drive. Similarly the large mature trees on the Bonnie Brae's site contribute significantly to the historic and cultural context of the house. Preservation of these trees is being considered as part of the requirements of the block plan process.

These trees were inventoried, assessed, tree tagged and locations surveyed (see figure 3c). The trees along Creditview Road are predominately sugar maple (42%) and white ash (16%) with the balance composed of 20 additional species. Of the 138 existing trees, 19 were assessed as very poor of which 8 were deemed hazardous and 32 were assessed as poor and incapable of tolerating any disturbance to their root zone. Accordingly 51 (37%) trees are recommended for removal. See figure 3c for inventory, location and assessment. Trees in conflict with connecting roads to Creditview Road will require removal.

Existing Vegetation Assessment and Recommendations Report

The trees on the Bonnie Brae's site are predominately sugar maple 44 (68%) of which 8 (18%) are deemed in very poor or poor condition and recommended for removal and 7 (11%) are black walnut with 1 designated very poor and recommended for removal. In addition, trees in conflict with the proposed north-south road immediately east of Creditview Road will require removal. The balance of the trees are composed of 6 species including one magnificent shagbark hickory. See figure 3c for inventory and assessment. As well, in addition to the mapping, the arborist's report "Tree Inventory and Assessment for Creditview Crossing", August 02, 2006 should be reviewed for additional information.

Other Table Land Vegetation

Within the hedgerows and as individual trees throughout the site there are significantly large bur oak and smaller walnut, hickory, white ash, maple and elm. See figure 3a. Many of the largest trees are in decline but many are worthy of protection to assess their prospects for preservation by future detailed assessment, survey, (location) and grading relative to draft plan preparation and FSR impacts.

In addition, there appears to be a very high quality grouping of bur oak in the north east quadrant of the block, located on a non-participating land parcel. Due to the land's legal status assessment, tagging and measuring could not be completed. In the south west, on the west edge of a stormwater management block, a small grouping of 4" black walnut are established and worthy of protection to determine future prospects for preservation. See figure 3d for removal and preservation recommendations.

Management and Enhancement of Preserved Trees

Creditview Road and Bonnie Braes Site

An arborist has inventoried, tagged and assessed the condition of existing trees along Creditview Road and the driveway and house area on the Bonnie Braes property. These trees have also been located by survey and shown superimposed on the current block plans (August 2007), see figure 3c. The numbers adjacent to each tree is the tree tag number attached at time of inventory. See attached Tree Inventory and Assessment Report, August 2, 2006.

The assessed condition of the trees has also been shown on the attached figure 3c, with trees assessed as poor and very poor illustrated as one category, recommended for removal. Trees assessed as fair are shown as a secondary category. Trees assessed as good and very good have been illustrated as a third category and are recommended for preservation.

Based on this information, driveway locations for lots fronting to Creditview Road were selected to correspond to tree removals and poorer quality trees. This information was again reviewed by the arborist on site, on a tree by tree basis, to ensure trees recommended for preservation were capable of surviving a restricted development/ building process by protecting a critical rooting zone. The results of this exercise are shown on figure 3c, and addressed in the arborist report "Driveway Development Impacts Street Trees along Creditview Road", January 12, 2007.

The restricted development/ building process criteria includes:

- Limited width driveways, some with shared access to abutting lots.
- All municipal servicing from Creditview Road, to be located under the driveway. This will require the franchise utilities and the municipality to be flexible with their standards and separation requirements.
- Tree removal to be directed by the arborist, some will require removal in pieces so not to damage neighbouring trees.
- Trees which remain will require pruning and remediation of wounds, both existing and created, as well as a fertilizing/ watering program through the development/building period.
- Tree protection plywood fence hoarding will be installed and maintained during the entire development/building period. The limits and location of the hoarding will be determined by the arborist.
- Existing grades will be maintained in the critical rooting zone.
- Proposed building site plans (including proposed grading) will be reviewed and commented on by the arborist. Site plans will also show the accurate location of the existing tree(s), the drip line and existing elevations in the critical root zone.
- Information to the new home owners to include tree preservation history and recommendations for maintaining the health and longevity of their tree(s).

The plywood protective tree hoarding of existing trees will be removed individually once the lot construction is complete including the spreading of topsoil. The existing vegetative cover within the previously hoarded area will be removed by hand and topsoil feathered to this zone to meet existing grade.

Where trees have been removed and subsequent to the development/building period, new street trees will be planted in a manner to re-establish the treed boulevard along the east side of Creditview Road. Species will be selected to have

greater adaptation to urban survival conditions, to provide a mix of species and to be capable of growing to the sizes of the existing trees.

Note, the trees along Creditview Road have been assessed and recommendations made based solely on anticipated Block 5 development impacts. Creditview Road will also be subject to urban development pressures: for the routing of regional water mains and sewers, as well as, installation of franchise utility mains, sidewalks and street lights. With the majority of the existing trees falling within the current road right-of-way or along its limit, preservation success will depend equally on the City of Brampton exercising diligence and control over the activities of parties other than the land owner development group.

Table Land Vegetation – To Be Preserved

Table land vegetation designated for preservation shown on figure 3d, will require additional investigation, assessment and mitigation as the planning and detail design stages for the respective subdivisions proceed.

Draft plan preparation will take into account steps necessary to preserve trees:

- Lot sizing and lot line location to maintain tree root zone and crown protection to allow for 6m construction zone around building envelope without impacting roots or crown.
- Lot sizing and lot line location to allow for preservation of existing undisturbed grades throughout critical root zone.
- Additional more detailed field review of trees designated for preservation to ensure trees are properly assessed to determine longevity following construction.
- Protective hoarding of trees to be preserved prior to any construction activities occurring around the trees. Many of the trees fall on old fence lines which also represent different land owners. Co-ordinated preservation of trees which straddle property boundaries is necessary. Unless determined otherwise protective hoarding is to be placed at dripline plus 2m.

During the detail design stages the following items will be considered:

- Mitigation measures where above objectives cannot be met, ie., crown pruning to facilitate construction, special grading solutions to allow grade changes around trees, tree watering and feeding program during construction.
- Horizontal and vertical survey of vegetation designated for preservation to ensure proper base information is considered in the detail design stages.
- Removal of trees designated for preservation where their survival and continued health requirements cannot be met or sustained.
- Protective hoarding of trees to be preserved prior to any construction activities occurring around the trees. Many of the trees fall on old fence lines which also represent different land owners. Co-ordinated preservation of trees which straddle property boundaries is necessary. Unless determined otherwise protective hoarding is to be placed at dripline plus 2m.
- Trees on abutting non-participating land holdings are designated with preservation status. Construction activities within the development lands can impair and kill vegetation on other properties by physical damage, compaction in the root zone, grading in the root zone, flooding and water table changes. Trees within 6m of property lines should be similarly inventoried, assessed and surveys completed to facilitate mitigation measures during detail design.

Existing Vegetation Assessment and Recommendations Report

Conclusion

Block 5 is endowed with a high quality woody vegetation especially along Creditview Road, on the Bonnie Braes site and within some of the hedgerows on site. Work undertaken for the block plan stage has prepared detailed assessments, recommendations and mitigation measures for trees on Creditview Road and the Bonnie Braes site designating trees for removal and preservation and by illustrating lotting/ driveway layouts to preserve as many high quality trees as possible. For the entire block (participating land owners only), all table land vegetation has been inventoried and preliminary recommendations made for removal and preservation pending detailed assessment, survey and mitigation recommendations, excercises which occur in the draft plan process and subsequently in the detailed design process for subdivision registration. This study has also identified the need to preserve trees on abutting (non-participating lands) parcels. Further, it has articulated the need to be aware of urbanization activities within the Creditview Road right-of-way, by parties other than this land owners group, which will impact the highly valued trees on the east side of Creditview Road.

To preserve valued trees through the many years of planning, servicing, and building construction requires a co-ordinated dedication and understanding of the many hazards which can sabotage preservation efforts by all parties involved in the approval, design and construction stages. However, compliance is required, as there is little benefit to leaving a homeowner or the municipality with remediation or removal costs for a large tree which suffers or dies 2-5 years after the subdivision is completed. The most important step is to protect existing vegetation of value prior to topsoil stripping and bulk grading in a manner that assures their health and survival until the detailed design stage is completed during the subdivision registration process when additional protection and mitigation measures can be implemented.

The objectives of this exercise have been:

- to preserve as many of the high quality trees along Creditview Road and the Bonnie Braes site as possible and to then replant with trees to refill the gaps over time, and
- to preserve as many of the high quality trees on the participating and abutting non-participating lands as possible in a manner that their preservation does not become a short term liability for the homeowner or municipality.
- the objectives of future exercises include replanting the subdivisions in a manner that is complementary to the existing woodlots, valley lands and preserved table land trees, restoring movement corridors, replacing lost wildlife habitat, and providing a net gain in large tree canopy cover and volume over time.

APPENDIX 3A
PRELIMINARY VEGETATION INVENTORY & ASSESSMENT

LEGEND	
(line symbol)	LIMIT OF SUBDIVISION
(dashed box)	NON PARTICIPATING LAND OWNERS
(hatched box)	VALLEYLANDS & WOODLOTS
S1 TO S35	SEE ARBORIST REPORT JANUARY 26, 2007

CONDITION	
VG	Very Good
G	Good
F	Fair
M	Moderate
M-P	Moderate - Poor
P	Poor
D	Dead

TREE KEY	
A	Apple
Ag	Green Ash
Aw	White Ash
B	Beech
Bp	Paper Birch
Bt	Buckthorn
Bw	Basswood
Cb	Black Cherry
Cc	Chokecherry
Cds	Domestic Sweet Cherry
Cp	Pin Cherry
Cw	White Cedar
E	Elm
Es	Siberian (Chinese) Elm
Hb	Bitternut Hickory
Hs	Shagbark Hickory
Ht	Hawthorn
Ir	Ironwood
Lb	Black Locust
Lh	Honey Locust
M	Hard Maple (Sugar)
Mm	Manitoba Maple
Ms	Silver Maple

TREE KEY	
Ob	Bur Oak
Or	Red Oak
Ow	White Oak
Pa	Aspen Poplar (Trembling)
Pan	Austrian Pine
Pj	Jack Pine
Ps	Scots Pine
Pw	White Pine
Sm	Sumac
Sc	Colorado Spruce
Sn	Norway Spruce
Sw	White Spruce
T	Tamarack
Wb	Black Walnut
Wbl	Black Willow
Ws	Willow (shrub)
Ww	Weeping Willow
cr	Cucumber Vine
d	Red Osier Dogwood
gr	Grape Vine
h	Honeysuckle
r	Rose
rp	Raspberry

Appendix 3a

Project Name
Creditview Crossing
Municipality
City of Brampton

Credit Valley Secondary Plan Sub-Area 5
Community Design Guidelines

Sheet Title
Preliminary Vegetation Inventory & Assessment

ARBORIST VERIFICATION
JANUARY 26, 2007 /
DiBLASIO LANDS INVENTORY MARCH 28, 2008

FIELD WORK AND SITE PHOTOS
NOVEMBER 25, 27 & DECEMBER 04, 2006 /
DiBLASIO LANDS MARCH 28,2008

BASE & BLOCK PLAN INFORMATION
RECEIVED FROM GLEN SCHNARR & ASSOCIATES MARCH 17, 2008

No	Date	Revisions	By
3.	Mar.28.2008	DiBlasio Lands Inventory Added	MK
2.	Feb.28.2007	Submission to City of Brampton	MK
1.	Feb.21.2007	Draft circulated	MK

The MBTW Group
Community Planning
Urban Design
Landscape Architecture

Job No:	FDG-060
Designed:	MK
Drawn:	RS
Date:	December 2006
Scale:	1:3000
Drawing No.:	Appendix 3a

APPENDIX 3B
SITE IMAGES

A

B

C

D

E

F

G

H

I

J

K

L

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N

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P

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R

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T

U

V

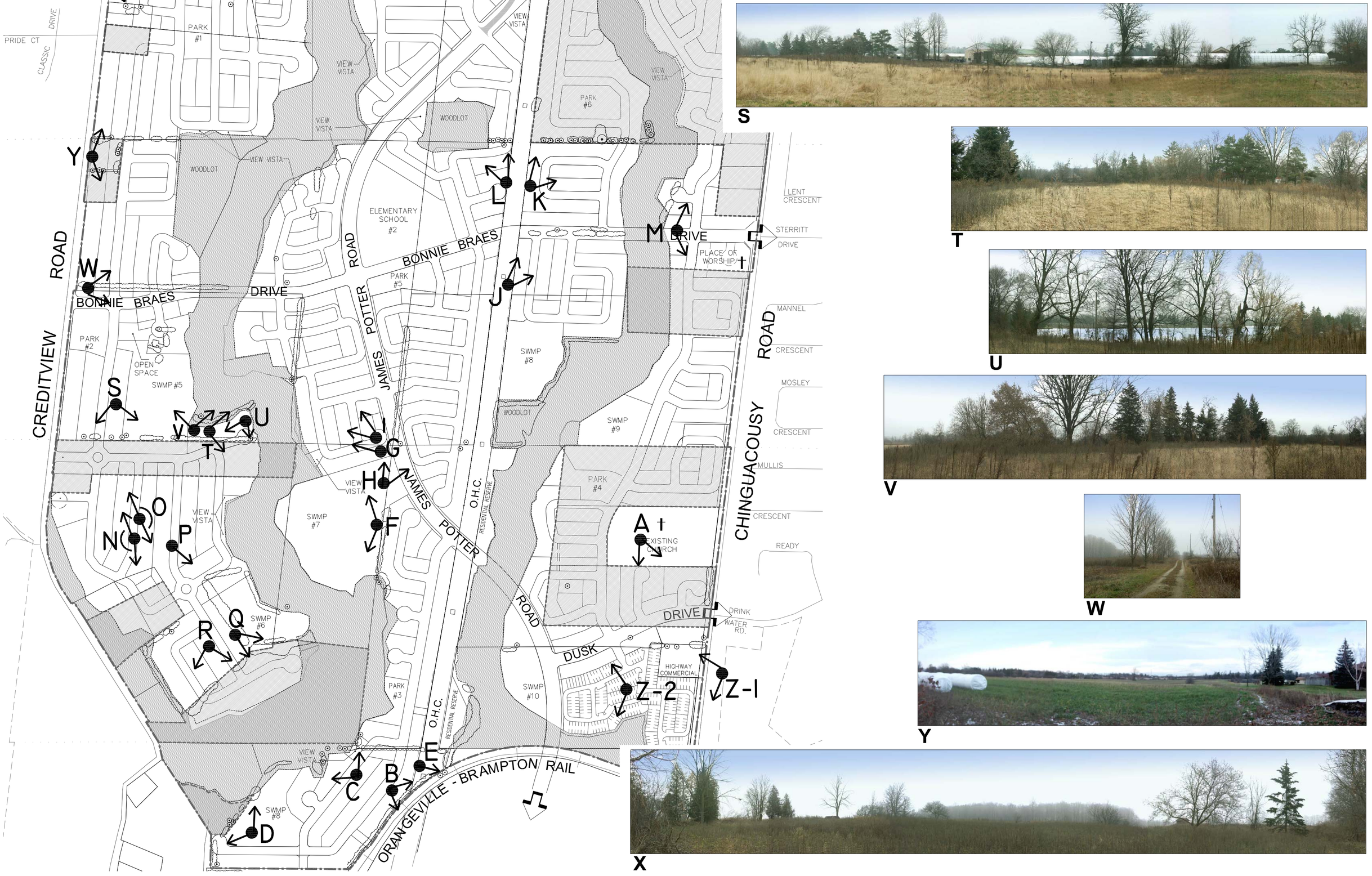
W

Y

X

Z-1

Z-2



Appendix 3b

Project Name: **Creditview Crossing**

Municipality: City of Brampton

Sheet Title: **Site Images**

Credit Valley Secondary Plan Sub-Area 5
Community Design Guidelines

LEGEND: A — PHOTO AND ORIENTATION

FIELD WORK AND SITE PHOTOS
November 25, 27 & December 04, 2006/
DIBLASIO LANDS MARCH 28, 2008

No	Date	Revisions	By
3.	Mar.28.2008	DIBlasio Lands Inventory Added	MK
2.	Feb.28.2007	Submission to City of Brampton	MK
1.	Feb.21.2007	Draft circulated	MK

The MBTW Group
Community Planning
Urban Design
Landscape Architecture

Job No: FDG-060
Designed: MK
Drawn: RS
Date: December 2006
Scale: N.T.S.
Drawing No.: Appendix 3b

APPENDIX 3C
CREDITVIEW ROAD TREES & DEVELOPMENT IMPACTS

7 Oaks
TREE CARE & URBAN FORESTRY CONSULTANTS INC.

MBTW Group
255 Wicksteed Avenue, Unit 1A
Toronto, Ontario
M4H 1G8

January 12, 2007

Att: Ms Marie Kipen

Dear Ms. Kipen:

RE: OUR MATTER TA-06-025
DRIVEWAY DEVELOPMENT IMPACTS
STREET TREES ALONG CREDITVIEW ROAD

I have reviewed the proposed house and driveway sitings along Creditview Road and related them to the previously inventoried trees to determine their preservation potential.

