JOINT STAFF REPORT
ACTION REQUIRED

Municipal Class Environmental Assessment Study (Schedule "C") for a New Northwest PATH Connection (Union Station to Wellington Street)

Date:	March 13, 2008
To:	Public Works and Infrastructure Committee
From:	Acting Chief Planner and Executive Director, City Planning Division General Manager, Transportation Services Division
Wards:	Ward 28, Toronto Centre-Rosedale Ward 20, Trinity-Spadina
Reference Number:	Pw080017

SUMMARY

A Municipal Class Environmental Assessment (EA) study has been undertaken to develop, examine and evaluate a number of alternative solutions and designs in order to recommend a new northwest pedestrian connection between Union Station and the existing PATH pedestrian underground network in the vicinity of Wellington Street. The project is based on an overwhelming need to plan and prepare for significant increases in pedestrian demand within Union Station and its environs over the next 15 to 20 years and beyond.

The study has concluded that additional pedestrian facilities are needed to provide the capacity required to relieve congestion and support future downtown growth and pedestrian activities generated by GO Transit's ongoing service expansion. The evaluation of a reasonable range of alternative solutions, which included consultation with the public, adjacent property owners and review agencies, resulted in the following preferred alternative:

- A new underground pedestrian tunnel situated primarily below the York Street right-of way. The new tunnel would start at the northwest corner of the Union Station property and extend northerly to the existing underground PATH system at two locations – at the PATH level at 70 York Street and immediately south of the property located at 100 Wellington Street W;

- An expanded and improved at-grade pedestrian realm on York Street, which is achieved by reconfiguring the street to two travel lanes (one-way northbound) and

allocating additional space within the right-of way to wider sidewalks and other enhancements (e.g. tree planting, boulevard treatments and new surface connections to the proposed pedestrian tunnel).

The preferred alternative has the benefit of:

- supporting current City Council direction and policy with respect to promoting public transit and other more sustainable modes of transportation as well as the goals and objectives of Union Station revitalization;
- providing expanded pedestrian capacity and effectively accommodating a range of pedestrian demands (more effective distribution and connectivity, weather protection and direct routing to demand areas northwest of Union Station);
- providing pedestrians with a safe and comfortable environment for commuting to and from Union Station;
- seeking to minimize potential disruptions and impacts to utilities, vehicular and transit operations; and
- maximizing public amenity opportunities and providing potential benefits to adjacent private properties.

GO Transit has indicated that the construction of the new northwest PATH pedestrian connection will be critical to the phasing of their operational improvement program, including a key component of station revitalization that includes opening of a new west GO (York Street) concourse area in Union Station (targeted for 2012), and must move forward to design and implementation on an urgent basis. GO Transit staff has indicated that they are prepared to support a recommendation to fund a one-third share of the cost, as a Provincial contribution. Given the need for these expanded pedestrian services is in large part, the result of GO Transit's improvement program to support downtown employment, a tri-partite partnership of provincial, federal and municipalities should be pursued.

A notice of Study Completion must now be issued and the Environmental Study Report filed in the public record for a 30-day review period in accordance with the requirements of the Municipal Class Environmental Assessment.

RECOMMENDATIONS

The Acting Chief Planner and Executive Director, City Planning and the General Manager, Transportation Services recommend that:

1. City Council endorse the Preferred Alternative set out in this report and contained in the Environmental Study Report, to provide additional pedestrian facilities at-grade and below-grade on York Street between Union Station and Wellington Street to support Union Station revitalization;

2. The Acting Chief Planner and Executive Director, City Planning Division be authorized to issue a Notice of Completion and to file the Environmental Study Report for the Municipal Class Environmental Assessment Study (Schedule "C") for a new northwest PATH connection (Union Station to Wellington Street) in the public record for 30 days in accordance with the requirements of the Municipal Class Environmental Assessment;

