The Barriefield Heritage Conservation District

THE BARRIEFIELD HERITAGE CONSERVATION DISTRICT PLAN

PART I: CONSERVATION, DESIGN AND LANDSCAPING GUIDELINES

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Prepared for The Corporation of the Township of Pittsburgh

By

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PART I

Conservation, design and landscaping guidelines

THE BARRIEFIELD HERITAGE CONSERVATION DISTRICT PLAN

PART I

CONSERVATION, DESIGN AND LANDSCAPING, GUIDELINES

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Statement of Intent

STATEMENT OF INTENT

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Introduction

The 1978 Barriefield Village Heritage Conservation District Study noted that the future development of the village of Barriefield:

could take three forms: first, a continuation of current trends with controls subject to the existing official plan; second, a coordinated community effort with some controls to emphasize the village's best features and value of its historic background; and third, a definite highlighting of the village as an historic area of restored and reconstructed buildings under extensive controls. Of these three possible futures the LACAC recommends the middle course.

The main assumption inherent in this course is that new buildings can be built, and old houses can be renovated and maintained; to the common benefit.

The middle ground, sought by the municipality and LACAC, envisaged an environment where old and new buildings co-existed in a respectful manner; with neither the excesses of new construction and redevelopment nor the stultifying effects of a rigid restoration approach prevailing.

The Revised Barriefield Heritage Conservation District Plan

The 1991 Barriefield Heritage Conservation District Plan seeks to continue this course of action anticipated in the 1978 study. It is the intent of municipal council to guide and manage physical change and development within the heritage conservation district by:

adopting a revised Barriefield Heritage Conservation District Plan;

- determining permit applications for changes and alterations according to the guidelines contained in the Barriefield Heritage Conservation District Plan; and
- initiating public works and improvements that are within the financial capabilities of the Corporation of the Township of Pittsburgh.

It is the intent of municipal council to complement these initiatives by making appropriate amendments to the Township's Zoning by-law and Official Plan.

Heritage Interests, Property Owner Interests and Community Interests

Council recognizes that within the Barriefield Heritage Conservation District there are a number of diverse interests. In certain instances these interests may be complementary. Inevitably, others may be in direct conflict. Some owners of heritage property may have single or multiple interests and see themselves as custodians of the family's, community's and the province's heritage with a duty to conserve and protect. Conversely, other property owners may see it as their obligation to provide comfortable and livable domestic surroundings for themselves and their family. It is accepted that not all owners of heritage property have equal financial resources to undertake conservation and restoration work .

Council does not seek to give primacy to any one particular interest, but seeks to ensure that any conflict amongst these interests is at best avoided or otherwise minimized.

Heritage Character

Council recognizes that:

 the Barriefield Heritage Conservation District comprises a unique ensemble of heritage buildings and landscapes that have resulted from a century and a half of many social, economic, natural and physical changes;

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 this unique heritage character is to be conserved and protected in the process of change.

Municipal Authority

Council recognizes that:

- district designation, under Part V of the Ontario Heritage Act, does not seek the preservation or restoration of a community to a former past state, but simply establishes a mechanism for the municipal review and determination of permit applications for changes to, and within, the *built* environment of a designated district;
- it cannot compel, nor does it seek to compel, the restoration of all heritage properties within the district;

Custodial Responsibility

Council recognizes that:

 owners of heritage property are to be considered the prime custodians of Barriefield's unique legacy;

Management of Change

Council recognizes that:

- many heritage buildings over the past century and a half have witnessed the introduction of a variety of changes to building fabric including additions, at the rear, side and as new upper storeys;
- change in Barriefield's built heritage and natural environments is to be expected in the future, yet it must be carefully *managed* in a manner that does not adversely affect those environments;

any proposed change within the district shall be considered:within a number of Council approved conservation, design, landscaping and planning guidelines; and with consideration of the individual merits of the proposed change.

Restoration of Heritage Property

Council recognizes that:

• certain property owners will seek to restore their property and Council will encourage property owners to seek appropriate grant aid for eligible work by ensuring conformity with the applicable guidelines in this Plan;

Alteration of Property

Council recognizes that:

 certain property owners will wish to add on, alter or otherwise change their property to accommodate required living space or new facilities and Council may permit such work provided it is in conformity with the applicable guidelines in this Plan;

Determination of Permit Applications

 all residents and property owners within the Barriefield Heritage Conservation District shall be afforded fair and equitable consideration in the determination of permit applications for alterations within the district.

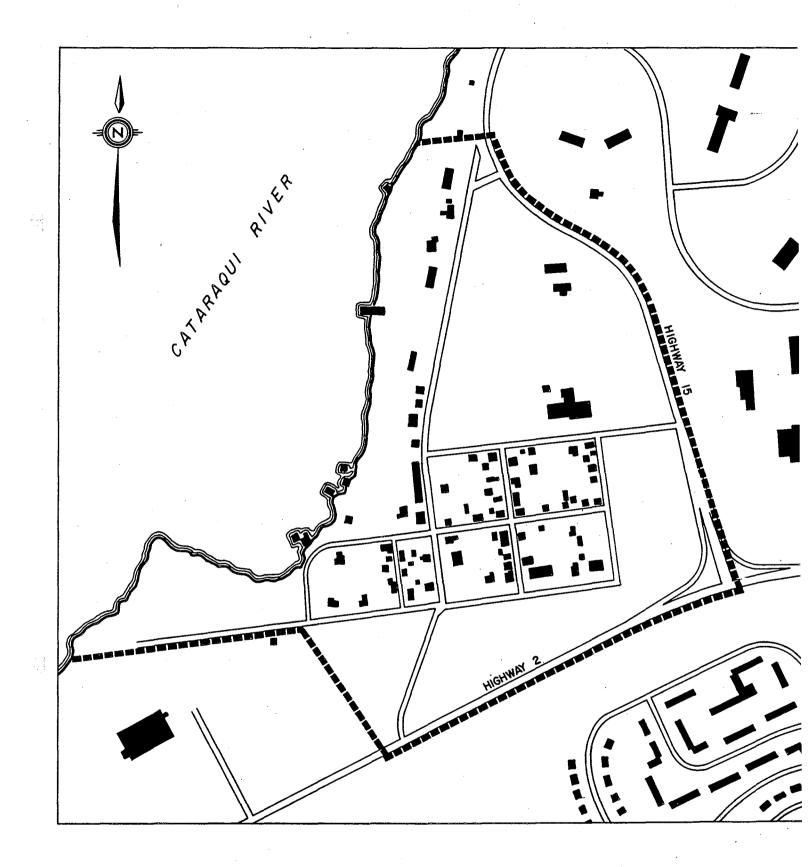
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HERE REPAIR - DISTRICT BOUNDARY

BARRIEFIELD HERITAGE CONSERVATION DISTRICT

DESIGNATING BY-LAW APPROVED - OMB 1981

1.0 INTRODUCTION

1.1 Purpose of the District Plan

This district plan, comprises Part I: Conservation, Design and Landscaping Guidelines, and Part II: Appendices. These documents supersede the Barriefield Village Heritage Conservation District Study (1978) and the Barriefield Village Heritage Conservation District Plan (1979).

The heritage conservation district plan culminates the Barriefield Heritage Conservation District Plan Review process. The first phase of the review process comprised a number of activities including: heritage building and condition survey, landscape analysis, land use and development policies review, and public meetings. The results of this plan review are contained in the accompanying appendices.

From these results it was determined that a completely new district plan should be developed to provide a more precise and updated guide for the Township of Pittsburgh in conserving Barriefield.

The new district plan is intended to provide the basis for the careful management and protection of the area's heritage resources including: buildings, landscape features and archaeological sites. Additionally the plan provides guidance on relevant planning and development matters that may affect the unique character of this historic settlement.

Accordingly, this plan should be used and consulted by a variety of people and agencies including:

- property owners;
- Municipal Council;
- municipal staff;

- Local Architectural Conservation Advisory Committee (LACAC); and,
- those utilities, public agencies, authorities, Provincial and Federal Ministries having jurisdiction or interests in and around Barriefield.

1.2 The District Plan Rationale

All historic communities undergo change, development and renewal. Some changes are of considerable magnitude, often linked to natural disasters and the economic fortunes of a community. Boom-bust cycles, flooding and conflagration often wreak devastating change on the built and natural environment, including loss of buildings and vegetation through destruction, abandonment, neglect and lack of care or maintenance. Other changes result from the discreet or common everyday activities that seek to make our environment a comfortable place to live and work in, such as building additions and alterations, new street lighting, hydro line installations, road widenings and realignments and so on.

Put simply, the environment we see today is the result of myriad social, economic, natural and physical changes that have occurred over many decades. The Barriefield of 1990, is not the Barriefield of 1890.

Heritage conservation district designation does not seek the preservation or restoration of any such designated Ontario community. Under Part V of the Ontario Heritage Act district designation simply establishes a mechanism for the municipal review and determination of permit applications for changes to, and within the built environment. The purpose of municipal review is left unstated in the Act. Clearly, change in any heritage conservation district is anticipated, otherwise there would be no process of review, simply a "freeze" or prohibition of any alteration or change.

Contemporary heritage *management* practice recognizes a variety of activities and terms: conservation, preservation, restoration, and reconstruction, to name a few. These are elaborated on in this plan. Yet, key to any activity in dealing with heritage building fabric is the realization that the majority of heritage buildings and structures within Barriefield have been and will continue to be used by people for residential purposes. Continued use will inevitably involve changes to building fabric.

While all property owners may be considered as custodians of Barriefield's unique heritage, not everyone wishes to, or will want to, restore or even preserve their buildings or property. Some may well wish to add to or alter their houses to accommodate needed living space. Historical research and review of historic photographs reveals that over the past century and a half Barriefield has witnessed the construction of a variety of buildings, as well as the construction of later additions to these buildings.

This plan seeks neither to reverse this practice and prohibit change, nor does it seek the restoration of every heritage building nor the preservation of all heritage buildings as they exist today.

This plan recognizes that Barriefield and its residents are not static entities. The plan is founded upon the basis that change in Barriefield's unique built heritage and natural environments is to be expected. Of critical importance is that the changes in Barriefield's heritage environment must be *managed* in a manner that recognizes and respects that special character derived from its heritage building stock.

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Accordingly, this district plan, unlike its predecessor, does not envisage a particular built environment that is to be achieved within a certain time frame. Rather, the heritage conservation district plan anticipates that as change is initiated by property owners it must be carefully managed within a number of conservation, design, landscaping and planning guidelines in order to seek a number of general objectives for the community. The objectives are described in section 2.

A key principle for heritage conservation district planning is that there shall be a presumption in favour of retaining the distinguishing characteristics of a heritage property and that the destruction, alteration or removal of historic fabric or distinguishing architectural features and landscaping shall be considered as the least desirable course of action.

1.3 Format of the District Plan

These guidelines address the principles of district conservation and contain a number of goals and objectives respecting buildings, landscape, land use and new development. Conservation guidelines are included and guide property owners in caring for and maintaining their heritage buildings.

Other sections describe guidelines for alterations, additions and new construction with the objective of providing a minimum standard of appropriateness for change within Barriefield. (A number of building case studies are included in the appendices and describe how changes have been made in the past.)

Specific guidance is provided on landscape improvements to features in Barriefield as well as general advice on landscape design. A suggested plant material list has been developed for use by property owner of materials cultivated prior to 1870-1880. The list has been appended to this document.

