



Hamilton

**HAMILTON MUNICIPAL HERITAGE COMMITTEE**

**REPORT 18-008**

**9:30 a.m.**

**August 16, 2018**

**Room 264, 2<sup>nd</sup> Floor**

**Hamilton City Hall**

**71 Main Street West**

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**Present:** Councillor A. Johnson, M. Pearson and J. Partridge  
A. Denham-Robinson (Chair), W. Arndt, D. Beland, G. Carroll, C. Dmitry, K. Garay, M. McGaw, T. Ritchie, R. Sinclair, K. Stacey and T. Wallis

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**THE HAMILTON MUNICIPAL HERITAGE COMMITTEE PRESENTS REPORT 18-008,  
AND RESPECTFULLY RECOMMENDS:**

**1. Inventory & Research Working Group Meeting Notes – June 25, 2018 (Item 8.1)**

**(a) 1320 Woodburn Road, Glanbrook**

That the property at 1320 Woodburn Road, Glanbrook be included in the City of Hamilton's Register of Property of Cultural Heritage Value or Interest and be added to the staff work plan.

**2. Hamilton Municipal Heritage Committee Terms of Reference Review (Item 8.2)**

WHEREAS, in order to achieve their Council approved mandate, the volunteer work of the Hamilton Municipal Heritage Committee, its Working Groups and Sub-Committees may be more demanding than other municipal committees and boards; and

WHEREAS, it is important to offer transparency during the application process, to provide potential applicants with a better understanding of the scope of work, roles and responsibilities, and to facilitate a more informed decision;

THEREFORE, BE IT RESOLVED:

- (a) That Hamilton Municipal Heritage Committee Terms of Reference, be amended by adding the following sub-sections to read as follows:
- (i) To advise and assist City staff and Council on all matters relating to the designation of property, the review of heritage permit applications and other cultural heritage conservation measures under Parts IV and V of the *Ontario Heritage Act*, R.S.O. 1990, c.O.18.
  - (ii) To advise and assist City staff and Council in the preparation, evaluation and maintenance of a list of properties and areas worthy of conservation.
  - (iii) To advise and assist City staff and Council on any other matters relating to the conservation of listed properties or areas of cultural heritage value or interest.
  - (iv) To advise City staff and Council on programs and activities to increase public awareness and knowledge of heritage conservation issues.
  - (v) To prepare, by the 31st day of January each year, an annual report of the previous year's activities.
  - (vi) ***To participate, where possible, on at least one of the following Working Groups of the Hamilton Municipal Heritage Committee:***
    - ***Inventory and Research (Meets monthly for a minimum of 2 hours)***
    - ***Policy and Design (Meets monthly, or as needed, for a minimum of 2 hours)***
    - ***Education and Communication (Meets monthly or as needed, for a minimum of 2 hours)***
    - ***Heritage Permit Review Sub-Committee (Meets monthly – membership includes selected members of HMHC, but is completed through a separate application process, for a minimum of 2 hours)***
  - (vii) ***To participate, where possible in other external groups and/or stakeholder committees.***
  - (viii) ***To participate, where possible in heritage events and activities, such as the Annual Hamilton Municipal Heritage Recognition Awards.***

- (b) That staff be directed to review the standard meeting times, format and locations of the Hamilton Municipal Heritage Committee to make them inclusive and accessible; and,
- (c) That staff be directed to forward a copy of the Code of Conduct, for signature by each volunteer member of the Hamilton Municipal Heritage Committee's Working Groups.

**3. Proposed Amendments to the Hamilton Municipal Terms of Reference and Recruitment Process (Item 8.2(a))**

- (a) That the Proposed Amendments to the Hamilton Municipal Heritage Committee Terms of Reference and Recruitment Process, attached hereto as Appendix "A", be approved; and
- (b) That the information found in the Proposed Amendments to the Hamilton Municipal Terms of Reference and Recruitment Process be included in the call for volunteer members of the Hamilton Municipal Heritage Committee; effective for the 2018 application process and future terms.

