APPENDIX C



# Building Condition Assessment and Recommendations for Moving a Dwelling at 1158 Burnhamthorpe Road, Oakville



Albertson-Dryland House, 2017 (David Cuming)

At the request of Jason Mosdell of Mattamy Homes, Mark Shoalts, P.Eng, CAHP, conducted site reviews and also reviewed the David Cuming report on the 1½ storey brick veneer dwelling at 1158 Burnhamthorpe Road in Oakville. To be consistent with the Cuming report, the dwelling will be referred to as the Albertson-Dryland House. The two site visits were made on January 9 and January 17, 2018. The purpose of the review was to assess the condition of the structure and masonry and to determine if and how it could be moved to another property. The focus is on the front 1½ storey brick portion of the dwelling; there is an aluminum-sided rear kitchen wing that is of much later construction than the main house, is of little or no architectural significance, and is in very poor condition. This report includes estimates of the age of parts of the building based on the author's experience, comparison to similar examples, and the dates and references from previous reports included in the Cuming report. The detailed review did not encompass the complete building because of the general agreement of the heritage assessments on the lack of significance of the kitchen wing; it was carried out to determine the feasibility and desirability of moving the main house and is intended to deal with that specific concern.

### 1.1 Executive Summary

The Albertson-Dryland House, at 1158 Burnhamthorpe Road, was built in approximately 1858 by Hiram Albertson. The main house is a 1 ½ storey wood-framed brick-veneered building on a rubble stone basement. There is a wood framed single storey kitchen wing with crawlspace on the rear of the house. While there are parts of the kitchen wing of very indeterminate age

and some of it appears to have been built or rebuilt with salvaged materials, its general appearance is indicative of late 1950s or early 1960s construction. The kitchen wing has no significance or architectural merit, is in very poor condition, and would greatly complicate the task of moving the house intact. Sybil Rampen of the Joshua Creek Heritage Art Centre at 1086 Burnhamthorpe Road is quoted by the Trafalgar Township Historical Society as remembering the kitchen being built<sup>1</sup>, putting it clearly later than the 1940s. It does not warrant further consideration and will be assumed to be demolished.

The main part of the house is in nearly as poor condition as the kitchen wing, and has had numerous obvious and poorly executed alterations to it since its original construction. The building is not a good example of any architectural style or accomplishment, has no known associations with any significant persons, and has a number of defects and deteriorated areas that would create serious difficulties in achieving a successful move. The house is a last remnant of a farmstead of dubious merit as outlined in earlier assessments and confirmed in the Cuming report. Its best quality is its age, and that is insufficient to redeem its many and varied problems and shortcomings. Moving the house as described in 3.1 could be accomplished but would require extensive repairs both before and after the move. Restoring the house as described in 3.2 would necessitate rectifying numerous poorly executed alterations and repairs previously carried out. Neither option would result in a good example of a domestic building of the period.

## 2.1 Building Structure and Details

The Albertson-Dryland house is architecturally undistinguished, and is a curious transition between the waning popularity of the vernacular neoclassical style and the rising gothic revival style of 1860s and 1870s Ontario houses. A small house, measuring approximately 16' X 32', it has few of the typical hallmarks and pleasing proportions of the ubiquitous mid-19<sup>th</sup> century Ontario farmhouse exemplified by the Henderson residence, almost exactly the same age and dimensions.



Henderson house, 1859, typical neoclassical Ontario house

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<sup>&</sup>lt;sup>1</sup> http://images.ourontario.ca/TrafalgarTownship/2845998/data?dis=dm

The Albertson-Dryland roof pitch is steeper than neoclassical norms, yet not quite to the pitch of typical gothic revival houses. It has the symmetrical form of an early house but the fenestration is distinctly odd. Very unusually, it has a single window asymmetrically placed in each of the front and rear walls of the upper floor when none is typical.



West elevation, 2017 (David Cuming)

The gable ends have one window between the two of them, when a pair of windows in each is typical.



South elevation, 2017 (David Cuming)

A single window in the first-floor south end is balanced by an anomalous door in the north end, seemingly superfluous to the front and rear doors in the same room. The crude masonry work and finishing details, lack of windows, and added door give the north end of

the building the distinct appearance of a poorly-executed repair to a catastrophic event in the life of the house. More will be said later about the brickwork.

