

Memo

Date: Wednesday, November 02, 2022
Project: Ontario Line TA
To: Ontario Line Technical Advisor – Stantec
From: Ontario Line Technical Advisor – SVN
Subject: HDDR Addendum: Pape and Cosburn Stations

Project Overview

Metrolinx, an agency of the Province of Ontario, is proceeding with the planning and development of the Ontario Line (the Project), extending from Exhibition/Ontario Place to the Ontario Science Centre in the City of Toronto.

The Project is a new approximately 15.6-kilometre subway line with connections to Line 1 (Yonge-University) subway service at Osgoode and Queen Stations, Line 2 (Bloor-Danforth) subway service at Pape Station, and Line 5 (Eglinton Crosstown) Light Rail Transit (LRT) service at the future Science Centre Station. Fifteen stations are proposed, with additional connections to three GO Transit lines (Lakeshore East (LSE), Lakeshore West (LSW) and Stouffville), and the Queen, King, Bathurst, Spadina, Harbourfront, and Gerrard/Carlton streetcar routes. The Project will reduce crowding on Line 1 and provide connections to new high-order rapid transit neighbourhoods. The Project will be constructed in a dedicated right-of-way (RoW) with a combination of elevated (i.e., above existing rail corridor/roadway), tunnelled (i.e., underground), and at-grade (i.e., at the same elevation as the existing rail corridor) segments at various locations. An overview of the Study Area is shown in Figure 1.

Purpose of the Ontario Line Environmental Impact Assessment Report

The Project is being assessed in accordance with Ontario Regulation (O. Reg.) 341/20: Ontario Line Project under the *Environmental Assessment Act*. O. Reg. 341/20: Ontario Line Project outlines a Project-specific environmental assessment process that includes an Environmental Conditions Report (ECR), Environmental Impact Assessment Report (EIAR), and an opportunity for Early Works Report(s) for assessment of works that are ready to proceed in advance of the EIAR. The ECR documents the local environmental conditions of the Ontario Line Study Area and provides a preliminary description of the potential environmental impacts of the Project. Information provided in the ECR is used to inform the Early Works Report(s) and the EIAR, which study environmental impacts in further detail and confirm and refine preliminary mitigation measures identified in the ECR.

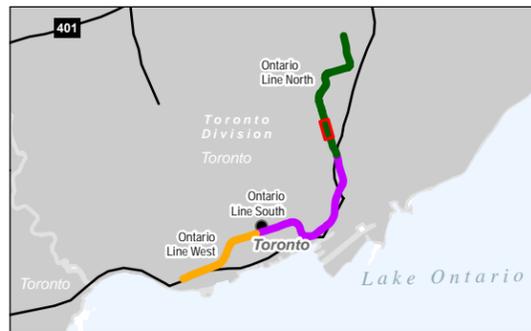
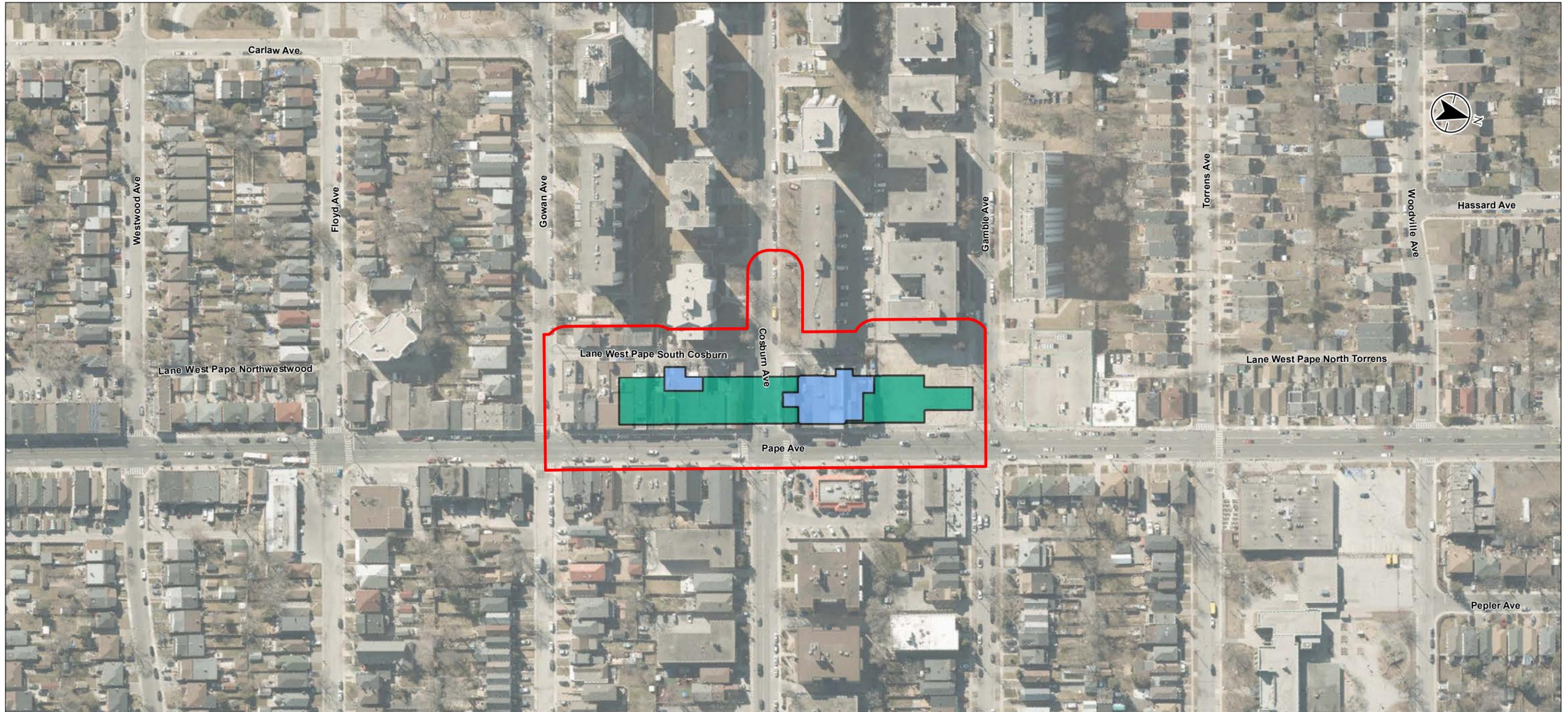
The EIAR includes environmental impact assessment results, proposed mitigation measures, proposed monitoring activities, potentially required permits and approvals and a record of consultation, among other information, to meet O. Reg. 341/20: Ontario Line Project requirements.