It should be noted that there are a certain percentage of these trees that, regardless of their location, are of low species value, poor/very poor condition and/or hazardous and should not be considered for future preservation.

Our determination of driveway impacts is based on a factor of thirty (30) percent or less critical rooting disturbance with a zero (0) root plate encroachment. I am also assuming that the servicing for the proposed lots will be installed in the same location as the proposed driveways, all finished grades within the critical rooting zone will match existing and that protection of the remaining critical rooting zones will be implemented. Should this not be the case for certain locations, a review of each tree and all proposed impacts will need to be re-examined, once all of the details are known, before the preservation potential can be accurately determined.

I have also provided recommendations for either removing or preserving specific trees.

I remain, yours in Conservation

Eugene M. Storozinski
Consulting Arborist/Principal
I.S.A. Certification ON-0884A

Tree Tag	Driveway Impact	Preservation Potential	Recommendation
1107	Low	Low	Remove
1108	Low	High	Preserve, Protect & Maintain
1109	Low	Low	Remove
1110	Low	Low	Remove
1111	High	Low	Remove
1112	Low	Low	Remove
1113	Low	Low	Remove
1114	Low	Low	Remove
1115	Low	Low	Remove
1120	Low	Medium	Preserve, Protect & Maintain
1121	Low	High	Preserve, Protect & Maintain
1122	Low	Low	Remove
1123	High	Low	Remove
1124	High	Low	Remove
1125	High	Low	Remove
1126	Low	Low	Remove
1127	Low	High	Preserve, Protect & Maintain
1128	Low	Low	Remove
1129	High	Low	Remove
1130	Low	High	Preserve, Protect & Maintain
1131	Low	High	Preserve, Protect & Maintain
1142	Low	Low	Remove
1143	Low	High	Preserve, Protect & Maintain
1144	High	Low	Remove
1145	Low	High	Preserve, Protect & Maintain
1146	Low	High	Remove
1147	High	Medium	Remove
1148	High	Medium	Remove
1162	Low	High	Preserve, Protect & Maintain
1163	Low	High	Preserve, Protect & Maintain

1164	High	Low	Remove
1165	Medium	Low	Remove
1166	Low	High	Preserve, Protect & Maintain
1167	Low	High	Preserve, Protect & Maintain
1168	High	Low	Remove
1169	Low	High	Preserve, Protect & Maintain
1170	High	Medium	Preserve, Protect & Maintain
1171	High	Low	Remove
1172	Low	High	Preserve, Protect & Maintain
1173	Low	Low	Remove
1174	Low	Low	Remove
1175	Low	High	Preserve, Protect & Maintain
1192	Low	High	Preserve, Protect & Maintain
1193	High	Low	Remove
1194	High	Medium	Preserve, Protect & Maintain
1195	Low	Low	Remove
1196	Low	Low	Remove
1197	Low	Low	Remove
1198	Low	Low	Remove
1199	Medium	High	Preserve, Protect & Maintain
1200	Medium	High	Preserve, Protect & Maintain
1201	Low	High	Preserve, Protect & Maintain

Tree Inventory and Assessment

For

CREDITVIEW CROSSING

Prepared For:
The MBTW Group
Matter No: TA-06-025
August 02, 2006

2 Lorwood Ct. P.O. Box 2453, Stn. B Richmond Hill, ON L4E 1A5 Tel: (905) 773-1733 Fax: (905) 773-9319

TABLE OF CONTENTS

1.0 INTRODUCTION

7 Oaks Tree Care & Urban Forestry Consultants Inc. was retained by the MBTW Group to provide a tree inventory and assessment for existing trees located along the east side of an existing roadway within the City of Brampton as well as within an existing heritage property.

Specifically, those trees along the easterly portion of Creditview Road, from Queen Street southerly to approximately 270 metres south of Springbrook Creek and all significant trees within the existing heritage site.

Authorization to proceed with this report was obtained from the MBTW Group by Fax Transmittal dated April 19, 2006

2.0 PURPOSE

This base report will address the pre-development issues that pertain to the existing tree cover along the east side of Creditview Road. The inventory, assessment and hazard potential are identified and will assist in quantifying the preservation potential of each of the significant trees.

3.0 METHODOLOGY

3.1 Review

Prior to on site inspection, a review of pertinent documents was conducted; Creditview Crossing Block Plan Design Report, as prepared by The MBTW

Group and dated May 25, 2006; Topographic survey as supplied by The MBTW Group.

3.2 Field Study

On site inspection and data recording was initiated on May 02, July 23, July 24 and November 14, 2006. All significant trees which were located on the east side of the Creditview Road road allowance, from Queen Street to the north, southward to approximately 270 metres south of Springbrook Creek were inventoried and assessed. Also, all significant trees along the existing driveway entrance to and within the heritage site were inventoried and assessed. A numbered aluminum tag was installed on the east side of the bole of each tree at approximately two (2) metre height and all measurements and assessment detail was recorded at this time.

All data obtained on site is empirical in nature and expressed in the metric system of measure.

3.3 Tree Species

All inventoried trees are identified by their commonly used name followed by the most current taxonomic binomial. See APPENDIX I.

3.4 Tree Size

All trees whose diameter was twenty (20) centimeters or greater were classed as significant and inventoried. Diameters were measured at 1.4 metres above existing grade (Breast Height), where possible, as per accepted urban forestry standards.

Tree heights and canopy spread were not recorded. See APPENDIX I

3.5 Tree Condition

A generalized assessment system was employed to describe the overall conditions of each inventoried tree. A five (5) level scale of plant health and structure, with descriptors of Very Good, Good, Fair, Poor and Very Poor, was used to quantify the range of the tree's condition. Very Good condition was assessed to a tree whose health, growth rate, crown closure and structural integrity is greater than eighty (80) percent of a perfect specimen. Conversely, Very Poor was assessed to a tree whose condition is less than twenty (20) percent of a perfect specimen. Trees assessed as being in a hazardous condition are those whose failure is predicted in the short term and where such failure will result in property or structure damage or physical harm to persons under current conditions.
See APPENDIX I.

4.0 TREE INVENTORY

A total of two hundred and three (203) significant trees, one (1) cedar hedge and one (1) white spruce hedge were inventoried and assessed. Species numbers and percent composition are:

Hard Maple
- *Acer saccharum*, 102 specimens, 51%

Manitoba Maple
- *Acer negundo*, 8 specimens, 4%

Red Maple
- *Acer rubrum*, 3 specimens, 1.5%

Silver Maple
- *Acer saccharinum*, 1 specimen, 0.5%

White Ash
- *Fraxinus americana*, 22 specimens, 11%

Bur Oak
- *Quercus macrocarpa*, 6 specimens, 3%

Chinese Elm
- *Ulmus parvifolia*, 2 specimens, 1%

White Elm
- *Ulmus americana*, 4 specimens, 2%

Horse Chestnut
- *Aesculus hippocastanum*, 1 specimen, 0.5%

Black Walnut
- *Juglans nigra*, 13 specimens, 7.5%

Hawthorne
- *Crataegus sp.*, 4 specimens, 2%

Apple
- *Malus sp.*, 1 specimen, 0.5%

European Buckthorn
- *Rhamnus cathartica*, 1 specimen, 0.5%

White Cedar
- *Thuja occidentalis*, 3 specimens, 1.5%

White Cedar Hedge
- *Thuja occidentalis*, 1 Unit of 17 trees, 0.5%

Weeping Willow
- *Salix alba* var., 1 specimen, 0.5%

Basswood
- *Tilia americana*, 7 specimens, 3.5%

Trembling Aspen
- *Populus tremuloides*, 1 specimen, 0.5%

White Pinus
- *Pinus strobus*, 2 specimens, 1.0%

Carolina Poplar
- *Populus x canadensis*, 6 specimens, 3%

White Spruce
- *Picea glauca*, 1 specimen, 0.5%

Black Cherry
- *Prunus serotina*, 1 specimen, 0.5%

Black Willow
- *Salix nigra*, 1 specimen, 0.5%

Shagbark Hickory
- *Carya ovata*, 1 specimen,

Austrian Pine
- *Pinus nigra*, 1 specimen. 0.5%

Russian Olive
- *Elaegnus angustifolia*, 1 specimen, 0.5%

Norway Spruce
- *Picea abies*, 2 specimens, 1.0%

Although species numbers and composition reflect certain quantity, it should be noted that the sizes of certain species and their respective crowns would increase their presence and position within their site. ie: *Acer saccharum*, *Acer saccharinum, Quercus macrocarpa, Acer rubrum*, etc.

5.0 TREE MANAGEMENT

5.1 Tree Preservation

All significant trees within the study area are of varying conditions. Only those trees that are native, non-invasive and which exhibit a condition rating of FAIR or

better should be considered for future tree preservation.

Design features like final grades, hydrology, site servicing (both main and secondary), building footprints, driveway entrances, boulevard widths, storm water management, street lighting, road reconstruction all have certain impacts on existing trees and all issues should be considered within the context of tree preservation.

Tree protection, both for above ground and below ground parts of the retained trees should be given serious consideration during the planning stages of development and should form part of any construction agreement.

5.2 Tree Removal

Of the 203 trees inventoried, 22 were assessed as VERY POOR, of which three (3) were deemed to be HAZARDOUS. It would be a prudent approach to remove these hazardous trees prior to their imminent collapse.

Forty-five (45) of the significant trees were assessed as being in POOR condition, of which 8 were deemed to be HAZARDOUS. Again, their immediate removal is recommended. The remaining significant trees, in POOR condition, will not tolerate any additional disturbances to their root systems and their retention within the final design process should be carefully decided.

5.3 Tree Maintenance

Once the final design works for development, and road reconstruction are available, a maintenance program involving tree trimming, tree fertilizing and structural assistance should be undertaken to ensure that the short and long term

needs of the trees, to be preserved, are addressed and that the maximum numbers of significant trees can be retained for the future.

This nineteen (19) page report was prepared by:

Eugene M. Storozinski
Consulting Arborist/Principal
I.S.A. Certification OSA

APPENDIX I

Tag #	Species	DBH (cm)	Assessed Condition	Remarks
1100	Chinese Elm *Ulmus parvfolia*	39x39x37	Good	3 stems
1101	White Elm *Ulmus americana*	58	Good	
1102	Manitoba Maple *Acer negundo*	57	Good	
1103	White Elm *Ulmus americana*	43x20x27	Good	3 stems
1104	Horse Chestnut *Aesculus hippocastanum*	59	Good	
1105	Sugar Maple *Acer saccharum*	21	Good	
1106	Sugar Maple *Acer saccharum*	66	Poor	
1107	Manitoba Maple *Acer negundo*	22	Fair	
1108	Black Walnut *Juglans nigra*	25	Good	
1109	Sugar Maple *Acer saccharum*	65	Poor	Hazard
1110	Hawthorn *Crataegus sp.*	21x21x18x14	Fair	4 stems
1111	Sugar Maple *Acer saccharum*	65	Poor	
1112	Sugar Maple *Acer saccharum*	60	Poor	
1113	Hawthorn *Crataegus sp.*	21x13x16	Good	3 stems
1114	Sugar Maple *Acer saccharum*	64	Very Poor	
1115	Sugar Maple *Acer saccharum*	46	Poor	Hazard
1116	White Ash *Fraxinus Americana*	14x14x13	Good	3 stems
1117	Common Apple *Malus sp.*	14x18	Fair	2 stems
1118	White Ash *Fraxinus Americana*	23x12	Poor	2 stems
1119	Sugar Maple *Acer saccharum*	46	Poor	Hazard

Tag #	Species	DBH (cm)	Assessed Condition	Remarks
1120	Sugar Maple *Acer saccharum*	59	Good	
1121	White Ash *Fraxinus Americana*	27	Fair	
1122	White Ash *Fraxinus Americana*	22	Poor	
1123	White Ash *Fraxinus Americana*	33x31	Poor	
1124	White Ash *Fraxinus Americana*	24	Poor	
1125	Sugar Maple *Acer saccharum*	63	Poor	
1126	White Ash *Fraxinus Americana*	18x12	Fair	2 stems
1127	Bur Oak *Qurecus macrocarpa*	52	Good	
1128	White Ash *Fraxinus Americana*	22	Very Poor	
1129	Sugar Maple *Acer saccharum*	70	Very Poor	
1130	Sugar Maple *Acer saccharum*	51	Fair	
1131	Sugar Maple *Acer saccharum*	64	Good	
1132	Sugar Maple *Acer saccharum*	71	Good	
1133	Sugar Maple *Acer saccharum*	74	Good	
1134	White Ash *Fraxinus Americana*	30	Fair	
1135	White Ash *Fraxinus Americana*	30x27	Good	2 stems
1136	White Ash *Fraxinus Americana*	34	Good	
1137	White Ash *Fraxinus Americana*	36	Poor	
1138	White Ash *Fraxinus Americana*	46	Good	
1139	White Ash *Fraxinus Americana*	33	Poor	
1140	Bur Oak *Qurecus macrocarpa*	79	Good	
1141	Bur Oak *Qurecus macrocarpa*	66	Very good	

Tag #	Species	DBH (cm)	Assessed Condition	Remarks
1142	White Ash *Fraxinus Americana*	33x22	Poor	
1143	Chinese Elm *Ulmus parvfolia*	29x24	Good	
1144	White Ash *Fraxinus Americana*	32x31	Very Poor	2 stems
1145	Bur Oak *Qurecus macrocarpa*	20	Very good	
1146	Hawthorn *Crataegus sp.*	11x26x10	Good	3 stems
1147	Buckthorn *Rhamnus cathartica*	13x20x13	Good	3 stems
1148	Hawthorn *Crataegus sp.*	22x15x24x8	Good	4 stems
1149	White Cedar *Thuja occidentalis*	5 – 25	Good	17 trees within a hedge
1150	Red Maple *Acer rubrum*	79	Good	
1151	Weeping Willow *Salix alba 'Tristis'*	139	Very Poor	
1152	Manitoba Maple *Acer negundo*	25x22	Good	
1153	Manitoba Maple *Acer negundo*	37	Poor	
1154	Manitoba Maple *Acer negundo*	26	Fair	
1155	Manitoba Maple *Acer negundo*	52	Good	
1156	Sugar Maple *Acer saccharum*	56	Fair	
1157	Sugar Maple *Acer saccharum*	55	Good	
1158	Sugar Maple *Acer saccharum*	55	Good	
1159	Sugar Maple *Acer saccharum*	66	Good	
1160	Sugar Maple *Acer saccharum*	91	Fair	
1161	Sugar Maple *Acer saccharum*	82	Fair	
1162	Sugar Maple *Acer saccharum*	65	Good	
1163	Sugar Maple *Acer saccharum*	57	Good	

Tag #	Species	DBH (cm)	Assessed Condition	Remarks
1164	Sugar Maple *Acer saccharum*	67	Poor	
1165	Sugar Maple *Acer saccharum*	64	Poor	
1166	Sugar Maple *Acer saccharum*	46	Good	
1167	Sugar Maple *Acer saccharum*	61	Fair	
1168	Sugar Maple *Acer saccharum*	84	Fair	
1169	Sugar Maple *Acer saccharum*	78	Good	
1170	Sugar Maple *Acer saccharum*	64	Fair	
1171	Sugar Maple *Acer saccharum*	70	Poor	
1172	Sugar Maple *Acer saccharum*	85	Fair	
1173	Sugar Maple *Acer saccharum*	97	Very Poor	
1174	Sugar Maple *Acer saccharum*	82	Very Poor	
1175	Sugar Maple *Acer saccharum*	91	Good	
1176	Sugar Maple *Acer saccharum*	136	Very Poor	Hazard
1177	Sugar Maple *Acer saccharum*	79	Poor	Hazard
1178	Sugar Maple *Acer saccharum*	99	Good	
1179	Sugar Maple *Acer saccharum*	92	Poor	
1180	Sugar Maple *Acer saccharum*	58	Good	
1181	Sugar Maple *Acer saccharum*	44	Good	
1182	Basswood *Tilia Americana*	89	Very Poor	Hazard
1183	Sugar Maple *Acer saccharum*	63	Poor	Hazard
1184	Sugar Maple *Acer saccharum*	56	Good	
1185	Bur Oak *Qurecus macrocarpa*	89	Fair	