**4. Hamilton Municipal Heritage Committee Masonry Guidelines (Item 8.3)**

WHEREAS, the City of Hamilton is home to many historic buildings and structures constructed of masonry;

WHEREAS, the exposure to harsh weather conditions and building construction failure makes masonry susceptible to deterioration, requiring regular maintenance and often the need for alteration and restoration;

WHEREAS, heritage guidelines are useful reference tools for heritage planning staff, the Heritage Permit Review Subcommittee and Hamilton Municipal Heritage Committee (HMHC) for their processes of reviewing applications for alteration under the Ontario Heritage Act;

WHEREAS, these guidelines are an educational resource for heritage property owners, architects and contractors to carry out a successful masonry restoration; fulfilling the HMHC's mandate for public education and community outreach; and

WHEREAS, these guidelines follow the format of a preceding document entitled Heritage Window Guidelines; as approved by Hamilton City Council, on December 17, 2014;

THEREFORE, BE IT RESOLVED:

That the Heritage Masonry Guidelines, produced by the Policy and Design Working Group of the HMHC and attached hereto as Appendix "B", be approved.

**FOR INFORMATION:**

**(a) CHANGES TO THE AGENDA (Item 1)**

The Clerk advised the Committee of the following changes:

**1. ADDED CEREMONIAL ACTIVITY (Item A)**

Hamilton Municipal Heritage Recognition Award – Kyle Slote, Thier + Curran Architects for 7-11 Brock Street, Hamilton

**2. ADDED DISCUSSION ITEM (Item 8)**

8.2(a) Proposed Revisions and Updates to the Hamilton Municipal Terms of Reference

**3. ADDED GENERAL INFORMATION (Item 11)**

11.2 Ontario Heritage Conference Update (no copy) (Added Item 11.2)

The Agenda for the August 16, 2018 Hamilton Municipal Heritage Committee was approved, as amended.

**(b) CEREMONIAL ACTIVITY (Added Item A)**

Kyle Slote from Thier + Curran Architects, on behalf of Bill Curran, Architect, accepted a Hamilton Municipal Heritage Recognition Award for their property at 7-11 Brock Street, Hamilton.

**(c) DECLARATIONS OF INTEREST (Item 2)**

There were no declarations of interest.

**(d) APPROVAL OF MINUTES OF PREVIOUS MEETING (Item 3)**

**(i) July 19, 2018 (Item 3.1)**

The Minutes of the July 19, 2018 meeting of the Hamilton Municipal Heritage Committee were approved, as presented.

**(e) DISCUSSION ITEM (Item 8)**

**(i) Hamilton Municipal Heritage Committee Terms of Reference Review (Item 8.2)**

A. Denham-Robinson relinquished the Chair to address the Committee respecting the Hamilton Municipal Heritage Committee Terms of Reference Review.

For further disposition of this matter, refer to Item 2.

**1. Proposed Amendments to the Hamilton Municipal Terms of Reference and Recruitment Process (Item 8.2(a))**

A. Denham-Robinson addressed the Committee respecting the Proposed Revisions and Updates to the Hamilton Municipal Terms of Reference. Copies of the document were distributed at the meeting, and are available at [www.hamilton.ca](http://www.hamilton.ca).

For further disposition of this matter, refer to Item 3.

A. Denham-Robinson assumed the Chair.

**(f) GENERAL INFORMATION/OTHER BUSINESS (Item 11)**

**(i) Buildings and Landscapes (Item 11.1)**

The Dunington-Grubb Gardens, 1000 Main Street East (within Gage Park) were moved from the List of Buildings and Landscapes (YELLOW) to the List of Endangered Buildings and Landscapes (RED).

The following updates were received:

**(a) Endangered Buildings and Landscapes (RED):  
(Red = Properties where there is a perceived immediate threat to heritage resources through: demolition; neglect; vacancy; alterations, and/or, redevelopment)**

(i) Tivoli, 108 James Street North, Hamilton (D) – A. Johnson

No report.

(ii) Andrew Sloss House, 372 Butter Road West, Ancaster (D) – M. McGaw

No report.