Purpose of the Heritage Detailed Design Report Addendum

This report (Heritage Detailed Design Report Addendum – HDDR Addendum) forms part of the EIAR and builds on the *Heritage Detailed Design Report* (HDDR) (Stantec 2022) that documents and describes known and potential built heritage resources (BHRs) and cultural heritage landscapes (CHLs) in the HDDR Study Area.

The purpose of the HDDR Addendum is to review and confirm preliminary impacts and mitigation measures identified in the HDDR against further refinement of the proposed undertaking during the detailed design phase of work as it relates to Pape Station and Cosburn Station. This includes assessment and description of changes to the heritage status of structures since the issuance of the HDDR, including identification of additional known or potential BHRs and CHLs where Project infrastructure was introduced through design development. This HDDR Addendum builds upon the methodology established in the *HDDR* (Stantec 2022) and *Cultural Heritage Report* (AECOM 2020).

DRAFT



- Legend**
- Study Area
 - Station
 - Station Platform - Subsurface Level

0 30 60 metres
1:2,000 (At original document size of 11x17)



Project Location
Toronto, ON

Prepared by BCC on 2022-10-31

Client/Project
HDR CORPORATION
ONTARIO LINE TA
HDDR ADDENDUM

160560009 REVA

Figure No.
1-1

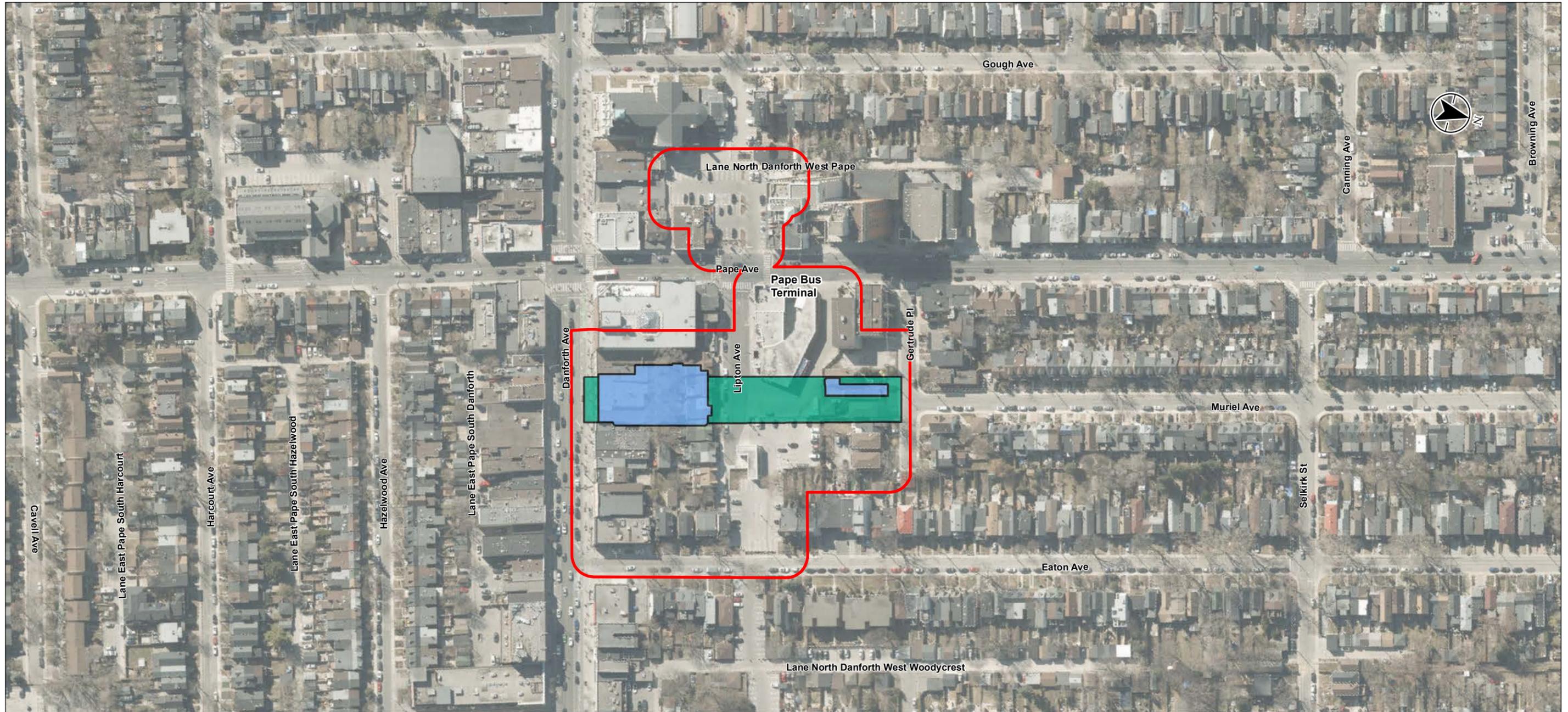
Title
Study Area – Cosburn Station

- Notes**
1. Coordinate System: NAD27 MTM zone 10
 2. Base features produced under license with the Ontario Ministry of Natural Resources and Forestry © Queen's Printer for Ontario, 2019.
 3. Orthoimagery © First Base Solutions, 2021. Imagery Date, 2020.
 4. The Project Footprint is current as of August, 2021. Where additional information was made available following this date, it was considered in Tables 5-1, 5-2, and 5-3 of the Heritage Detailed Design Report.

\\cdt1215-1011\work_group\01605\active\160560009\11_data\gis\mxd\heritage\report_figures\20221031_HDDR_Addendum\160560009_HDAD_Fig01_StudyArea.mxd Revised: 2022-10-31 By: BCowper

Disclaimer: This document has been prepared based on information provided by others as cited in the Notes section. Stantec has not verified the accuracy and/or completeness of this information and shall not be responsible for any errors or omissions which may be incorporated herein as a result. Stantec assumes no responsibility for data supplied in electronic format, and the recipient accepts full responsibility for verifying the accuracy and completeness of the data.

\\cd\1215-101\work_group\01605\active\160560009\11_data\gis\mxd\heritage\report_figures\20221031_HDDR_Addendum\160560009_HDAD_Fig01_StudyArea.mxd Revised: 2022-10-31 By: BCowper



- Legend**
- Study Area
 - Station
 - Station Platform - Subsurface Level

0 30 60 metres
1:2,000 (At original document size of 11x17)



Project Location: Toronto, ON Prepared by BCC on 2022-10-31

Client/Project: HDR CORPORATION, ONTARIO LINE TA, HDDR ADDENDUM 160560009 REVA

Figure No.

