

**Highway 401 Colborne to Brighton Planning Study  
Transportation Environmental Study Report Errata  
April 25, 2024**

**TRANSPORTATION ENVIRONMENTAL STUDY REPORT & APPENDICES – DECEMBER 2023**

The table below identifies revisions to the Transportation Environmental Study Report (December 2023) for the above-noted study based on comments received following filing of the Transportation Environmental Study Report (TESR), which included comments from the following technical agency:

- Ministry of Citizenship and Multiculturalism (dated February 1, 2024).

This TESR Errata is to be read in conjunction with the TESR (December 2023).

SECTION	TESR AS PUBLISHED DECEMBER 2023	TESR REVISION PUBLISHED APRIL 25, 2024
<i>Section 4.3.1 – Archaeology</i> (p.50 / PDF p.75)	A Stage 1 Archaeological Assessment was completed (see <b>Appendix K</b> ) for the Study Area as a part of this project.	A Stage 1 Archaeological Assessment was completed (see <b>Appendix K</b> ) for the Study Area as a part of this project ( <a href="#">Project Information Form [PIF] P365-0148-2021</a> ). The Stage 1 Archaeological Assessment was accepted into the Register by MCM on April 23, 2024.
<i>Section 4.3.1 – Archaeology</i> (p.50 / PDF p.75)	The majority of the Study Area, however, retains high potential for the presence of archaeological resources and a Stage 2 Archaeological Assessment is currently being completed for these areas.	The majority of the Study Area, however, retains high potential for the presence of archaeological resources and a Stage 2 Archaeological Assessment ( <a href="#">PIF [P1074-0136-2023]</a> ) is currently underway.
<i>Section 4.3.2 – Built Heritage and Cultural Heritage Landscapes</i> (p.63 / PDF p.88)	4.3.2 Built Heritage and Cultural Heritage Landscapes	4.3.2 Built Heritage <a href="#">Resources</a> and Cultural Heritage Landscapes
<i>Section 4.3.2 – Built Heritage and Cultural Heritage Landscapes</i> (p.63 / PDF p.88)	A Cultural Heritage Resource Assessment Report (CHRAR) was completed to provide preliminary information about built heritage and cultural heritage landscapes within the Study Area.  Prior to the field review, available current and historical aerial photographs and maps were reviewed for any potential cultural heritage resources that may be extant in the Study Area.	A Cultural Heritage Resource Assessment Report (CHRAR) was <del>completed to provide preliminary information about</del> <a href="#">to identify all existing and potential built heritage resources</a> and cultural heritage landscapes <a href="#">located</a> within the Study Area.  Prior to the field review, available current and historical aerial photographs and maps were reviewed for any <del>potential cultural heritage resources</del> <a href="#">BHRs and CHLs</a> that may be extant in the Study Area