(iii) Century Manor, 100 West 5th Street, Hamilton (D) – K. Garay

No report

- (iv) Beach Canal Lighthouse (D) – J. Partridge

No report.

- (v) 18-22 King Street East, Hamilton (R)(NOI) – K. Stacey

No report.

- (vi) 24-28 King Street East, Hamilton (R)(NOI) – K. Stacey

No report.

- (vii) 1 St. James Place, Hamilton (D) – K. Stacey

No report

- (viii) 2 Hatt Street, Dundas (R) – K. Stacey

No report.

- (ix) James Street Baptist Church, 96 James Street South,  
Hamilton (D) – A. Denham-Robinson

No report

- (x) Dunington-Grubb Gardens, 1000 Main Street East (within  
Gage Park) – D. Beland

**(b) Buildings and Landscapes of Interest (YELLOW):  
(Yellow = Properties that are undergoing some type of change,  
such as a change in ownership or use, but are not perceived as  
being immediately threatened)**

- (i) Delta High School, 1284 Main Street East, Hamilton (D) – D.  
Beland

No report.

- (ii) St. Giles United Church, 85 Holton Avenue South (L) – D.  
Beland

This property will remain on the list until staff have negotiated  
the salvage of items from the Church.

- (iii) 2251 Rymal Road East, Stoney Creek (R) – C. Dimitry

No report.

- (iv) Former Valley City Manufacturing, 64 Hatt Street, Dundas – K. Stacey

Staff report that a formal consultation application was received in 2017, and there have not been any development applications for the property since then, but condominium documents are being coordinated.

- (v) St. Joseph's Motherhouse, 574 Northcliffe Avenue, Dundas (R) (ND) - K. Stacey

Staff support the proposed changes that may be made on the property in future.

- (vi) Coppley Building, 104 King Street West; 56 York Blvd., and 63-76 MacNab Street North (NOI)– G. Carroll

No report.

- (vii) 1021 Garner Road East, Ancaster (Lampman House) (NOI)– M. McGaw

No report.

**(c) Heritage Properties Update (GREEN):**  
**(Green = Properties whose status is stable)**

- (i) The Royal Connaught Hotel, 112 King Street East, Hamilton (R) – T. Ritchie

M. Pearson advised that she has spoken with the owners of the property, and while the owners are aware of the pending designation, they are not prepared to pursue the designation yet.

- (ii) Auchmar, 88 Fennell Avenue West, Hamilton (D) – K. Garay

No report.

- (iii) Jimmy Thompson Pool, 1099 King Street E., Hamilton (R) – T. Ritchie

No report.

- (iv) Treble Hall, 4-12 John Street North, Hamilton (R) – T. Ritchie

No report.



- (v) 104 King Street West, Dundas (Former Post Office) – K. Stacey

No report.

**(d) Heritage Properties Update (black):  
(Black = Properties that HMHC have no control over and may be demolished)**

- (i) Auchmar Gate House, Claremont Lodge 71 Claremont Drive (R) – K. Garay

No report.

**(ii) Ontario Heritage Conference Update (Added Item 11.2)**

G. Carroll addressed the Committee respecting his participation in the Ontario Heritage Conference, on June 7-9, 2018 in Sault Ste. Marie. There was great interest in the draft Masonry Guidelines from the Hamilton Municipal Heritage Committee. The City of Hamilton utilizes its Municipal Heritage Register more than most similar and smaller sized municipalities.

The information respecting the Ontario Heritage Conference, was received.

**(f) ADJOURNMENT (Item 13)**

There being no further business, the Hamilton Municipal Heritage Committee adjourned at 11:10 a.m.

Respectfully submitted,

Alissa Denham-Robinson, Chair  
Hamilton Municipal Heritage Committee

Loren Kolar  
Legislative Coordinator  
Office of the City Clerk

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## **Background**

With each new term of Municipal Council, applications are accepted from members of the public, wishing to serve on various municipal Committees and Boards such as the Hamilton Municipal Heritage Committee (HMHC) and Heritage Permit Review (HPR) Sub-committee.