Tag #	Species	DBH (cm)	Assessed Condition	Remarks
1186	Sugar Maple *Acer saccharum*	68	Good	
1187	Sugar Maple *Acer saccharum*	84	Good	
1188	Sugar Maple *Acer saccharum*	61	Fair	
1189	Sugar Maple *Acer saccharum*	103	Good	
1190	Sugar Maple *Acer saccharum*	99	Very Good	
1191	Black Walnut *Juglans nigra*	34	Good	
1192	Sugar Maple *Acer saccharum*	96	Very Good	
1193	Sugar Maple *Acer saccharum*	102	Very Poor	Hazard
1194	Sugar Maple *Acer saccharum*	65	Fair	
1195	Basswood *Tilia americana*	37	Very Poor	
1196	Basswood *Tilia americana*	30	Very Poor	
1197	Basswood *Tilia americana*	33x30	Fair	2 stems
1198	Basswood *Tilia americana*	27	Fair	
1199	Sugar Maple *Acer saccharum*	65	Good	
1200	Sugar Maple *Acer saccharum*	65	Good	
1201	Black Walnut *Juglans nigra*	26	Good	
1202	Black Walnut *Juglans nigra*	35	Good	
1203	Black Walnut *Juglans nigra*	29	Fair	
1204	Black Walnut *Juglans nigra*	40	Good	
1205	Trembling Aspen *Populus tremuloides*	25	Poor	
1206	Bur Oak *Qurecus macrocarpa*	63	Good	
1207	Sugar Maple *Acer saccharum*	73	Very Good	

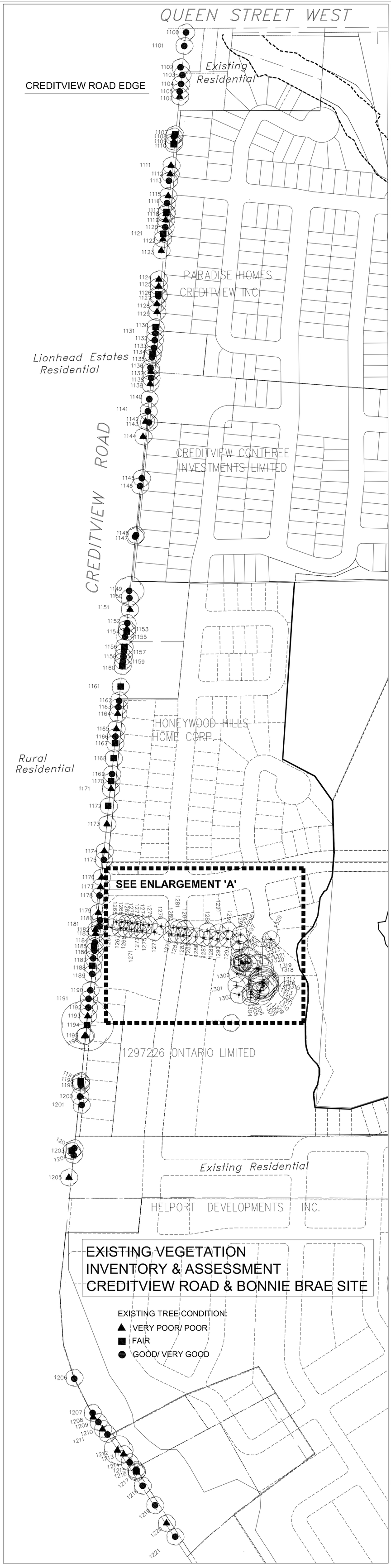
Tag #	Species	DBH (cm)	Assessed Condition	Remarks
1208	White Pine *Pinus strobus*	69	Poor	Hazard
1209	Sugar Maple *Acer saccharum*	83	Good	
1210	Basswood *Tilia americana*	58x72	Poor	Hazard 2 stems
1211	White Ash *Fraxinus Americana*	20	Good	
1212	White Pine *Pinus strobus*	65	Very Poor	
1213	White Elm *Ulmus americana*	47	Very Poor	
1214	Sugar Maple *Acer saccharum*	66	Good	
1215	Sugar Maple *Acer saccharum*	23	Good	
1216	White Elm *Ulmus americana*	22	Fair	
1217	Basswood *Tilia americana*	21	Poor	
1218	Red Maple *Acer rubrum*	99	Good	
1219	Silver Maple *Acer saccharinum*	52	Very Good	
1220	Sugar Maple *Acer saccharum*	112	Poor	
1221	Red Maple *Acer rubrum*	66	Very Good	
1222	Eastern Poplar *Populus deltoids*	48	Fair	
1223	Eastern Poplar *Populus deltoids*	46	Poor	
1224	Eastern Poplar *Populus deltoids*	40	Very Poor	
1225	Eastern Poplar *Populus deltoids*	37	Poor	
1226	Eastern Poplar *Populus deltoids*	40	Fair	
1227	Eastern Poplar *Populus deltoids*	47	Fair	
1228	White Spruce *Picea glauca*	21	Very Good	
1229	White Ash *Fraxinus Americana*	35	Fair	

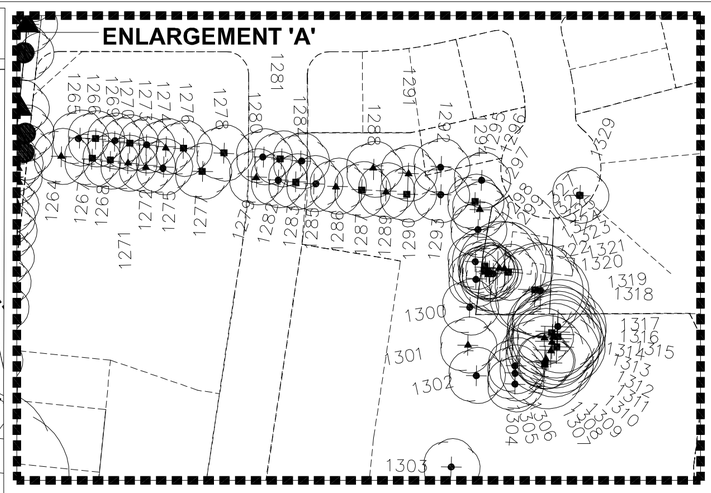
Tag #	Species	DBH (cm)	Assessed Condition	Remarks
1230	White Ash *Fraxinus Americana*	29	Fair	
1231	White Ash *Fraxinus Americana*	35	Good	
1232	White Ash *Fraxinus Americana*	29	Fair	
1233	Black Cherry *Prunus serotina*	51	Fair	
1234	White Ash *Fraxinus Americana*	26	Poor	
1235	Black Willow *Salix nigra*	40	Poor	
1236	Manitoba Maple *Acer negundo*	23	Poor	
1237	Manitoba Maple *Acer negundo*	51	Poor	Hazard
1246	Hard Maple *Acer saccharum*	79	Fair	
1265	Hard Maple *Acer saccharum*	75	Good	
1266	Hard Maple *Acer saccharum*	85	Fair	
1267	Hard Maple *Acer saccharum*	82	Fair	
1268	Hard Maple *Acer saccharum*	60	Fair	
1269	Hard Maple *Acer saccharum*	26	Good	
1270	Hard Maple *Acer saccharum*	48	Fair	
1271	Hard Maple *Acer saccharum*	96	Poor	
1272	Hard Maple *Acer saccharum*	69	Fair	
1273	Hard Maple *Acer saccharum*	39	Good	
1274	Hard Maple *Acer saccharum*	92	Poor	
1275	Hard Maple *Acer saccharum*	66	Good	
1276	Hard Maple *Acer saccharum*	72	Fair	
1277	Hard Maple *Acer saccharum*	82	Fair	

Tag #	Species	DBH (cm)	Assessed Condition	Remarks
1278	Hard Maple *Acer saccharum*	101	Fair	
1279	Hard Maple *Acer saccharum*	66	Poor	
1280	Hard Maple *Acer saccharum*	23	Good	
1281	Hard Maple *Acer saccharum*	41	Fair	
1282	Hard Maple *Acer saccharum*	47	Good	
1283	Hard Maple *Acer saccharum*	21	Fair	
1284	Hard Maple *Acer saccharum*	54	Good	
1285	Hard Maple *Acer saccharum*	55	Good	
1286	Hard Maple *Acer saccharum*	36	Poor	
1287	Hard Maple *Acer saccharum*	49	Fair	
1288	Hard Maple *Acer saccharum*	71	Poor	
1289	Hard Maple *Acer saccharum*	58	Poor	
1290	Hard Maple *Acer saccharum*	81	Fair	
1291	Hard Maple *Acer saccharum*	85	Poor	
1292	Hard Maple *Acer saccharum*	20	Very Good	
1293	Hard Maple *Acer saccharum*	65	Good	
1294	Hard Maple *Acer saccharum*	79	Good	
1295	Hard Maple *Acer saccharum*	20	Fair	
1296	Hard Maple *Acer saccharum*	46	Very Poor	
1297	Hard Maple *Acer saccharum*	47	Very Good	
1298	Hard Maple *Acer saccharum*	34	Good	
1299	Shag Bark Hickory *Carya ovata*	65	Good	

Tag #	Species	DBH (cm)	Assessed Condition	Remarks
1300	Black Walnut *Juglans nigra*	56	Good	
1301	Black Walnut *Juglans nigra*	125	Very Poor	
1302	Hard Maple *Acer saccharum*	25 x 22	Good	2 Stems
1303	Black Walnut *Juglans nigra*	107	Good	
1304	Black Walnut *Juglans nigra*	22	Good	
1305	Black Walnut *Juglans nigra*	22	Good	
1306	Hard Maple *Acer saccharum*	25	Good	
1307	Austrian Pine *Pinus nigra*	39	Poor	
1308	Black Walnut *Juglans nigra*	24	Fair	
1309	Hard Maple *Acer saccharum*	13 x 16	Poor	2 Stems
1310	White Spruce *Picea glauca*	29	Poor	
1311	White Spruce *Picea glauca*	37	Fair	
1312	White Spruce *Picea glauca*	27	Poor	
1313	White Spruce *Picea glauca*	22	Poor	
1314	Russian Olive *Elaeagnus angustifolia*	48	Poor	
1315	White Spruce *Picea glauca*	20	Fair	
1316	White Spruce *Picea glauca*	23	Fair	
1317	White Spruce *Picea glauca*	41	Good	
1318	Norway Spruce *Picea abies*	56	Good	
1319	Norway Spruce *Picea abies*	63	Fair	
1320	Hard Maple *Acer saccharum*	62	Fair	
1321	White Cedar *Thuja occidentalis*	32	Very Poor	

Tag #	Species	DBH (cm)	Assessed Condition	Remarks
1322	White Cedar *Thuja occidentalis*	21	Dead	
1323	Hard Maple *Acer saccharum*	30	Good	
1324	Hard Maple *Acer saccharum*	22	Fair	
1325	Hard Maple *Acer saccharum*	28	Good	
1326	Hard Maple *Acer saccharum*	20	Fair	
1327	Hard Maple *Acer saccharum*	20	Fair	
1328	White Spruce Hedge *Picea glauca*		Good	Height: 4 – 6m; 11 trees within a hedge
1329	Black Walnut *Juglans nigra*	19 x 12 x 20	Fair	3 Stems





BONNIE BRAE SITE-TREE INVENTORY / ASSESSMENT

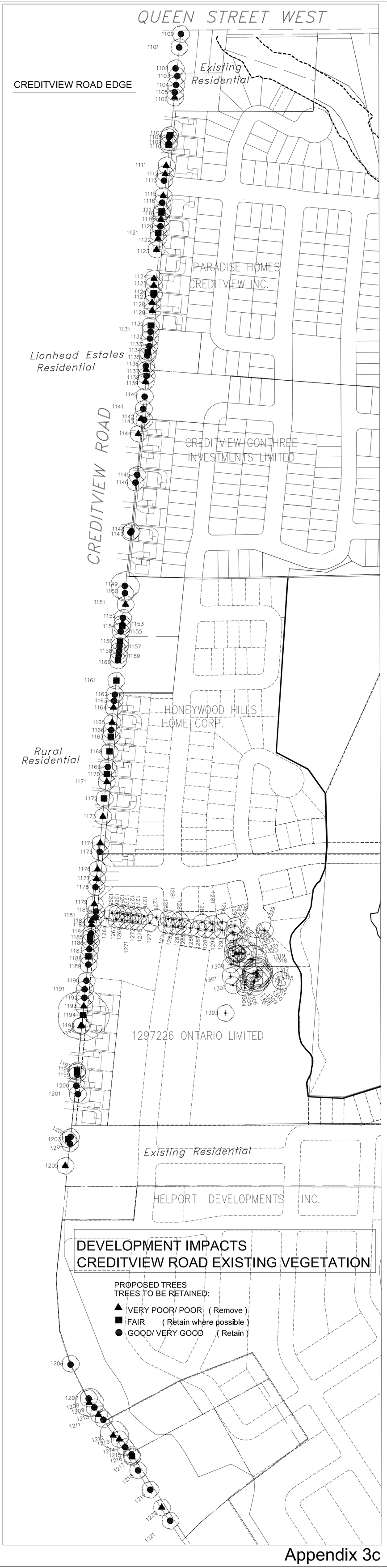
TREE TAG	SPECIES	DBH (cm)	ASSESSED CONDITION	REMARKS
1264	Sugar Maple	79	Fair	
1265	Sugar Maple	75	Good	
1266	Sugar Maple	85	Fair	
1267	Sugar Maple	82	Fair	
1268	Sugar Maple	60	Fair	
1269	Sugar Maple	26	Good	
1270	Sugar Maple	48	Fair	
1271	Sugar Maple	96	Poor	Remove
1272	Sugar Maple	69	Fair	
1273	Sugar Maple	39	Good	
1274	Sugar Maple	92	Poor	Remove
1275	Sugar Maple	66	Good	
1276	Sugar Maple	72	Fair	
1277	Sugar Maple	82	Fair	
1278	Sugar Maple	101	Fair	
1279	Sugar Maple	66	Poor	Remove
1280	Sugar Maple	23	Good	Remove (roadway)
1281	Sugar Maple	41	Fair	Remove (roadway)
1282	Sugar Maple	47	Good	Remove (roadway)
1283	Sugar Maple	21	Fair	
1284	Sugar Maple	54	Good	
1285	Sugar Maple	55	Good	
1286	Sugar Maple	36	Poor	Remove
1287	Sugar Maple	49	Fair	
1288	Sugar Maple	71	Poor	Remove
1289	Sugar Maple	58	Poor	Remove
1290	Sugar Maple	81	Fair	
1291	Sugar Maple	85	Poor	Remove
1292	Sugar Maple	20	Very Good	
1293	Sugar Maple	65	Good	
1294	Sugar Maple	79	Good	
1295	Sugar Maple	20	Fair	
1296	Sugar Maple	46	Very Poor	Remove
1297	Sugar Maple	47	Very Good	
1298	Sugar Maple	34	Good	
1299	Shag Bark Hickory	65	Good	
1300	Black Walnut	56	Good	
1301	Black Walnut	125	Very Poor	Remove
1302	Sugar Maple	25x22	Good	2 stems
1303	Black Walnut	107	Good	
1304	Black Walnut	22	Good	
1305	Black Walnut	22	Good	
1306	Sugar Maple	25	Good	
1307	Austrian Pine	39	Poor	Remove
1308	Black Walnut	24	Fair	
1309	Sugar Maple	13x16	Poor	2 stems/Remove
1310	White Spruce	29	Poor	Remove
1311	White Spruce	37	Fair	
1312	White Spruce	27	Poor	Remove
1313	White Spruce	22	Poor	Remove
1314	Russian Olive	48	Poor	Remove
1315	White Spruce	20	Fair	
1316	White Spruce	23	Fair	
1317	White Spruce	41	Good	
1318	Norway Spruce	56	Good	
1319	Norway Spruce	63	Fair	
1320	Sugar Maple	62	Fair	
1321	White Cedar	32	Very Poor	Remove
1322	White Cedar	21	Dead	Remove
1323	Sugar Maple	30	Good	
1324	Sugar Maple	22	Fair	
1325	Sugar Maple	28	Good	
1326	Sugar Maple	20	Fair	
1327	Sugar Maple	20	Fair	
1328	White Spruce Hedge		Good	Ht. 4-6m; 11 Trees within hedge
1329	Black Walnut	19x12x20	Fair	3 stems