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<p><i>Section 4.3.2 – Built Heritage and Cultural Heritage Landscapes</i> (p.63 / PDF p.88)</p>	<p>26 cultural heritage resources (CHRs) were identified within or adjacent to the Study Area as well as eleven built heritage resources.</p> <p>Properties screened for cultural heritage value or interest (CHVI) are shown in Exhibit 4-39 to Exhibit 4-49.</p> <p>Built heritage and cultural heritage landscape recommendations are detailed in Section 8.3 and Appendix L. Five Cultural Heritage Evaluation Reports (CHERs) were completed for the following properties and results are summarized in Section 8.3.2 of this TESR:</p> <ul style="list-style-type: none"> <li>• 12 McDonald Road</li> <li>• 18 Lake Road</li> <li>• 389 Crandall Road</li> <li>• 439 Crandall Road</li> <li>• 638 County Road 26</li> </ul>	<p>26 cultural heritage <b>landscapes</b> were identified within or adjacent to the Study Area as well as eleven built heritage resources. <b>These properties with known or potential cultural heritage value or interest (CHVI) identified in the CHRAR are outlined in Exhibit 4-39.</b></p> <p><b>Exhibit 4-39: Summary of CHLs and BHRs in the Study Area</b></p> <table border="1"> <thead> <tr> <th>Resource</th> <th>Type</th> <th>Address/Location</th> </tr> </thead> <tbody> <tr><td>CHL 1</td><td>Roadscape</td><td>Highway 401</td></tr> <tr><td>CHL 2</td><td>Roadscape</td><td>Purdy Road</td></tr> <tr><td>CHL 3</td><td>Farm Complex</td><td>478 Purdy Road</td></tr> <tr><td>CHL 4</td><td>Farm Complex</td><td>856 Purdy Road</td></tr> <tr><td>CHL 5</td><td>Roadscape</td><td>Durham Road/Herley Road</td></tr> <tr><td>CHL 6</td><td>Roadscape</td><td>Honey Road</td></tr> <tr><td>CHL 7</td><td>Farm Complex</td><td>297 Honey Road</td></tr> <tr><td>CHL 8</td><td>Farm Complex</td><td>148 Samis Road</td></tr> <tr><td>CHL 9</td><td>Roadscape</td><td>Crandall Road</td></tr> <tr><td>CHL 10</td><td>Farm Complex</td><td>426 Crandall Road</td></tr> <tr><td>CHL 11</td><td>Farm Complex</td><td>439 Crandall Road</td></tr> <tr><td>CHL 12</td><td>Roadscape</td><td>Telephone Road</td></tr> <tr><td>CHL 13</td><td>Farm Complex</td><td>13711 Telephone Road</td></tr> <tr><td>CHL 14</td><td>Roadscape</td><td>Lake Road</td></tr> <tr><td>CHL 15</td><td>Roadscape</td><td>McDonald Road</td></tr> <tr><td>CHL 16</td><td>Recreational/Residential</td><td>Little Lake</td></tr> <tr><td>CHL 17</td><td>Farm Complex</td><td>14764 Little Lake Road</td></tr> <tr><td>CHL 18</td><td>Farm Complex</td><td>14287 Telephone Road</td></tr> <tr><td>CHL 19</td><td>Farm Complex</td><td>14393 Telephone Road</td></tr> <tr><td>CHL 20</td><td>Farm Complex</td><td>14511 Telephone Road</td></tr> <tr><td>CHL 21</td><td>Farm Complex</td><td>15064 Telephone Road</td></tr> </tbody> </table>	Resource	Type	Address/Location	CHL 1	Roadscape	Highway 401	CHL 2	Roadscape	Purdy Road	CHL 3	Farm Complex	478 Purdy Road	CHL 4	Farm Complex	856 Purdy Road	CHL 5	Roadscape	Durham Road/Herley Road	CHL 6	Roadscape	Honey Road	CHL 7	Farm Complex	297 Honey Road	CHL 8	Farm Complex	148 Samis Road	CHL 9	Roadscape	Crandall Road	CHL 10	Farm Complex	426 Crandall Road	CHL 11	Farm Complex	439 Crandall Road	CHL 12	Roadscape	Telephone Road	CHL 13	Farm Complex	13711 Telephone Road	CHL 14	Roadscape	Lake Road	CHL 15	Roadscape	McDonald Road	CHL 16	Recreational/Residential	Little Lake	CHL 17	Farm Complex	14764 Little Lake Road	CHL 18	Farm Complex	14287 Telephone Road	CHL 19	Farm Complex	14393 Telephone Road	CHL 20	Farm Complex	14511 Telephone Road	CHL 21	Farm Complex	15064 Telephone Road
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		CHL 22	Farm Complex	15120 Telephone Road
		CHL 23	Farm Complex	15154 Telephone Road
		CHL 24	Roadscape	County Road 26
		CHL 25	Farm Complex	638 County Road 26
		CHL 26	Farm Complex	16536 Telephone Road
		BHR 1	Farmhouse	296 Purdy Road
		BHR 2	House	449 Purdy Road
		BHR 3	Farmhouse	740 Purdy Road
		BHR 4	Barns	756 Purdy Road
		BHR 5	Farmhouse	356 Honey Road
		BHR 6	House	204 Crandall Road
		BHR 7	House	377 Crandall Road
		BHR 8	Barn	389 Crandall Road
		BHR 9	House	318 Lake Road
		BHR 10	Farmhouse	14835 Telephone Road
		BHR 11	Farmhouse	15097 Telephone Road
		<p>Properties screened and identified as having potential cultural heritage value or interest (CHVI) are shown in Exhibit 4-40 to Exhibit 4-50.</p>		
		<p><del>Built heritage and cultural heritage landscape recommendations are detailed in Section 8.3 and Appendix L. Five Cultural Heritage Evaluation Reports (CHERs) were completed for the following properties and results are summarized in Section 8.3.2 of this TESR:</del></p>		
		<p>Mitigation measures and next steps for potentially impacted BHRs and CHLs are detailed in Section 8.3 and Appendix L. Based on the results of the preliminary impact assessment Cultural Heritage Evaluation Reports (CHERs) were completed for the following properties:</p>		
		<ul style="list-style-type: none"> <li>12 McDonald Road</li> </ul>		