During the typical application process, limited information is provided to individuals interested in volunteering for these particular heritage related groups. Often detailed information is not provided to applicants until the interview process or only once a successful applicant begins their 4-year term when an orientation session is held.

## **Proposed Recommendations for Amendments to Terms of Reference**

**WHEREAS**, in order to achieve their Council approved mandate(s), the volunteer work of the Hamilton Municipal Heritage Committee, its Working Groups and Sub-Committees may be more demanding than other municipal committees and boards; and

**WHEREAS**, it is important to offer transparency during the application process, to provide potential applicants with a better understanding of the scope of work, roles and responsibilities, to facilitate a more informed decision;

That the following revisions and updates offered by the Hamilton Municipal Heritage Committee, be approved for inclusion in the HMHC Terms of Reference for the call for volunteer members of municipal Committees and Boards; effective for the 2018 application process and all future terms.

### **1. Provide the HMHC Mandate**

- a) To provide greater transparency, fully describe the mandate of HMHC and the commitment of time required (note standard date and time of monthly meetings).
- b) Define the required role of “Advisor” to City Council on matters related to the Ontario Heritage Act, compared to the definition of “Heritage Advocate”.
- c) Outline the need for representation from Hamilton and each of the former municipalities of Ancaster, Dundas, Flamborough, Glanbrook and Stoney Creek.

### **2. Provide a Summary of Working Groups and Sub-Committees**

- a) To provide greater transparency, briefly describe the existing Working Groups of HMHC - their roles and responsibilities – provide each of their mandates and outline the importance of these working groups
  - Inventory and Research (Meet monthly)
  - Policy and Design (Meet monthly, or as needed)
  - Education and Communication (Meet as needed)

## **Proposed Amendment to the Hamilton Municipal Terms of Reference and Recruitment Process**

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- Heritage Permit Review Sub-Committee (Meet monthly – membership includes selected members of HMHC, but is completed through a separate application process)
- b) As previously approved by Council, the Chair of each Working Group and Sub-Committee must be an active member of HMHC.
- c) Chair (or delegated representative) from each Working Group to provide an update at each monthly HMHC meeting in the form of a verbal update, through minutes of meetings, etc.

### **3. Provide a Summary of HMHC Representation on External Groups & Stakeholder Committees**

To provide greater transparency, briefly describe other external groups / stakeholder committees in which HMHC volunteers may be called to participate. For example:

- Cross-Melville District Heritage Committee (Dundas) (includes 1 elected member of HMHC)
- Joint Plaquing Sub-committee with the former Historical Board (included 2 elected members of HMHC)
- Gore Park Master Plan Stakeholder Group
- Century Manor Focus Group
- Community Enrichment Fund Focus Group
- Special Heritage Event Planning Groups
- Etc.

### **4. Provide a Summary of HMHC Representation in Heritage Events & Activities**

To provide greater transparency, briefly describe other opportunities, heritage events, activities and public outreach, in which HMHC volunteers may be called to participate. For example:

- Hamilton Municipal Heritage Committee Heritage Recognition Awards Event (organized and hosted by HMHC each June)
- Annual Heritage Day Marketplace and Awards (Interactive HMHC Display Table)
- Waterdown East Flamborough Archives & Heritage Society Book Fair (Interactive HMHC Display Table)
- Places of Worship Resource Event
- Heritage related workshops and special presentations
- Ontario Heritage Conference (opportunity for 1-2 HMHC members to attend)
- National Trust Conference
- Etc.

## **Proposed Amendment to the Hamilton Municipal Terms of Reference and Recruitment Process**

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### **5. Additional Notes**

All members are strongly encouraged to participate in working groups and in public outreach opportunities as representatives of HMHC.

Working Groups are an important method of expediting the process of review and recommendation for heritage matters. The work done at the working group level, assists City Staff and HMHC to work more efficiently. This is imperative for the successful operation of the committee.

Should the number of volunteers on a Working Group be so limited that work can no longer continue effectively, then HMHC members will be asked to assist in the search for appropriate heritage volunteers and/or HMHC volunteer nominations will be requested.