1-2

Title

Study Area – Pape Station

- Notes**
1. Coordinate System: NAD27 MTM zone 10
 2. Base features produced under license with the Ontario Ministry of Natural Resources and Forestry © Queen's Printer for Ontario, 2019.
 3. Orthoimagery © First Base Solutions, 2021. Imagery Date, 2020.
 4. The Project Footprint is current as of August, 2021. Where additional information was made available following this date, it was considered in Tables 5-1, 5-2, and 5-3 of the Heritage Detailed Design Report.

Disclaimer: This document has been prepared based on information provided by others as cited in the Notes section. Stantec has not verified the accuracy and/or completeness of this information and shall not be responsible for any errors or omissions which may be incorporated herein as a result. Stantec assumes no responsibility for data supplied in electronic format, and the recipient accepts full responsibility for verifying the accuracy and completeness of the data.

Identification of Known, Previously Identified, and Potential Built Heritage Resources/Cultural Heritage Landscapes – Pape Station and Cosburn Station

The HDDR Study Area was compared to the current Footprint of Pape Station and Cosburn Station to identify properties not previously included in the HDDR or which have recently been identified by the City of Toronto in the Danforth Avenue Planning Study and listed on the Municipal Heritage Register. The properties identified in the Danforth Avenue Planning Study were determined to have known or potential Cultural Heritage Value or Interest (CHVI) and are inventoried as part of this HDDR Addendum. CHVI was determined based on the Criteria Checklist (MTCS 2016), data collection and field reviews conducted by qualified cultural heritage professionals, and professional knowledge and experience. The 7 properties identified within the Study Area fit into three categories:

- 2 resources that were previously included in the HDDR (Table 1)
- 5 properties that have been recently listed or designated and were therefore not captured in previously completed reports (Table 2)

Newly identified properties were assigned reference numbers beginning with Ontario Line Additional North (OLAN) to indicate that they are part of the Ontario Line North Additional set. Previously identified properties retain their original reference number. The properties determined to have known or potential CHVI and previously identified BHRs and CHLs identified in Stantec's *HDDR* are illustrated on Figure 2.

A total of 1 BHRs or CHLs were identified in the Cosburn Station Footprint:

- 1 previously identified BHR

A total of 6 BHRs or CHLs were identified in within the Pape Station Footprint:

- 5 properties identified in the Danforth Avenue Planning Study and inventoried as additional lands
- 1 previously identified BHR

Table 1. Known and Previously Identified BHRs and CHLs

Cultural Heritage Report Ref. # or OLA Ref. #	Type of Property	Location/ Address	Heritage Recognition	Description of Known or Potential Cultural Heritage Value or Interest (CHVI) and Heritage Attributes	Photographs/Digital Image
OLN-020	Commercial Streetscape	968-1042 Pape Avenue 947-1031 Pape Avenue Commercial Streetscape	Potential BHR/CHL Identified during field review	<p>Early-to-mid-twentieth century commercial streetscape- 968-1042 Pape Avenue and 947-1031 Pape Avenue</p> <p>Design or Physical Value:</p> <ul style="list-style-type: none"> Commercial streetscape on the east and west sides of Pape Avenue, with a variety of architectural styles and designs Low rise with one or two-storey massing <p>Historical or Associative Value:</p> <ul style="list-style-type: none"> Constructed circa 1910s-1940s <p>Contextual Value:</p> <ul style="list-style-type: none"> Historical associations with the development of the East York community Create a commercial “main street” between Sammon Avenue and Gamble Avenue <p>Potential to Meet Ontario Regulation 10/06: No</p> <p>Potential Heritage Attributes:</p> <ul style="list-style-type: none"> Mixture of one and two-storey commercial structures, decorative brickwork, mixture of flat, gable and mansard roofs 	
OLN-021	Place of Worship	746 Pape Avenue Calvary Church	Potential BHR/CHL Identified during field review (Note, not listed on OHT Places of Worship Inventory)	<p>Calvary Church- 746 Pape Avenue</p> <p>Design or Physical Value:</p> <ul style="list-style-type: none"> Gothic influenced church building Symmetrical façade with entrance wings and stained glass windows <p>Historical or Associative Value:</p> <ul style="list-style-type: none"> Constructed in circa 1930s Possible historical associations with the community <p>Contextual Value:</p> <ul style="list-style-type: none"> Located on the west side of Pape Avenue, north of Danforth Avenue Property includes the church, a 21st century apartment building and a parking lot (Not listed on Ontario Heritage Trust Places of Worship Inventory) <p>Potential to Meet Ontario Regulation 10/06: No</p> <p>Potential Heritage Attributes:</p> <p>Gothic-inspired design, symmetrical façade, flat roof, front entrance wings/ vestibules, stained glass windows</p>	