2.0 Conservation Goals, Objectives and Principles

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2.0 CONSERVATION GOALS, OBJECTIVES AND PRINCIPLES

2.1 Introduction

The intention of the Barriefield Heritage Conservation District Plan is to ensure the wise management of physical change and development in order to conserve the unique character of the district and its component buildings and spaces. It is anticipated that most conservation issues in the district will be addressed through the plan's policies and the guidelines described in the following sections. The following goals, objectives and principles form the framework for detailed guidelines in section 3. Where a particular conservation issue is not addressed in those detailed guidelines the goals, objectives and principles in this section should from the basis for advice to property owners or decision making by the Township of Pittsburgh.

The study area contains a diverse range of properties dating from the early nineteenth to the late twentieth century. The built structures reflect the prevalent stylistic influences such as Georgian, Classical Revival, Gothic, Victorian, Ontario Vernacular and contemporary as well as the typical construction techniques and building materials of the period. The most dominant building material in the area is stone. Also dominant are frame buildings with wooden siding. Less prevalent are solid brick and brick veneer structures.

Most of the buildings within the district are single detached residences with a few semi-detached or row-type housing. The houses range in height from one to two and a half storeys, yet the overall form of the district is typified by the low profile character of the predominant one and a half storey residences. Wooden shingles were the predominant historical roofing materials. All heritage buildings have been subject to inventory and are described in the Appendices.

The distinctive architectural features of the area are its variety of scale, mass, decorative detailing and building siting. Although many individual buildings and properties have been altered over time due to changing tastes, economics and fashion, the overall nineteenth century village character has been retained and occasionally enhanced.

The contemporary landscape in the Barriefield Heritage Conservation District contains a mixture of natural and built features which reflect the long history of European settlement in the area. The domestication of the land by the Loyalist and European settlers resulted in obvious changes to the landscape such as the clearance of the forest, the creation of bounded fields, roads and pathways, houses, mills and churches. More discrete landscape changes are also evident in Barriefield such as stone survey markers, dry stone walls, boulevards, ditches, abandoned rights-of-ways, lilac hedgerows and the mature black willows along the river's edge.

Barriefield's unique setting on a high river embankment overlooking the Cataraqui River, the St. Lawrence River and the historic grounds of nearby Fort Henry to the south and the City of Kingston has contributed greatly to its distinctive landscape character.

Barriefield's proximity to the Cataraqui River suggests that the area has potential to reveal archaeological remains of past, pre-historic, aboriginal activity. The documented historical buildings that were once known to have existed on the shores of the Cataraqui River suggest that the area also has potential to reveal more recent archaeological remains of historical, Euro-Canadian, human activity. These types of heritage features are fragile and non-renewable and their conservation must be a consideration in the review of any major development proposals.

Wise conservation and sensitive management of change within Barriefield can be promoted by a clear statement of goals and objectives for the designated heritage conservation district. While general in nature, goals and objectives provide a framework for more specific guidance and action as well as direction towards the kind of environmental management anticipated in a conservation district.

2.2 Barriefield District Conservation Goals and Objectives

2.2.1 District Conservation Goals

- To maintain the low density residential character of Barriefield heritage conservation district.
- To protect and enhance the existing low rise residential profile of Barriefield.
- To avoid the destruction of Barriefield's heritage building and landscape fabric and to encourage only those changes that are undertaken in a manner that if such alterations or additions were removed in the future, the essential form and integrity of the heritage property would remain unimpaired.

2.2.2 Objectives: Heritage buildings

- To encourage the ongoing maintenance and repair of individual heritage buildings (those structures found in the Part III: Appendices, December 1990, Appendix 3) by property owners.
- To support the continuing care, conservation and restoration of heritage buildings wherever appropriate by providing guidance on sound conservation practice and encouraging applications to funding sources for eligible work.

2.2.3 Objectives: Landscape

- To encourage the maintenance, enhancement and protection of the village landscape character of Barriefield.
- To maintain and preserve natural features such as the Cataraqui -River banks, existing trees, treelines, hedgerows, and grass lands within the district.

- To maintain and preserve natural features such as the Cataraqui River banks, existing trees, treelines, hedgerows, and grass lands within the district.
- To maintain and preserve built landscape features such as stone walls and fences.
- To encourage the protection and retention of existing road and streetscapes within Barriefield and to avoid or minimize the adverse effects of public undertakings.
- To enhance public spaces with appropriate landscaping.

2.2.4 Objectives: Archaeology

• To avoid wherever possible the disruption or disturbance of known archaeological sites within the Barriefield heritage conservation district.

2.2.5 Objectives: Land use

- To encourage the maintenance of a stable, low density residential environment in the district.
- To support existing uses and adaptive re-uses wherever feasible within the existing heritage building stock.
- To prevent the establishment of those land uses which would be out of keeping with or have detrimental effects upon the residential character of the district.

2.2.6 Objectives: New development

- To encourage new development only where it respects or otherwise complements the prevailing low profile and built character of existing buildings and structures within Barriefield.
- To discourage the demolition of existing heritage buildings and their replacement by new development.

2.3 Barriefield District Conservation Principles

The purpose of this section is to establish a context for the conservation of heritage buildings and to provide a general framework for the more detailed guidance offered in later sections. Accordingly any proposed changes within Barriefield heritage conservation district shall be considered with regard to the following principles:

- Heritage buildings are to be retained and re-used wherever possible and the demolition of heritage buildings shall be actively discouraged.
- There shall be a presumption in favour of retaining the distinguishing characteristics of a heritage property and the destruction, alteration or removal of historical fabric or distinguishing architectural features and landscaping shall be considered as the least desirable course of action.
- Alterations and changes that have occurred in the past may be of significance in the development of a particular heritage building and its environment and should be protected.
- Stylistic and architectural features or examples of fine craftwork that distinguish a particular building must be treated with sensitivity and where deteriorated should be repaired rather than replaced.
- Replacement of architectural features should match the material being replaced in composition, design, texture, colour, size and level of craftwork.
- Historical, physical or pictorial and documentary evidence shall guide the repair or replacement of missing architectural features of an individual heritage building. Guesswork or use of architectural elements borrowed from other buildings should be avoided.
- Surface cleaning of historic structures must only be undertaken when accumulated dirt adversely affects the historical fabric of a

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heritage building and undertaken only by the gentlest means possible. Sandblasting, high pressure water washing, strong chemical cleaning and other methods that may damage building materials must be avoided.

- Contemporary design of alterations and additions will be permitted where they do not destroy significant historical, architectural, streetscape or cultural features.
- Contemporary design of alterations and additions should be permitted where they are of a size, location, colour and material that is compatible with the prevailing character of the building, streetscape, landscape and district.
- All public works should seek to avoid adverse effects to the character of Barriefield heritage conservation district and in particular to individual heritage buildings, archaeological sites, walls, fences and distinctive trees and treelines within the district.
- New construction comprising freestanding buildings should respect the prevailing character of: adjacent buildings; the existing streetscape, landscaping and grade levels; and the district as a whole. New construction must be of compatible design in location, size, height, setback, orientation, materials, colour, roof and roofline, fenestration, scale and proportion.

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3.0 CONSERVATION GUIDELINES

3.1 Building Conservation

Owners of a heritage property may be considered as stewards or custodians with a responsibility to transmit to future generations a rich, built-heritage. Maintaining buildings in good physical condition and ensuring viable and satisfactory uses are the cornerstones of conserving older heritage structures.

The deterioration of building elements or materials is a natural phenomenon. It can be significantly slowed by sound repair and maintenance or considerably accelerated by inadequate attention to such factors as water damage, paint failure and so on. The process of *conservation*, which is the remedial measures necessary to prevent decay, must be used to promote the longevity of building materials. Sound maintenance practice is the single most important technique in the promotion of good conservation.

Generally, the conservation issues within the district relate mainly to: the continuing maintenance, repair and restoration of historic building fabric; appropriate alterations and additions to existing heritage structures; and new construction. Repair and maintenance is the minimum conservation action and yet the most effective action required to maintain a building since it often insures against harmful and irreparable damage.

For the purposes of this district plan and its use in the consideration of change and development within the Barriefield village a number of terms are defined to aid the reader. These terms are drawn, in shortened form, from the Ontario Heritage Foundation's Manual of Principles and Practice for Architectural Conservation, *Well Preserved*, (Mark Fram, 1988) and are described on the following page.

Conservation: An umbrella term that encompasses a broad range of activities aimed at preventing decay by wisely using heritage resources and purposely intervening to remove or obviate threats to those resources.

Preservation: Preservation involves stopping, as permanently as possible, those processes contributing to the deterioration of a building or site and making essential repairs to keep it in its existing state.

Restoration: Restoration is the recovery of the forms and details of a property as it appeared at a particular time by removing work of intervening periods and, where necessary, replacing or reproducing missing elements.

Reconstruction: Reconstruction involves the re-creation of a vanished building or feature on its original site based on evidence from historical documents.

The following sections offer general guidelines on the maintenance, repair and restoration of existing heritage buildings within the district.

3.2 Foundations

Building foundations which are sound and watertight are essential to the good health of the district's structures. The early discovery of problems can normally be corrected inexpensively and efficiently. If problems are allowed to persist untreated significant damage such as excessive settlement may occur. The importance of the regular inspection of basements and foundation walls cannot be overstressed. Using a flashlight look for signs of moisture, cracks, deflection of structural members and settlement. Settlement can take years to occur and normally does take place during the first years of the structure's life. Often older buildings which have settled reach an equilibrium. However, changes in ground water levels, excessive spring runoff, earth movements, new tree plantings too close to a structure and disconnected downspouts can result in further destabilization of the structure and foundation. New additions and the construction of new buildings on adjacent properties may also contribute to settlement.

Another problem with basements and foundations is the lack of proper ventilation which can cause fungal growth. Undetected growth can also cause stress through weakening sill plates which may affect the integrity of the basement foundation and the above structural framework. Termites are another problem which should be monitored and corrected.

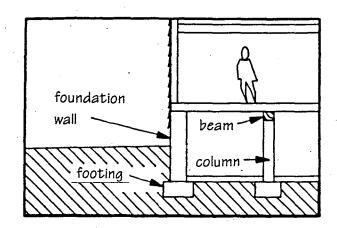
Repairs to foundation problems should be undertaken only after consultation with a professional engineer or architect who has a knowledge of heritage buildings systems. Make repairs where possible using traditional building practices and using sound building science principles.

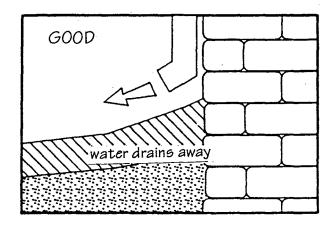
Make sure proper exterior drainage is in place and direct water away from the building. Install drainage tiling if necessary to control excessive moisture. When excavating, remember there may be archaeological concerns that can occur. Excavate in short sections, repair and backfill. If deteriorated mudsills exist, the property owner may consider pouring a new footing or re-instating a new mudsill. Generally the guidelines for masonry restoration of walling should be applied to any exposed external foundation walls whether they are brick, stone or concrete block. Areas exposed to extreme environment conditions at the lower foundation walling may require a slightly stronger masonry mortar to prevent accelerated deterioration. Conditions may vary requiring expert advice. Refrain from parging exterior foundation walls with cementitious materials as a method of waterproofing. If additions or alterations are being considered it is worth examining methods of construction which spread the load uniformly onto an existing foundation wall or footing. Consolidation of a masonry wall may entail grouting. Seek expert advice and a qualified contractor to undertake the project. Use low sodium grouting mixtures to prevent efflorescence to brick or stone masonry.

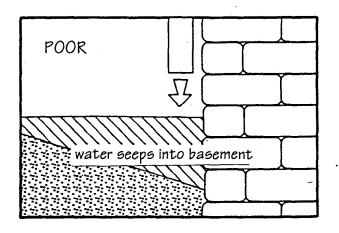
3.3 Structure

Structural systems in buildings often vary in size, shape and design. Techniques employed by a variety of builders and designers as well as local availability of materials will also contribute to differences in construction methods and choice of materials.