If HMHC volunteer nominations are called, and no nominations are received, it may be necessary to assign HMHC members, and/or equally distribute volunteer resources to fulfil each working group's mandate.

# Masonry Restoration Guidelines

## Hamilton Municipal Heritage Committee

### 1.0 Purpose

The intent of these Guidelines is to provide guidance in reviewing applications for alteration under the *Ontario Heritage Act* and provide guidance to heritage property owners, architects and contractors to carry out a successful masonry restoration.

### 2.0 Content:

#### 1.0 Purpose

#### 2.0 Content

#### 3.0 Application

#### 4.0 General Provisions

#### 5.0 Re-pointing

##### 5.1 Guidelines

#### 6.0 Mortar

##### 6.1 Recommended Mortar Specification for Historic Masonry, Stone and Brick

##### 6.2 Recommended Approach to Colour Matching Masonry

##### 6.3 Recommended Curing Approach to New Mortar

#### 7.0 Masonry Cleaning Guidelines

##### 7.1 Water Cleaning

##### 7.2 Chemical Cleaning

##### 7.3 Poultice

##### 7.4 Sandblasting

##### 7.5 Other Methods of Cleaning Such as Soda Blasting, Bead Blasting and Dry Ice Blasting

#### 8.0 Special Masonry Features

#### 9.0 Historic Exterior Stucco

##### 9.1 Inspection and Maintenance

##### 9.2 Repairs and Replacement

#### 10.0 Regulatory Requirements and Financial Incentives

### 3.0 Application

# Masonry Restoration Guidelines

## Hamilton Municipal Heritage Committee

The City of Hamilton is home to many historic buildings and structures that represent the City's diverse heritage and contribute to its unique identity. Many of the City of Hamilton's historic buildings are constructed with limestone, clay brick, stone, cast stone, and concrete materials.

The proper conservation of these historic structures is vital in order to preserve these heritage resources. The intent of this policy is to develop sensitivity to the particular needs of historic masonry by providing the best practices for masonry restoration. These guidelines offer helpful advice on the appropriate materials and methods to be used.

### 4.0 General Provisions

Brick, stone, and concrete are found on the majority of Hamilton's built heritage resources. The exposure to harsh weather conditions and building construction failure makes masonry susceptible to deterioration, especially at the mortar joints. Deterioration is identified by cracks or spalling and is often a result of:

- a) Water penetration from interior or exterior;
- b) Expansion and contraction of materials due to repeated wetting and drying (freezing and thawing);
- c) Stresses caused by the formation of salt crystals beneath the surface, especially common when cement is used as a quick fix to fill a masonry crack;
- d) Material impurities and incompatibility;
- e) Overgrowth of vegetation, (ivy, in particular), will cause severe damage to masonry;
- f) Poor craftsmanship during construction;
- g) Previous poor or incorrect repairs/restoration; and,
- h) Structural settlement shifts.

The decision to repair masonry is often related to some obvious sign of deterioration such as cracks in mortar joints, disintegrating mortar, loose bricks or stones, damp walls, or damaged plasterwork. However, it may be incorrect to assume that repointing the masonry will address the source of the deterioration. Therefore, it is recommended to investigate and understand the causes of deterioration before taking

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action in order to not only direct the repair of the masonry but also address the deficiencies that will potentially result from other problems.

### 5.0 Re-pointing

The most commonly required repair work undertaken on historic masonry is repointing, also known as “pointing”. It is the process of removing deteriorated mortar from the joints of a masonry wall and replacing it with new mortar.

It should be noted that while the mortar joints themselves are an important part of the building’s historical fabric, they are meant to be a sacrificial element of the wall assembly. In other words, mortar – unlike masonry units – is meant to deteriorate over time. Consequently, it is understood that historical masonry structures will require repointing periodically. It is important that repointing is correctly done since improper repointing can cause physical damage to the masonry units themselves, which are more difficult and expensive to repair.