SUMMARY OF DRIVEWAY DEVELOPMENT IMPACTS STREET TREES ALONG CREDIT VIEW ROAD

TREE TAG	SPECIES	DRIVEWAY IMPACT	PRESERVATION POTENTIAL	ARBORISTS PREVIOUS ASSESSMENT	RECOMMDATION
1107	Manitoba Maple	Low	Low	Fair	Remove
1108	Black Walnut	Low	High	Good	Preserve, Protect & Maintain
1109	Sugar Maple	Low	Low	Poor	Remove
1110	Hawthorn	Low	Low	Fair	Remove
1111	Sugar Maple	High	Low	Poor	Remove
1112	Sugar Maple	Low	Low	Poor	Remove
1113	Hawthorn	Low	Low	Good	Remove
1114	Sugar Maple	Low	Low	Very Poor	Remove
1115	Sugar Maple	Low	Low	Poor	Remove
1116	White Ash	Road Intersection	N/A	Good	Remove due to Road
1117	Common Apple	Road Intersection	N/A	Fair	Remove due to Road
1118	White Ash	Road Intersection	N/A	Poor	Remove due to Road
1119	Sugar Maple	Road Intersection	N/A	Poor	Remove due to Road
1120	Sugar Maple	Low	Medium	Good	Preserve, Protect & Maintain
1121	White Ash	Low	High	Fair	Preserve, Protect & Maintain
1122	White Ash	Low	Low	Poor	Remove
1123	White Ash	High	Low	Poor	Remove
1124	White Ash	High	Low	Poor	Remove
1125	Sugar Maple	High	Low	Poor	Remove
1126	White Ash	Low	Low	Fair	Remove
1127	Bur Oak	Low	High	Good	Preserve, Protect & Maintain
1128	White Ash	Low	Low	Very Poor	Remove
1129	Sugar Maple	High	Low	Very Poor	Remove
1130	Sugar Maple	Low	High	Fair	Preserve, Protect & Maintain
1131	Sugar Maple	Low	High	Good	Preserve, Protect & Maintain
1142	White Ash	Low	Low	Poor	Remove
1143	Chinese Elm	Low	High	Good	Preserve, Protect & Maintain
1144	White Ash	High	Low	Very Poor	Remove
1145	Bur Oak	Low	High	Very Good	Preserve, Protect & Maintain
1146	Hawthorn	Low	High	Good	Remove
1147	Buckthorn	High	Medium	Good	Remove
1148	Hawthorn	High	Medium	Good	Remove
1162	Sugar Maple	Low	High	Good	Preserve, Protect & Maintain
1163	Sugar Maple	Low	High	Good	Preserve, Protect & Maintain
1164	Sugar Maple	High	Low	Poor	Remove
1165	Sugar Maple	Medium	Low	Poor	Remove
1166	Sugar Maple	Low	High	Good	Preserve, Protect & Maintain
1167	Sugar Maple	Low	High	Fair	Preserve, Protect & Maintain
1168	Sugar Maple	High	Low	Fair	Remove
1169	Sugar Maple	Low	High	Good	Preserve, Protect & Maintain
1170	Sugar Maple	High	Medium	Fair	Preserve, Protect & Maintain
1171	Sugar Maple	High	Low	Poor	Remove
1172	Sugar Maple	Low	High	Fair	Preserve, Protect & Maintain
1173	Sugar Maple	Low	Low	Very Poor	Remove
1174	Sugar Maple	Low	Low	Very Poor	Remove
1175	Sugar Maple	Low	High	Good	Preserve, Protect & Maintain
1176	Sugar Maple	Road Intersection	N/A	Very Poor (Hazard)	Remove due to Road
1177	Sugar Maple	Road Intersection	N/A	Poor (Hazard)	Remove due to Road
1178	Sugar Maple	Road Intersection	N/A	Good	Remove due to Road
1190	Sugar Maple	Low	High	Very Good	Preserve, Protect & Maintain
1191	Black Walnut			Good	Preserve, Protect & Maintain
1192	Sugar Maple	Low	High	Very Good	Preserve, Protect & Maintain
1193	Sugar Maple	High	Low	Very Poor	Remove (Hazard)
1194	Sugar Maple	High	Medium	Fair	Preserve, Protect & Maintain
1195	Basswood	Low	Low	Very Poor	Remove
1196	Basswood	Low	Low	Very Poor	Remove
1197	Basswood	Low	Low	Fair	Remove
1198	Basswood	Low	Low	Fair	Remove
1199	Sugar Maple	Medium	High	Good	Preserve, Protect & Maintain
1200	Sugar Maple	Medium	High	Good	Preserve, Protect & Maintain
1201	Black Walnut	Low	High	Good	Preserve, Protect & Maintain

Percentage of Preserved Trees on Creditview : 70 %
Percentage to be removed: 30%

NOTE:
There are a certain percentage of these trees that, regardless of their location, are of low species value, poor/very poor condition and/or hazardous and should not be considered for future preservation. Determination of driveway impacts is based on a factor of thirty (30) percent or less critical rooting disturbance with a zero (0) root plate encroachment. Assuming that the servicing for the proposed lots will be installed in the same location as the proposed driveways, all finished grades within the critical root zones will be implemented. Should this not be the case for certain locations, a review of each tree and all proposed impacts will need to be re-examined, once all of the details are known, before the preservation potential can be accurately determined.
Note, these recommendations / conclusions are based solely on the impacts of development & building within Block 5 boundaries. Urbanization activities within the Creditview Road R.O.W. are unknown at this time, but will certainly have impact on the health & survival of existing trees.



Appendix 3c

Project Name: Creditview Crossing

Municipality: City of Brampton

Sheet Title: Creditview Road Trees & Development Impacts

Credit Valley Secondary Plan Sub-Area 5
Community Design Guidelines

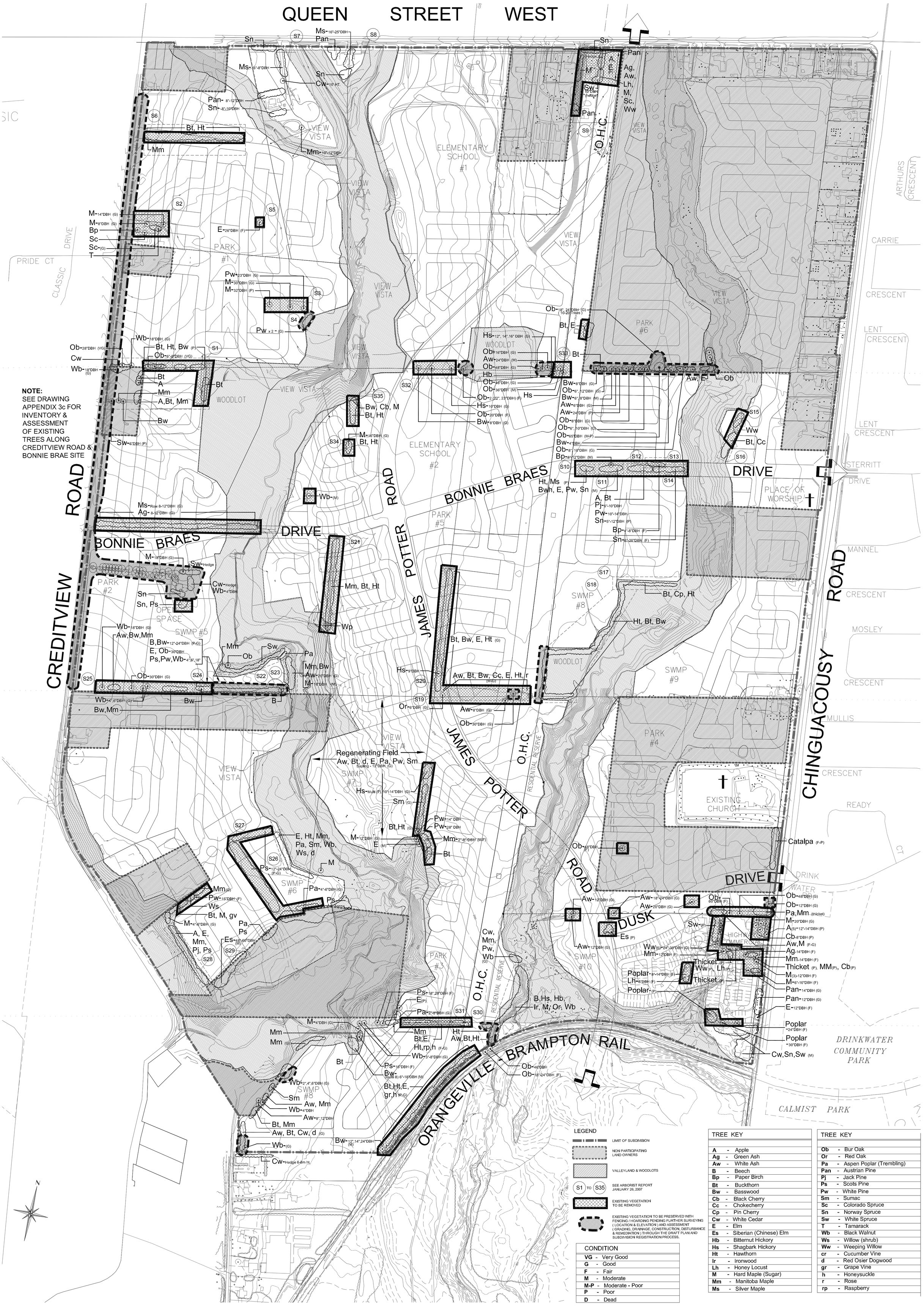
SURVEY OF EXISTING TREES J.D. BARNES JANUARY 2007.

No	Date	Revisions	By
2.	Feb.28.2007	Submission to City of Brampton	MK
1.	Feb.21.2007	Draft circulated	MK

The MBTW Group
Community Planning Urban Design Landscape Architecture

Job No:	FDG-060
Designed:	MK
Drawn:	RS
Date:	December 2006
Scale:	Approx. 1:2000
Drawing No.:	Appendix 3c

APPENDIX 3D
PRELIMINARY VEGETATION REMOVAL & PRESERVATION PLAN



LEGEND

- LIMIT OF SUBDIVISION
- NON PARTICIPATING LAND OWNERS
- VALLEYLAND & WOODLOTS
- S1 TO S35 — SEE ARBORIST REPORT JANUARY 26, 2007
- EXISTING VEGETATION TO BE REMOVED
- EXISTING VEGETATION TO BE PRESERVED WITH FENCING / HOARDING PENDING FURTHER SURVEYING (LOCATION & ELEVATION) AND ASSESSMENT (GRADING, DRAINAGE, CONSTRUCTION, DISTURBANCE & REMEDIATION) THROUGH THE DRAFT PLAN AND SUBDIVISION REGISTRATION PROCESS.

CONDITION	
VG	Very Good
G	Good
F	Fair
M	Moderate
M-P	Moderate - Poor
P	Poor
D	Dead

TREE KEY	
A	Apple
Ag	Green Ash
Aw	White Ash
B	Beech
Bp	Paper Birch
Bt	Buckthorn
Bw	Basswood
Cb	Black Cherry
Cc	Chokecherry
Cp	Pin Cherry
Cw	White Cedar
E	Elm
Es	Siberian (Chinese) Elm
Hb	Bitternut Hickory
Hs	Shagbark Hickory
Ht	Hawthorn
Ir	Ironwood
Lh	Honey Locust
M	Hard Maple (Sugar)
Mm	Manitoba Maple
Ms	Silver Maple

TREE KEY	
Ob	Bur Oak
Or	Red Oak
Pa	Aspen Poplar (Trembling)
Pan	Austrian Pine
Pj	Jack Pine
Ps	Scots Pine
Pw	White Pine
Sm	Sumac
Sc	Colorado Spruce
Sn	Norway Spruce
Sw	White Spruce
T	Tamarack
Wb	Black Walnut
Ws	Willow (shrub)
Ww	Weeping Willow
cr	Cucumber Vine
d	Red Osier Dogwood
gr	Grape Vine
h	Honeysuckle
r	Rose
rp	Raspberry

Appendix 3d

Project Name: **Creditview Crossing**

Municipality: City of Brampton

Sheet Title: **Credit Valley Secondary Plan Sub-Area 5**
Community Design Guidelines

Preliminary Vegetation Removal & Preservation Plan

ARBORIST VERIFICATION JANUARY 26, 2007 / DIBLASIO LANDS INVENTORY MARCH 28, 2008

FIELD WORK AND SITE PHOTOS NOVEMBER 25, 27 & DECEMBER 04, 2006 / DIBLASIO LANDS MARCH 28,2008

BASE & BLOCK PLAN INFORMATION RECEIVED FROM GLEN SCHNARR & ASSOCIATES MARCH 17, 2008

No	Date	Revisions	By
3.	Mar.28.2008	DIBlasio Lands Inventory Added	MK
2.	Feb.28.2007	Submission to City of Brampton	MK
1.	Feb.21.2007	Draft circulated	MK

The MBTW Group — Community Planning, Urban Design, Landscape Architecture

Job No: FDG-060
Designed: MK
Drawn: RS
Date: December 2006
Scale: 1:3000
Drawing No.: Appendix 3d

APPENDIX 3E
REFERENCE DOCUMENTS

A PLAN OF TREE PRESERVATION AND MANAGEMENT

For

Creditview Road Street Trees

Prepared for:
The MBTW GROUP
Matter No: TA-07-046
August 13, 2008

2 Lorwood Court, P.O. Box 2453, Stn. B, Richmond Hill, Ontario L4E 3K6 Tel: (905) 773-1733 Fax: (905) 773-9319

TABLE OF CONTENTS

1.0 INTRODUCTION

7 Oaks Tree Care and Urban Forestry Consultants was retained by the MBTW GROUP to provide a plan to preserve, protect and maintain existing street trees located on Creditview Road, from Queen Street southerly to municipal address 8605, City of Brampton. It is being proposed that the existing deep and shallow services, along this length of Creditview Road, be replaced and also to allow the development of certain lands for residential purposes.

2.0 PURPOSE

The preparation of this report has amalgamated all proposed construction factors, servicing requirements, lot access and proposed grading into a plan that addresses a "TREES FIRST" approach to the construction and development of this area. Maximum tree preservation, tree protection and tree maintenance are paramount in maintaining the rural character and charm of this area and it is to this end that this report aspires to.

3.0 METHODOLOGY

3.1 Review

After many meetings, both board and on-site, requests, comments and input from City of Brampton staff, design and detail for utility mains and services, trail location and design, engineering design, driveway entrance layout detail and grading plans, all of these features were adjusted to maximize the number of trees to be retained as well as

minimizing the construction impacts and stresses that will occur to the trees that are to be preserved.

This report is to be read and reviewed in conjunction with our previous reports; TA-06-25 - "TREE INVENTORY AND ASSESSMENT" dated August 02, 2006,

TA-06-025 - addendum "DRIVEWAY DEVELOPMENT IMPACTS" dated January 12, 2007.

See ENCLOSURE II & III

3.2 Field Study

Initial site review was initiated on May 02, 2006. Additional reviews of the site were continual up to and including February 07, 2008, May 12, 2008, May 13, 2008, May 29, 2008 and June 03, 2008. At these times, all trees were tagged, identified and assessed. Each and every inclusion, modification and addition/deletion to the proposed street detail and/or profile was reviewed in the field and its impact on the tree/s was ascertained. All proposals, which would negatively impact the trees, were noted and changes and/or modifications to their design were requested.

3.3 Tree Species

All inventoried trees are identified by their common, regionally used name followed by the most current taxonomic nomenclature.

See APPENDIX I

3.4 Tree Locations

All inventoried trees have been surveyed on a Site Servicing/Lotting plan. A numbered aluminium tag has been installed on the bole of each tree to further identify each specimen.

See ENCLOURE I

3.5 Tree Conditions

A generalized assessment system was employed to describe the overall condition of each inventoried tree. A five (5) level scale of plant health and structure with descriptors of VERY GOOD, GOOD, FAIR, POOR, and VERY POOR was used to quantify the range of a tree's condition. VERY GOOD condition was applied to a tree whose health, growth rate, crown closure, and structural integrity is greater than eighty (80) percent of a perfect specimen. Conversely, VERY POOR was applied to a tree whose condition is less than twenty (20) percent of a perfect specimen. Dead trees have no condition value and were not inventoried.

See APPENDIX I, APPENDIX II, APPENDIX III & APPENDIX IV

3.6 Tree Sizes

All trees were sized by measuring their diameter at breast height (DBH) as per accepted arboricultural standards. Trees on the east side of Creditview Road, having a DBH of twenty (20) centimetres or greater, were inventoried. Trees on the west side of Creditview Road, having a DBH of thirty (30) centimetres or greater, were inventoried.

See APPENDIX I

3.7 Critical Rooting Zones

All tree critical rooting zones have been determined by employing the base formula as developed by Dr. Kim Coder, Researcher/Scientist, University of Georgia and modifying this formula to accommodate local soil structure.

An average threshold of tolerance of thirty (30) percent critical root loss has been determined as the maximum acceptable limit.