Wood is the most common building material and has always been relatively inexpensive and readily available in Ontario from the beginning of European settlement. The construction method for frame structures varies greatly as building techniques developed with advancements in technology. The earliest structures were generally log and then heavy timber construction. This was followed by wooden platform framing and balloon framing which relied on machine sawn lumber.







FOUNDATION CONDITIONS

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The proper method of conservation for heritage frame structures begins with the assessment of the type of construction employed in the building. This will allow for the development of proper strategies for maintenance, repair and restoration. Knowledge of the construction method is useful in the design of additions and alterations.

Inspect and record structural stability problems; note cracking, deflection, fungal or insect attack; stabilize weakened structural members and systems with a method which can be repaired and reversed if necessary. Another method employs supplementing the existing structure system when damaged or inadequate. Replacement of any structural materials should be made in the same species and of the same dimension and structural capacity where possible. In solid masonry structures the joist pockets and wood/masonry connections should be examined for deterioration and fungal growth due to moisture and a lack of proper ventilation.

The effects of settlement and problems with leakage or cracks should be monitored for activity before work is considered. Inactive cracks and/ or leaning wall can be in a static state and no longer cause for concern. Often the pattern of settling and self-adjusting in an older structure is complex and may take decades to complete.

It is of the utmost importance to make any *major repairs* to the structural soundness of a building first before completion of work to the exterior elements like stone, brick, stucco and even wood siding. This is very critical in situations where new additions or alterations are being considered. The building owner should also consider supplementing the existing structural system when damaged or inadequate. This solution is preferable in circumstances where braces, splices or flitch plates can be utilized and later removed if necessary.

UNACCEPTABLE BRICK POINTING ribbon reverse struck (water collects on edge) (lets water in) deeply recessed buttering (brick face obscured) (lets water in) keyed

When restoring, replace specialized joinery work and unusual or rare engineering or technical innovations only when necessary. Specialized work will require a skilled craftsperson, technician or a professional engineer with heritage training or experience. Proper plans and specifications may be required to execute the project. Structural repairs to masonry or stucco should be completed with non-ferrous metal hardware to prevent rusting. The grouting of masonry walls when required should be completed by experienced professional tradespeople.

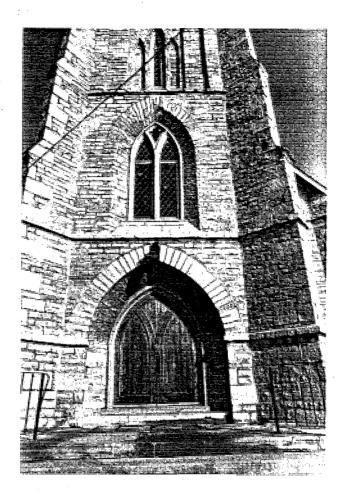
3.4 Exterior Wall Cladding

Generally the historic buildings of Barriefield were built either of stone or in wood siding over a frame structure. A number of brick masonry structures also exist.

Walls should be examined for cracks, brick spalling, stains, leaks, mortar erosion, local distress, leaning or bowing, efflorescence, blisters and loose or falling building fabric. Priorize the work which must be considered for repair and future maintenance, and then take appropriate action.

3.4.1 Brick and Stone Masonry

Repairs to localized area should match the original as closely as possible in size, colour, texture, surface treatment and strength for reasons of appearance and durability. With brick and stone it is critical that mortar which bonds the original walling units is examined for texture, colour, type of jointing and composition. A good match of the above noted qualities will contribute to_a better completed job. The choice of replacement brick must follow similar criteria in terms of type, unit size, colour, texture and composition. Maintain decorative brick



In order to prevent the decay of lower masonry units make sure the surface water drains away from the building. Never spread rock salt near masonry as this will accelerate decay of both stone and brick. elements. The maintenance of brick walling will help preserve the building fabric. With stone masonry similar criteria should guide the choice of replacement units.

Major restoration should follow guidelines developed in the Annotated Master Specification for the Cleaning and Repair of Historic Masonry, available from the Ontario Ministry of Culture and Communications, Heritage Branch, Toronto. This guide provides an excellent source of information on the subject of masonry conservation and repair.

When replacement brick is to be used, it should be chosen carefully. Salvage brick can be used in areas where exposure to excessive weathering is not likely to occur. It is important to evaluate the strength and durability of "old" bricks when considering them for re-use. Do not employ the use of softer interior bricks for exterior masonry repairs. Building stone should also be chosen for similar reasons of durability.

The retention of original finishes or coatings on masonry including paint, whitewash and parging should be maintained when possible. The cleaning of masonry can be considered useful in the prevention of deterioration and the restoration of original appearance. However, it is critical to the success of a cleaning operation that the "patina" be maintained. The patina of age is part of the building's history. This will involve specialized care by a competent contractor. The "good as new" appearance usually means too aggressive an approach to cleaning is being recommended. Make sure that all cleaning operations are carried out during a frost-free period by skilled operators. Test patches should be completed in inconspicuous areas before any work is undertaken. Be wary of sandblasting in any circumstances and remember caustic chemicals used improperly can be just as harmful to the building and the environment.

3-7

Many historic masonry structures were built using more elastic mortars with a high lime and low cement content. Modern mortar is generally harder and its use can be harmful for older buildings when employed with soft or friable masonry materials. A general rule with masonry repointing is to make sure the mortar is weaker than the surrounding. masonry. It is easier and cheaper to repoint masonry walling rather than replace historic masonry units.

Repointing is required when it is badly deteriorated or when water penetration is a problem. Do not repoint old mortar sections in good condition. Always clean out deteriorated mortar with a hand chisel back to sound surfaces rather than using power chisels. The composition of the new mortar must match as closely as possible the qualities of the old in strength, colour and texture. Avoid the use of plasticisors or colourants.

Acceptable brick joints include: the flush; the semi-recessed; the rodded or thumbed joint; and the regular struck joint. Stone masonry joints considered acceptable include: sacked and rubbed flush joint; sacked and slightly concave; the shallow struck recessed; shallow recessed; and thumbed.

Unacceptable joints include: the tucked joint; tuck beaded joint; the bleeding joint; ribbon, deeply recessed, keyed reverse struck; and buttered joint.

3.4.2 Stucco

Stucco – sometimes referred to as rough cast – has been a much used exterior cladding in Ontario architecture and is found within the district. It is a type of external plastering or rendering of lime or lime and cement mortar which is placed on lath. Sometimes it is found applied directly to masonry surfaces. It produces a uniform finish which is rain resistant and which adds architectural effect to the building surface with its texture, detailing and colour. Traditionally stucco was seldom painted but took its colour from the aggregate and any permanent pigment mixed in the finish coat.

Common failures of stucco include bulging, cracking, deterioration at the ground line and at the roofline. Moisture penetration and structural settlement are prime causes in stucco failure. Stucco can be repaired in several ways:

- Ensure that textured or decorated stucco surfaces are accurately recorded before repairs begin. Note the thickness of the stucco relative to the wood trim and maintain this dimension in order not to hide or destroy the function of detailing i.e. sill drips, corner boards.
- New stucco should never be be applied over an existing surface since this can hide damaged surfaces and destroy architectural detailing. Remove unsound stucco to lath or a sound base and duplicate original formulation in strength, composition and texture.
- Patching and new stucco surfaces should match the historic finish, colour and texture and any special markings found on original stucco surface.
- Do not paint the stucco surface if it is not already painted.
- To date no effective method of cleaning stucco has been developed. Dirt and dust should be rinsed off with water on a yearly basis.

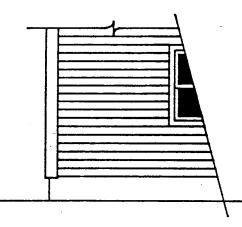
3.4.3 Wooden Siding

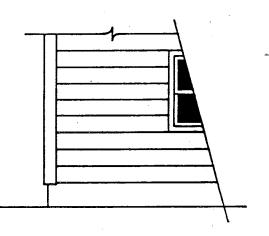
Examples of clapboard siding or horizontal wooden cladding and board and batten (generally found on outbuildings) are found in the district as well as some decorative shingle siding. Wood siding should be repaired wherever possible. Small cosmetic repairs or "dutchmen" should be carried out in wood or a combination of wood and glue. New replacement wooden siding should match the original in form, style, dimension, profile and method of installation. Cornerboards should match the original in dimension and profile. Although wood and synthetic siding may appear similar at a distance, the materials are significantly different. The use of real board and batten and *not* applied wood battens over a plywood as a base should be encouraged. Plywood appears similar at a distance but is not an original replacement material. Selection of a skilled craftsperson to complete the installation of the materials is recommended.

3.4.4 Synthetic Siding

The exterior historic character of a heritage building is largely established by its style and decorative detailing which are in turn influenced by the detail, colour and surface characteristics of the walling material. Wooden siding as well as brick or stone structures are often reclad in modern synthetic siding rather than renewing the original building material. In the case of historic buildings this can lead to significant changes to the exterior appearance of the building.

Synthetic siding coarsens the visual texture of the building and destroys the architectural scale of a house by altering size and spacing of the original wooden siding. Its application generally means the removal of decorative and other trim such as cornerboards, and window and door trim. Wooden siding and brick units are often damaged by nailing the synthetic siding directly to the original building fabric or by adding

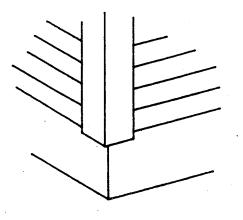




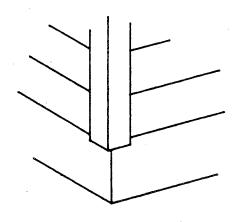
Acceptable

Unacceptable

Historical siding widths, profiles and gauges should be repeated when re-siding with clapboard.



Acceptable



Unacceptable

furring strips to the original walling material. The inability of synthetic sidings to bend often leads to vertical placement in problem areas thus spoiling the original lines of a historic building.

The application of synthetic siding also affects the general maintenance and repair of the historic building by contributing to moisture problems if applied over a building which needs repair and it prevents the inspection of the underlying building fabric. Synthetic siding tends to be prone to denting. It is not maintenance free and its insulation value is not significant. Its use is not recommended for heritage structures where it is not already extant.

3.5 Roofing

Respect the original roof configuration, roofing materials and any architectural details such as dormers, cupolas, vents and cresting.

Assess the condition of the roof yearly. Look for or examine: broken, loose or missing shingles, corroded, broken or loose fasteners or seams; the condition of the valley flashing and ridge; level and plumb roof planes. Examine the attic space for signs of moisture and the adequacy of ventilation. With flat roofs, it is important to assess the condition of the tar and gravel covering as well as the drainage. This roof type often has a shorter lifespan.

Repairs should be made before considering entire roof replacement. Even small patch repairs should be carried out in a conscientious manner and match the original material.

Make sure rainwater gutters are regularly cleaned to prevent backup and ice dams. Inspect all flashing for signs of fatigue and erosion. Assess corrosion failure due to atmospheric or galvanic action. Areas



A proper roof inspection should be carried out annually. Sound flashing and operational downspouts and gutters are critical to the long term maintenance of this feature whether it is built of wood, metal or asphalt. around the chimney and dormers are often vulnerable and apt to fail. Remove affected metal and replace in kind. When sealants have failed due to expansion, age or improper application clean all surfaces and replace sealants as directed.