#### 5.1 Guidelines

The following guidelines provide advice on appropriate materials and methods for repointing historic masonry structures:

- a) *Limit repointing to areas of deterioration.* Only repoint in areas where mortar is loose or crumbling. If the bond is intact on both sides of a joint and the mortar is cohesive and firm, do not repoint as the joint is sound.
- b) *Cut out deteriorated mortar before repointing.* Cutting out must not damage masonry units or widen the joints. Loose and crumbling mortar should be removed prior to repointing to facilitate adhesion between the new and old mortar. All material is to be removed from the side of masonry units to the depth of sound mortar, and all dust and debris is to be removed. As a general rule, mortar removal is done to a depth of 2 to 2 ½ times the width of the joint. In brick buildings, this will usually mean removal to a minimum depth of 25mm when the joints are extremely narrow (3mm) the mortar should be removed to a minimum depth of 10mm. This process should be completed with hand tools rather than power tools. If the mortar deterioration extends deep within the walls, a low-pressure mortar injection may be necessary to reach the appropriate depth.
- c) *Use a mortar mix that is equal, or lower in strength, to the historic mortar.* Do not use modern formulations with ordinary Portland cement. Acceptable mortar mixes vary, depending on the type of masonry used, (i.e. brick, stone, or cement), and on performance expectations. Ideally, a sample of mortar that

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has been identified as original material is extracted and analyzed in a laboratory to obtain the original composition and ratio of ingredients. In the absence of proper testing, an acceptable historical mortar mix should be used and matched closely as possible through visual and physical comparison onsite. (**Refer to 6.1 Recommended Mortar Specification**)

- d) *Point with a porous mortar.* Pointing with a porous mortar allows the wall to breathe by allowing moisture to migrate and evaporate through the mortar instead of the masonry unit. The mortar must match the original in material composition and method of construction and application.
- e) *The repointing should be carried out when the temperature is between 5 and 25 degrees C,* to avoid the possibility of frost or rapid drying of the mortar.

## 6.0 Mortar

### **6.1 Recommended Mortar Specification for Historic Masonry**

Mortars for repointing historic buildings are typically custom mixed in order to ensure the proper physical and visual qualities. These materials can be combined in varying proportions to create a mortar with the desired performance and durability.

The recommended mortar for historic masonry is the mixture of lime and white non-staining cement, which is different from Portland cement mortar normally used in modern construction.

Mortars for repointing should be softer or more permeable than the masonry units and no harder or more impermeable than the historic mortar to prevent damage to the masonry units. It is a common error to assume that hardness or high strength is a measure of suitability, particularly for lime-based historic mortars. A mortar that is stronger in compressive strength than the masonry units will result in permanent damage to the masonry, such as cracking and spalling.

Permeability of the mortar is very important—if the mortar does not permit moisture to migrate out of the wall and evaporate, it will cause permanent damage to the masonry units. Depending on the application, the mix must be adjusted to suit the masonry material type and exposure.

# Masonry Restoration Guidelines

## Hamilton Municipal Heritage Committee

### ***6.2 Recommended Approach to Colour Matching Masonry***

For aesthetic reasons, it is recommended that the texture and colour of the mortars should match the original historic masonry, which is primarily a result of the type of sand used. Pigments can be used to achieve the desired colour; however, pigments often result in short or long-term spots. A small test patch is recommended to achieve desired mortar outcome.

### ***6.3 Recommended Curing Approach to New Mortar***

Repointing should not take place in temperatures near or below freezing (below 5°C), or in hot or direct sunlight. Both cases would not allow the mortar to achieve its desired strength. When the temperature is above 25° C (77° F), newly laid mortar must be protected against rapid drying with damp burlap protection and frequent misting to control drying and shrinkage.

## **7.0 Masonry Cleaning Guidelines**

First, it is important to determine if cleaning the masonry is appropriate. The objective of cleaning a historic masonry building must be considered carefully before arriving at a decision to clean. There are several major reasons for cleaning a historic masonry building: improve the appearance of the building by removing unattractive dirt or soiling materials, or non-historic paint from the masonry; delay deterioration by removing soiling materials that may be damaging the masonry; or provide a clean surface to accurately match repointing mortars or patching compounds, or to conduct a condition survey of the masonry.