The house has a rubble stone foundation typical of buildings from the 19<sup>th</sup> century in Ontario. There is a fairly dry basement of reasonable depth with a modern exterior stair access in the south end. A steel lintel, ribbed architectural concrete blocks, and concrete repairs indicate a 1970s date for the exterior stair. There are indications of former interior stairs that may have been removed and the floor filled in, however there have been numerous alterations to the floor structure that make definitive statements difficult.



Cut off timber joist & filled-in floor

The south end of the main floor has its original round pine timber joists, some with the bark still clinging to them, flattened on top to receive the flooring.



Round pine timber joists with bark attached

By 1858 this would be considered somewhat crude, but it is not that unusual. The joists are framed into a timber sill plate that has been flattened top and bottom by broad-axe and rests on the stone foundation.



Timber sill plate on stone foundation

This original hewn floor structure has been replaced with sawn members in the north end of the house. 2x8 joists sit on a 2x8 plate on the stone wall, and sawn studs can be seen sitting on the plate in the style of late 19<sup>th</sup> or early 20<sup>th</sup> century balloon framing.



Replaced wood plate and joists in north end with balloon studs

Both the timber joists and the lumber joists exhibit decay in various stages, and have been supported at intermediate points by a range of wooden posts, beams, and bolsters.



Sawn and hewn joists decayed & with mid-support

The complete main floor has tongue and groove wood flooring laid directly on the joists; however it is not original. All of the original pine flooring, which would likely have been  $1\,\%$  thick, 4"-6" random width straight-sawn pine T&G laid directly on the joists, has been removed and replaced with 3/4" thick, 3" & 4" wide circular-sawn oak T&G laid directly on the joists.



Circular sawn oak flooring on pine joists

This is unheard of as original material in an 1858 farmhouse in Canada West; the circular saw had been invented but was only beginning to be introduced into the country. Even a decade later circular sawn wood was a rarity and hardwood flooring was not yet in fashion in refined homes, never mind farmhouses. Confirmation of these assumptions is seen on the second floor of the house where the typical 1" thick, random width 8" and wider pine flooring (thinner and wider than the original ground floor) typical of the 1850s still exists.



Wide pine flooring on 2<sup>nd</sup> floor

The interior main floor of the house remains as the original two rooms, with little architectural distinction. The main room has vertical T&G wood wainscoting over an older, vertical T&G wood wainscoting unlikely original in a front room but possible in a kitchen wing. The casing on the doors and windows and the window sash are typical of a somewhat later period than 1858, more like 1870s or 80s.



2 layers of wood wainscoting, later style window and casing

The narrow pine stairs leading to the second floor appear original, as does the damaged plain pine balustrade, the previously noted flooring, and the plain beaded casing upstairs.



Original narrow pine stairs



Damaged plain pine balustrade



Older style beaded casing on 2<sup>nd</sup> floor

Vandals have knocked some holes in some walls, and the circular-sawn wood lath is indicative of a much later date than 1858. It is also curious that the studs carrying this lath appear to be somewhat weathered, which is distinctly unusual, indicative of a fairly lengthy period of exposure between framing and lathing.



Circular sawn wood lath on weathered studs

It is apparent from these alterations to the flooring and structure and the complete replacement of the brick on the north end of the house, that there must have been some very extensive damage to the house, possibly a fire. Further destructive investigation would be required to confirm this.

The brick on the house is almost certainly a later upgrade to what would have been a wood-clad dwelling. The earliest original brick veneer house that the author has seen in southern Ontario was built in about 1877. The addition of brick veneer to earlier wood buildings was a fairly common practice, and the author was involved in the assessment of a frame house of similar age not far away in Streetsville in which the original wood siding and trims were still in place beneath the brick. Numerous other examples exist and are cited in literature.



For many years I was amazed at the absolute similarity in size as well as proportions between the smaller brick farm house of the 1850's and earlier log houses. The resemblance was altogether too startling. A house near Rosemont on Highway 89 provides the explanation.