Table 2. Additional Lands

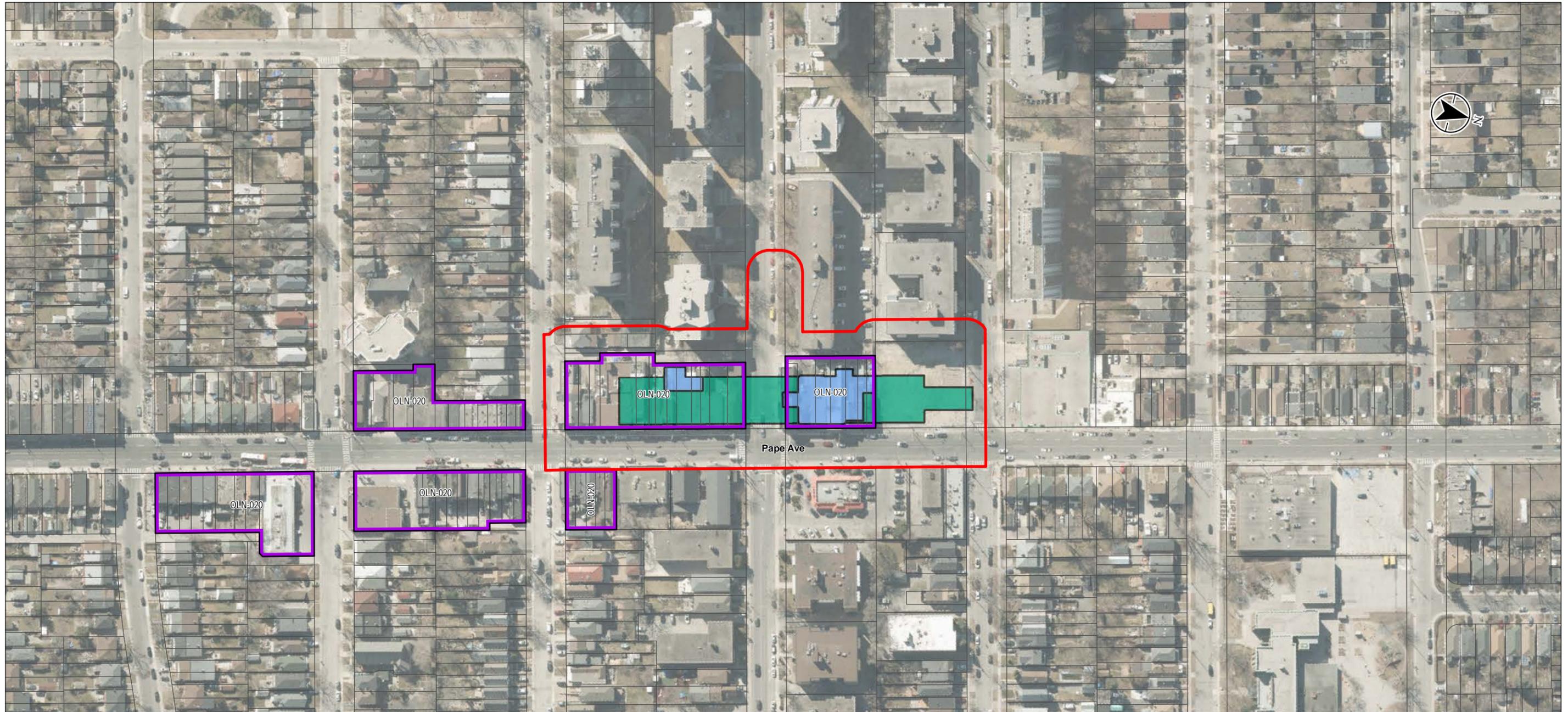
Cultural Heritage Report Ref. # or OLA Ref. #	Type of Property	Location/ Address	Heritage Recognition	Description of Known or Potential Cultural Heritage Value or Interest (CHVI) and Heritage Attributes	Photographs/Digital Image
OLAN-005	Mixed-Use	670-678 Danforth Ave	Listed on the Municipal Heritage Register	<p>Design or Physical Value:</p> <ul style="list-style-type: none"> Commercial structure on the north side of Danforth Avenue Low rise with three-storey massing with regularly placed windows on the second and third storeys <p>Historical or Associative Value:</p> <ul style="list-style-type: none"> Constructed circa 1910s-1940s <p>Contextual Value:</p> <ul style="list-style-type: none"> Historical associations with the development of the Danforth community Contributes to a commercial “main street” along Danforth Avenue <p>Potential to Meet Ontario Regulation 10/06: No</p> <p>Potential Heritage Attributes:</p> <ul style="list-style-type: none"> Three-storey mixed-use structure with stacked bay windows. Flat roof with detailed parapet 	
OLAN-006	Mixed-Use	680 Danforth Ave and Laneway North Of Danforth Avenue	Listed on the Municipal Heritage Register	<p>Design or Physical Value:</p> <ul style="list-style-type: none"> Commercial structure on the north side of Danforth Avenue Low rise with three-storey massing with regularly placed windows on the second and third storeys <p>Historical or Associative Value:</p> <ul style="list-style-type: none"> Constructed circa 1910s-1940s <p>Contextual Value:</p> <ul style="list-style-type: none"> Historical associations with the development of the Danforth community Contributes to a commercial “main street” along Danforth Avenue <p>Potential to Meet Ontario Regulation 10/06: No</p> <p>Potential Heritage Attributes:</p> <ul style="list-style-type: none"> Three-storey mixed-use structure with stacked bay windows. Flat roof with detailed parapet 	

Cultural Heritage Report Ref. # or OLA Ref. #	Type of Property	Location/ Address	Heritage Recognition	Description of Known or Potential Cultural Heritage Value or Interest (CHVI) and Heritage Attributes	Photographs/Digital Image
OLAN-007	Mixed-Use	702 Danforth Ave	Listed on the Municipal Heritage Register	<p>Design or Physical Value:</p> <ul style="list-style-type: none"> Commercial structure on the north side of Danforth Avenue Low rise with two-storey massing with red brick cladding connected to a residential structure at the rear of the property <p>Historical or Associative Value:</p> <ul style="list-style-type: none"> Constructed in 1930 <p>Contextual Value:</p> <ul style="list-style-type: none"> Historical associations with the development of the Danforth community Contributes to a commercial “main street” along Danforth Avenue <p>Potential to Meet Ontario Regulation 10/06: No</p> <p>Potential Heritage Attributes:</p> <ul style="list-style-type: none"> Two storey commercial structure with decorative brickwork and a datestone Flat roof with stone parapet 	
OLAN-008	Mixed-Use	704-708 Danforth Ave	Listed on the Municipal Heritage Register	<p>Design or Physical Value:</p> <ul style="list-style-type: none"> Commercial structure on the north side of Danforth Avenue Low rise with three-storey massing with regularly placed windows on the second and third storeys <p>Historical or Associative Value:</p> <ul style="list-style-type: none"> Constructed in 1922 <p>Contextual Value:</p> <ul style="list-style-type: none"> Historical associations with the development of the Danforth community Contributes to a commercial “main street” along Danforth Avenue <p>Potential to Meet Ontario Regulation 10/06: No</p> <p>Potential Heritage Attributes:</p> <ul style="list-style-type: none"> Two storey commercial structure with a datestone, decorative window casings Flat roof with concrete parapet 	

Cultural Heritage Report Ref. # or OLA Ref. #	Type of Property	Location/ Address	Heritage Recognition	Description of Known or Potential Cultural Heritage Value or Interest (CHVI) and Heritage Attributes	Photographs/Digital Image
OLAN-009	Mixed-Use	710 Danforth Ave	Listed on the Municipal Heritage Register	<p>Design or Physical Value:</p> <ul style="list-style-type: none"> Commercial structure on the north side of Danforth Avenue adjacent to Eaton Avenue Low rise with two-storey massing with red brick cladding <p>Historical or Associative Value:</p> <ul style="list-style-type: none"> Constructed circa 1910s-1940s <p>Contextual Value:</p> <ul style="list-style-type: none"> Historical associations with the development of the Danforth community Contributes to a commercial “main street” along Danforth Avenue <p>Potential to Meet Ontario Regulation 10/06: No</p> <p>Potential Heritage Attributes:</p> <ul style="list-style-type: none"> Two-storey commercial structure, regular placement of windows on the first and second storey, decorative brickworks, flat roof, metal cornice 	

DRY

\\cd\1215-101\work_group\01605\active\160560009\11_data\gis_car\d\gis\mxd\heritagereport\figures\20221031_HDDR_Addendum\160560009_HDAD_Fig02_CH_Resources.mxd Revised: 2022-10-31 By: BCowper