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		<ul style="list-style-type: none"> <li>• 18 Lake Road</li> <li>• 389 Crandall Road</li> <li>• 439 Crandall Road</li> <li>• 638 County Road 26</li> </ul>
<p><i>Section 8.3.1 – Archaeological Resources</i> (p.209 / PDF p.234)</p>	<p>Based on the results of the Stage 1 AA, a Stage 2 AA is required for those parts of the Study Area determined to retain archaeological potential (see Figure 6 in <b>Appendix K</b>).</p> <p>These recommendations for the Stage 2 archaeological assessment are to follow the requirements of Section 2 of the <i>Standards and Guidelines for Consultant Archaeologists</i> (MCM, 2011). The recommendations are as follows:</p> <ul style="list-style-type: none"> <li>• Recently ploughed agricultural fields must be subject to pedestrian survey at 5 m intervals as per Section 2.1.1 of the <i>Standards and Guidelines for Consultant Archaeologists</i> (2011). Prior to pedestrian survey, the field must be ploughed and weathered to allow for ideal conditions for the identification of archaeological resources. After ploughing, soil visibility must be at least 80% in order for pedestrian survey to proceed.</li> <li>• Where ploughing is not possible, the property must be subject to test pit survey at 5 m intervals as per Section 2.1.2 of the <i>Standards and Guidelines for Consultant Archaeologists</i> (2011). This recommendation includes areas such as wood lots, bush lots, manicured lawns, and areas of scrub overgrowth. Test pit survey can be increased to 10 m intervals in areas of confirmed disturbance based on professional judgement.</li> <li>• Orchards where the area between plants is less than 5 m can be subject to test pit survey at 5 m intervals. Orchards where are between plants is greater than 5 m can be subject to strip-ploughing.</li> </ul> <p>It should be noted that areas determined to no longer retain archaeological potential should not be subject to</p>	<p>Based on the results of the Stage 1 AA, a Stage 2 AA is required for those parts of the Study Area determined to retain archaeological potential (see Figure 6 in <b>Appendix K</b>). <i>The Stage 2 AA will be undertaken by a licensed archaeologist, in compliance with the Ontario Heritage Act. The recommendations of the Stage 2 AA will be followed.</i></p> <p><i>It should be noted that archaeological concerns have not been fully addressed until reports have been entered into the Ontario Public Register of Archaeological Reports where those reports recommend that:</i></p> <ol style="list-style-type: none"> <li>1. <i>The archaeological assessment of the project area is complete and</i></li> <li>2. <i>All archaeological sites identified by the assessment are either of no further cultural heritage value or interest (as per Section 48(3) of the Ontario Heritage Act) or that mitigation of impacts has been accomplished through excavation or an avoidance and protection strategy.</i></li> </ol> <p>Areas determined to no longer retain archaeological potential shall not be subject to ground disturbing activities until the <i>proponent receives a letter from MCM indicating that the reports have been entered into the Ontario Public Register of Archaeological Reports.</i></p>