3. City Council grant authority to the Chief Corporate Officer, in consultation with the General Manager, Transportation Services and the Acting Chief Planner and Executive Director, City Planning, to undertake discussions with other government agencies to pursue a tri-partite partnership of provincial, federal and municipalities and private sector stakeholders to secure commitments and related agreements to fund the construction and maintenance of a new Union Station northwest PATH pedestrian connection;

4. The General Manager, Transportation Services report back during the 2009 Capital Budget process on the results of the funding discussions and 2009-2013 Capital Budget impact associated with construction of a new northwest PATH pedestrian connection, as well as on the ownership of the facility and associated maintenance and security arrangements; and

5. The appropriate City officials be authorized and directed to take the necessary action to give effect thereto.

Financial Impact

There is no immediate financial impact resulting from the recommendations contained in this report. However the funds required for the construction and any other costs related to the construction and maintenance of the Preferred Alternative set out in this report are not currently available and have not been included in Transportation Services 2008 Capital Budget and 2009-2012 Capital Plan.

Based on the work completed in this study, the cost of this project is $65 million, of which $62.5 million is required for construction of the new pedestrian tunnel and $2.5 million is required for at-grade public realm improvements. Project costs include a dedication of one percent (1%) to public art.

City staff recognize that funding partnerships with other levels of government are crucial for the successful implementation of this initiative. Preliminary discussions with government agencies such as GO Transit, during the course of this EA Study indicate a keen interest in moving this project forward, and GO Transit staff have indicated they are prepared to support a recommendation to fund one-third of the cost, as a Provincial contribution. This project responds to GO Transit's expanding services and as such, should be supported by Provincial and Federal orders of government. City staff will pursue a tri-partite partnership with the other levels of government.

This project is a "growth related capital project" and as such, will be included as an eligible project in the City's Development Charges by-law which is currently being updated. In addition, the private sector (those properties which will have a direct benefit associated with new PATH connections) have indicated potential support for this project. City staff will also pursue these sources of funds in order to keep the City's debt to a minimum.

With the authorization of Council, City staff are prepared to undertake formal discussions with government agencies and private sector stakeholders to secure appropriate funding and cost sharing arrangements and enter into any required operating and maintenance agreements necessary for this project. Agreements may also be required with the affected utility companies for the relocation of existing utilities in conflict with the undertaking. The financial obligations of the City will be determined in more detail and reported back during the 2009 Capital Budget process.

The Deputy City Manager and Chief Financial Officer has reviewed this report and agrees with the financial impact information.

DECISION HISTORY/ISSUE BACKGROUND

City Council, at its meeting on June 27, 28 and 29, 2006, adopted Clause No. 16(a) contained in Planning and Transportation Committee Report 4 entitled "Union Station District Plan - Area Bounded by Bay Street, Wellington Street - Simcoe Street, the Rail Corridor, Rees Street and Lake Shore Boulevard/Harbour Street", and in doing so, requested, among other things, that staff take the necessary action on a priority basis, to commence an Environmental Assessment (EA) for the creation of a new northwest PATH connection in accordance with the design directions noted in the Union Station District Plan (May 2006).

Following Council's direction, City Planning and Transportation Services staff, with joint funding from GO Transit, have undertaken a Municipal Class Environmental Assessment Study (Schedule 'C') for a New Northwest PATH Connection (Union Station to Wellington Street) and retained the consulting firm Arup Canada Inc. to assist with the study. The Class EA Study was carried out with the assistance of technical consultants and supported by a Technical Advisory Committee comprising staff from City Planning, Transportation Services, Facilities and Real Estate, Technical Services, Toronto Water, Economic Development and GO Transit.

The purpose of this new PATH connection will be to relieve existing pedestrian congestion, support Union Station revitalization and future downtown growth, and accommodate pedestrian activities generated by GO Transit's service expansion over the next twenty years. A new northwest connection will disperse existing PATH activity and provide additional routing opportunities in conjunction with the development of a new York Street GO concourse at Union Station.

