

General – executive summary

Our firm was engaged by Stephenson Engineering to assist with heritage requirements related to its consultant contract regarding the repair/replacement of a deteriorated late 20th century pseudo-industrial style mild steel 'bridgeway' that forms part of added 2006 east ground floor entrance to the c.1950's extension of the c.1914 vernacular stone cottage. Recent photographs and a few excerpts of detail drawings, prepared by dTAH, were provided by the City, unfortunately with no access to full record drawings or archival photography of the house.

On 22 April 2020 we conducted a visual condition review and photo-documentation of the bridge/entrance structure, the exterior of the stone cottage (MacEwan House), and its context including immediately adjacent buildings, landscape, and vistas. The bridge/entrance elements are necessary for the current use and context, as a public park and visual arts centre, but do not contribute to the character-defining elements. Our review photos are available upon request with selected images in **Appendix B**.

The subject c. 2006 bridge and entrance interventions are omitted from the 'character-defining elements' at Historic Places.ca confirming that they do not contribute to heritage value; however, the 'bridgeway' is mentioned in the municipal designation statement description without qualification. As one end of the bridge structure is currently embedded in historic masonry, the proposed repair/replacement will require localized masonry cutting-out and patching (and galletting) with appropriate mortar as well as repair/replacement of adjacent deteriorated wood trim. The Heritage Application Guideline includes masonry repairs or replacement in 'alterations that require a heritage permit'.

The Proponent's proposed scope of work is limited to necessary maintenance, specifically repair or replacement-in-kind of the bridge element. This scope varies from the existing design only in upgrades to the durability of replacement materials and details, and is intended to include no significant alteration of the heritage character-defining elements. In this context, a related heritage impact assessment (HIA) may be 'scoped' or limited to the detail design, execution, quality assurance, and quality control, related to alteration of the physical connection to the masonry historic fabric. The proposed primary conservation treatment is *rehabilitation* (according to the *Standards and Guidelines for the Conservation of Historic Places in Canada*) and applies to required minor alterations of the character-defining masonry to accommodate the replacement of the non-contributing steel bridge and related wood decking and trim.

The proposed 'repair' work provides an opportunity to correct certain bridge details that may have contributed to evident premature deterioration, steep transition limiting accessibility, and potential damage to the adjacent heritage character-defining elements of the stone cottage. We therefore recommended amendment of the connection detail at masonry pockets to mitigate impact on the heritage asset, and other minor refinements.

Heritage Status

The MacEwan House is located in Riverwood Park, an assembly of three adjacent properties owned by the City of Mississauga at 4300 Riverwood Park Lane, (formerly, designated as, 1447 Burnhamthorpe Road, Mississauga, City of, Ontario, L5C, Canada). The property received Municipal Heritage Designation (Part IV), under By-law 505-2004 dated 2004/12/15. Adjacent properties on the Municipal Heritage Register: 1455 Burnhamthorpe Rd W (designated under Part IV), 1477 Burnhamthorpe Rd W (listed), 1469 Burnhamthorpe Rd W (listed). Related Character-Defining Elements (ref. Historic Places .ca) include: "vernacular style of the MacEwan House, with its stone construction, pitched roof and concrete basement floor ...[and] location on the bank of the Credit River".



Image 1: 2006 photo from Historic Places.ca, image 2 of 130, City of Mississauga; location given as 1465 Burnhamthorpe Road West; unpainted woodwork visible here, along with aerial photos, confirm construction year of new entrance/bridgeway.

Location, Current Use, and Context

The Mac Ewan House is part of *Visual Arts Mississauga* ("VAM") responsible for the management and operation of lands and premises known as the VAM Building and MacEwan House, 4170 and 4300 Riverwood Park Lane (formerly 1475 & 1465 Burnhamthorpe Road West) which is located on the north side of Burnhamthorpe Road West, west of Creditview Road and east of Mississauga Road, City of Mississauga, Regional Municipality of Peel, in Ward 6.