4.0 TREE INVENTORY

A total of one hundred and six (106) trees are located within or in close proximity to the proposed area of construction and are identified by tag #'s 278-322 and 1100 – 1205

See APPENDIX I & ENCLOSURE I

5.0 TREE PRESERVATION / PROTECTION / MANAGEMENT

5.1 Tree Removal

All dead trees and trees scheduled to be removed, shall be removed prior to any construction activity or installation of any tree protection fencing or barriers. Only those trees that have been assessed as dead, hazardous, very poor condition, some poor condition and/or incompatible with the proposed road/driveway design shall be removed at this time. Approval of City of Brampton is required prior to the removal of any tree. These tree removals shall be performed in such a manner as to prevent damage to other existing trees and shrubs that are to be preserved. A total of forty-one (41) trees are scheduled to be removed.

See APPENDIX I

5.2 Tree Protection

All trees scheduled to be PRESERVED PROTECTED AND MAINTAINED or RETAINED AND PROTECTED shall have their critical rooting zones protected with the installation of a TREE PROTECTION BARRIER. Lot specific zoning setbacks shall be created for all lots with impacted tree protection zones.

These tree protection barriers shall be installed at the approved location and shall be maintained in their original location and condition. Under no circumstances are these tree protection barriers to be breached for the purpose of equipment, vehicle, or material storage or discharge. These tree protection barriers and the area contained by these barriers shall remain in a completely undisturbed condition until all house construction, construction activity related to the reconstruction of Creditview Road, its servicing and driveway installations, are complete.

These tree protection barrier locations may be temporarily adjusted in the future only in consultation with the Consulting Arborist and City of Brampton:

1. To allow for the safe installation of soffits and other related construction activities above the soffit level on the proposed residential homes, once building permits are obtained. Under no circumstances will any excavations be allowed within the tree protection zones. Temporary adjustments to the Tree Protection Zones shall be allowed to facilitate this installation; it shall be replaced in its original location immediately after completion of permitted construction activities.
2. To allow for the construction of the proposed trail system.
3. To allow for any finished grading to occur.

Tree protection barrier adjustments, if deemed necessary, shall only be approved and authorized by the consulting Arborist and the City of Brampton.

See APPENDIX I & ENCLOSURE I

5.3 Tree Maintenance

5.3.1 Tree Fertilizing/Inoculation

All trees that are scheduled to be Preserved, Protected and Maintained shall have their critical rooting zones deep root fertilized prior to any construction activity on this site. The fertilizer formulation to be used shall be 30-8-8, 60% U.F. with a complete micro-nutrient package. This fertilizer formulation shall also contain a mycorrhizal innoculant formulated for liquid application and contain endomycorrhizal and ectomycorrhizal species. This fertilizer solution shall be applied at the rate of 1.2 kg N per 100 sq. m of soil area, employing a high pressure injection system. Only water shall be used as a carrier.

5.3.2 Tree Trimming and Pruning

All trees that are scheduled to be Preserved, Protected and Maintained shall have their crowns cleaned of all dead/dieing branches and limbs, all structurally weak branches and limbs, all crossing and/or rubbing branches and limbs and all broken and or stubbed branches and limbs. All trees that will sustain more than twenty (20) percent critical rooting zone damage and are in Fair condition or better shall also have their crown volume reduced by proper pruning, to compensate for shoot/root ratio difference.

See APPENDIX I

5.3.3 Tree Structure Enhancement

All trees that are scheduled to be Preserved, Protected and Maintained and are observed to have weak crotches or structural problems related to co-dominant stems or included bark conditions shall have these conditions corrected by proper pruning and/or with the installation of approved flexible braces.

5.3.4 Root Pruning

During the course of development, where an excavation is required, any exposed roots from any trees to be preserved shall be pruned-back and/or repaired to arboricultural standard. Where it is deemed necessary, the use of a Hydrovac system shall be employed to excavate the soils within the critical rooting zones.

5.4 Tree Inspection and Monitoring

The Creditview street trees shall be inspected and monitored from the initial tree maintenance phase through all phases of construction, on an as required basis. Any and all damage to any part of the tree/s shall be reported, immediately, to the Consulting Arborist who will determine and initiate the proper method/s of mitigating the damage.

6.0 QUALITY ASSURANCE

6.1 Arboricultural Services

All tree removals, trimming/pruning, root pruning, bracing and fertilizing on any tree shall be carried out to the most current arboricultural standards and only by qualified Arborists who are certified to practice in the province of Ontario.

6.2 Awareness of Trees by Contractors

It shall be the responsibility of the developer to organize, or have organized, site meetings with all contractors working within the immediate area of trees, to make them aware of the value that the trees have to the community and that avoidable damage to trees will not be tolerated. Any avoidable damages to trees will be the responsibility of the developer and the costs of repair or financial replacement of trees will be born by the developer as per current I.S.A., C.T.L.A. formula/s.

them aware of the value that the trees have to the community and that avoidable damage to trees will not be tolerated. Any avoidable damages to trees will be the responsibility of the developer and the costs of repair or financial replacement of trees will be born by the developer as per current I.S.A., C.T.L.A. formula/s.

This fifty-one (51) page report was prepared by:

Eugene M. Storozinski
Consulting Arborist/Principal
I.S.A. Certification ON-884A

APPENDIX I

Tag #	Species	DBH (cm)	Assessed Condition	Recommendations
1100	Chinese Elm *Ulmus parvfolia*	39x39x37	Good	Retain and protect with tree hoarding.
1101	White Elm *Ulmus americana*	58	Good	Preserve, protect and maintain.
1102	Manitoba Maple *Acer negundo*	57	Good	Preserve, protect and maintain.
1103	White Elm *Ulmus americana*	43x20x27	Good	Retain and protect with tree hoarding.
1104	Horse Chestnut *Aesculus hippocastanum*	59	Good	Retain and protect with tree hoarding
1105	Sugar Maple *Acer saccharum*	21	Good	Retain and protect with tree hoarding
1106	Sugar Maple *Acer saccharum*	66	Poor	Retain and protect with tree hoarding
1107	Manitoba Maple *Acer negundo*	22	Fair	Remove. Requested by City.
1108	Black Walnut *Juglans nigra*	25	Good	Remove. Conflicts with site grading.
1109	Sugar Maple *Acer saccharum*	65	Poor	Hazard. Structurally unsound. Remove
1110	Hawthorn *Crataegus sp.*	21x21x18x14	Fair	Remove.Requested by City.
1111	Sugar Maple *Acer saccharum*	65	Poor	Remove. Requested by City.
1112	Sugar Maple *Acer saccharum*	60	Poor	Remove. Conflict with proposed road. Will not survive construction impacts. Retention will create visual obstruction for vehicular traffic.
1113	Hawthorn *Crataegus sp.*	21x13x16	Good	Remove. Conflict with proposed road.
1114	Sugar Maple *Acer saccharum*	64	Very Poor	Remove. Conflict with proposed road. Tree has collapsed. Removed by others.

Tag #	Species	DBH (cm)	Assessed Condition	Remarks
1115	Sugar Maple *Acer saccharum*	46	Poor	Hazard. Structurally unsound. Remove.
1116	White Ash *Fraxinus Americana*	14x14x13	Good	Preserve, protect and maintain.
1117	Common Apple *Malus sp.*	14x18	Fair	Preserve, protect and maintain.
1118	White Ash *Fraxinus Americana*	23x12	Poor	Remove. In state of rapid decline. Will not survive construction impacts and reduction of critical root zone.
1119	Sugar Maple *Acer saccharum*	46	Poor	Hazard. Structurally unsound. Remove.
1120	Sugar Maple *Acer saccharum*	59	Good	Preserve, protect and maintain.
1121	White Ash *Fraxinus Americana*	27	Fair	Preserve, protect and maintain.
1122	White Ash *Fraxinus Americana*	22	Poor	Remove. In state of rapid decline. Will not survive construction impacts.
1123	White Ash *Fraxinus Americana*	33x31	Poor	Preserve, protect and maintain.
1124	White Ash *Fraxinus Americana*	24	Poor	Remove. Conflict with proposed driveway. Tree has collapsed and been removed by others.
1125	Sugar Maple *Acer saccharum*	63	Poor	Preserve, protect and maintain.
1126	White Ash *Fraxinus Americana*	18x12	Fair	Preserve, protect and maintain.
1127	Bur Oak *Qurecus macrocarpa*	52	Good	Preserve, protect and maintain.
1128	White Ash *Fraxinus Americana*	22	Very Poor	Remove. In state of rapid decline. Will not survive construction impacts.
1129	Sugar Maple *Acer saccharum*	70	Very Poor	Remove. In state of rapid decline. Will not survive construction impacts.
1130	Sugar Maple *Acer saccharum*	51	Fair	Preserve, protect and maintain.

Tag #	Species	DBH (cm)	Assessed Condition	Remarks
1131	Sugar Maple *Acer saccharum*	64	Good	Preserve, protect and maintain.
1132	Sugar Maple *Acer saccharum*	71	Good	Preserve, protect and maintain.
1133	Sugar Maple *Acer saccharum*	74	Good	Preserve, protect and maintain.
1134	White Ash *Fraxinus Americana*	30	Fair	Preserve, protect and maintain.
1135	White Ash *Fraxinus Americana*	30x27	Good	Preserve, protect and maintain.
1136	White Ash *Fraxinus Americana*	34	Good	Preserve, protect and maintain.
1137	White Ash *Fraxinus Americana*	36	Poor	Remove. In state of rapid decline. Will not survive construction impacts.
1138	White Ash *Fraxinus Americana*	46	Good	Preserve, protect and maintain.
1139	White Ash *Fraxinus Americana*	33	Poor	Preserve, protect and maintain.
1140	Bur Oak *Qurecus macrocarpa*	79	Good	Preserve, protect and maintain.
1141	Bur Oak *Qurecus macrocarpa*	66	Very good	Preserve, protect and maintain.
1142	White Ash *Fraxinus Americana*	33x22	Poor	Preserve, protect and maintain.
1143	Chinese Elm *Ulmus parvfolia*	29x24	Good	Preserve, protect and maintain.
1144	White Ash *Fraxinus Americana*	32x31	Very Poor	Remove. In state of rapid decline. Will not survive construction impacts.
1145	Bur Oak *Qurecus macrocarpa*	20	Very good	Preserve, protect and maintain.
1146	Hawthorn *Crataegus sp.*	11x26x10	Good	Preserve, protect and maintain.
1147	Buckthorn *Rhamnus cathartica*	13x20x13	Good	Remove. Requested by City.
1148	Hawthorn *Crataegus sp.*	22x15x24x8	Good	Remove. Requested by City.
1149	White Cedar Hedge *Thuja occidentalis*	5 – 25	Good	Preserve, protect and maintain.
1150	Red Maple *Acer rubrum*	79	Good	Preserve, protect and maintain.

Tag #	Species	DBH (cm)	Assessed Condition	Remarks
1151	Weeping Willow *Salix alba 'Tristis'*	139	Very Poor	Retain and protect with tree hoarding. Located on adjacent private property.
1152	Manitoba Maple *Acer negundo*	25x22	Good	Preserve, protect and maintain.
1153	Manitoba Maple *Acer negundo*	37	Poor	Remove. In state of rapid decline. Will not survive construction impacts.
1154	Manitoba Maple *Acer negundo*	26	Fair	Preserve, protect and maintain.
1155	Manitoba Maple *Acer negundo*	52	Good	Preserve, protect and maintain.
1156	Sugar Maple *Acer saccharum*	56	Fair	Preserve, protect and maintain.
1157	Sugar Maple *Acer saccharum*	55	Good	Preserve, protect and maintain.
1158	Sugar Maple *Acer saccharum*	55	Good	Preserve, protect and maintain.
1159	Sugar Maple *Acer saccharum*	66	Good	Preserve, protect and maintain.
1160	Sugar Maple *Acer saccharum*	91	Fair	Preserve, protect and maintain.
1161	Sugar Maple *Acer saccharum*	82	Fair	Preserve, protect and maintain.
1162	Sugar Maple *Acer saccharum*	65	Good	Preserve, protect and maintain.
1163	Sugar Maple *Acer saccharum*	57	Good	Preserve, protect and maintain.
1164	Sugar Maple *Acer saccharum*	67	Poor	Remove. Conflict with driveway. In state of rapid decline. Will not survive construction impacts.
1165	Sugar Maple *Acer saccharum*	64	Poor	Remove. In state of rapid decline. Will not survive construction impacts.
1166	Sugar Maple *Acer saccharum*	46	Good	Preserve, protect and maintain.
1167	Sugar Maple *Acer saccharum*	61	Fair	Preserve, protect and maintain.

Tag #	Species	DBH (cm)	Assessed Condition	Remarks
1168	Sugar Maple *Acer saccharum*	84	Fair	Preserve, protect and maintain.
1169	Sugar Maple *Acer saccharum*	78	Good	Preserve, protect and maintain.
1170	Sugar Maple *Acer saccharum*	64	Fair	Preserve, protect and maintain.
1171	Sugar Maple *Acer saccharum*	70	Poor	Remove. Conflict with driveway.
1172	Sugar Maple *Acer saccharum*	85	Fair	Preserve, protect and maintain.
1173	Sugar Maple *Acer saccharum*	97	Very Poor	Remove. In state of rapid decline. Will not survive construction impacts.
1174	Sugar Maple *Acer saccharum*	82	Very Poor	Remove. In state of rapid decline. Will not survive construction impacts.
1175	Sugar Maple *Acer saccharum*	91	Good	Preserve, protect and maintain.
1176	Sugar Maple *Acer saccharum*	136	Very Poor	Hazard. Structurally unsound. Remove.
1177	Sugar Maple *Acer saccharum*	79	Poor	Hazard. Structurally unsound. Remove.
1178	Sugar Maple *Acer saccharum*	99	Good	Preserve, protect and maintain.
1179	Sugar Maple *Acer saccharum*	92	Poor	Preserve, protect and maintain.
1180	Sugar Maple *Acer saccharum*	58	Good	Preserve, protect and maintain.
1181	Sugar Maple *Acer saccharum*	44	Good	Preserve, protect and maintain.
1182	Basswood *Tilia Americana*	89	Very Poor	Hazard. Structurally unsound. Remove.
1183	Sugar Maple *Acer saccharum*	63	Poor	Hazard. Structurally unsound. Remove.
1184	Sugar Maple *Acer saccharum*	56	Good	Preserve, protect and maintain.
1185	Bur Oak *Qurecus macrocarpa*	89	Fair	Preserve, protect and maintain.
1186	Sugar Maple *Acer saccharum*	68	Good	Preserve, protect and maintain.
1187	Sugar Maple *Acer saccharum*	84	Good	Preserve, protect and maintain.

Tag #	Species	DBH (cm)	Assessed Condition	Remarks
1188	Sugar Maple *Acer saccharum*	61	Fair	Preserve, protect and maintain.
1189	Sugar Maple *Acer saccharum*	103	Good	Preserve, protect and maintain.
1190	Sugar Maple *Acer saccharum*	99	Very Good	Preserve, protect and maintain.
1191	Black Walnut *Juglans nigra*	34	Good	Preserve, protect and maintain.
1192	Sugar Maple *Acer saccharum*	96	Very Good	Preserve, protect and maintain.
1193	Sugar Maple *Acer saccharum*	102	Very Poor	Hazard. Structurally unsound. Remove.
1194	Sugar Maple *Acer saccharum*	65	Fair	Preserve, protect and maintain.
1195	Basswood *Tilia americana*	37	Very Poor	Remove. In state of rapid decline. Will not survive construction impacts.
1196	Basswood *Tilia americana*	30	Very Poor	Remove. In state of rapid decline. Will not survive construction impacts.
1197	Basswood *Tilia americana*	33x30	Fair	Preserve, protect and maintain.
1198	Basswood *Tilia americana*	27	Fair	Preserve, protect and maintain.
1199	Sugar Maple *Acer saccharum*	65	Good	Preserve, protect and maintain.
1200	Sugar Maple *Acer saccharum*	65	Good	Preserve, protect and maintain.
1201	Black Walnut *Juglans nigra*	26	Good	Preserve, protect and maintain.
1202	Black Walnut *Juglans nigra*	35	Good	Preserve, protect and maintain.
1203	Black Walnut *Juglans nigra*	29	Fair	Preserve, protect and maintain.
1204	Black Walnut *Juglans nigra*	40	Good	Preserve, protect and maintain.
1205	Trembling Aspen *Populus tremuloides*	25	Poor	Remove. Diseased. Death is imminent.
278	Manitoba Maple *Acer negundo*	39	Fair	Retain and protect with tree hoarding.
279	Black Walnut *Juglans nigra*	30	Good	Retain and protect with tree hoarding.