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	ground disturbing activities until the recommendations stated herein have been accepted by the MCM, and the report has been entered into the Public Register of Archaeological Reports.	
<p><i>Section 8.3.2 – Built Heritage Resources and Cultural Heritage Landscapes</i></p> <p>Exhibit 8-14: Potential Impacts and Mitigation Strategies for Built Heritage Resources (BHR) and Cultural Heritage Landscapes (CHL) (p.213 / PDF p.238)</p>	<p>CHL 16 – “Mitigation Strategies” Column:</p> <ul style="list-style-type: none"> <li>• A Recommended Plan should be selected that maintains as great an offset as possible between the Highway 401 widening and the properties lining McDonald Road along the northwest shores of Little Lake. Given the immediate adjacency of these properties to the grading limits, mitigation measures should be undertaken during construction planning to ensure that indirect impacts, such as vibrations, or the proximity of construction equipment, do not damage the buildings. Staging and construction activities should be appropriately located and/or planned to avoid impacting the properties. If necessary, construction fencing should be erected around property boundaries to ensure they are not damaged by any construction machinery or vehicles.</li> <li>• The Lake Road bridge replacement and associated McDonald Road intersection reconstruction should be designed in a manner resulting in as few property impacts as possible. Storage and construction staging areas should be located close to the grading limits to avoid impacts to the roadscape and the heritage resources identified in the Study Area.</li> <li>• The rural cross-section of McDonald Road should be maintained to ensure the new construction is consistent with the rural character of the roadscape.</li> <li>• Where construction is anticipated to result in grading impacts and tree removal around the intersection of Lake Road and McDonald Road and the north side of McDonald, post-construction</li> </ul>	<p>CHL 16 – “Mitigation Strategies” Column:</p> <ul style="list-style-type: none"> <li>• <a href="#">As a result of potential direct impacts to the properties on the north side of the lots fronting McDonald Road adjacent to Highway 401 and the potential introduction of a toe wall and/or noise barrier wall along the boundary of the future MTO property requirement, a CHER is recommended to be completed for 12 McDonald Road prior to selection of the Recommended Plan to determine if the potentially impacted property over 40 years old possesses CHVI. If the property has CHVI, an HIA should also be completed to evaluate alternatives, assess potential impacts to the resource, and recommend appropriate mitigation measures.</a></li> <li>• A Recommended Plan should be selected that maintains as great an offset as possible between the Highway 401 widening and the properties lining McDonald Road along the northwest shores of Little Lake. Given the immediate adjacency of these properties to the grading limits, mitigation measures should be undertaken during construction planning to ensure that indirect impacts, such as vibrations, or the proximity of construction equipment, do not damage the buildings. Staging and construction activities should be appropriately located and/or planned to avoid impacting the properties. If necessary, construction fencing should be erected around property boundaries to ensure they are not damaged by any construction machinery or vehicles.</li> <li>• The Lake Road bridge replacement and associated McDonald Road intersection reconstruction should be designed in a manner resulting in as few property impacts as possible. Storage and construction staging areas should be located close to the grading limits to avoid impacts to the roadscape and the heritage resources identified in the Study Area.</li> </ul>