John Rempel, Building With Wood UofT Press, 1967



Brick veneer over original wood siding,
Nigel Hutchins, <u>Restoring Houses of Brick & Stone</u>, Van Nostrand Reinhold, 1982

There are numerous indicators that point strongly to this conclusion. The wood soffit was installed before the brick was laid, which would not be done if the brick was original. The author removed a brick at the soffit, and the concealed wood exhibited a fair degree of weathering, which would not be the case if the brick were original. There is no frieze or even a small moulding to finish the joint between the brick and the soffit; mortar was used to fill the gap. This lack of finishing detail is unheard of even in the simplest carpenter-built house.



Brick laid over finished soffit

The exterior casing on the windows and doors did not cover the gap behind the brick, and a small wood trim was installed after the original trim to close it off.



Kerfed trim to cover the gap at the door head

The brick overhangs the foundation in places. The bricks themselves are a consistently-made product with a deep frog typical of a brick manufacturer, not the more irregularly moulded flat bricks typical of site-produced bricks in the mid-century, again indicating a later date than 1858 for the brick. Unfortunately many of the bricks appear to have been under-fired and are failing. Some of these failed bricks were removed by the author to view the back-up. There are cut nails used as brick ties to hold the veneer to the back-up.



Failed bricks, mortar patching, and cut nails for brick ties

The cut nails and style of brick indicate an 1880s time-period for the installation of the bricks. The pine sheathing behind the brick did not show evidence of being formerly covered by wood siding, but the siding would typically have been nailed directly to the framing and may have been replaced with thicker sheathing when bricking the house to provide a more robust back-up. The window heads include both curved and flat jack arches. The window sills are a varied collection including both thin and thick concrete (unheard of before the 1890s) and a single thick wood sill. The concrete sills were cast-in-place onto the brick, a technique unlikely to have been used by a competent mason.

Brickyards were just coming into production in the 1850s, and site-produced bricks were still the norm; brick houses themselves were quite rare. A 1974 study by W.R. Wightman<sup>2</sup> determined that in 1851 only 5% of non-log rural houses were constructed of brick, and in 1861 only 8% were constructed of brick. In 1851, approximately 43% of the houses in the province were non-log, and in 1861 53% of the houses were non-log. More than 85% of non-log houses were wood frame. The data, gathered primarily from census information, does not make any reference to or distinction of brick veneer houses because, at that time, they did not exist. In 1861, less than one in twenty houses in the province was built of brick. Houses were built primarily of log and frame, with small amounts of brick or stone, and a minute fraction of other materials. Later in the 19<sup>th</sup> century it was well in fashion to convert a frame house to a brick house; moving it upscale in both the owner's mind and in appearance.

The assumed catastrophic event that necessitated reframing much of the main floor and relathing and plastering some interior partitions also clearly affected the north wall of the house. The east and west walls are bearing, so the north wall could be removed without seriously harming the structure or losing support of the roof. As earlier indicated, the presence of a single door on the ground floor and no windows up or down in the wall is distinctly odd and may have been an alteration done for a specific purpose when the wall was rebuilt. There is no soffit or fascia on the north gable end and the bricks were laid right up to the roof sheathing, however the eave soffit was in place before the brick was laid. While one could assume that a frieze and soffit were intended to be installed, and indeed should have been installed after the brick, the gaps at the roof sheathing were filled with mortar indicating that is was intended to be and has been the finished product. The bricks on the north end do not match the rest of the house, and in fact they appear to be salvaged. Many bricks are chipped and broken and were laid that way.



Brick laid against sheathing boards, no soffit or fascia

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<sup>&</sup>lt;sup>2</sup>Construction Materials in Colonial Ontario 1831-1861, W.R. Wightman, 1974



Chipped and broken brick laid into the north wall

The mortar used in the north wall has much coarser aggregate than the rest of the house; the toothing-in at the corners is poor, and the general line of the bricks is crooked. The workmanship is clearly inferior to the rest of the house. The repair gives every appearance of a job done with few resources or access to skilled labour.