Tag #	Species	DBH (cm)	Assessed Condition	Remarks
280	Black Walnut *Juglans nigra*	31	Good	Retain and protect with tree hoarding.
281	Green Ash *Fraxinus pensylvannica*	58	Fair	Retain and protect with tree hoarding.
282	Black Walnut *Juglans nigra*	45	Good	Retain and protect with tree hoarding.
283	Black Walnut *Juglans nigra*	56	Very Good	Retain and protect with tree hoarding.
284	White Elm *Ulmus americana*	31x26x30x21x21	Good	Retain and protect with tree hoarding.
285	Black Willow *Salix nigra*	64	Poor	Retain and protect with tree hoarding.
286	Basswood *Tilia americana*	41	Very Poor	Remove. Extensive die back in crown. Dead top. Hazard.
287	Black Walnut *Juglans nigra*	47	Good	Retain and protect with tree hoarding.
288	Basswood *Tilia americana*	48	Very Poor	Remove. Stem cavities and excessive decay. Hazard
289	Black Walnut *Juglans nigra*	20x28	Good	Retain and protect with tree hoarding.
290	White Elm *Ulmus americana*	29x17	Good	Retain and protect with tree hoarding.
291	Red Maple *Acer rubrum*	35	Very Poor	Remove. Dead top. Broken limbs. Hazard.
292	Sugar Maple *Acer saccharum*	45	Good	Retain and protect with tree hoarding.
293	Silver Maple *Acer saccharinum*	98	Very Poor	Remove. Dead stems. Stem Cavities with decay. Hazard.
294	Green Ash *Fraxinus pensylvannica*	55	Fair	Retain and protect with tree hoarding.
295	Black Walnut *Juglans nigra*	31	Very Good	Retain and protect with tree hoarding.
296	Black Walnut *Juglans nigra*	52	Fair	Retain and protect with tree hoarding.
297	Black Walnut *Juglans nigra*	36	Good	Retain and protect with tree hoarding.
298	Black Walnut *Juglans nigra*	32	Good	Retain and protect with tree hoarding.

Tag #	Species	DBH (cm)	Assessed Condition	Remarks
299	Black Walnut *Juglans nigra*	12x13x23x17	Fair	Retain and protect with tree hoarding.
300	Black Walnut *Juglans nigra*	45	Fair	Retain and protect with tree hoarding.
301	Weeping Willow *Salix alba 'var'*	65	Fair	Retain and protect with tree hoarding.
302	White Ash *Fraxinus Americana*	39	Good	Retain and protect with tree hoarding.
303	Carolina Poplar *Populus x canadensis*	47	Very Poor	Remove. Dead top and stem. Hazard.
304	Carolina Poplar *Populus x canadensis*	34	Very Poor	Remove. Dead top and stem. Hazard.
305	Carolina Poplar *Populus x canadensis*	50	Poor	Retain and protect with tree hoarding.
306	Bitternut Hickory *Carya cordiformis*	46	Very Good	Retain and protect with tree hoarding.
307	Bur Oak *Qurecus macrocarpa*	62x65	Fair	Retain and protect with tree hoarding.
308	Bur Oak *Qurecus macrocarpa*	67	Fair	Retain and protect with tree hoarding.
309	Basswood *Tilia americana*	21x28	Fair	Retain and protect with tree hoarding.
310	Sugar Maple *Acer saccharum*	65	Poor	Retain and protect with tree hoarding.
311	Bur Oak *Qurecus macrocarpa*	180	Poor	Retain and protect with tree hoarding.
312	White Birch *Betula nigra."var"*	25x25x13	Very Good	Retain and protect with tree hoarding.
313	White Ash *Fraxinus Americana*	54	Poor	Retain and protect with tree hoarding.
314	Red Oak *Quercus rubra*	152	Very Poor	Retain and protect with tree hoarding.
315	Bur Oak *Qurecus macrocarpa*	156	Poor	Retain and protect with tree hoarding.
316	Norway Spruce *Picea abies*	51	Fair	Retain and protect with tree hoarding.
317	Manitoba Maple *Acer negundo*	53	Poor	Remove. Stem cavity with excessive decay. Lean to east. Hazard.
318	Manitoba Maple *Acer negundo*	37	Fair	Retain and protect with tree hoarding.
319	White Ash *Fraxinus Americana*	55	Very Poor	Remove. Stem cavity with excessive decay. Hazard

Tag #	Species	DBH (cm)	Assessed Condition	Remarks
320	Manitoba Maple *Acer negundo*	130	Very Poor	Retain and protect with tree hoarding.
321	White Ash *Fraxinus Americana*	67	Fair	Retain and protect with tree hoarding.
322	Norway Maple *Acer platanoides var*	50	Very Good	Retain and protect with tree hoarding.

APPENDIX II

HAZARD TREES TO BE REMOVED

PHOTO JOURNAL

Tree # 1109

Tree # 1115

Tree # 1119

Tree # 1176

Tree # 1177

Tree # 1182

Tree # 1183

Tree # 1193

APPENDIX III

TREES IN VERY POOR CONDITION TO BE REMOVED

PHOTO JOURNAL

Tree # 1128

Extensive tip die back

Dead scaffold limbs

Tree # 1129

Central stem collapsed

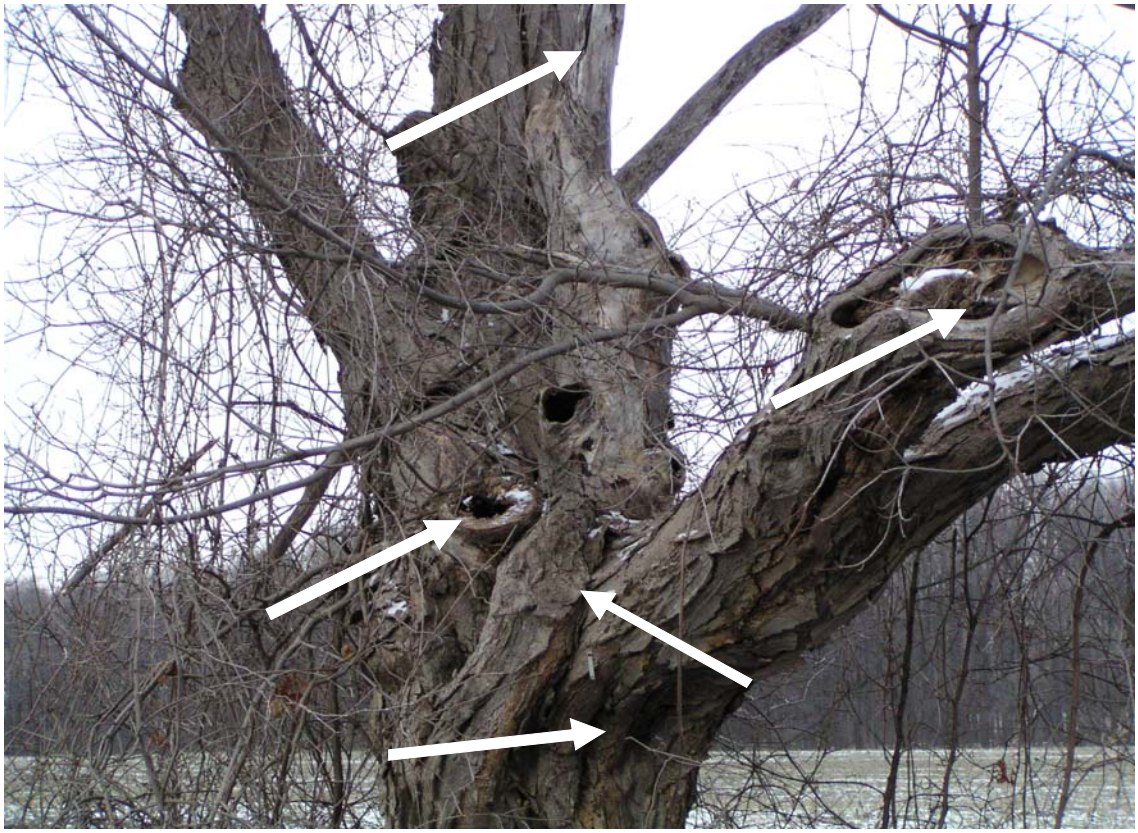
Extensive die back

Tree # 1144

Extensive crown die back

Dead scaffold limbs

Tree # 1173



Stem cavities / Weak crotch / Decay

Tip die back / Dead scaffold limbs

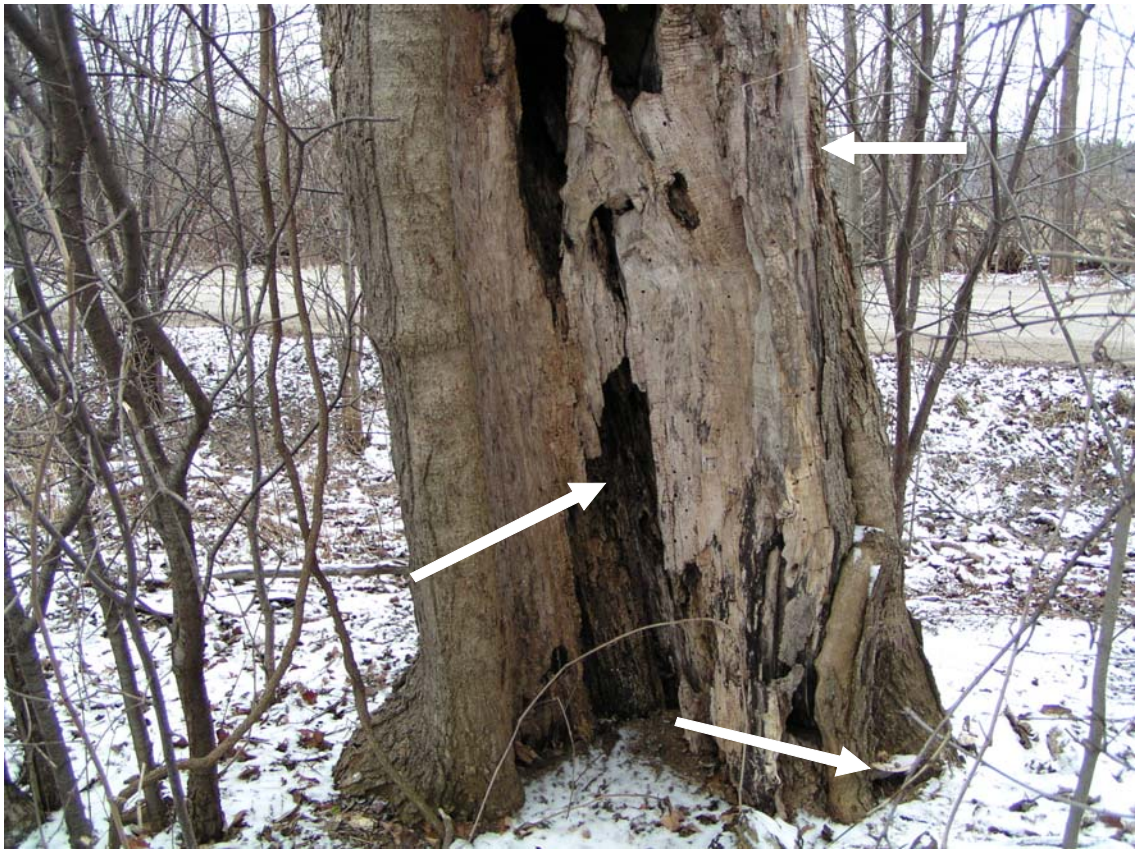
Tree # 1174

Partial collapse

Tree dead

Tree # 1193

Extensive crown die back



Extensive trunk decay / fruiting bodies at base / bark sloughing from trunk

Tree # 1195

Extensive trunk cavity and decay

Crown die back / Dead top

Tree # 1196

Stem cankers / Extensive decay

Dead top

APPENDIX IV

TREES IN POOR CONDITION TO BE REMOVED

PHOTO JOURNAL

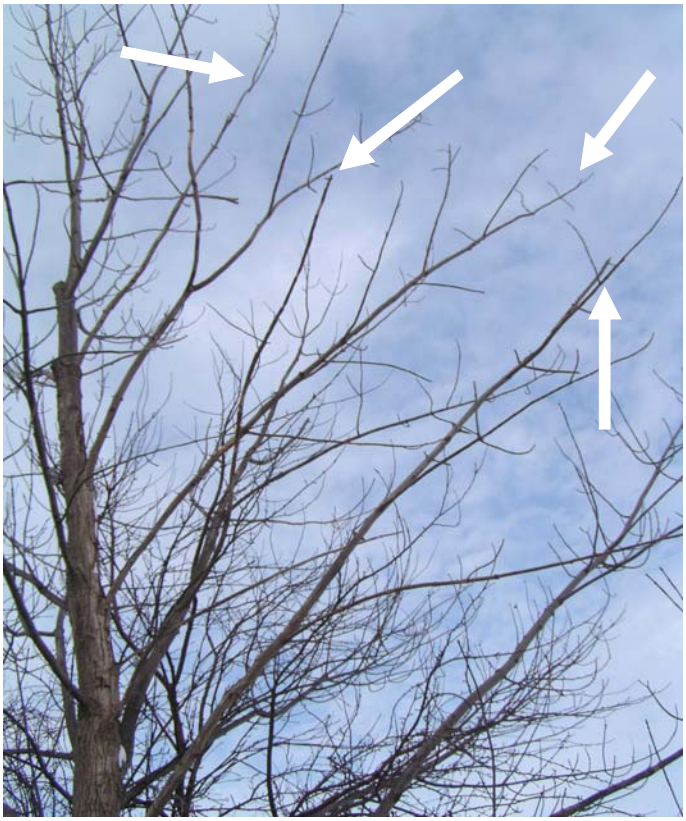
Tree # 1112

Decayed main stem

Dead central leaders

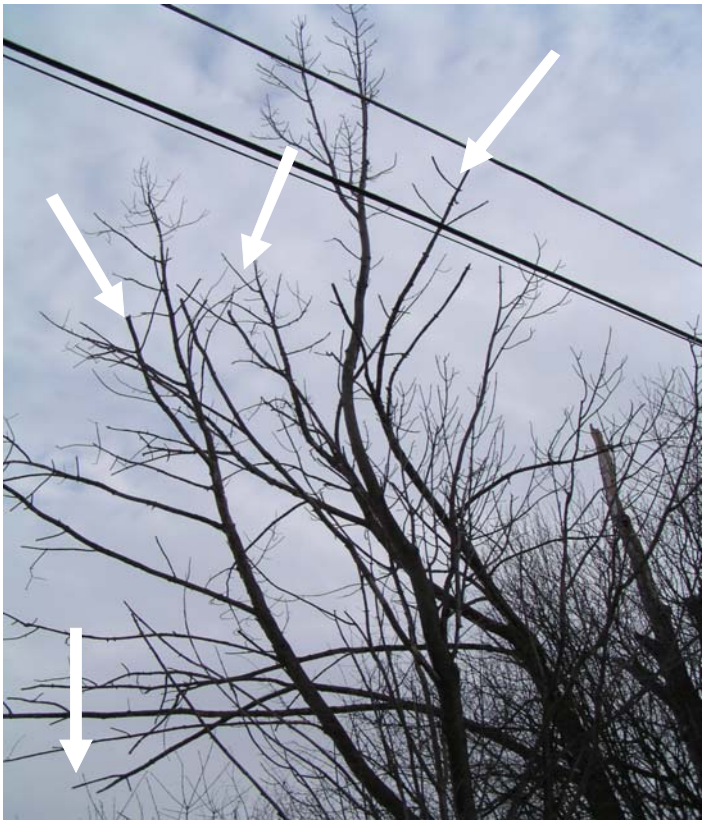
Tree # 1118

Bark sloughing / trunk decay



Extensive crown die back

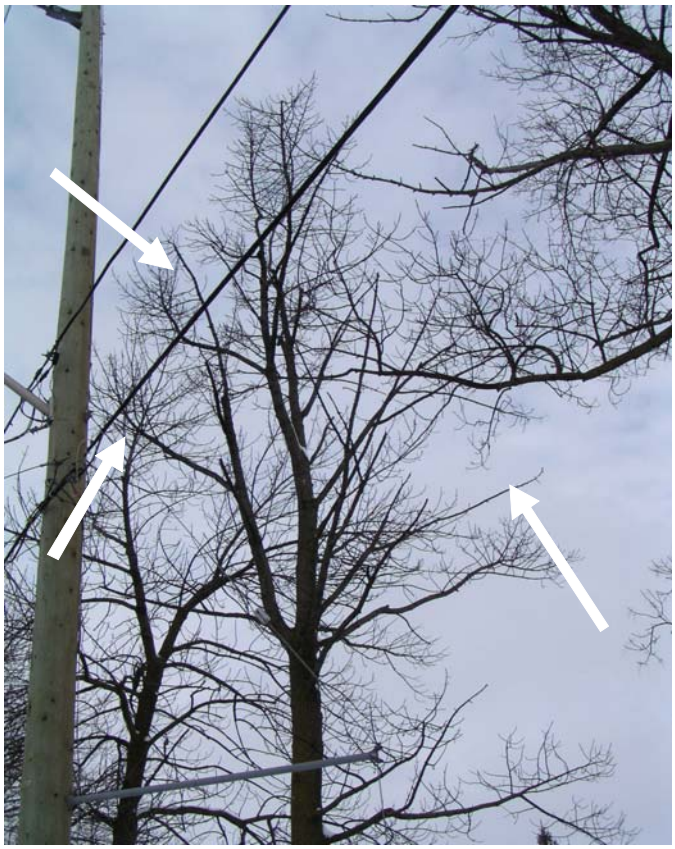
Tree # 1122



Extensive crown dieback

Decayed main stem

Tree # 1137



Extensive crown die back

Tree # 1153

Decayed main stem / fungal fruiting bodies

Dead scaffold branches

Tree # 1165

Dead co-dominant stem / crown die back

Collapsed co-dominant stem and trunk cavities

Tree # 1171

Weak / decayed crotches

Dead central stem

Tree # 1205

Diseased stem with cankers / depressed lesions

Extensive crown die back

ADDENDUM II

Addendum to TA-07-046

August 14th 2008

Re: **Creditview Crossing Street Trees**

The attached flow chart shall outline the actions for tree protection and preservation of the abovementioned trees.