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	<p>landscaping with native tree species should be employed to mitigate visual impacts to the roadscape.</p>	<ul style="list-style-type: none"> <li>• The rural cross-section of McDonald Road should be maintained to ensure the new construction is consistent with the rural character of the roadscape.</li> <li>• Where construction is anticipated to result in grading impacts and tree removal around the intersection of Lake Road and McDonald Road and the north side of McDonald, post-construction landscaping with native tree species should be employed to mitigate visual impacts to the roadscape.</li> </ul>
<p><i>Section 8.3.2 – Built Heritage Resources and Cultural Heritage Landscapes</i> (p.210 / PDF p.235)</p>	<p>A Cultural Heritage Resource Assessment Report (CHRAR) was completed to document the cultural heritage landscapes and built heritage resources within and adjacent to the Study Area (see <b>Appendix L</b>). As part of this study, potential direct and indirect impacts to cultural heritage resources were identified and general mitigation measures were recommended for affected built heritage resources and cultural heritage landscapes.</p> <p>Direct impacts refer to the demolition or removal of a structure, and/or occupying sites or locations that are required for temporary construction purposes, ancillary services and secondary functions.</p> <p>Indirect impacts which include temporary impacts during construction such as the introduction of physical, visual, audible or atmospheric elements that are not in keeping with their character and/or setting.</p> <p><b>Exhibit 8-14</b> considers the potential direct and indirect impacts and mitigation strategies for the identified cultural heritage resources, based on the MCM's <i>Information Bulletin 3</i> (2017).</p>	<p>The preliminary impact assessment identified potential impacts to known and potential BHRs and CHLs based upon an assessment of proposed project activities using the descriptions of impacts and examples provided in <i>Information Bulletin 3: Heritage Impact Assessments for Provincial Heritage Properties</i> (MCM 2017). The assessment included identifying and describing all preliminary design alternatives that were proposed and evaluating the impacts of each alternative on known and potential BHRs and CHLs. For properties identified as a known or potential BHR or CHL where direct adverse impacts are anticipated, a Cultural Heritage Evaluation Report was recommended as a next step to determine whether the property has CHVI. For properties determined to have CHVI by MTO, a Heritage Impact Assessment (HIA) will be completed to fully assess potential impacts and propose alternatives and mitigation to conserve the property's CHVI.</p> <p>A direct adverse impact is described as one that would have a permanent and irreversible negative affect on the CHVI of a property or result in the loss of a heritage attribute on all or part of the PHP. Examples of direct adverse impacts on a PHP may include, but are not limited to:</p> <ul style="list-style-type: none"> <li>• Removal or demolition of all or part of any heritage attribute;</li> <li>• Removal or demolition of any building or structure on the PHP whether or not it contributes to the CHVI of the property (i.e. non-contributing buildings);</li> <li>• Any land disturbance, such as a change in grade and/or drainage patterns that may adversely affect a PHP, including archaeological resources;</li> <li>• Alterations to the property in a manner that is not sympathetic, or is incompatible, with CHVI of the property.</li> </ul>

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		<p>This may include necessary alterations, such as new systems or materials to address health and safety requirements, energy-saving upgrades, building performance upgrades, security upgrades or servicing needs;</p> <ul style="list-style-type: none"> <li>• Alterations for access requirements or limitations to address such factors as accessibility, emergency egress, public access, security;</li> <li>• Introduction of new elements that diminish the integrity of the property, such as a new building, structure or addition, parking expansion or addition, access or circulation roads, landscape features;</li> <li>• Changing the character of the property through removal or planting of trees or other natural features, such as a garden, or that may result in the obstruction of significant views or vistas within, from, or of built and natural features;</li> <li>• Change in use for the PHP that could result in permanent, irreversible damage or negates the property’s CHVI; and,</li> <li>• Continuation or intensification of a use of the PHP without conservation of heritage attributes (MCM, 2017:6-7).</li> </ul> <p>Indirect impacts which include temporary impacts during construction such as the introduction of physical, visual, audible or atmospheric elements that are not in keeping with their character and/or setting.</p> <p><b>Exhibit 8-14</b> considers the potential direct and indirect impacts and mitigation strategies for the identified cultural heritage resources, based on the <i>Information Bulletin 3: Heritage Impact Assessments for Provincial Heritage Properties</i> (MCM 2017).</p>
<p><i>Section 8.3.2 – Built Heritage Resources and Cultural Heritage Landscapes</i> (p.217 / PDF p.242)</p>	<p>Based on the results of this assessment, 18 CHLs and 5 BHRs will be directly impacted by the proposed short-listed alternatives for the Project. In addition, there may be indirect impacts to one CHL and one BHR given the proximity of construction activities. As such, the recommendations are as follows:</p>	<p>Based on the results of this assessment, the recommendations are as follows:</p>
<p><i>Section 8.3.2.1 Cultural heritage Evaluation Reports</i> (p.217 / PDF p.242)</p>	<p>638 County Road 26 (CHL 25) was identified to have CHVI and an HIA should be completed for this property</p>	<p>638 County Road 26 (CHL 25) was identified to have as having CHVI and is anticipated to be adversely and directly impacted as a result of the Recommended Plan. and an An HIA will be undertaken in detail design should be completed for this property.</p>



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		<p>Additional paragraph included:</p> <p>Any HIAs will be undertaken by qualified person(s), will be provided to MCM for review and comment, and will be made available to interested parties on request. HIAs will follow <i>Information Bulletin 3: Heritage Impact Assessments for Provincial Heritage Properties</i> (MCM 2017).</p>