- Legend**
- Study Area
 - Station
 - Station Platform - Subsurface Level
 - Potential BHR/CHL
 - Property Parcel

0 30 60 metres
1:2,000 (At original document size of 11x17)



Project Location: Toronto, ON
Prepared by BCC on 2022-10-31

Client/Project: HDR CORPORATION, ONTARIO LINE TA, HDDR ADDENDUM
160560009 REVA

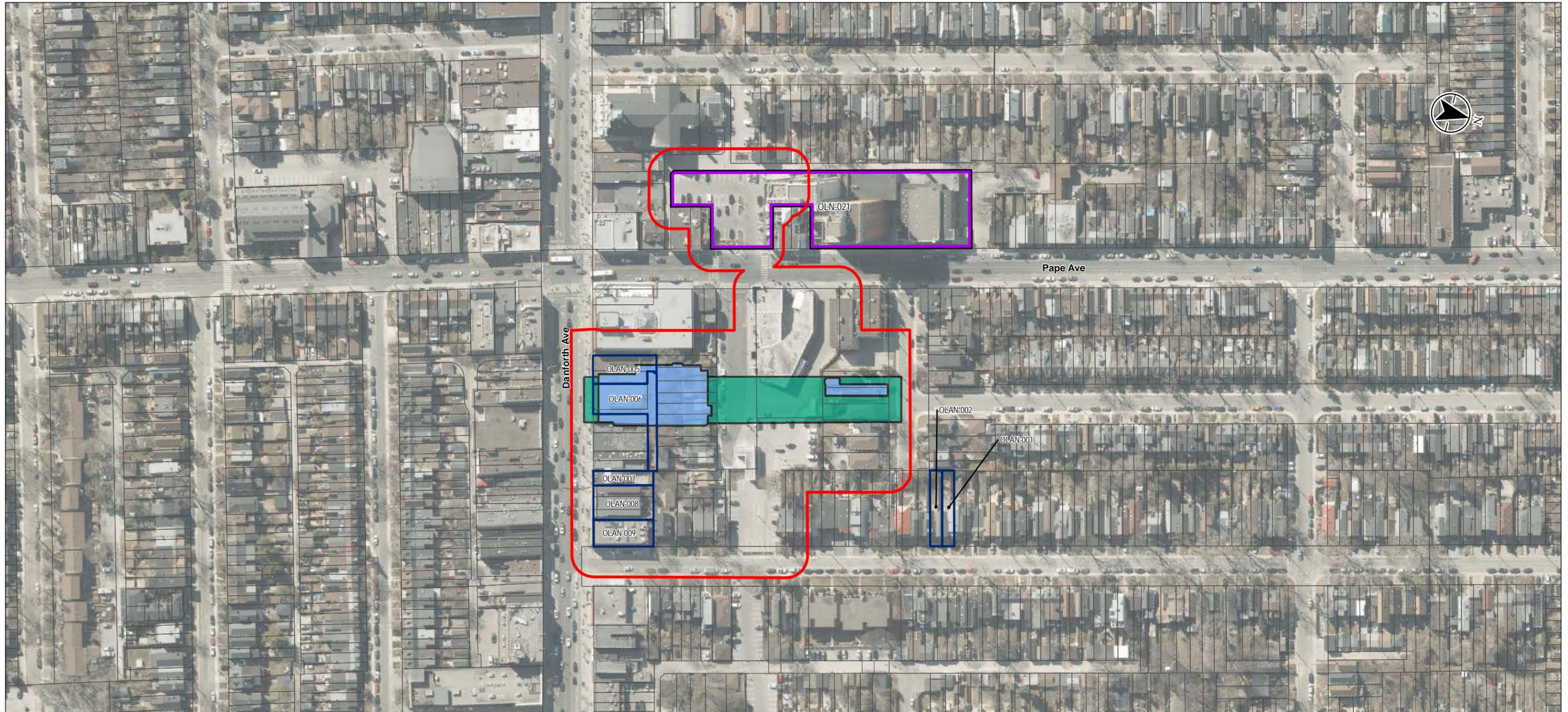
Figure No.
2-1

Title
Previously Identified or Potential Built Heritage Resources - Cosburn Station

- Notes**
1. Coordinate System: NAD27 MTM zone 10
 2. Base features produced under license with the Ontario Ministry of Natural Resources and Forestry © Queen's Printer for Ontario, 2019.
 3. Orthoimagery © First Base Solutions, 2021. Imagery Date, 2020.
 4. The Project Footprint is current as of August, 2021. Where additional information was made available following this date, it was considered in Tables 5-1, 5-2, and 5-3 of the Heritage Detailed Design Report.

Disclaimer: This document has been prepared based on information provided by others as cited in the Notes section. Stantec has not verified the accuracy and/or completeness of this information and shall not be responsible for any errors or omissions which may be incorporated herein as a result. Stantec assumes no responsibility for data supplied in electronic format, and the recipient accepts full responsibility for verifying the accuracy and completeness of the data.

\\c01215-101\work_group\p01605\active\160560009\11_data\gis_car\d\gis\mxd\heritage\report_figures\20221031_HDDR_Addendum\160560009_HDAD_Fig02_CH_Resources.mxd Revised: 2022-10-31 By: BCowper



- Legend**
- Study Area
 - Station
 - Station Platform - Subsurface Level
 - Potential BHR/CHL
 - Additional CH Properties
 - Property Parcel

0 30 60 metres
1:2,000 (At original document size of 11x17)



Project Location: Toronto, ON
Prepared by BCC on 2022-10-31

Client/Project: HDR CORPORATION, ONTARIO LINE TA, HDDR ADDENDUM
160560009 REVA

Figure No.
2-2

Title
Previously Identified or Potential Built Heritage Resources - Pape Station

- Notes**
1. Coordinate System: NAD27 MTM zone 10
 2. Base features produced under license with the Ontario Ministry of Natural Resources and Forestry © Queen's Printer for Ontario, 2019.
 3. Orthoimagery © First Base Solutions, 2021. Imagery Date, 2020.
 4. The Project Footprint is current as of August, 2021. Where additional information was made available following this date, it was considered in Tables 5-1, 5-2, and 5-3 of the Heritage Detailed Design Report.

Potential Impacts, Mitigation Measures, and Monitoring Activities

In accordance with Sections 15(2)6, 15(2)7 and 15(2)8 of O. Reg. 341/20, this HDDR Addendum describes the potential impacts, mitigation measures, and monitoring activities to verify the effectiveness of mitigation measures associated with the Project. This impact assessment builds upon the methodology established in the HDDR. Impacts have been anticipated in locations where Project components overlap with cultural heritage resources.