The choice of roofing material replacement should be carried out after a proper cost analysis taking into account grant monies where applicable. Selection of a modern or alternative roofing material should respect the colour, dimensions and texture as well as visual impact of the original roof and the effect on the streetscape. When replacing asphalt shingle roofing attempt to use basic colours such as red, green or black. The use of brown asphalt shingles should be avoided as a substitute for wooden shingles.

Place new vents or elements such as skylights in discreet locations making sure they are properly flashed and sealed.

When planning a roof restoration, investigate the roof area and/or examine historic photographs and other documentary sources to identify the original roofing material. The main historic roofing materials used within the village area appears to have been wood shingles. Make sure colour, textures and dimensional qualities respect the original material. Purchase the best quality shingles available free from defects and made of heartwood.

The other roof material found in the village was metal. Investigate the type of metal used and the method of installation. Metal roofs can be composed of tin, terneplate, galvanized steel or even painted steel. Hire an experienced contractor familiar with proper installation techniques. Property owners can assist by directing the contractor to certain information sources if there are any questions regarding details for sources of material flashing, ridges and junctions.

Chimneys are masonry roof features which should be examined for stability and soundness annually. This includes making sure the flue liner is operating effectively and that the chimney cap is secure. Flashings often fail in this area and regularly cause roofing material decay. Masonry chimneys should be repaired with the same method and approach discussed in Section 3.4. Decorative chimneys or chimney pots must be restored through repair or replacement in style, profile and dimension where possible. Chimneys must not be simplified in rebuilding if original work or later extant work includes special detailing.

Dis-used chimneys should be capped and maintained. Often they provide a balance for the structure upon which they sit and complement an existing chimney.

When rebuilding a former chimney which has been removed, consult photographic material before designing an appropriate chimney.

3.6 Decorative Wooden Detailing

Decorative wooden detailing and ornamentation such as porches verandahs and dormers, scrollwork, spindles, columns and turned posts, brackets, vergeboards, finials and pendants, dentils etc. are found on even modest historic buildings of the nineteenth and twentieth centuries. They are considered to be an integral part of the building's character and should be retained. Since carved, sawn and turned details are very susceptible to deterioration they should be checked regularly for signs of decay.

Signs of rot, insect infestation, fungi, mechanical damage and structural fatigue are common problems in exterior woodwork. Understanding the nature of decay will allow for a better choice of repair and maintenance

options. Look for blistering paint or a total absence of a surface covering as a signal of a potential problem. Make sure that the fastenings are secure and that they are free from rust.

When undertaking repairs use the gentlest means possible to strip or clean wood or finishes, being mindful not to remove or harm sound wood. Small cosmetic repairs can often be accomplished with compatible wood fillers which are then painted. More serious problems may require wood insertions or splices. When total decay has occurred, new wood should be used to duplicate the original structural or decorative element. Make sure a competent craftperson is hired to undertake the work. Maintenance of wooden elements will require regular inspections to ensure there is no damage from excessive moisture - wood's number one enemy.

In order to restore decorative woodwork, moulding profiles should be taken of all elements in order to ensure that they are properly replicated. It is important to use a skilled craftsperson who has knowledge of practice, tools and wood. All existing structural and decorative elements should be examined for failure and reused when possible. Assessment of the type of repair should be considered in conjunction with historical documentation. The restored elements should be protected by a non-toxic water repellent to prevent future decay. Regular painting is one of the best methods to ensure the protection of exterior woodwork. Do not rely on caulking to prevent water absorption. Properly detailed elements should be self-draining, where possible. With repairs to smaller areas, it is recommended that a filler which contains maximum strength and durability be selected for the patching. Any splicing should be completed in the same type of wood, ensuring the direction of grain is matched.

The reconstruction of elements based on historic photographs should be drawn first before the replication of the element is commissioned. Working or shop drawings are useful when prepared. Conjectural restorations should be avoided.

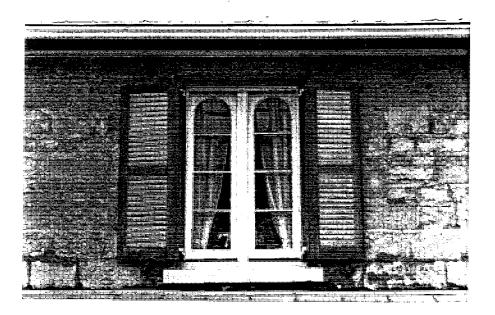
3.7 Windows and Doors

These important building features are an integral part of the architecture of the district's heritage buildings. They also reflect changes in the original design and often exhibit fine quality craftsmanship.

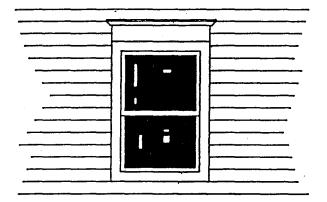
The inspection and assessment of these features for structural soundness and deterioration is of critical importance. Retention and proper repair of original window frames, sash, glass and door panelling is highly recommended. Badly decayed areas in an otherwise sound window or door should be repaired using compatible filler materials or appropriate joinery detailing. Retain existing glazing where possible and save door and window hardware during repairs. Never enlarge window or door openings or make them smaller since this has a negative effect on the heritage character of the building. The one exception is when an original size of the door or window opening is being restored.

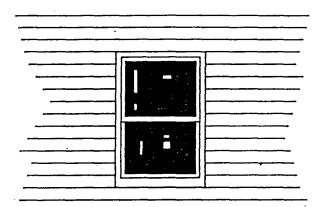
Replacement wooden windows or doors should be completed in kind. Aluminum, coated metal or vinyl units are **not recommended** as replacements. A replacement window or door should match the original in style, shape placement and be based on the use of historic photographs when available to meet the above criteria.

When restoring a building to its original appearance new replacement sash should maintain the muntin profile and dimensions of the original window. This may require new shaping blades or knives to be cut to reproduce the moulding profile. Try to make double hung windows work properly. Storm windows and doors are also-heritage features and should be utilized. When new glazing is required it should resemble some of the qualities of older, single pane glass where possible. Double glazed wood window replacements are not recommended for use on principal facades of existing historic buildings, but may be considered for rear or side facades that are not visible to public view. Double glazed



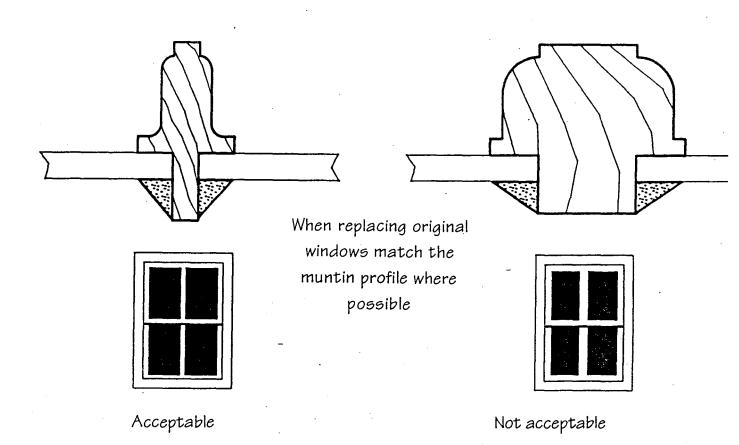
Maintain the original windows and repair rather than replace. Restore shutters to operational use whenever possible. New shutters should always match the original dimensions and method of construction.

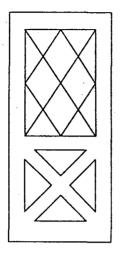


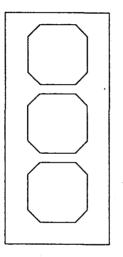


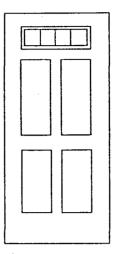
Acceptable

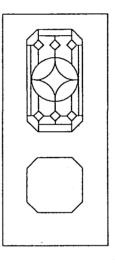
Do not remove window trim when re-siding or installing new windows Not acceptable

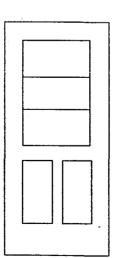


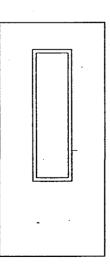












DOORS TO AVOID

panes are not acceptable for purposes of restoration as original muntin and mullion bars are thin and will not accept the thickness of a sealed, double glazed unit, usually three-quarters-of-an inch to one-inch.

Entrances which include transoms and sidelights often exhibit well executed, fine craftwork. The retention of this fine craftmanship is desirable and worthy of restoration through proper conservation techniques. The employment of very experienced craftpersons or carpenters experienced in restoration techniques may be necessary to conserve this level of fine craftwork and ensure its proper repair and retention of strength.

Prepare for the restoration of these elements by using original moulding profiles and photographs to develop shop drawings.

3.8 Exterior Paint

Painting is the most common form of maintenance and decoration work completed by property owners. The renewal of painted exterior surfaces on an eight to fifteen year period is generally accepted contingent upon environmental conditions.

Paint renewal should be considered only after a thorough inspection of the surface. Look for signs of mechanical wear, cracking, scaling, peeling, blistering, loss of gloss, soiling, chalking or mildew. With these conditions present prepare the surfaces properly. Realize that new paints can bond poorly to old paints if the surfaces are not prepared by sanding, scraping and the use of a good primer coat. Since paint adheres poorly to burnt wood, it is not advisable to use a blow torch for removal. Always take precautions when removing lead based paints. Lead fumes are toxic.



Wood siding must be kept weather tight. Regular cleaning and painting will be necessary to preserve this form of cladding.

Choose a colour scheme which is sympathetic to the structure and its design elements as well as the neighbourhood. There are many good sources of historic paint colour schemes for homes. Original paint colours may be exposed when removing old paint from historic buildings making it possible to match these earlier colours.

Original paint colours can be determined through paint analysis when carried out by a professional or an informed property owner. If no traces of the original paint exist, representative colours for the period can be determined from contemporary period trade magazines and catalogues.

When restoring a period colour scheme make matches with dry samples. Remember not to confuse a prime coat with finish colours. Also, older paints have a tendency to yellow and/or darken from the original colours.

3.9 Energy Conservation

The owners of older homes will encounter problems with recommended approaches to energy conservation because they often have been developed for new buildings or with new construction in mind.

Older heritage structures can be adversely affected by some of the measures or products used in the search for a better, more energy efficient structure. A very helpful booklet published by the Ontario Ministry of Culture and Communications titled, *Heritage Energy Conservation Guidelines* shows how to be respectful to the older building's architectural merits while upgrading the energy of efficiency and comfort of the structure.

Good energy conservation principles can be practiced in older buildings successfully when an appropriate approach is taken. First, the owner of a heritage building must accept that the building will never be as energy efficient as a new structure. Second, it is important to understand the inherent energy conservation measures built into our older buildings and make use of them where they exist. Third, consider energy conservation measures which have less impact on the heritage features yet raise the comfort level, i.e. air sealing, weatherstripping and caulking, attic insulation and proper heating plant operation.

The above mentioned booklet presents an approach to energy conservation which includes:

- the completion of an architectural evaluation;
- a technical survey to gain an understanding of how your building works and the problems which exist; and
- how to undertake an energy audit to discover the efficiency of the structure before completing energy conservation measures.

One building element often considered for improved energy conservation efficiency is the window. Original wood windows should never be replaced with double glazed metal or metal clad wood windows. The payback period is often lengthy and cheap metal windows seldom contain the proper thermal breaks. Making older windows function properly through repair, including proper reputtying, frame and trim caulking, weatherstripping and proper painting, is considered preferable to replacement. The same considerations apply to original wooden doors and entrances. When replacing windows and doors choose good quality wood products. Vinyl clad windows should not be used as replacement units.