This schedule provides explicit direction for pre-, during, and post-construction activities to ensure the viability and longevity of the significant trees to be retained on these sites.

All procedures and recommendations comply with current arboricultural standards for tree preservation and protection.

Pre-Construction

TIMELINE	ACTIVITY	PURPOSE/ACTION
November 2007	Inoculate and deep root fertilize all street trees that are to be preserved, protected and maintained	To encourage fine root proliferation and increase ability of tree to absorb soil solution and nutrients.
March 2008	Inform area residents of up-coming tree trimming/maintenance of street trees. Hand deliver notices.	Manage and maintain good public relations.
April 03, 2008	Begin tree trimming of all street trees. No tree removal at this time.	Pre-stress trees to prepare for construction activity. General health and care. Reduce hazard potential.
May 13, 2008	Site meeting to review location of sanitary sewer and water lateral connections and adjust locations to accommodate existing trees.	To reduce impacts/damage to critical root zones of trees.
May 15, 2008	Finish trimming street trees	
June 2008	Hand deliver approved notices to area residents.	Manage and maintain good public relations
June 05, 2008	Inoculate and deep root fertilize all Bonnie Braes driveway and house trees.	To encourage fine root proliferation and increase ability of tree to absorb soil solution and nutrients.
June 05, 2008	Begin tree trimming of all Bonnie Braes trees.	Pre-stress trees to prepare for construction activity. General health and care. Reduce hazard potential.
June 2008	Finish trimming Bonnie Braes trees.	
To be determined pending receipt and approval of detailed tree inventory and preservation plan for Creditview Road and Bonnie Braes site.	Remove all street trees and Bonnie Braes trees that are scheduled to be removed.	Eliminate hazards and those trees in very poor condition that will not survive construction impacts.
To be determined pending receipt and approval of detailed tree inventory and preservation plan for Creditview Road and Bonnie Braes site.	Install tree protection barriers as per approved drawings.	Prevent damage to critical rooting zone during construction.
To be determined pending receipt and approval of detailed tree inventory and preservation plan for Creditview Road and Bonnie Braes site.	Preconstruction meeting with developer's representative, builders, contractors, subcontractor's and equipment operators prior to soil stripping/earth works and or excavations.	To identify each person's role in preventing damage to the existing trees. To emphasise care and control to protect all above ground and below ground parts of the existing trees. To discuss equipment size and restrictions around trees.

July-Sept. 2008	Manage soil moisture. Water trees' root zones as required during drought period.	Prevent stressful growing condition and encourage proper root and shoot growth.

During Construction

TIMELINE	ACTIVITY	PURPOSE/ACTION
June/July 2008	Soil stripping on subdivision lands and reconstruction of Creditview Road begins.	Inspection of work area to insure that equipment is not encroaching on trees or tree protection zones. Topsoil stockpile to be located in a location that will not affect the overland flow of storm water or drainage around the Bonnie Braes trees. Arborist to approve location.
June/July 2008 and as road construction progresses	Routine inspection and review of all construction practices by Arborist.	To ensure that all contractors and trades adhere to stated protocols for working around existing trees. No encroachment into Tree Protection Zones or storage or discharge of extraneous material into this zone will be allowed.
June/July 2008 and as road construction progresses	Overhanging tree branches conflict with road building and /or utility installation equipment operation.	Operator to stop work and seek instruction on how to proceed around tree limbs so that no damage occurs to tree/s. Options to consider are redirect angle of approach, use smaller equipment or prune tree. Arborist will determine the method used.
July 2008 and as road construction progresses	Manage soil moisture.	Water trees' root zones as required during drought period. Prevent stressful growing condition and encourage proper root and shoot growth.
As road construction progresses	Excavations near trees. Exposed roots.	Arborist to initiate remedial root pruning and repair.
As road construction progresses	Installation of driveways, municipal and franchised utility services to be installed initially to east limit of Tree Protection Barrier.	Reduce additional impacts on existing trees' root system.
Building Permit Stage for new house construction	Design of proposed house selected and proposed building footprint identified on site. Lot grading engineered.	Proposed house locations and lot grading reviewed and approved by Arborist. Encroachment of building footprint into Tree Protection Zone prohibited. Adjust house if necessary. Fine finished grading to be minimized within Tree Protection Zone. Fine finished grading within Tree Protection Zone to be manually completed without the use of mechanical equipment. Builder's strategy and technique to be approved by Arborist.
Prior to any house construction	Maintain all Tree Protection Barriers and Zones in their original and undisturbed condition.	To prevent any damage to the existing trees' root system

Prior to any house construction	Preconstruction meeting with builders' representative, excavator operator concrete/forming sub-trades.	Explain work protocols around existing trees.
As house construction progresses	Manage soil moisture	Water trees' root zones as required during drought period. Prevent stressful growing condition and encourage proper root and shoot growth
As house construction progresses	Arborist to monitor all construction activities.	Frequency of inspections to be determined by Arborist, based on need.
As house construction progresses	Access to lots for excavation and delivery of building materials. Driveway entrances off Creditview Road to be fenced.	All access to building lots shall be from the rear of the lot. Access to building lots from Creditview Road may be allowed on condition that the access is a minimum of twenty (20) metres from any existing tree. Prevent re-injury to trees' root system.
As house construction progresses	Excavations near trees. Exposed roots.	Arborist to initiate remedial root pruning and repair.
As house construction progresses	All basement and other excavated materials.	All excavated materials shall be cast to the rear of the lot Prevent slump and runoff into Tree Protection Zones. Prevent surface water ponding over critical root zone by restricting overland flow.
As house construction progresses	Temporary relocation of east side of Tree Protection Barrier as may be approved by Arborist and City of Brampton.	To allow trades to work safely during soffit installation and related construction activities above soffits. Root protection plates to be installed over exposed critical root zone to prevent compaction of soil and damage to absorption roots. Root protection plates to be removed and Tree Protection Barrier reinstalled in original location immediately after completion of required works. Does not allow any excavation of soils within the Tree Protection Zone.
As house construction progresses	Tree branches encroaching into approved building space.	Arborist to initiate required tree trimming if required.
As house construction progresses	Extension of utility/municipal services from east side of Tree Protection Zone to house.	Use of small rubber tired backhoe shall be used for excavating and all cast materials shall be placed/temporarily stored as far from existing trees as possible.
As house construction progresses	Delivery of trim, cabinetry, or other like items for finishing works.	Access from Creditview Road will be allowed conditional on delivery truck's GVWR does not exceed 12,000 kg. and load does not exceed 4.3m. height from travelled surface.
As house construction progresses	Grading of lots	Lots shall be graded in such a manner to allow for the placement of ten (10) cm. of topsoil under the sod in all front yard areas.

*NOTE: In the event that a tree/s are accidentally damaged during construction, the developer/contractor shall, without delay, contact the Arborist. The Arborist shall assess the damages and initiate the needed repair works to the tree/s.

Post Construction

TIMELINE	ACTIVITY	PURPOSE/ACTION
After house occupancy permit issued	Removal of Tree Protection Barriers and remaining fence. Installation of wood chip pathway and demarcation of property line with one post at each corner and one post at each midpoint with notice on mid-post identifying the limit of the front yard and the future pathway to be constructed.	Allow for the fine finish grading within the Tree Protection Zones. All grading shall be completed manually, without the assistance of heavy equipment. Fill grade changes shall be limited to fifteen (15) cm. in depth. The material used shall be screened and friable sandy loam topsoil.
After house occupancy permit issued	Remedial Tree Maintenance	Tree condition to be reassessed and any further tree trimming and/or repair will be initiated by the Arborist..
November 2009	Re-fertilize trees	To increase health and vigour of the trees. To assist in the mitigation of construction stresses. Fertilizer formulation shall include a root stimulant to encourage root regeneration. Arborist to approve formulation and method of application.
After house occupancy permit issued	Landscaping within the Tree Protection Zone	Shall be limited to the installation of sod where appropriate. Lots which do not have existing street trees/preservation zones may have proposed new tree plantings installed at this time.
After house occupancy permit issued	Finish driveway installation	Access for homeowner
After new home owners move into house.	Information Brochure	Brief history of efforts to retain the Creditview street trees, their value to the community and a list of do's and don'ts to help preserve them.
Three (3) years after house construction	Installation of proposed trail along Creditview Road.	Installation of trail to be constructed as per MBTW design and detail.
Three (3) years after house construction	Installation of additional street trees	Installation as per MBTW design and detail
Until Assumption by City of Brampton	Monitor the health and well being of all existing and newly planted trees	Provide any further remedial work or maintenance for these trees.

APPENDIX 4
CREDITVIEW ROAD STUDY

Concurrent with the finalization of this Community Design Guideline, detail design for the servicing and reconstruction of Creditview Road was ongoing. Regional obligations to provide trunk water and sewer servicing to a developing block north of Queen Street caused the acceleration of this detail design exercise.

The Block 5 land owners group, by discussion with the Region and City of Brampton, determined significant benefits to advancing Block 5 Creditview Road servicing needs with the Region's trunk servicing obligations. By co-operative design and construction Creditview Road re-construction would occur at one time, thus:

- Reducing impact on existing homeowners;
- Reducing impact on the significant existing trees to be preserved; and
- Compressing the considerable consultation, review and approval processes needed to reconstruct Creditview Road as a heritage corridor of atypical construction standards negotiated with the Region, City, and all utility providers.

Creditview Road Treatment Matrix - Page 1

	Streetscape Elements & Services	23m R.O.W Typical Urban Road Profile	23m R.O.W Custom Proposal Creditview Road	Benefit(s)
	STREETSCAPE ELEMENTS			
1	**STREET TREES**	* NEW BOULEVARD STREET TREES ON BOTH SIDES OF STREET. * SETBACK 5m FROM STREETLINE.	* EXISTING TREES TO REMAIN IN R.O.W. * NEW TREES TO BE PLANTED IN FRONT YARD ON PRIVATE PROPERTY. * WHERE EXISTING TREES REMOVED, INFILL TREES TO BE PROVIDED.	MAJORITY OF EXISTING TREES RETAINED. PROPOSED PLANTING TO INFILL MISSING TREES IN BOULEVARD WITH NEW SECOND ROW OF STREET TREES ON LOT ENSURES TREED CHARACTER OF ROAD IS RETAINED, ENHANCED AND CONTINUES IN FUTURE.
2	**LANDSCAPE IMPROVEMENTS**	* TYPICALLY NO SHRUB OR UNDERSTORY PLANTING.	* PLANTING TO AUGMENT THE EXISTING TREES AND HEDGEROWS.	PLANTINGS, EXISTING TREES AND THE DITCHES PROVIDE FOR THE HABITAT MOVEMENT FOR SMALL MAMMALS, AMPHIBIANS AND REPTILES.
3	**SIDEWALK/WALKWAY**	* 1.5m WIDE CONCRETE SIDEWALK ON BOTH SIDES OF ROAD. * 2.75m SET BACK FROM STREETLINE.	* 1.5m ASPHALT WALKWAY CONSTRUCTED ON EXISTING GRADE. * SETBACK 0.3m OFF STREETLINE	ASPHALT WALKWAY LESS IMPACT TO EXISTING TREE ROOT SYSTEMS, ENHANCES LONGEVITY OF TREES AND PROVIDES SAFE WALKING CONDITION FOR THE RESIDENTS.
4	**DRIVEWAYS**	* 2-8% SLOPE TOWARDS STREET. * TYPICAL 6m WIDE DOUBLE DRIVEWAY. 1.2m SEPARATION BETWEEN PAIRED DRIVEWAYS.	* MATCH EXISTING GRADES. * INSTALL RETAINING WALLS AT EDGES OF DRIVEWAYS IF NECESSARY TO PRESERVE ROOT ZONE OF EXISTING TREES. * TYPICAL 3m WIDE SINGLE DRIVEWAY. NO SEPARATION BETWEEN PAIRED DRIVEWAYS.	LIMITS GRADING IMPACT TO EX. TREE ROOT SYSTEMS, ENHANCES LONGEVITY OF TREES.
5	**ROAD PAVEMENT WIDTH**	* 10m WIDE ASPHALT PAVEMENT.	* +/- 7m WIDE ASPHALT PAVEMENT	MAINTAINS RURAL CHARACTER AND MAINTAIN THE EXISTING STORM DRAINAGE RUNOFF.
6	**TRAFFIC CALMING MEASURES (DURATHERM, ASPHALT TREATMENT, AND RAISED INTERSECTION)**	* NONE REQUIRED.	* THREE DURATHERM ASPHALT TREATMENT PROPOSED ALONG CREDITVIEW RD. ALL-WAY STOPS PROPOSED AT FUTURE T-INTERSECTIONS, RAISED INTERSECTION PROPOSED AT STREET 'A' & CREDITVIEW RD, RAISED INTERSECTION AT STREET 'B' & CREDITVIEW RD.	REDUCES SPEED AND MINIMIZES TRAFFIC FLOW ON CREDITVIEW ROAD.
7	**CURBS**	* 0.5m WIDE CURB & GUTTER ON BOTH SIDES OF ROAD	* 0.25m WIDE CURB & GUTTER PROVIDED AT SELECT LOCATIONS FOR PEDESTRIAN SAFETY.	MAINTAINS RURAL CHARACTER.
8	**ROAD SHOULDER**	* NONE REQUIRED.	* GRAVEL SHOULDER.	MAINTAINS RURAL CHARACTER AND WILDLIFE PASSAGE.
9	**DITCHES**	* NONE, STORMWATER CONVEYED TO STORM SEWER BY CURB & GUTTER AND CATCHBASIN SYSTEM.	* MAINTAIN EX. DITCH, VARIABLE DEPTH (MIN. 0.20m APPROX.) * STORMWATER CONVEYED TO STORM SEWER BY DITCH INLET CATCHBASINS, INSTALLED AS REQUIRED.	MAINTAINS RURAL CHARACTER, LIMITS DISTURBANCE TO EXISTING TREE ROOTS WHICH ENHANCES LONGEVITY OF TREES AND ATTENUATE, STORE AND POTENTIALLY INFILTRATE FLOWS PROVIDING A BENEFIT TO DOWNSTREAM HYDROLOGY FOR SPRINGBROOK CREEK AND THE CREDIT RIVER.
10	**STREET LIGHTS**	* ON BOTH SIDES OF ROAD 5.25m SETBACK FROM STREETLINE. * STANDARD SPUN CONCRETE POLES & COBRA HEAD LIGHTS OR UPGRADE.	* CITY REVIEWING POSSIBILITY OF UTILIZING LIGHTING STANDARDS CONSISTENT WITH RURAL ESTATE RESIDENTIAL. * CITY TO ADVISE.	MAINTAINS RURAL CHARACTER AND LIMITS DISTURBANCE TO EXISTING TREE CROWN AND ROOTS WHICH ENHANCES LONGEVITY OF TREES.
11	**MAILBOXES**	* COMMUNITY MAILBOXES	* EXISTING PRIVATE MAILBOXES TO BE RELOCATED TO WEST SIDE OF ROAD.	MAINTAINS RURAL CHARACTER.