It is recommended that cleaning of historic masonry be done with the gentlest means possible. Generally, a gentle pressure wash with water is all historic masonry requires.

The use of abrasive cleaning methods is not recommended on heritage buildings as they operate by wearing down dirt or paint from a masonry surface, which can simultaneously erode the surface of the building material. It is recommended that methods be tested on a small inconspicuous area of the masonry before applying to the larger surface area.

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The following cleaning methods are discussed below for different applications:

### *1. Water Cleaning*

Water cleaning is the gentlest means of cleaning to remove dirt from historic masonry. However, it may be detrimental to badly deteriorated masonry or on gypsum. There are four kinds of water-based methods: soaking, pressure water washing, water washing with mild detergents, and steam cleaning. Even water used with high enough pressure can be detrimental, so, high-pressure water washing is strongly discouraged.

### *2. Chemical Cleaning*

Chemical cleaners can be used on historic masonry to remove persistent dirt or paint, including graffiti. The chemical cleaning is followed by water cleaning to rinse the chemical off the surface. Acidic cleaners, alkaline cleaners and the organic compound are used to remove dirt on the masonry, while organic solvent and alkaline paint removers are used to remove graffiti. However, **not all chemical cleaners are appropriate for historic masonry**, so, care should be taken to choose an appropriate product.

### *3. Poultice*

Poultice cleaning can be an effective way to remove graffiti and stains that already penetrated on the wall. Poultice cleaning is often used for smaller applications often consisting of more delicate and detailed architectural features. Poultice consists of water and a medium to create a paste that is applied to the surface with the intent of drawing out the dirt and stains. The most common medium is clay; however, chemical mediums are at times appropriate. Care should be taken to thoroughly rinse and neutralize the masonry when chemical mediums are used.

### *4. Sandblasting*

**Sandblasting is not recommended.** Bricks develop a protective skin from the firing process. This skin protects the brick from the elements. Without this protective layer, bricks will deteriorate.

Sandblasting historic brick will not only remove paint, dirt and graffiti, but it also removes the protective skin; leaving the brick exposed to the elements and subject to some of the following problems:

*Spalling:* Sandblasting leaves the brick exposed and weakened. Spalling occurs when the brick begins to deteriorate, turning into a powder and breaking apart. Spalling can also occur from repointing with a mortar that is

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too hard which causes the face of the brick to break off to expose the softer interior.

*Weakened Structure:* Often people sandblast and then apply a sealer to the face to prevent spalling or other damage. Heritage brick and lime mortar are very breathable building materials. Sealing one side of the material, prevents that natural breathability, causing moisture to build up within the brick on the underside of the sealer. With moisture build-up, minerals will be deposited just below the surface of the sealer; eventually weakening the structure of the masonry unit, causing it to break apart.

*Cosmetic Damage:* Sandblasted brick will leave the surface uniformly rough, and it will not have the same appearance as the original surface. The brick will lose some of its character and charm.

### 5. *Other Methods of Cleaning such as Soda Blasting, Bead Blasting and Dry Ice Blasting*

**These cleaning methods are not recommended.** Similar to sandblasting; these methods are used to remove dirt, paint and graffiti on masonry. However, these methods are often promoted as being more environmentally friendly, less abrasive and less damaging to masonry surfaces.

It is recommended that property owners do their due diligence to investigate the pros and cons of any new methods of cleaning masonry and always test on a small inconspicuous area of the masonry before applying to the larger surface area to ensure the masonry surface is not damaged.

## 8.0 Special Masonry Features

Beyond the masonry cladding of a building, special masonry features such as stone walls, chimneys, rubble stone foundations, stone buttresses, stone stairs and masonry garden features are all types of building elements a heritage property owner may need to repair over the lifetime of a building.

### *Wall-capping*

Do not use mortar mix to finish the top of a masonry structure, for example, a wall or a chimney. This is not the correct method for finishing these structures. Specific capping stones or capping bricks should be used to finish the top of these assemblies. This will ensure that the water can run off, which will prevent the moisture from entering the structure's core. Allowing water to enter the core of the structure will eventually lead to degradation and failure of the masonry assembly.