3.10 Religious and Institutional Structures

St. Mark's Anglican Church and the former Township Hall are important community buildings within the Barriefield heritage conservation district. These larger structures present a variety of conservation issues usually not encountered in residential properties.

Although much of the foregoing advice on conservation also applies to these buildings and structures, their larger size may make even basic tasks, such as inspection or painting, difficult and expensive projects. It is important therefore, to establish regular maintenance routines on a monthly, quarterly, semi annual, annual and five yearly basis or as required to maintain a sound state of repair.

Ongoing maintenance is vital to the conservation of churches and larger buildings. Negligence in this area may contribute to the development of serious problems in the future, accompanied by high financial costs. Accordingly, the following steps should be considered by the appropriate owners:

- establish a permanent building committee;
- obtain professional advice from a professional competent in the field of church conservation;
- identify the building's problems;
- establish and implement a plan of repairs and maintenance.

As a minimum action, full reports should be made every five years in order to revise and update the established maintenance program.

3.11 Archaeological Sites

The district's proximity to the Cataraqui River and the documented historical buildings that were once known to have existed suggest that the area has potential to reveal archaeological remains of past human activity. These heritage resources are fragile and non-renewable. Their location, protection and conservation require that only trained and licensed archaeologists may survey and carry out appropriate testing or excavation of such sites.

Due to the nature of these features it is always advisable to seek professional advice or assistance from a licensed archaeologist prior to approval of any major development, especially on previously undisturbed lands. Contact for further information may be made through the Heritage Branch of the Ontario Ministry of Culture and Communications, the Cataraqui Archaeological Research Foundation, and Queen's University Faculties of Anthropology, Art and Architectural History.

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4.0 GUIDELINES FOR ALTERATIONS, ADDITIONS AND NEW CONSTRUCTION

4.1 Introduction

Since the settlement of Barriefield in the early 1800s a variety of buildings have been constructed reflecting prevailing building techniques and construction materials. Many of these earlier buildings have survived as they were originally constructed. Repairs, changing domestic needs and new services all make their mark upon the fabric and form of buildings. Some have resulted in the alteration of windows and doors, the recladding of frame structures or the construction of new additions.

Physical change within the Village of Barriefield, as in most communities, has occurred in three ways as:

- alterations and additions to existing buildings;
- infilling between existing buildings; and,
- a variety of public works such as road building.

These changes in the past development of Barriefield have not been consciously guided by a set of design guidelines. Yet there is a prevailing character to the building form of heritage structures that up until quite recently has been respected in more recent buildings. With some exceptions, generally this character is:

- one to one-and-a-half stories;
- three bays in width;
- side gable;
- low to medium pitched roof;

- zero setback of buildings on Wellington, George, Drummond and Regent Streets, and the west side of Main Street (southern portion);
- variable setbacks elsewhere in the district.

The purpose of the guidelines is to:

- provide a statement of design objectives and preferences;
- establish a standard to ensure the quality of development and redevelopment of existing properties; and
- assist property owners, LACAC, consultants and the municipal Council in the review of proposals for alterations and additions to existing buildings.

The guidelines have been developed by examining typical building types within Barriefield to determine:

- the types of building additions which have previously been constructed, and how the additions have influenced the integrity of the original building and its context;
- the individual problems that might influence the design of a new addition;
- the particular heritage attributes of the buildings which must be protected; and
- which zoning by-law requirements should be amended to protect the heritage attributes of the dwellings, and the distinctive character of the community.

An important objective in the following guidelines is to encourage change that is in keeping with, and respects, existing building form. The guidelines should be read:

- in conjunction with the goals, objectives and principles in section 2 and advice on building conservation in section 3;
- ii) as a prerequisite for the consideration of applications under Part V, Section 42 of the Ontario Heritage Act.

The guidelines for alterations and additions in section 4.2 are intended for owners of more recently constructed buildings that usually would not be considered as heritage buildings. The key principle here is to ensure that change is neighbourly and takes into consideration effects on adjacent properties and the streetscape.

In section 4.3 and 4.4 the intent is to provide more specific guidance on changes to heritage buildings with a view to retaining the distinguishing features and fabric.

Sections 4.5 and 4.6 address the integration of new construction. A final cautionary note is advised in the purpose, use and application of these design guidelines. The guidelines provide a general framework for considering the *minimum standard of appropriateness* for change within the district. They must be considered an aid to *consistent decision making* rather than a specific formula for designing a new building, addition or architectural feature.

4-3

4.2 Alterations and additions to non-heritage buildings

Not all buildings within Barriefield may be considered to be of heritage significance. Nevertheless it is important to recognize that altering and adding to these buildings throughout the village may affect nearby heritage structures or their setting and the character of the heritage conservation district.

Accordingly, the following shall be considered in the design and placement of alterations and additions to non-heritage buildings:

- Avoid alterations to walls, windows and doors that attempt to recall historical design motifs and materials such as "snap-in" muntins, decorative surrounds and shutters.
- 2) Wherever possible locate new roof vents, solar panels, skylights, and dormers away from public view in inconspicuous locations.
- 3) Attempt to design and locate needed parking spaces in unobtrusive areas of a residential property, trying to ensure that front lawns, tree plantings and hedges are retained.
- 4) Where possible try to locate new additions in a way that will not result in the widening of the existing front facade, i.e. at the rear or stepped back from the facade towards the rear of the building.
- 5) Upper storey additions should attempt to maintain the height of existing roof lines and predominant roof profile and configuration of

adjacent buildings especially in close proximity to heritage structures.

6) Materials should match the existing wherever possible.

4.3 Alterations to heritage buildings and sites

The modernization of residential and commercial structures has long involved the process of renewal. Historically, the renewal was often completed in natural building materials such as wood, stone, stucco or in materials of a low technological basis like iron or brick.

The nature of renewal in the form of alterations has a greatly changed face today. More of the building components used in the present are made of synthetic or "high-tech" materials like vinyl, aluminum, plastic or pre-cast concrete. These mass produced components offer good products generally at competitive prices. However, heritage properties and these building materials are not always considered to be compatible when preservation is the emphasis for the type of project being considered.

Generally, alterations to heritage buildings must ensure that:

- historical building materials and architectural features are protected;
- character defining elevations, especially those which face the street or public space, are not radically changed. (Radical change would include alterations such as the installation of bay windows, removing multi-paned sash windows, making a new or enlarged entranceway, installing patio doors or recladding a masonry structure in stucco or artificial stone. Radical change would generally not include the construction of a well designed porch); and,
- replacement building components or features be correct, replicate the original and fit the existing heritage features both visually and functionally.

4.3.1 Roofs

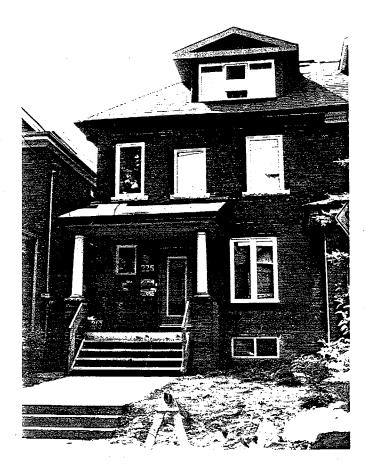
- Roof shape and configuration; decorative features and original roofing material shall be retained and conserved.
- Non-functioning chimneys shall be capped and repointed rather than demolished.
- New roof vents, solar panels, skylights, and dormers when required are best located inconspicuously, away from public view and in a manner that does not damage important features.

4.3.2 Walls

- Protect original walls from cleaning methods that may permanently alter or damage the appearance of surfaces e.g. sandblasting, strong liquid chemical solutions, and high pressure water cleaning.
- Avoid the application of new surfaces or new coatings that alter the appearance of original building material, especially where they are substitutes for masonry repairs and repointing e.g. waterproof/water repellent coatings, paint, aluminum or vinyl siding and stucco.

4.3.3 Windows

- Protect and maintain original window openings as well as their distinguishing features such as materials, frame, sash, muntins, surrounds, glazing, stained glass and shutters.
- Avoid removing or blocking up windows that are important to the architectural character of the building.



Install new windows on facades not exposed to the streetscape and public view. When this is not possible every attempt should be made to match the original style of window unit and respect the balance of the wall plane.



- Changing the proportions and dimensions of windows by cutting new openings, and changing the glazing pattern or divisions by removing muntin bars or mullions, installing "snap-in" muntins or obscuring window trim with metal or other material shall be discouraged.
- New windows must be installed on rear or other inconspicuous elevations wherever possible.
- New window design that is compatible with the overall character of the building is to be encouraged but it should not duplicate the historical fenestration pattern.

4.3.4 Entrances

- Protect and maintain entrances and porches especially on principal facades where they are often key in defining the character of the building.
- Conserve glazing, doors, steps, historic lighting fixtures, balustrades and entablatures and avoid the removal of porches and architectural features.
- The design and construction of a new entrance and/or porch are encouraged to be compatible with the character of the building. Restoration of a missing porch should be based upon historical, pictorial and physical documentation.
- Encourage required new entrances to be installed on secondary elevations rather than the principal facades. Where external staircases are proposed they should be located at the rear of a building or located behind verandahs, sun rooms, and other additions.

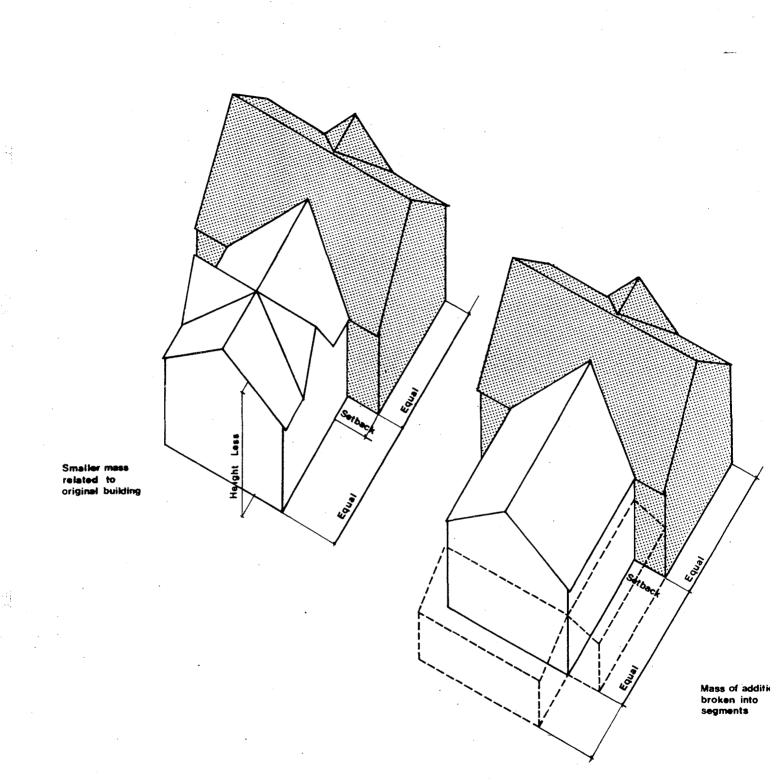
4.3.5 Features and spaces around buildings

- Attempt to preserve and maintain driveways, walkways, fences and walls that contribute to the special character of the space around a heritage building.
- Design and locate new parking spaces so that they are as unobtrusive as possible, ensuring that front lawns and tree plantings are maintained.
- Try to minimize soil disturbance around buildings (either through excavation and lowering grade levels or through piling of soil and raising grades) in order to protect or reduce the possibility of damaging unknown archaeological remains.
- Maintain proper site drainage and ensure water does not damage foundation walls and pool around or drain towards the building.