Image 2: Context Map showing MacEwan House location.



Image 3: Google Sat view marked to show bridge.

Existing conditions

The original bridge design appears to have been conceived as a cantilevered structure to span the five foot wide basement exit landing, perhaps intended to minimize impact on the old stone wall of the house, with supporting length spanning over a planter to reach a paved asphalt path. However, the potentially cantilevered end of the bridge's structural channel beams is rigidly embedded in the old masonry and appears to 'virtually' support the heavy steel plate doorway canopy/surround. Bearing pads, between the under-side of bridge beams and top of concrete retaining wall, were not visible for review.

The bridge/wall connection points exhibited localized masonry efflorescence and rust stain, darker grey mortar, rotted wood trim, and more intensely corroded steel elements. Rust staining also marked the concrete retaining wall and basement landing below. Wood, steel, and concrete elements appear to be in direct contact with stone masonry without normal isolation membrane, mastic, or bitumen-impregnated joint filler. Such observations suggest potential hard mortar, masonry rust-jacking, cracking, and water infiltration into surrounding stone masonry resulting in premature deterioration of bridge and heritage fabric.

Existing bridge abutment connections and transitions, at both the old masonry wall and new bearing plates on concrete pads at grade, appear to be designed without due consideration of thermal or differential movement of the long structural steel channels and rigid steel guard railings, nor mitigation of corrosion of these painted steel components, infiltration at masonry embedment of rust-jacking of ferrous metal, nor drainage/drying of adjacent wood trim

Open mortar joints were observed in historic masonry adjacent to basement level concrete steps and landing with no isolation/sealant joint to protect masonry from migrating moisture and de-icing salts.

The bridge spans a planter[planting appears designed to screen the basement walk-out] in which the top of soil and mulch has been permitted to rise above the under-side of the bridge and covered most of the bottom flange. The poorly vented concealed space beneath the deck above the planter may trap moisture and be attractive to small rodents.

Recommendations (draft)

Repair, or remove and replace, deteriorated portions of existing metal bridgeway, and related wood decking and vertical wood trim, generally to match existing, except refine design to improve durability and accessibility as follows (item 1 requires a heritage permit):

- 1) a) revise bridge connection & beam pockets at masonry wall and b) repoint open joints at walk way with salt resistant hydraulic mortar c) using CAHP-accredited heritage contractor;
- 2) upgrade painted steel to H.D. galvanized steel;
- 3) provide more durable replacement decking & trim;
- 4) lower grade in planter below bridge beams;
- 5) raise level of asphalt path at bridge landing.

Provide above work in accordance with attached drawings & specifications prepared by Stephenson Engineering with comments from heritage consultant allan killin architect inc.

End of recommendations

Bibliography

Standards and Guidelines for the Conservation of Historic Places in Canada, available at:

<https://www.historicplaces.ca/media/18072/81468-parks-s+g-eng-web2.pdf>

Canadian Register of Historic Places:

<https://www.historicplaces.ca/en/rep-reg/place-lieu.aspx?id=14143>

Ontario Heritage Act, R.S.O. 1990, c. 0.18, available at:

http://www.mtc.gov.on.ca/en/heritage/heritage_act.shtml

Ontario Heritage Tool Kit, available at:

http://www.mtc.gov.on.ca/en/heritage/heritage_toolkit.shtml

Ontario Standards and Guidelines for Conservation of Provincial Heritage Properties, available at:

http://www.mtc.gov.on.ca/en/heritage/heritage_s_g.shtml

Mississauga Heritage property applications, HIA terms of ref, S&G, available at:

<http://www.mississauga.ca/portal/discover/culture-planning-heritage>

Mississauga Heritage Register available at:

https://www7.mississauga.ca/documents/culture/heritage/2018-07-01_Mississauga_Heritage_Register_Web.pdf