The proposed impacts of the Project have been evaluated according to the MTCS *Information Bulletin 3: Heritage Impact Assessments for Provincial Heritage Properties (MTCS 2017)*. The MTCS document defines “impact” as a change, either positive or adverse, in an identified cultural heritage resource resulting from a particular activity. The document identifies *direct adverse impacts*, *indirect adverse impacts*, and/or *positive impacts* an activity may have on a heritage resource as defined below.

As presented in the HDDR, potential direct adverse impacts (ordered from most to least preferred) include:

- Encroachment onto the property causing a physical impact to the property, while avoiding physical impact to the building/landscape and/or the heritage attributes identified
- Introduction of new physical elements and/or alterations to the building/landscape without impacting the heritage attributes
- Modification of the building/landscape to fit a new use
- Introduction of new elements and/or alterations that results in a physical impact to a heritage attribute
- Relocation of all or part of the building/landscape
- Demolition of all or part of the building/landscape

As presented in the HDDR, potential indirect adverse impacts would be:

- Vibration impacts to the building/landscape related to the Project on or adjacent to the property

The purpose of the impact assessment contained in this HDDR Addendum is to identify potential impacts and recommend mitigation and monitoring measures for each property within the Footprint of Pape Station and Cosburn Station. The result is a complete list of properties that may be directly or indirectly impacted by the Project and prescribed mitigation recommendations. This was achieved through the following process:

- Review the Ontario Line components as they relate to the HDDR (Stantec 2022)
- Confirm impacts and mitigation measures
- Identify changes, and, where required, refine the mitigation measures for each property in the HDDR Study Area
- If required, identify monitoring recommendations

To help determine where impacts would be direct or indirect, measurements were taken from the outer limit of the Project Footprint to the property boundary and to the building, where applicable. In general, direct impacts are anticipated for properties in, or partially in, the Project Footprint, while indirect impacts are anticipated for properties located outside the Project Footprint, but in the HDDR Study Area and Zone of Influence (ZOI). In cases where a property was on or inside of the Project Footprint, a measurement of 0 m was assigned. Where the analysis produced results showing that the distance to the building was shorter than the distance to the property line, it was assumed that the building is on the property line and the property measurement was applied to both, to account for the varying accuracy of available data.

Table 5 and Table 6 present the anticipated impacts from the Project refined from the range of impacts and mitigation measures that were developed as part of the HDDR. In each case prior to defining the impact type, the more preferred options were considered and eliminated, where applicable.

In the case of demolition, all other approaches to the site were considered and eliminated prior to determining demolition as the only viable option. The tables also include the proposed mitigation measures in order to mitigate and reduce potential negative impacts to these resources that may result from the Project. In each case, avoidance is the preferred mitigation strategy as per the HDDR. Heritage related monitoring is recommended during and immediately following construction completion, where applicable.

Where possible, mitigation strategies have been summarized to reduce repetition in the impacts and mitigation tables. Table 3 lists the recurring mitigation measures and their detailed procedures. Where customized responses are required, it is noted. Table 4 lists the recurring mitigation measure required during construction and its detailed procedure.

Table 3. Detailed Procedures for Mitigation Measures

Impact Identified	Mitigation Measure	Detailed Procedure
Encroachment	<ul style="list-style-type: none"> Consult with the City of Toronto Sensitive Design 	<ul style="list-style-type: none"> Consult with City of Toronto's Heritage Planning Unit as part of the Detailed Design phase and prior to issuance of the draft EIAR regarding physical impact to the property in order to determine and obtain approval or permits that may be required. Design Project to encroach onto the property as little as possible, while avoiding impacts to the building or landscape and/or heritage attributes identified.

Impact Identified	Mitigation Measure	Detailed Procedure
New physical element or alteration (no impact to heritage attributes)	<ul style="list-style-type: none"> Consult with the City of Toronto Sensitive and Compatible Design 	<ul style="list-style-type: none"> Consult with City of Toronto's Heritage Planning Unit as part of the Detailed Design phase and prior to issuance of the draft EIAR regarding physical impact to the property in order to determine and obtain approval or permits that may be required. Design the Project to integrate new physical elements with the building or landscape and to be sympathetic and compatible with site-specific design (consideration of Parks Canada's <i>Standards & Guidelines for the Conservation of Historic Places in Canada</i>, 2010).
Modification to fit new use	<ul style="list-style-type: none"> Consult with the City of Toronto Adaptive Reuse Study 	<ul style="list-style-type: none"> Consult with City of Toronto's Heritage Planning Unit as part of the Detailed Design phase regarding physical impact to the property in order to determine and obtain approval or permits that may be required. Complete Adaptive Reuse Study for the reuse of the building, if appropriate.
New physical element or alteration (impacts to heritage attribute)	<ul style="list-style-type: none"> Consult with the City of Toronto Documentation and Salvage Sensitive and Compatible Design 	<ul style="list-style-type: none"> Consult with City of Toronto's Heritage Planning Unit as part of the Detailed Design phase and prior to issuance of the draft EIAR regarding physical impact to the property in order to determine and obtain approval or permits that may be required. Complete detailed documentation of the property that includes the identification of salvageable material and/or heritage attributes prior to alteration in order to inform what building components should be retained and conserved and/or restored. Design the Project to integrate new physical elements with the building or landscape and to be sympathetic and compatible with site-specific design (consideration of Parks Canada's <i>Standards & Guidelines for the Conservation of Historic Places in Canada</i>, 2010).
Relocation	<ul style="list-style-type: none"> Consult with the City of Toronto Documentation and Salvage Stabilization and preparation Interpretation/ Commemoration Framework 	<ul style="list-style-type: none"> Consult with City of Toronto's Heritage Planning Unit as part of the Detailed Design phase regarding physical impact to the property in order to determine and obtain approval or permits that may be required. Complete detailed documentation of the property that includes the identification of salvageable material and/or heritage attributes prior to relocation in order to inform what building components should be retained and conserved and/or restored. Stabilize the interior and exterior of the building before relocation. Prepare the new site, i.e., construction of a new foundation, prior to relocation. During Design, complete an Interpretation/Commemoration Strategy Framework in consultation with the City of Toronto Heritage Planning

Impact Identified	Mitigation Measure	Detailed Procedure
		Unit. Incorporate commemoration signage to communicate the cultural heritage value of the relocated structure on the property to the public, if required.
Demolition	<ul style="list-style-type: none"> Consult with the City of Toronto Documentation and Salvage Interpretation/ Commemoration Framework 	<ul style="list-style-type: none"> Consult with the City of Toronto's Heritage Planning Unit as part of the Detailed Design phase regarding physical impact to the property in order to determine and obtain approval or permits required. Complete detailed documentation of the property that includes the identification of salvageable materials and/or heritage attributes. Complete an Interpretation/Commemoration Strategy Framework in consultation with the City of Toronto Heritage Planning Unit. Incorporate salvageable materials and commemoration signage to communicate the cultural heritage value of the demolished structure on the property to the public.