4.4 Additions to heritage buildings and sites

Often there comes a point in a building's history when its occupants require an addition to the existing structure for a particular need. That need may include:

- the opportunity to update mechanical services of an existing building;
- to expand the living space for a growing family or a specialized activity; and,
- in order to reduce the acquisition costs of a new property, it may be more economical to add or re-build in the present location.



EXAMPLES OF REAR ADDITIONS TO A ONE AND ONE HALF STOREY, SIDE GABLE, HOUSE: Height, massing, setback and material will always be critical in deriving an appropriate design Additions, even more than alterations, can have a profound influence on the aesthetic architectural qualities of a heritage building. Therefore, a key objective in the design of an addition is to ensure that the completed structure adds to or enhances the history of the building and does not devalue it. A balance must be sought between the new and old or more specifically, a relationship of harmony. But a good design will only be as good as the trades people who put it in place. Good quality craftswork is important to the overall success of the project.

There are two important points to be considered when building an addition to a heritage building:

- 1) try to visualize the impact of the structure from the street or at a pedestrian level; and,
- 2) design new additions from the outside in.

Finally, new additions should be constructed in a way that:

- clearly differentiates them from original historical fabric; and,
- ensures the continued protection of distinguishing architectural features and does not radically change, damage; obscure, destroy or detract from such features.

The following shall be considered in the construction of new additions.

4.4.1 Location, massing and height

- Exterior additions, including garages, balconies and greenhouses are encouraged to be located at the rear or on an inconspicuous side of the building, limited in size and scale to complement the existing building, neighbouring property and the district.
- Multi-storey exterior additions are best set back from the existing front wall plane in order to be as unobtrusive as possible in the streetscape.
- Additions to structures with symmetrical facades should avoid creating imbalance and asymmetrical arrangements in building form.
- The height of rooflines of additions should be lower than the original building.
- Additions shall not overpower the original building in height and mass

4.4.2 Design

- New additions are best designed in a manner which distinguishes between old and new; and that avoid duplicating the exact style of the existing heritage building or imitating a particular historical style or period of architecture.
- Contemporary design of additions or those additions that reference or recall design motifs of the existing building are to be encouraged. Successful and compatible additions will be those that are complementary in terms of mass, materials, ratio of solids to voids (wall to windows) and colour.

4.5 Construction of new buildings

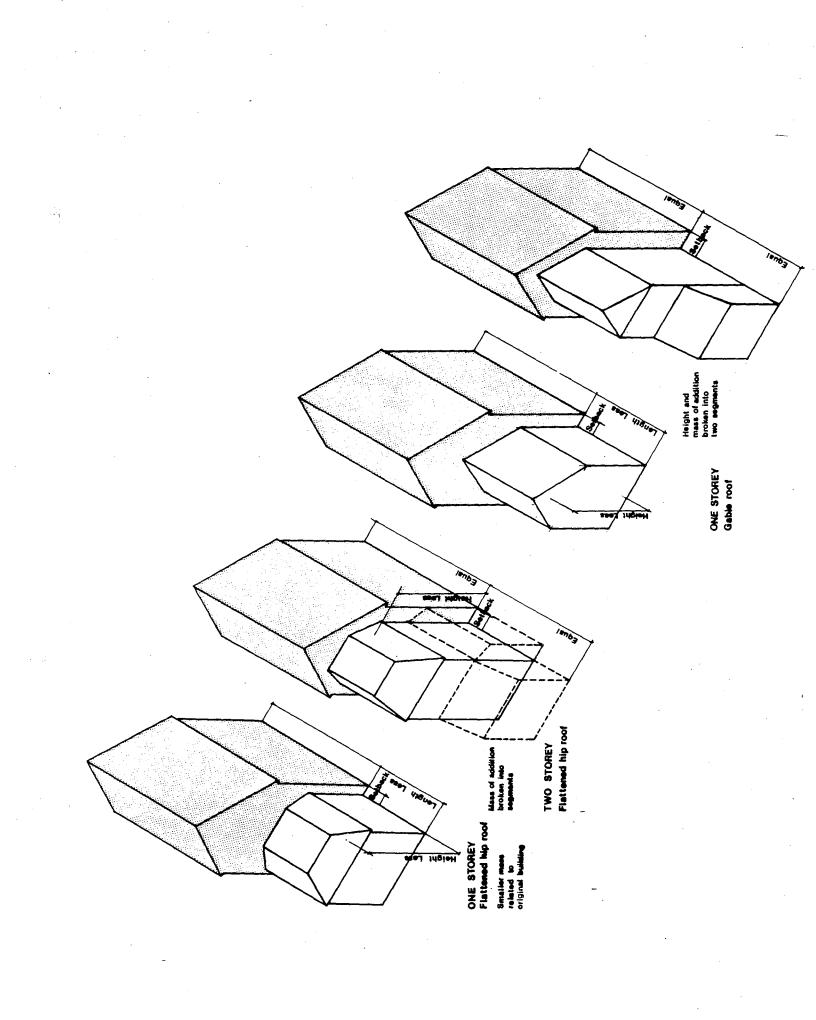
The introduction of new buildings into Barriefield must be seen as part of the continuing changes that are experienced within any community. New construction within the district may be anticipated as occurring through the process of infilling in accord with Official Plan policies or through the demolition of a building and subsequent reconstruction on the newly created vacant building site.

Building demolition is not prohibited by the Ontario Heritage Act but it will be actively discouraged within the designated district. New development, if permitted by the Official Plan and Zoning By-law, shall be required to be compatible with the character of adjoining properties and the streetscape. Property owners are encouraged to work with existing heritage buildings, altering and adding to them in a sympathetic manner, rather than demolishing and building anew.

The following guidelines for new construction are intended for use as a framework for providing minimum standards of appropriateness. They are not intended to be a detailed prescription for each new building. This will enable property owners and/or their architects to design creatively within a general context for future built form. Contemporary design is encouraged but with a view to utilizing traditional building forms and proportions.

4.5.1 Building height and floor area

The district is typified by low profile development with a predominance of one to one-and-a-half storey buildings. In this case a one-and-a-half storey building may include a kneewall. It is important that this low profile form of development is encouraged. In particular:



Building height of new structures must maintain the building height of adjacent properties and the immediate streetscape and should be neither excessively higher nor lower.

4.5.2 Building location

Within the district are a variety of building types in various configurations and arrangements. There is no one predominant building line or setback – except for the zero setback of buildings on Wellington, George, Drummond and Regent Streets – that distinguishes the whole district. The varied topography, road alignments and landscape units argue for the consideration of each individual development proposal on its own merits.

Particular attention shall be given to the following:

- New residential infill must maintain the existing setbacks of adjacent properties. Appropriate variances to the zoning by-law should be sought where the minimum requirement for front yards does not permit this. Where there are areas of significant variation in setback new residential infill should generally be located towards the front of the lot.
- New buildings should generally be located with the front facade parallel to the street.
- Residential buildings are encouraged to be located such that the bulk of the building is accommodated within the width of the lot_rather than in depth, in keeping with a side gable structure. Where, however, floor space requirements are such that this cannot be achieved comfortably rear additions in the form of a traditional tail or rear "T"section should also be encouraged.

Ancillary buildings must be located towards the rear of the lot.Garages, in particular, should not form part of the front facade of a new building and are best located towards the rear of the building as a separate structure.

4.5.3 Roofs

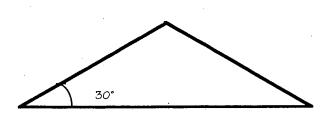
A predominant roof form in the district is the side gable and every effort should be made to respect this roof type within the district. Regard must be given to the following guidelines:

- Use of the side gabled roof at a low or medium pitch must be encouraged in all new development;
- Cross-gabled, flat or mono-pitched roots should generally be avoided on all new building;
- Steeply pitched roofs of all types shall be discouraged;
- Black or gray asphalt shingles, cedar shingles and metal are appropriate roofing materials for use within the district but concrete or clay tile shall be prohibited;
- Roof vents, solar panels, skylights and dormers are best located at the rear of a new building.

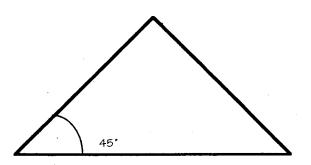
4.5.4 Windows and entrances

Traditionally within the district most buildings featured simple, vertical, rectangular windows usually ranked one on either side of a centrally placed door, accounting for a configuration of three bays. Accordingly, every attempt should be made to reflect traditional proportions and symmetrical facades. In particular:

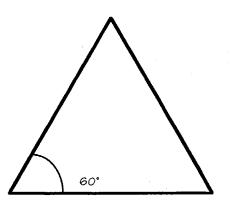
ROOF PITCH



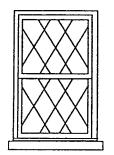
Low pitch roof less than 30° slope

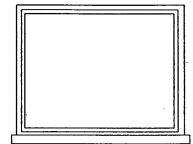


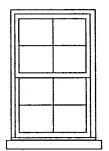
Medium pitch roof 30° to 45° slope

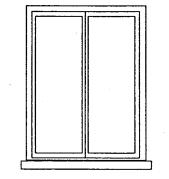


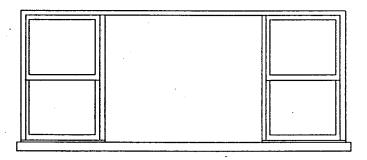
Steeply pitched roof more than 45° slope











NEW WINDOWS TO AVOID ON PRINCIPAL FACADES

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- Window designs are to be encouraged that generally reflect vertical and rectangular proportions and that avoid the use of decorative muntins or "snap-in" muntins;
- Square pane divisions are suitable in certain instances;
- On facades that face the street, windows and doors should maintain existing proportions found prevailing in the district and should not be excessive in relationship to the facade. Large, fulllength, multi-storey or picture windows and entrances must be avoided; and,
- If decorative shutters are used on building facades they should appear to correctly cover their respective windows in width and length.

4.5.5 Walling

Many of the district's heritage building stock is of stone. Traditional frame buildings are also prominent and offer visual variety in the type and appearance of material used in cladding e.g. clapboard, stucco, brick, and board and batten (outbuildings only). The replacement of these materials with synthetic sidings creates special problems not only in conservation (See section 3), but also has ramifications for contemporary building. It is often the case that vinyl and aluminum siding severely compromise the distinctive attributes of a conservation district.

The following should be considered:

• Walling materials in new residential building should reflect traditional materials and their respective colours and texture within the District namely clapboard, limestone and stucco (executed in white or light grey) in order of priority.

- Use of concrete or other masonry blocks, and plain and textured sheathing should be avoided in new construction.
- The use of brick within the core area should be avoided in new construction. The core area is the area bounded by James Street, LaChappelle Street, The Great Cataraqui River, Wellington Street, and George Street.
- Brick may be used outside the core area provided a brick structure is not located on a lot which abuts a lot along a street facade or The Great Cataraqui River on which is located a limestone, stucco, or brick structure: and the brick used is a plain, red clay, Ontario-size brick.
- Use of brick should be discouraged on lots north of Wellington Street which abut the The Great Cataraqui River.
- Use of decorative detailing such as quoins or brick patterning shall not be permitted as they are generally not found within the district.
- Board and batten is not recommended as the principal walling material for main buildings.

4.5.6 Outbuildings

Outbuildings whether developed as part of an existing complex of structures or as part of new construction and development should attempt to be:

- lower in profile than the principal structure;
- located to the rear of or at the side towards the rear; and,

generally be of like material or colour to that of the principal structure.

4.5.7 Public Works

Public works within the district e.g. road widening, new road construction, any flood works or bank stabilization, undertaken by a variety of authorities e.g. the municipality, Conservation Authority, and Federal ministries and agencies, have the potential to cause considerable disruption to the rich variety of heritage resources both above and below ground.