Crooked coursing, salvaged bricks, poor toothing-in, and coarse mortar

#### 3.1 Moving the House

Moving a 16' X 32' 1 ½ storey wood framed house is typically a simple affair, often constrained only by the cost of temporarily relocating overhead wires. Even if the wood framed house is clad with brick veneer, it is usually not a difficult task to relocate the building either with or without the veneer. The brick veneer on the Albertson-Dryland house is in such poor condition that it would be extremely difficult to lift and move the house without losing the brick. 120-year-old brick walls are very prone to sudden collapse when full support is not provided, openings are created, or the walls are subject to vibration. The author has seen it occur on several occasions, and in every case the walls that collapsed were in better condition than those on the Albertson-Dryland house. Although the prospect of losing the brick veneer seems at first to be catastrophic for the house, in fact it would return it closer to its original form; the brick veneer is in poor condition and is of at least two different ages, and removal is recommended as a first step if the decision to move the house is ultimately taken.

Lifting a frame house is accomplished by supporting the sill plates and any intermediate beams with lifting beams crossing them at right angles. This is dependent on the plates having some integrity and continuity, but the remaining original sill plates of the Albertson-Dryland house are partially deteriorated. Exacerbating this, they have been partially replaced with vastly differently-sized members supporting wall framing of an entirely different system than the original. The changes in framing are not aligned on the east and west walls, further complicating the task of supporting everything for a move. If the move were accomplished, the floor framing is deteriorated and substandard and would require much repair and replacement before it could be placed back into service. Moving the house would simply relocate an extensive, speculative reconstruction and reproduction of a poor example of domestic architecture from one site to another, greatly increasing the cost.

#### 3.2 Restoring the House

One must assume that restoration of the Albertson-Dryland house would be intended to result in a sound building meeting reasonable standards of utility, efficiency, and durability. Meeting current building code standards is neither required (depending upon a few specific factors) nor expected, but it is reasonable to want a building that meets certain expectations of a modern occupant. The exterior envelope requires extensive repairs and reconstruction of the masonry veneer; the problems with it have been outlined above but no emphasis was previously placed on future durability. The masonry is failing and requires major intervention to repair the failures and stop them from recurring. It cannot be left as is or simply patched. The floor framing is unacceptable as it is and requires major intervention. The kitchen wing must be demolished and replaced, which in itself calls into question the integrity of the original house following such a major intervention. The house has no services, no insulation, essentially no windows or doors, and little in the way of salvageable interior and exterior finishes. The existing appearance is drastically different than the original appearance of the building, and restoration of this appearance is of questionable merit even if it were possible to determine the details. Unfortunately, restoration of it to something approaching its original configuration is necessarily very speculative, and it would be very difficult to decide upon reasonable limits to the changes. Ultimately the finished product would be more in the nature of a speculative reconstruction than an actual restoration and would be of dubious value to either the heritage inventory or a modern user.

## **4.1 Conclusions**

The Albertson-Dryland House at 1158 Burnhamthorpe Road in Oakville is the remaining structure from a former farmstead grouping of buildings. Aside from a barn that was dismantled and removed to the adjacent property, where it now is in use at Joshua Creek Heritage Art Centre, there seems to be no documentation of any particular or significant buildings on the site, and in any case none exist now. The house is in very poor condition and is a greatly altered example of a poorly executed domestic type. The brick veneer was added to the house after its original construction, has had numerous and significant repairs since then, and has many areas in very poor condition. It is unlikely to survive a move. The significant alterations to the framing in the north end of the house present particular challenges in lifting and moving it. The sill plates are no longer continuous, and are not even consistent in size and location. The walls sit on the plates differently in the different sections, and repaired areas of the joists further weaken the structure that is typically counted on to assist in a move.

While not impossible, moving the Albertson-Dryland House would be a difficult task. The deterioration and failing of members and materials, as well as the extensive alterations to the house in the past make the repairs required to be able to use the house for any purpose in this or a new location a daunting task. Much of the house would in fact have to be rebuilt, and it would be difficult to justify rebuilding it to the poor standards exhibited in the existing exterior envelope. If the exterior were upgraded to the appearance of a typical farmhouse of the period, this would be speculative alteration and not supported by documentation, yet without this the building would be barely weatherproof. We cannot recommend moving the house or restoring it in its present location.



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