Table 4. Detailed Procedures for Monitoring Activities

Impact Identified	Monitoring Measure	Detailed Procedure
Vibration	<ul style="list-style-type: none"> Vibration Monitoring 	<ul style="list-style-type: none"> Document (review and establish) the structural condition of the building to determine if the structure is vulnerable to vibrations impacts. Establish vibration limits based on building conditions, founding soil conditions, and type of construction vibration. Implement vibration mitigating measures on the construction site and/or at the building. Monitor vibration during construction using seismographs, with notification by audible and/or visual alarms when limits are approached or exceeded. Conduct regular condition surveys and reviews during construction to evaluate efficacy of protective measure in place prior to construction.

Table 5. Potential Impacts, Mitigation Measures and Monitoring Activities, Cosburn Station

Cultural Heritage Report Ref. # or OLA Ref. #	Location / Address and Property Name	Heritage Recognition	Potential to meet O. Reg. 10/06	Type and Description of Potential Impact	Mitigation Measures	Monitoring Activities
OLN-020	968-1042 Pape Avenue 947-1031 Pape Avenue Commercial Streetscape	Potential BHR/CHL Identified during field review	No	<p>Direct adverse impact: The OLN-020 property boundaries and some of the buildings within this resource are located within the Project Footprint. The resource is at the location of a construction staging area, the alignment (below grade), and the new Cosburn Station. OLN-020 is a commercial streetscape, incorporating multiple individual buildings and properties. There are no direct or indirect impacts anticipated for buildings on the east side of Pape Avenue. On the west side of Pape Avenue, the properties between Floyd Avenue and Gowan Avenue are required for subsurface easement with no physical impacts to the properties anticipated. Also, on the west side of Pape Avenue, the properties between Gowan Avenue and Cosburn Avenue (1002-1028 Pape Avenue), as well as Cosburn Avenue and Gamble Avenue (1030-1042 Pape Avenue) are required for the station headhouse and associated construction staging.</p> <p>Therefore, given the nature of the project components required at this location, demolition is anticipated (Impact Type 2.C. Demolition of all or part of a building situated within the streetscape, Appendix G: Ontario Line Cultural Heritage Report). Options to avoid OLN-020 were considered and determined not to be feasible.</p> <p>Prior to reaching Impact Type 2.F from the range of potential impacts in Appendix G: Ontario Line Cultural Heritage Report – Demolition of all or part of the building, in consultation with Metrolinx, the mitigation options presented in the Appendix G, Type A-E, of the Ontario Line Cultural Heritage Report were considered and were eliminated. Partial demolition of the streetscape is the only viable option.</p> <p>Potential indirect adverse impact: Some of the properties outside the directly impacted area of the OLN-020 streetscape are located on the alignment and may be subject to vibration impacts.</p> <p>Therefore, given the proximity of the buildings to the Project Footprint some of the structures included in this resource may be subject to vibration impacts (Impact Type 3.A., Appendix G, Ontario Line Cultural Heritage Report).</p>	<p>Prior to property modifications, including but not limited to demolition, the following will be completed:</p> <ul style="list-style-type: none"> • Consult with the City of Toronto • Documentation and Salvage • Sensitive and Compatible Design • Interpretation/Commemoration Framework 	<ul style="list-style-type: none"> • Vibration Monitoring

Table 6. Potential Impacts, Mitigation Measures and Monitoring Activities, Pape Station

Cultural Heritage Report Ref. # or OLA Ref. #	Location / Address and Property Name	Heritage Recognition	Potential to meet O. Reg. 10/06	Type and Description of Potential Impact	Mitigation Measures	Monitoring Activities
OLN-021	746 Pape Avenue Calvary Church	Potential BHR/CHL Identified during field review (Note, not listed on Ontario Heritage Trust Places of Worship Inventory)	No	<p>Direct adverse impact: OLN-021 is anticipated to be directly impacted by the project. It is the location of an Emergency Exit Building (EEB) and construction staging area. However, the direct impacts at this property will be limited to the parking lot and will not impact heritage attributes.</p> <p>Therefore, a direct impact without impacts to the building or heritage attributes is anticipated (Impact Type 2.A. Encroachment onto the property causing a physical impact to the property, while avoiding physical impact to the building and/or the heritage attributes identified in Appendix A, Appendix G: Ontario Line Cultural Heritage Report).</p> <p>Indirect adverse impact: OLN-021 may be indirectly impacted by the Project. It is located adjacent to a construction staging area and may be subject to vibration impacts. The OLN-021 property boundary is within the Project Footprint, with the building located adjacent to a construction staging area approximately 3.1 m north of the footprint, falling within the 11 m ZOI.</p> <p>Therefore, given the proximity of the building to the Project Footprint the structure may be subject to vibration impacts (Impact Type 3.A., Appendix G, Ontario Line Cultural Heritage Report).</p>	<p>Prior to property modifications the following mitigation strategies will be completed:</p> <ul style="list-style-type: none"> • Consult with the City • Sensitive Design 	<ul style="list-style-type: none"> • Vibration Monitoring
OLAN-005	670-678 Danforth Ave	Listed on the Municipal Heritage Register	No	<p>Direct adverse impact: The property boundary and building at OLAN-005 are within the Project Footprint. The property is at the location of the new Pape Station, a construction staging area and a platform. Options to avoid OLAN-005 were considered and determined not to be feasible. Therefore, given the nature of the Project components required at this location, demolition is anticipated (Impact Type 2.F. Ontario Line Cultural Heritage Report).</p> <p>While OLAN-005 was not considered in the HDDR, the impact assessment framework and mitigation strategies presented in the HDDR have been adopted here. Therefore, prior to reaching Impact Type 2.F – Demolition of all or part of the building, in consultation with Metrolinx, the mitigation options presented in the HDDR were considered and were eliminated. Demolition of the building for the Project is the only viable option.</p>	<p>Prior to property modifications, including but not limited to demolition, the following will be completed:</p> <ul style="list-style-type: none"> • Consult with the City of Toronto • Documentation and Salvage • Sensitive and Compatible Design • Interpretation/Commemoration Framework 	<ul style="list-style-type: none"> • None Required