Accordingly, every effort should be made in both day-to-day operations and longer term planning, especially in those activities subject to Provincial and Federal planning and environmental legislation, to minimize adverse effects to the heritage conservation district and its constituent elements.

5.0 Landscape Conservation and Enhancement

5.0 Landscape conservation and enhancement	5-1
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5.0 LANDSCAPE CONSERVATION AND ENHANCEMENT

5.1 Introduction

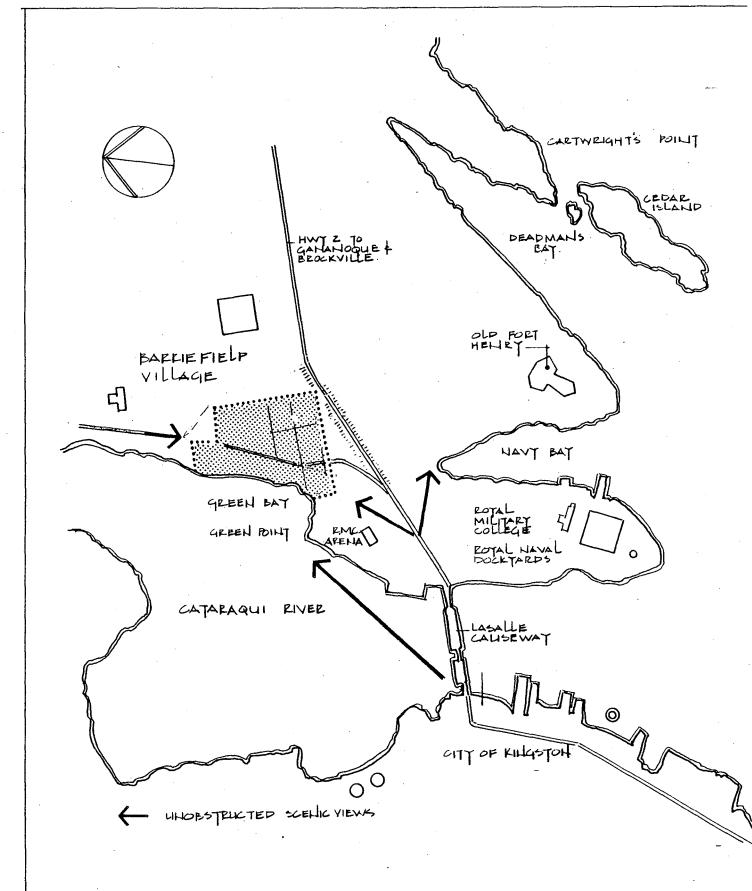
The plan review process has been carried out in 2 phases in order to first identify which individual landscape features are essential in contributing to the definition of the unique visual character of the Barriefield district. This inventory and analysis has documented many of the small landscape details such as curbs, pavement shoulders, and hedgerows which collectively create a cohesive visual impression of the district.

The analysis, contained in the Appendices, identified 8 separate landscape units each with its own characteristics and deficiencies. The following recommendations are intended to preserve and enhance the existing landscape features which are significant and to ameliorate those conditions which detract from the overall visual integrity of the district.

5.2 General recommendations

In general, standard Township policies respecting mandatory road widths and sidewalk installations should be assessed to determine if continued implementation in the village is advisable. As well, further undertakings by the municipality or utility companies relating to underground servicing should be planned so as to retain as much as possible the existing fences and hedgerows along the street rights-ofway. Uneven edges to the pavement, narrow sidewalks and grass boulevards should be retained or reinstated at the time of any road improvements such as resurfacing.

Sidewalks in the village are generally three feet wide and sit flush with the surrounding grade of the boulevard. This contrasts with the new, curb-faced, wider, sidewalk adjacent to new residential development on Main Street. Where sidewalk construction or new construction is



BARRIEFIELD HERITAGE CONSERVATION DISTRICT PLAN REVIEW

UNTERMAN MCPHAIL CUMING ASSOCIATES WENDY SHEARER LANDSCAPE ARCHITECT LIMITED

REGIONAL SETTING

SALE 1:1200 (APPROX)

undertaken in the village, it is recommended that the narrow width and grade be retained as much as possible while at the same time providing full accessibility at intersections and entrances.

The continuation of the special landscape character of the district relies heavily on the co-operation of the individual property owners. Many of the recommendations for tree planting and for the preservation of existing trees are aimed at the private property owner. These recommendations are intended to increase the home owners' enjoyment of their property and at the same time contribute to the public appreciation of the district and its rich history.

The landscape undergoes change constantly - both seasonally and annually as it matures. Sound horticulture practices such as fertilizing and pruning will help to ensure the continuation of the existing trees. Replanting the same species types in the district, whether undertaken by the municipality in the public road allowance or by the private property owner, will also ensure the continuation of the existing diversity.

The following general recommendations apply to the entire district. Specific recommendations for each of the 8 landscape units follow in section 5.4.

1. In general, all landscape features identified in the landscape unit descriptions should be conserved and enhanced in the process of any change and development. These features include: street alignments, street paving materials, shoulder and boulevard widths, property line hedgerows, stone and ornamental wood fencing along the edge of the streets and the mix of deciduous and coniferous trees and shrubs throughout the district. Open space in the north and south of the district should be preserved.

The term *conservation* when applied to the natural features of a landscape must be more broadly defined than their built counterparts. Conservation of hedgerows or trees must recognize

that there is a finite life span to the material. Techniques of conservation may include removal of mature trees and shrubs and replanting with the same species in the same locations.

This approach may create difficulties when the growing conditions have been altered by new development. For example changes in drainage, exposure, light conditions or disease resistance may require substitution of different varieties or species. As a general principle appropriate plant materials should duplicate, as much as possible, original materials, particularly their form and location.

- 2. The village streetscape of the 1890s consisted of a well defined edge to the street, established by hedgerows or wood and stone fences. Where deficiencies in the existing street edge have been identified, such as: the corner of Drummond and James St.; the east side of Main St. north of Wellington St.; and the north side of Wellington St.; new plantings or ornamental fencing should be added to better define the edges of the public and private space.
- 3. Specific landscape elements such as the entrance walls and pillars at the church and the stone wall at 206 James St. should be preserved.
- 4. Where new landscape plantings are undertaken especially in association with new residential development, a range of species should be selected which were traditionally found in the district and are still evident in the village.

These include the following:

Trees:

Black Walnut, Butternut, Ash, Norway Spruce, Apple, Scots Pine, Oak, and Mountain Ash. Shrubs:

Lilacs (White, Mauve, Deep Purple) Honeysuckle, Viburnum, Shrub Roses, and Rose of Sharon.

Herbaceous Material:

Daylilies, Virginia Creeper, Violets, Lily of the Valley, and Peony.

A more comprehensive list is appended to this document which provides a plant material list of those plants cultivated prior to 1870-1880 and are hardy to a Zone 5b.

5.3 Municipal Initiatives

The following recommendations relate to those areas that fall within municipal jurisdiction, namely: streets, streetlighting, sidewalks and boulevards, and street trees.

5.3.1 Streets

The existing alignments, elevations, layout pattern and road widths should be regularly maintained and retained in any resurfacing or upgrading work.

Several years ago the elevation of Main Street was raised as part of Highway improvements in the area. It is recommended that the existing grade remain unchanged. The costs of lowering the road bed together with the negative visual impacts of the relationship between the pavement and recent residential construction on Lilac Row i.e. the introduction of a steep slope or new retaining wall along the east edge of the road allowance, argues against regrading Main Street.

The raising of the street has caused run-off problems for several of the properties along the west side of the road. Regrading a new asphalt gutter, new catch basins and storm sewer outlets should be installed to mitigate the drainage problem. All drainage improvements should be



Preserve garden and retaining walls

designed to retain, as much as possible, the gravel shoulder and the distance separating the pavement and the residences.

5.3.2 Streetlighting

Since the turn of the century, the streets of Barriefield have been lined with tall wooden hydro poles supporting overhead wires and streetlights. These features of the rural settlement area contrast with the modern subdivision which invariably has underground utility servicing and low ornamental lighting, frequently in a popular "heritage" style. It is recommended that in the long term, and as funds become available, that guidelines be developed for a streetlighting plan. Importantly, in the short term, utility companies must be encouraged to rationalize this system in order to: make optimum use of the existing poles; to reduce the number of lines crossing the street; and, generally reduce wirescape and utility clutter to a minimum.

The street lights should be mounted on the existing poles and provide a safe level of illumination. Street lighting should be of a simple, contemporary design and complementary to the streetscape.

5.3.3 Sidewalks and boulevards

The existing sidewalks in the village, with the exception of the new sidewalks along the east side of Main Street, are approximately three feet wide, flush with the street and bordered by a grass or gravel boulevard. Replacement sidewalks should duplicate this pattern with minor modifications at each intersection to ensure that the sidewalk is ramped to the pavement and therefore fully accessible. Wide curb face sidewalks should not be installed.

5.3.4 Street trees

The municipality is encouraged to undertake both the preservation of the existing lilac hedgerows along the road allowances and to install new trees and hedgerows where needed throughout the village.

The street trees should be selected from a variety of hardy tree species to reinforce the mix of vegetation currently found in the district.

5.4 Specific recommendations for improvement

Landscape Unit 1: River's Edge.

The trees and wetland grasses and shrubs a long the river's edge should be protected and retained in any proposed redevelopment in the area. Any archaeological remnants of the former boat construction industry should be preserved. The installation of interpretative signage is recommended to describe the history of the industry and its importance to the village.

Landscape Unit 2: Riverbank.

The treed cover of this area should be retained as much as possible in any development proposal or new road construction in this area.

Removing trees and exposing the top of the bank should be avoided. The existing unopened road allowances should be developed as pedestrian links to the lower slopes.

Landscape Unit 3: James Street.

The present mix of fencing and hedgerows defining the property lines and the edge of the street should be retained. Property owners whose properties lack this clear definition are encouraged to install similar fencing or hedgerows along their frontages.

Front yard parking should be eliminated if possible or screened from view by the planting or fencing.

Landscape Unit 4: Grassed open space.

The open space surrounding the district should be conserved as much as possible in order to protect significant views into and from the village. Of particular sensitivity is the gradual slope on the south east, at the approach from Kingston, and the area north of the church. These areas in particular accent through contrast the cohesive visual character of the settlement area. Use of these areas for parking such as along the south side of James St. should be moderated with the installation of plant material screening.

Within this landscape unit it may be possible to allow low profile development to the south of the church, adjacent to Highway 15 and still retain major views.

Landscape Unit 5: Core area.

The uneven line of transition between the grass boulevard and gravel shoulder should be retained in all areas where it is currently found. The installation of wide curb faced sidewalks in new areas of the core should not be undertaken. The narrower width of the existing sidewalks should:

be retained as much as possible when new construction or repair is undertaken, subject to full and safe accessibility.

Property owners are encouraged to retain all existing property line plant material and decorative stone and wood fences. New trees and/or fencing should be installed along the 2 frontages of the grocery store to reduce the visual impact of the asphalt parking lot from the street.

Landscape Unit 6: Main Street, west side.

The existing trees, hedgerows and decorative fencing along Main St. should be retained in order to maintain the continuous visual definition of the edge of the street. Any new entrances should be defined by an opening in the existing borders. Replanting of groupings or specimen trees in the residential yards should be undertaken as the existing trees mature and are removed. The same mix of species is encouraged.

With respect to 273 Main St. a review of historical photographs reveals that, with the exception of the plank sidewalk and ornamental fence that have been lost, the landscape of 273 Main St. has remained unchanged for a considerable period and is now of importance within the village. The owner of 273 Main St. is encouraged to survey and document the existing historic landscape of this property.