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A professional should always be consulted where significant deterioration is evident, to ensure the structural integrity of the element has not been compromised and ensure the method of repair is correct.

### 9.0 Historic Exterior Stucco

Stucco or roughcast cladding is a material that covers the exterior of some historic buildings. It is traditionally placed on lath or directly on masonry producing a uniform finish that is resistant to rain. This process adds a decorative effect to the building surface with its texture, detailing and colour. Early stucco was generally applied in two or three coats for strength and durability. Stucco is a type of external plastering or rendering of lime, or lime and cement mortar with a sharp sand aggregate. Early stucco used animal hair, straw, or other binders. In the late 19th and early 20th century, stucco was made with a small portion of Portland cement and lime. Sand and fine gravel were used to create surface texture.

#### 9.1 *Inspection and Maintenance*

Simple tapping for a hollow sound will sometimes distinguish whether the stucco is applied to a wood frame or masonry. Areas of thin or failing stucco may also reveal the underlying structural system. Stucco is a rigid material and susceptible to cracking and crumbling. Water may enter cracks and rot the underlying lath; structural settlement may cause cracking, and poor original composition may result in poor adhesion to the lath causing cracking and the loss of pieces of stucco. Common failures of stucco include bulging, cracking, and deterioration at the ground line and at the roofline. These areas should be monitored. Maintain eavestroughs and downspouts to eliminate water penetration and damage to the coating and structural damage to the frame. The soil in planting beds should not be banked against a stucco wall.

#### 9.2 *Repairs and Replacement*

Traditionally, stucco was not painted. Its colour was derived from the aggregate, often sand, and any permanent pigment mixed in the finish coat. Normally applied in three coats, the finish coat received different surface treatments depending on the technique that was fashionable at the time. Repairs to stucco should seek to replicate these traditional techniques, avoiding contemporary processes such as blown applications. General guidelines to the repair of stucco cladding are as follows:

1. Accurately record textured or decorated stucco surfaces before repairs begin. Note the thickness of the stucco relative to the wood trim and

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maintain the dimension in order not to hide or destroy the function of detailing (i.e. sill drips, corner boards, window frames).

2. New stucco should never be applied over an existing surface since this can hide damaged surfaces and destroy architectural detailing.
3. Remove unsound stucco to lath or a sound base and duplicate original formulation in strength, composition, and texture.
4. Patching and new stucco surfaces should match the historic finish, colour, texture and any special markings found on original stucco surface. Consider repairing an entire wall surface, particularly if a principal elevation, to maintain consistent colour and texture if most of the surface is failing.
5. Duplicate original method of application (i.e. build up repairs in layers or coats to ensure good bonding and curing). Dampen patches and surrounding area for a couple of days after repair for successful adhesion of patched section to original stucco.
6. Do not paint the stucco surface if it is not already painted.
7. To date, no effective method of cleaning stucco has been developed. Dirt and dust should be rinsed off with water on a yearly basis.

### **10.0 Regulatory Requirements and Financial Incentive Programs**

Consulting with the City's Planning and Economic Development Department is required before proceeding with any work on a structure that is designated under the Ontario Heritage Act or located within one of the seven Heritage Conservation Districts. The proposed work may require a building permit and/or Heritage Permit.

The proposed work may also qualify for funding by the City of Hamilton Financial Incentive Programs. For applicable projects, the City offers the Heritage Property Grant Program as well as the Hamilton Community Heritage Fund (HCHF)

Heritage Property Owners are encouraged to contact the City's Heritage Planning Staff for helpful advice, guidance and assistance with any questions they may have.

# Masonry Restoration Guidelines

## Hamilton Municipal Heritage Committee

Who to contact:

Cultural Heritage Planner in the Planning and Economic Development Department

Tel: 905-546-2424 ext. 1202 or ext. 1214

*Document Prepared by:*

*Policy and Design Working Group of the  
Hamilton Municipal Heritage Committee*

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