Creditview Road Treatment Matrix - Page 2

	Streetscape Elements & Services	23m R.O.W Typical Urban Road Profile	23m R.O.W Custom Proposal Creditview Road	Benefit(s)
	MUNICIPAL SERVICES			
12	WATER	* WATERMAIN ON ONE SIDE OF STREET 4.5m SETBACK FROM STREETLINE. * LATERAL SERVICE CONNECTION IN LANDSCAPED AREA.	* EX. WATER MAIN TO REMAIN. * LATERAL SERVICE CONNECTION INSTALLED UNDER PROPOSED DRIVEWAYS.	LIMITS DISTURBANCE TO EXISTING TREES CROWN AND ROOTS WHICH ENHANCES LONGEVITY OF TREES
13	FIRE HYDRANTS	* LOCATED ON ONE SIDE OF STREET, 2m SETBACK FROM STREETLINE.	* EXISTING HYDRANTS TO REMAIN.	LIMITS DISTURBANCE TO EXISTING TREE CROWN AND ROOTS WHICH ENHANCES LONGEVITY OF TREES
14	SANITARY SEWER	* SEWER MAIN LINE SETBACK 1.5m OFF CENTERLINE OF ROAD. * LATERAL SERVICE CONNECTIONS LOCATED UNDER DRIVEWAY.	* SEWER MAINLINE TO BE CONSTRUCTED WITHIN PAVED ROADWAY. * LATERAL SERVICE CONNECTIONS LOCATED UNDER DRIVEWAY.	LIMITS DISTURBANCE TO EXISTING TREE CROWN AND ROOTS WHICH ENHANCES LONGEVITY OF TREES
15	STORM SEWER	* SEWER MAINLINE SETBACK 1.5 m FROM CENTRELINE OF ROAD. * LATERAL SERVICE CONNECTIONS INSTALLED UNDER DRIVEWAYS.	* SEWER MAIN LINE TO BE CONSTRUCTED UNDER PAVED ROADWAY. * LATERAL SERVICE CONNECTIONS INSTALLED UNDER DRIVEWAYS.	LIMITS DISTURBANCE TO EXISTING TREE CROWN AND ROOTS WHICH ENHANCES LONGEVITY OF TREES
	UTILITIES			
16	GAS	* ON BOTH SIDES OF ROAD. 1.0m SETBACK FROM STREETLINE IN JOINT USE UTILITY TRENCH. (1.0-1.9m SETBACK FROM STREETLINE). * SHORT SERVICE CONNECTION.	* EXISTING MAIN AT WEST SIDE OF CREDITVIEW ROAD, INDIVIDUAL LONG SERVICE TO LOTS ON EAST SIDE. * JOINT USE UTILITY TRENCH FROM SHOULDER OF ROAD TO LOTS.	LIMITS DISTURBANCE TO EXISTING TREE CROWN AND ROOTS WHICH ENHANCES LONGEVITY OF TREES
17	POWER	* ALL WIRING UNDERGROUND IN CONCRETE DUCTBANK IN BOULEVARD. * PAD MOUNT TRANSFORMERS ABOVE GRADE IN BOULEVARD. * SERVICE ROUTED U/G THROUGH LANDSCAPED SIDEYARD.	* MAINTAIN EXISTING OVERHEAD WIRES, ALIGNMENT & POLE LOCATIONS. * UPGRADE EXISTING WOOD POLES TO TALLER WOOD POLES. * UTILIZE POLE MOUNTED TRANSFORMERS. * SERVICE TAKEN U/G FROM POLE TO TAP JUNCTION BOX (U/G BOX FLUSH TO GRADE) & DISTRIBUTED FROM TAP JUNCTION BOX TO ROAD SHOULDER IN 3 PARTY TRENCH (CABLE, TELEPHONE & POWER). SERVICE FROM ROAD SHOULDER TO LOTS VIA 4 PARTY TRENCH (CONDUITS ENCASED IN CONCRETE), INCLUDING GAS. * LATERAL TRENCHING TO APPROVAL OF ARBORIST. * LOT SERVICE TRENCH PLACED IN THE SHOULDER OF THE DRIVEWAY.	MAINTAINS RURAL CHARACTER AND LIMITS DISTURBANCE TO EXISTING TREE ROOTS WHICH ENHANCES LONGEVITY OF TREES
18	TELEPHONE	* UNDERGROUND SERVICE ON BOTH SIDES OF ROAD VIA JOINT USE UTILITY TRENCH (1.0-1.9M SETBACK FROM STREETLINE). * SERVICE CONNECTION ROUTED U/G THROUGH LANDSCAPED SIDEYARD.	* UTILIZING WOOD HYDRO POLES FOR SERVICE TRANSMISSION, 3 PARTY COMMON UTILITY TRENCH FROM POLE TO ROAD SHOULDER. * SERVICE TO LOTS VIA 4 PARTY LATERAL TRENCH (CONDUITS ENCASED IN CONCRETE). COMMON CABLE / TELEPHONE PEDESTAL / BOX IN REVIEW.	MAINTAINS RURAL CHARACTER AND LIMITS DISTURBANCE TO EXISTING TREE ROOTS WHICH ENHANCES LONGEVITY OF TREES
19	CABLE	* U/G SERVICE ON BOTH SIDES OF ROAD IN JOINT USE UTILITY TRENCH (1-1.9m SETBACK FROM STREETLINE). * SERVICE ROUTED U/G THROUGH LANDSCAPED SIDEYARD.	* UTILIZING WOOD HYDRO POLES FOR TRANSMISSION OF SERVICE, 3 PARTY UTILITY TRENCH FROM POLE TO ROAD SHOULDER. * SERVICE TO LOTS VIA 4 PARTY LATERAL TRENCH (CONDUITS ENCASED IN CONCRETE). * CONTEMPLATED COMMON CABLE / TELEPHONE PEDESTAL / BOX (TO BE FINALIZED BY BELL & ROGERS)	MAINTAINS RURAL CHARACTER AND LIMITS DISTURBANCE TO EXISTING TREE ROOTS WHICH ENHANCES LONGEVITY OF TREES

Creditview Road Treatment Matrix - Page 3

	Other Creditview Road Treatments	Typical City Standards/Requirements	Custom Creditview Road Proposal	Benefit(s)
	OTHER TREATMENTS			
20	**EXECUTIVE HOUSING LOTS**	* SINGLE FAMILY DETACHED LOTS WITH A MINIMUM OF 50 FOOT FRONTAGE. * LIMITED SEMIS AND TOWNHOUSES PERMITTED.	* MINIMUM 60 FOOT SINGLE FAMILY DETACHED LOTS. * NO SEMIS OR TOWNHOUSES PROPOSED.	LOT WIDTHS COINCIDES WITH TREE LOCATIONS AND LOCATION OF DRIVEWAYS DETERMINED BASED ON INSPECTIONS BY ARBORIST ON THE MOST BENEFICIAL LOCATIONS FOR THE TREES.
21	**CREDITVIEW ROAD LOT GRADING**			
22	**TREE MANAGEMENT OR MAINTENANCE PLAN**	AS PER CITY STANDARDS	FOR ALL ROADS AND CREDITVIEW * IDENTIFY AND ADDRESS ALL SAFETY/HAZARD CONDITIONS OF EXISTING TREES AND REMOVE TREES THAT ARE NOT SALVAGABLE * IDENTIFY AND ADDRESS ALL SAFETY/HAZARD CONDITIONS OF EXISTING TREES THAT ARE SALVAGEABLE BY PROPER ARBORICULTURAL METHODS. * MAXIMIZE TREES TO BE RETAINED AND PRESERVED BY IDENTIFYING CONDITION, DEFECTS AND NEEDS OF TREES. * MINIMIZE STRESS RELATED ISSUES WHICH IMPACT ABOVE AND BELOW GROUND PARTS OF THE TREES. * INCREASE STABILITY, HEALTH AND VIGOUR OF TREES BY JUDICIOUS PRUNING, CABLING AND DEEP ROOT FERTILIZING.	* MAINTAIN THE CHARACTER OF THE EXISTING STREETSCAPE * MAINTAIN THE AESTHETICS * PROVIDE A MORE PLEASANT AND PSYCOLOGICALLY SOOTHING EXPERIENCE FOR USERS OF THE ROAD * ENHANCE THE ENVIRONMENT FOR RESIDENTS, USERS, AND LOCAL FAUNA.
23	**BONNIE BRAES FARMSTEAD**	* PRESERVATION OF HERITAGE STRUCTURE AND CULTURAL LANDSCAPE, IF WARRANTED.	* PROVISION OF A PARK AND STORMWATER MANAGEMENT FACILITY TO MAINTAIN THE EXISTING TREE-LINED DRIVEWAY AND THE HERITAGE FARMSTEAD.	MAXIMIZES THE PRESERVATION OF BONNIE BRAES FARMSTEAD AND CULTURAL LANDSCAPE AND PROVIDES ENHANCED VISIBILITY TO THE HERITAGE FEATURE.
24	**FUTURE ROAD CONNECTIONS**	* FOUR ROAD CONNECTIONS TO SATISFY TRAFFIC AND EMERGENCY ACCESS.	* THREE ROAD CONNECTIONS TO RESPOND TO RESIDENT CONCERNS REGARDING CREDITVIEW ROAD TRAFFIC FLOW.	LESS CONNECTIONS OF INTERNAL ROADS FROM BLOCK 5 AREA TO CREDITVIEW ROAD TO RESPOND TO RESIDENT CONCERNS.
25	**CONSTRUCTION TIMING AND METHODS**	* REGIONAL LOCAL IMPROVEMENT SANITARY SEWER ALONG CREDITVIEW ROAD NEEDS TO BE IN PLACE BY JULY 2008.	* INTEGRATE OTHER SERVICES AND INFRASTRUCTURE ALONG CREDITVIEW ROAD WITH THE REGION'S LOCAL SANITARY SEWER TIMING. * CONSTRUCT MUCH OF THE STRUCTURE FOR LOTS ALONG CREDITVIEW ROAD INTERNALLY FROM BLOCK 5, AS TECHNICALLY POSSIBLE. * AVOID USE OF CREDITVIEW ROAD FOR CONSTRUCTION VEHICLES IN THE DEVELOPMENT OF BLOCK 5 AREA.	LIMITS DISTURBANCE TO EXISTING TREE CROWN AND ROOTS WHICH ENHANCES LONGEVITY OF TREES AND MIIMIZES CONSTRUCTION DISTURBANCES FOR THE EXISTING CREDITVIEW ROAD RESIDENTS.
26	**GROWTH MANAGEMENT**	* CONSTRUCTION OF BONNIE BRAES DRIVE AND JAMES POTTER ROAD IN BLOCK 5 BEFORE THE FIRST OCCUPANCY PERMIT IS ISSUED.	* PROPOSES SPINE SERVICING TO ENSURE THAT BONNIE BRAES DRIVE AND JAMES POTTER ROAD IS CONSTRUCTED AS PER THE CITY REQUIREMENT.	PROVIDES OTHER ROAD ACCESS AS AN ALTERNATIVE TO CREDITVIEW ROAD AND MINIMIZES TRAFFIC DEMAND ON CREDITVIEW ROAD.

Creditview Road Treatment Matrix - Page 4

27	SPECIAL MEETINGS	• FOUR STATUTORY PUBLIC MEETINGS.	• FOUR STATUTORY PUBLIC MEETINGS. • TWO INFORMAL RESIDENT MEETINGS. • ONE FOCUS RESIDENT GROUP MEETING. • SEVERAL MEETINGS WITH CITY STAFF, REGIONAL STAFF AND UTILITY COMPANIES AND COUNCILLORS.	PROVIDED SUFFICIENT OPPORTUNITY FOR INPUT BY THE STAKEHOLDERS, GOVERNMENT AGENCIES AND THE PUBLIC.

APPENDIX 5
COST RESPONSIBILITY MATRIX

&

APPENDIX 6
STREET BUFFERS ELEVATION

APPENDIX 5
Cost Responsibilities Matrix

Cost Responsibilities Matrix For Non-Executive and Transitional Residential Areas (Developer acts as agent for City)		
City Cost (Cost Recovery via DC)	Developer Cost	Item
	✓ ✓ ✓ ✓ ✓ ✓ ✓	**Arterial Roads** - entry features, soft landscaping and irrigation - acoustic fence and masonry piers - 100% planting buffer block to City standards - 1.2m high chain link fencing window streets - masonry columns at pedestrian access points - street trees - grade, topsoil, and sod boulevards
	✓ ✓ ✓ ✓ ✓ ✓	**Internal Roads** - on-lot privacy and light acoustic fence per City policy - community mailbox pads - street trees - 1.2m high chain link fencing window streets - masonry columns at pedestrian access points - grade, topsoil, and sod boulevards without abutting residences
	✓ ✓ ✓ ✓ ✓	**SWM Ponds** - grading, topsoiling, seeding, sodding - aquatic, shrub and tree planting per City policy - edge plantings of perennials and bulbs - lookouts/ viewports, see page 106 - fountain swm pond #8B-10
	✓ ✓ ✓ ✓	**Valleylands** - remove debris and old fences - remove dead or hazardous trees and/or limbs at the discretion of the City Urban Forestry Division - remove invasive species and replant to desirable native species - remediation, restoration of disturbed areas
✓	✓ ✓ ✓ ✓	**Open Space (Vista Blocks)** - grade, topsoil, and sod - street trees - plantings within blocks - lookouts/ view points/ trail heads: paving, retaining walls, barriers, benches - trails with/without night lighting
✓ ✓ ✓ ✓ ✓ ✓	 ✓ ✓	**Pedestrian Pathway - Valleyland, SWM, Open Space and Woodlots** - tree removal and pruning - asphalt paving, bridges, walkway, lighting, and planting - plantings to provide privacy - bridges and decorative columns - night lighting - walkway blocks: trail and fencing - trail head: specialty paving, masonry columns, planting - granular pathway in woodlots
	✓ ✓ ✓	**Woodlots** - removal of dead or hazard trees and/or limbs - remediation, restoration at disturbed edges - removal of invasive species and replanting to desirable native species
	✓ ✓	**Hydro Corridor** - planting to screen views down corridor at road crossings - planting to screen publicly visible towers
	✓ ✓ ✓	**Bridges (on Roadways)** - upgrade bridge parapet walls/ railings - upgrade sidewalk widths/ materials - restore/ plant bridge abutments at valley crossings

APPENDIX 5

Cost Responsibilities Matrix - Executive Residential Areas In addition to the cost responsibilities identified in other parts of this appendix, developer funded upgrades are required in executive residential areas.		
City Cost (Developer Recovery via DC)	Developer Cost	Item
	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓	**Executive Residential Areas (see figures 5.9a page 118)** - roundabout - decorative metal fence - upgraded privacy fence - pedestrian crossings - 100mm cal. street trees - double row trees on Creditview Road (1 in road right-of-way, 1 on lot) - decorative street signs - upgraded community mailboxes with canopy structure if located in open space block

Cost Responsibilities Matrix - Parks (Developer acts as agent for City) Refer to Part III Open Space Design Figures 4.1e to 4.1o		
City Cost (Developer Recovery via DC)	Developer Cost	Item
	✓	- 1.2m high chain link fencing park/ private land interface
	✓	- 1.2m high decorative metal fence park/ private interface park #2
	✓	- subgrade and rough grading, block storm drainage
✓		- additional storm system for drainage
✓		- topsoil and sod
✓		- 70mm cal. deciduous trees and 1.8m high coniferous trees
	✓	- larger plant material
✓		- asphalt pathways and granular pathway (park #4)
✓		- night lighting (standard park post/ luminaire)
✓		- playground curbing, drainage, equipment and resiliant surface
	✓ [1]	- specialty paving at entries, seating areas, park focus areas
✓		- furnishings: benches, waste and signs
	✓ [1]	- park entry elements: masonry piers, fencing
	✓	- highly ornamental plantings "Flower City": shrubs, perennials, bulbs at entries
✓ 50%	✓ [1] 50%	Park #1, Figure 4.1e Shade structure
	✓ ✓ ✓ ✓	- Park #2 Figure 4.1g, park at Creditview Road and Bonnie Braes Drive - tree removals, remediation and restoration planting - granular path in tree allee upgrade - fence along Creditview Road
	✓ [1]	- Park #5, Figure 4.1m Shade structure/ Community Information
✓		- Park #6, Figure 4.1o Shade structure

[1] Developer contribution to shade structures and other park upgrades to be revisited following 2009 DC review.

APPENDIX 6 - STREET BUFFERS ELEVATION

A. PLANTINGS IN HOUSE FLANKAGE LOCATIONS TO RESPOND TO ARCHITECTURAL ELEVATION - SCREEN UTILITIES/ STORAGE, KEEP WINDOWS & ARCHITECTURAL DETAIL VISIBLE; DO NOT USE INVASIVE SPECIES

B. USE SLOPE OF BERM TO ADVANTAGE TO DISPLAY BULBS & PERENNIAL PLANTINGS & LOWER SPREADING EVERGREEN SHRUBS

C. BLOCK PLANTING AS PER CITY GUIDELINES WITH DECIDUOUS SHRUBS WITH ORNAMENTAL STEM COLOUR, FLOWER, & FALL COLOUR, HEIGHT TO OBSCURE FENCE (.9 TO 1.2ht); PLANT BOTH SIDES OF FENCE; USE HARDY, SALT & DROUGHT TOLERANT SPECIES WHICH REQUIRE LITTLE ONGOING MAINTENANCE

D. CONCENTRATE BULB & PERENNIAL PLANTINGS AT PEDESTRIAN ACCESS POINTS