A rehabilitation plan for this significant property should be prepared to guide its conservation. Any redevelopment of this property should be designed in a manner that retains this landscape. A single narrow driveway entrance, framed by streetside planting is preferable in order to retain both the streetscape and the private landscape.

Overhead wires should be maintained as much as possible on one side of the street only. Street lighting providing adequate light levels should make use of the existing poles. A simple modern fixture that does not dominate the streetscape is appropriate.

Landscape Unit 7: Main Street, east side.

The edges of the newly developed properties should be defined with the installation of plant material. Establishing lilac fence rows both perpendicular to Main St. and parallel to Main St. will provide the definition of the street which is currently missing. The visual impact of the double interlocking stone driveways should be lessened either with a break in a strong edge definition of the front of the property or by narrowing the driveway at the street.

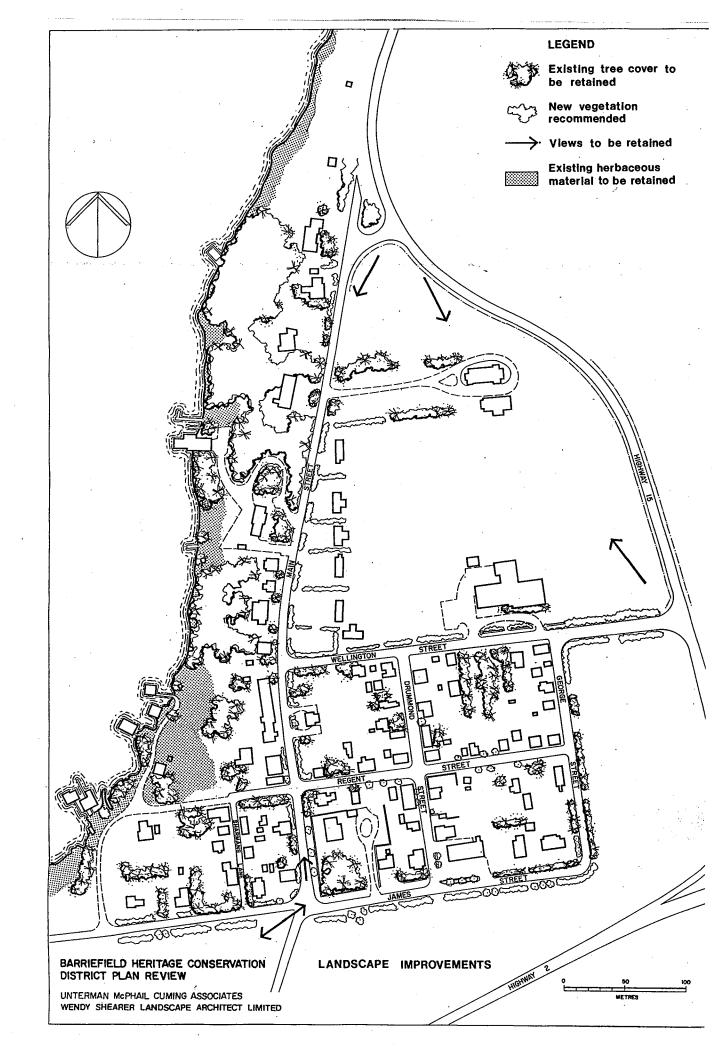
Home owners are encouraged to select and plant shrubs and herbaceous material in keeping with the material typically found in the core area. This does not include weeping forms, low coniferous shrubs or ornamental standards.

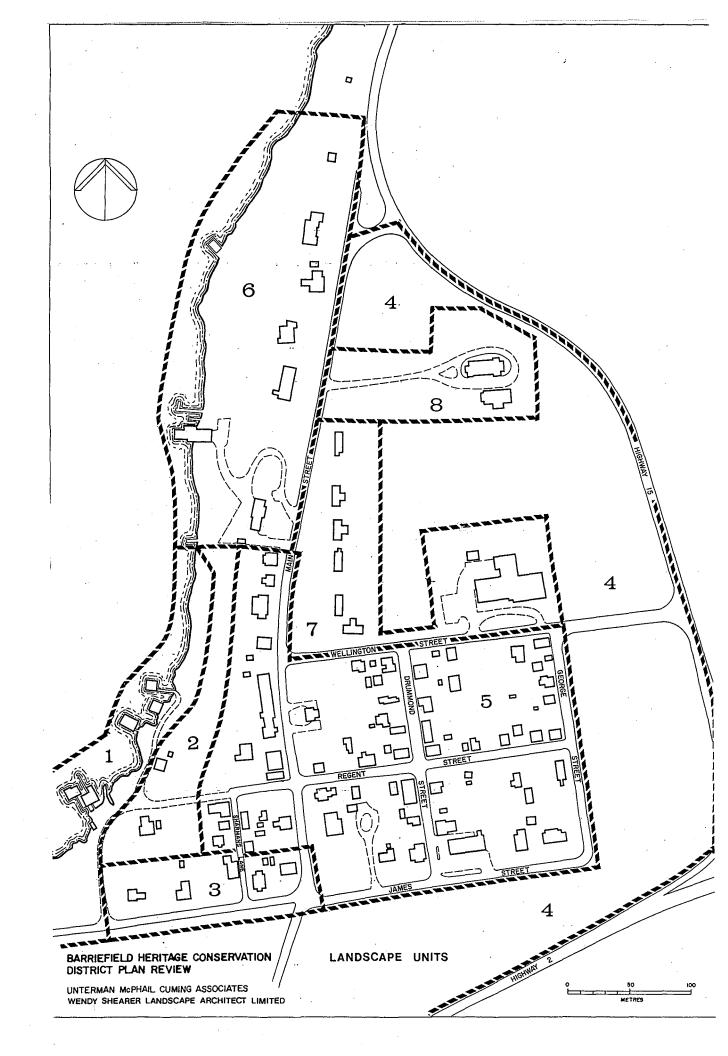
The installation of trees and shrubs along the north side of Wellington St. is recommended.

Landscape Unit 8: St. Mark's Anglican Church.

The entrance walls, pillars, trees and shrubs should be conserved and the views of the church from the north and up the drive from Main St. should be retained. Existing trees and grasslands to the north of the church must be maintained as open space.

The church is encouraged to install ground level accent lighting on the building and tower facade to replace the present pole mounted lights.





Appendix

Plant Material List

Landscape

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BARRIEFIELD HERITAGE CONSERVATION DISTRICT:

List of Plant Material Appropriate for the Village of Barriefield All plants were cultivated prior to 1870 - 1880 and are hardy to zone 5b

TREES

Common Name White Ash Basswood Blue Beech Butternut Black Walnut Black Locust Sugar Maple Silver Maple Mountain Ash Norway Spruce White Spruce Austrian Pine Scots Pine Horse Chestnut Honey Locust Mulberry

SHRUBS

Common Name Persian Lilac Common Lilac Honeysuckle Snowball Grape Holly Fragrant Currant Slender Deutzia Red Osier Dogwood Mock Orange Privet Japanese Quince Rose of Sharon Smoke Bush Snowberry Spindletree Vanhoutte Spirea Old Fashioned Weigela

Botanical Name Fraxinus americana Tilia americana Carpinus caroliniana Juglans cinerea Juglans nigra Robinla pseudoacacia Acer saccharum Acer saccharinum Sorbus aucuparia Picea ables Picea glauca Pinus nigra Pinus sylvestris Aesculus hippocastanum Gleditsia triacanthos Morus alba

Botanical Name Syringa x persica Syringa vulgaris Lonicera spp. Viburnum opulus Mahonia aquifolium Ribes odoratum Deutzia gracilis Cornus sericea Philadelphus spp. Ligustrum spp. Chaenomeles japonica Hibiscus syriacus Cotinus coggygria Symphoricarpos albus Euonymus europaeus Spiraea x vanhouttei Weigela florida

PERENNIALS Common Name Monkshood Anemone Campanula **Bleeding Heart** Buttercup Carnation Columbine Primroses English Daisy Michaelmas Daisy Feverfew Foxglove Globe Flower Gas Plant Jacobs Ladder Larkspur Lily of the Valley Daylily Lobelia Lungwort Sweet Alyssum Violet Everlasting Pea Peony Plantain Lily Phlox Speedwell Spiderwort Sweet William Coreopsis Wallflower Yarrow Yucca Christmas Rose

Botanical Name Aconitum napellus Anemone spp. Campanula Dicentra spectabilis Ranunculus repens Dianthus sp. Aquilegia sp. Primula Bellis perennis Aster sp. Chrysanthemum parthenium Digitalis orientalis Trollius Dictamnus albus Polemonium caeruleum Delphinium Convallaria majalis Hemerocallis Lobelia Pulmonaria officinalis Alyssum sp. Viola cornuta Lathyrus latifolius Paeonia spp. Hosta sp. Phiox paniculata Veronica spp. Tradescantia virginiana Dianthus barbatus Coreopsis sp. Cheiranthus cheiri Achillea sp. Yucca spp. Helleborus niger

BULBS Common Name Anemone Crocus Daffodil (Jonguil) Dahlia Fritillaria Gladiolus Hyacinth Grape Hyacinth Iris Madonna Lily Martagon Lily Snowdrop Tuberose Tulip

VINES

<u>Common Name</u> Scarlet Runner Bean Bittersweet Clematis Honeysuckle Morning Glory Sweet Pea Trumpet Creeper Dutchman's Pipe Botanical Name Anemone coronaria Crocus Narcissus spp. Dahlia spp. Fritillaria spp. Gladiolus spp. Hyacinthús Muscari Iris spp. Lilium candidum Lilium martagon Galanthus nivalis Polianthes tuberosa Tulipa

Botanical Name

Celastris scandens Clematis sp. Lonicera spp. Ipomoea purpurea Lathyrus odorata Campsis radicans Aristolochia durior

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FLOWER SEEDS

(ADVERTISED IN THE KINGSTON NEWS, 1845)

Adonis acstivalis or vernal

Balsam - fine double or Lady's Slipper

Bellflower

Catchfly - Lobels White - Crimson

Coxcomb - Great Crimson Velvel

Columbine - Double purple

Cassia - Sensitive

China Astere - mixed

Cypress Vine - Crimson

Adonis or pheasant eve

Hollyhock - double crimson - double yellow

Honesty or Satin flower

Jacob's ladder

Lavatera - red

Lupin - small Blue, yellow

Marvel of Peru - Scarlet sweet scented

Morning Glory - Azure, mixed

Monkey Flower - Monks hand

Poppy - Double white, mixed

Pink - Carnation - Chinese Imperial - Maiden

Primcose - Evening Blue

Rocket - Sweet

Scabiosa - sweet

Sweet Peas - mixed colors

Snapdragon - scarlet

Stock Gilliflower - scarlet, 10 weeks - purple, 10 weeks

Wallflower - Yellow - Red

Amaranthus - tricolor **Ballon Vine** Candytuft - White Rocket - Purple - Two colored Campion - Rose Convolvulus - Major - Minor Tricolor Coreopsis - Tinctoria - Splendeor Centaurea - Large Blue American Columbian - Pink Forget-Me-Not Gypsophilia elegans Ryachinth Ice Plant - Red Larkspur - basal branching Love Lies Bleeding - Crimson, Buff Marigold - African Mignonette - Sweet scented Must Plant Nastorium - Dwarf, Large flowering Prince's Feather Primcose - rose colored - night swelling Pinke - mixed Rose Campion Silene - Rubella Sweet Sultan - purple Sweet William - mixed colors Venus' Looking Glass

Researched and compiled for Barriefield Rock Garden Committee By: --Fred Williams

Superintendent of Parks City of Kingston

With kind assistance Bellvue House Kingston

Zinnia elegans