Cultural Heritage Report Ref. # or OLA Ref. #	Location / Address and Property Name	Heritage Recognition	Potential to meet O. Reg. 10/06	Type and Description of Potential Impact	Mitigation Measures	Monitoring Activities
OLAN-006	680 Danforth Ave and Laneway North Of Danforth Avenue	Listed on the Municipal Heritage Register	No	<p>Direct adverse impact: The property boundary and building at OLAN-006 are within the Project Footprint. The property is at the location of the new Pape Station, a construction staging area and a platform. Options to avoid OLAN-006 were considered and determined not to be feasible. Therefore, given the nature of the Project components required at this location, demolition is anticipated (Impact Type 2.F. Ontario Line Cultural Heritage Report).</p> <p>While OLAN-006 was not considered in the HDDR, the impact assessment framework and mitigation strategies presented in the HDDR have been adopted here. Therefore, prior to reaching Impact Type 2.F – Demolition of all or part of the building, in consultation with Metrolinx, the mitigation options presented in the HDDR were considered and were eliminated. Demolition of the building for the Project is the only viable option.</p>	<p>Prior to property modifications, including but not limited to demolition, the following will be completed:</p> <ul style="list-style-type: none"> • Consult with the City of Toronto • Documentation and Salvage • Sensitive and Compatible Design • Interpretation/Commemoration Framework 	<ul style="list-style-type: none"> • None Required
OLAN-007	702 Danforth Ave	Listed on the Municipal Heritage Register	No	<p>Direct adverse impact: The property boundary and building at OLAN-007 are within the Project Footprint. The property is at the location of the new Pape Station, a construction staging area and a platform. Options to avoid OLAN-007 were considered and determined not to be feasible. Therefore, given the nature of the Project components required at this location, demolition is anticipated (Impact Type 2.F. Ontario Line Cultural Heritage Report).</p> <p>While OLAN-007 was not considered in the HDDR, the impact assessment framework and mitigation strategies presented in the HDDR have been adopted here. Therefore, prior to reaching Impact Type 2.F – Demolition of all or part of the building, in consultation with Metrolinx, the mitigation options presented in the HDDR were considered and were eliminated. Demolition of the building for the Project is the only viable option.</p>	<p>Prior to property modifications, including but not limited to demolition, the following will be completed:</p> <ul style="list-style-type: none"> • Consult with the City of Toronto • Documentation and Salvage • Sensitive and Compatible Design • Interpretation/Commemoration Framework 	<ul style="list-style-type: none"> • None Required
OLAN-008	704-708 Danforth Ave	Listed on the Municipal Heritage Register	No	<p>Direct adverse impact: The property boundary and building at OLAN-008 are within the Project Footprint. The property is at the location of the new Pape Station, a construction staging area and a platform. Options to avoid OLAN-008 were considered and determined not to be feasible. Therefore, given the nature of the Project components required at this location, demolition is anticipated (Impact Type 2.F. Ontario Line Cultural Heritage Report).</p> <p>While OLAN-008 was not considered in the HDDR, the impact assessment framework and mitigation strategies presented in the HDDR have been adopted here. Therefore, prior to reaching Impact Type 2.F – Demolition of all or part of the building, in consultation with Metrolinx, the mitigation options presented in the HDDR were considered and were eliminated. Demolition of the building for the Project is the only viable option.</p>	<p>Prior to property modifications, including but not limited to demolition, the following will be completed:</p> <ul style="list-style-type: none"> • Consult with the City of Toronto • Documentation and Salvage • Sensitive and Compatible Design • Interpretation/Commemoration Framework 	<ul style="list-style-type: none"> • None Required

Cultural Heritage Report Ref. # or OLA Ref. #	Location / Address and Property Name	Heritage Recognition	Potential to meet O. Reg. 10/06	Type and Description of Potential Impact	Mitigation Measures	Monitoring Activities
OLAN-009	710 Danforth Ave	Listed on the Municipal Heritage Register	No	<p>Direct adverse impact: The property boundary and building at OLAN-009 are within the Project Footprint. The property is at the location of the new Pape Station, a construction staging area and a platform. Options to avoid OLAN-009 were considered and determined not to be feasible. Therefore, given the nature of the Project components required at this location, demolition is anticipated (Impact Type 2.F. Ontario Line Cultural Heritage Report).</p> <p>While OLAN-009 was not considered in the HDDR, the impact assessment framework and mitigation strategies presented in the HDDR have been adopted here. Therefore, prior to reaching Impact Type 2.F – Demolition of all or part of the building, in consultation with Metrolinx, the mitigation options presented in the HDDR were considered and were eliminated. Demolition of the building for the Project is the only viable option.</p>	<p>Prior to property modifications, including but not limited to demolition, the following will be completed:</p> <ul style="list-style-type: none"> • Consult with the City of Toronto • Documentation and Salvage • Sensitive and Compatible Design • Interpretation/Commemoration Framework 	<ul style="list-style-type: none"> • None Required

DRAFT

Summary and Conclusions

In summary, a total of 7 BHRs or CHLs are located in the HDDR Addendum Study Area, including:

- 2 resources that were previously included in the HDDR
- 5 resources that have been recently listed or designated and were therefore not captured in previously completed reports which were included in this HDDR Addendum as part of the additional lands

Of these resources, all are anticipated to be directly impacted. The results of this HDDR Addendum reflect the typical impacts and mitigation approaches anticipated for the Project. Noting that more than one type of direct impact is identified for some resources, the types of direct impacts anticipated include:

- 6 resources for which complete or partial demolition is anticipated
- 1 resource where encroachment is anticipated

Closure

This memorandum has been prepared for the sole benefit of Metrolinx and may not be used by any third party without the express written consent of Stantec Consulting Ltd. Any use which a third party makes of this report is the responsibility of such third party.

We trust this memorandum meets your current requirements. Please do not hesitate to contact us should you require further information or have additional questions about any facet of this report.

This memorandum was prepared by Christian Giansante and Lashia Jones, MA, CAHP and reviewed by Tracie Carmichael, BA, B.Ed.

References

AECOM. 2020. Cultural Heritage Report: Existing Conditions and Preliminary Impact Assessment. On file at Metrolinx.

Ministry of Tourism, Culture and Sport (MTCS), 2016:
Criteria for Evaluating Potential for Built Heritage Resources and Cultural Heritage Landscapes, A Checklist for the Non-Specialist.
<http://www.mtc.gov.on.ca/en/heritage/tools.shtml>.

Ministry of Tourism, Culture and Sport (MTCS), 2017:
Information Bulletin 3 Heritage Impact Assessments for Provincial Heritage Properties

Parks Canada. 2010. The Standards and Guidelines for the Conservation of Historic Places in Canada. Electronic Document:
<https://www.historicplaces.ca/media/18072/81468-parks-s+g-eng-web2.pdf>

Stantec, 2022. Heritage Detailed Design Report (FINAL). On file at Metrolinx.

DRAFT