4300 Riverwood Park Lane, Property Heritage Details, available at:

https://www.mississauga.ca/portal/services/property/?paf_portalId=default&paf_communityId=200005&paf_pageId=2700006&paf_dm=shared&paf_gear_id=6500016&paf_gm=content&paf_gear_id=6500016&action=heritage&heritageTab=yes&propDetailsTab=no&id=60702&addressId=402003&pin=null&rollNumber=2105040154031000000&redirectPage=1

MacEwan House, Mississauga Heritage Designated Properties, image 2 of 130, available at:

http://www.mississauga.ca/portal/discover/heritagedesignatedproperties?paf_gear_id=13400033&imageId=42200011&index=1&returnUrl=%2Fportal%2Fdiscover%2Fheritagedesignatedproperties

Context Map & Aerial photos, 4300 Riverwood Park Lane, Mississauga Maps, available at:

<http://www6.mississauga.ca/missmaps/maps.aspx#map=17/-8869021.12/5398246.92/0.9075712110370514>

Mississauga General Committee Minutes, June 30, 2009, page 30 [confirming use and address].

Appendix A

Aerial photography from Maps – selected details from 2005(left) and 2006 (right)



Image 1, 2006 photo of MacEwan House, description:

“W.R. Percy Parker built this stone cottage from the remains of an old pickling plant. His daughter, Margaret MacEwan later purchased the home from her widowed mother.”

Designation Statement - excerpts related to MacEwan House

The property known as Riverwood, 1447 Burnhamthorpe Road West, has been recommended for heritage designation for reasons of its historical, architectural and contextual significance.

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Historical Background:

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The original patent from the crown for Lots 4 and 5, Range 4, went to Peter McDougall in 1833. The adjacent Lot 6 was a patent from the crown to William MacGrath, who owned property south of Burnhamthorpe Road. The properties changed hands several times until June of 1913, Lots 4, 5 and 6 were bought by W.R.P Parker, from Allen Case. In 1913 the Parkers, who resided in Toronto, built a stone cottage from what existed of a former stone building on the site. The Parkers used this cottage, now known as the MacEwan house, for six years as a summer home.

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Archaeological studies conducted on the property have also proven the lands to be of native prehistorical significance dating from the Middle to Late Iroquoian Periods. For the most part these components have been removed through archaeological investigations, but a high archaeological potential remains throughout the site for historic archaeological resources.

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Architectural and other Heritage Resources:

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The MacEwan House is a single storey Credit River stone structure, the original portion dating to approximately the mid nineteenth century. It is an elongated "T" shape, the top of the "T" being the original portion of the building. Due to the grade differences surrounding the building, much of the cellar portion is fully exposed. The windows are multi-paned casement. The medium pitched roof has stuccoed gable ends. On the original portion, or west side of the house, the roof has a very slight bellcast to it. On the east facade a small bridgeway connects the house to the upper ground level several feet away from the east wall. The house rests not too far from the top of bank and would have a dominant view of the river valley when the grounds were clear of trees. Interior features of particular note include the fireplace in the main room, which was part of the original structure, and the horseshoe imprints in the cellar floor that belonged to a winner of the Queen's Plate. Directly to the east of the MacEwan House is the MacEwan Barn.

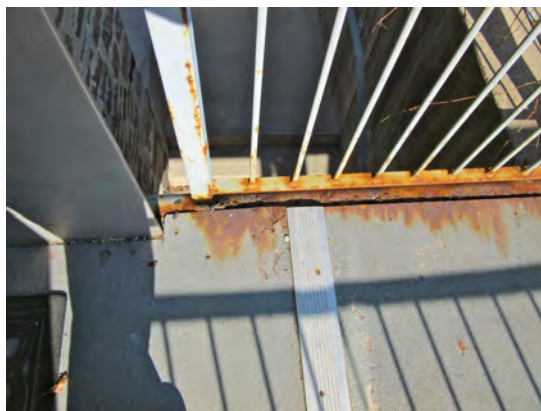
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end of appendix A

Appendix B – selected condition review photographs by Allan Killin, MRAIC, OAA, CAHP



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