One of the main policy objectives of the Official Plan is to link land use and transportation planning policies and create a comprehensive strategy for accommodating the City's future trip growth in a way that reduces auto-dependency. This approach is reflected in the City's guidelines, programs and practices which promote walking as a mode that encourages both health and transportation benefits – cornerstones of comprehensive City building. New infrastructure that complements the Union Station revitalization and encourages pedestrian activity is consistent with Official Plan policy.

The Union Station Master Plan

Toronto City Council adopted the Union Station Master Plan in December 2004. The Master Plan is a bold, visionary roadmap for the restoration, revitalization and operation of the Union Station complex. As a high-level policy document it is intended to direct decision making for Union Station as it continues to evolve. The Master Plan advocates for strong pedestrian connections leading to, through and from the Station and defines the need to improve overall pedestrian conditions /amenities both within the station and its environs. The northwest PATH link is identified in the Master Plan as a key proposed pedestrian connection between the downtown and Union Station.

The Union Station District Plan

Toronto City Council adopted the Union Station District Plan in May 2006. The District Plan provides an opportunity to advance pedestrian issues in the vicinity of Union Station. The Plan makes several recommendations and pushes the pedestrian agenda in ways that are positive and proactive for the City of Toronto. The District Plan provides a vision for Union Station that integrates the historic character of the area with that of a thriving, modernized multi-modal transportation hub at its centre.

The District Plan also sets out a number of guiding principles for the public realm that are intended to enhance and improve the pedestrian environment and better integrate the heritage and transportation requirements into the fabric of the downtown by improving pedestrian connectivity, in part through the introduction of a new northwest PATH link to serve existing and future demands.

COMMENTS

Study Process

The New Northwest PATH Connection (Union Station to Wellington Street) Environmental Assessment Study has been completed according to the requirements for a Schedule "C" project under the Municipal Class Environmental Assessment (the Class EA). The Class EA process requires that the City confirm the need (i.e. define the problem/opportunity), identify feasible solutions, evaluate the impact of the alternative solutions on the natural, social and economic environments, and select an alternative for construction.

As a requirement of the Schedule "C" projects, if City Council endorses the recommendations of this study, the Environmental Study Report (ESR) will be filed in the public record for a minimum 30-day review period. During this period, members of the public and any other interested individual, interest group, or government agency, may submit comments on the project or request that a Part II Order be issued. A Part II Order, if granted by the Minister of the Environment, elevates the status of the project from a Class EA Study to an individual Environmental Assessment. If this occurs, the project cannot proceed until the proponent completes an Individual Environmental Assessment Study and receives approval from the Minister. If a Part II Order is not requested and assuming no other objections are received during the filing period, the project is approved under the Environmental Assessment Act and design/construction may proceed.

The ESR describes in detail the first three phases of the five-phase environmental planning process set out by the Class EA:

- Phase 1 – identification of the problem or opportunity;
- Phase 2 – identification and evaluation of alternative solutions; and
- Phase 3 – identification and evaluation of alternative design concepts for the preferred solution.

The preparation of the ESR and the filing of the document in the public record constitute Phase 4 of the environmental planning process. Phase 5 is the construction and operation or implementation of the project, and monitoring of impacts, in accordance with the terms of the EA approval. The New Northwest PATH Class Environmental Assessment Study is currently at Phase 4 of the process.

It is recommended that City Council endorse the Preferred Alternative set out in this report and contained in the Municipal Class Environmental Assessment Study document, to provide additional pedestrian facilities at-grade and below-grade on York Street between Union Station and Wellington Street to support Union Station revitalization.

In addition (and as a requirement of Schedule "C" projects) it is recommended that the Acting Chief Planner and Executive Director, City Planning Division be authorized to issue a Notice of Completion and to file the Environmental Study Report for the Municipal Class Environmental Assessment Study (Schedule "C") in the public record for 30 days in accordance with the requirements of the Municipal Class Environmental Assessment.

Public Consultation

Public involvement is an integral part of the EA Study process. The public consultation requirements of the Class EA were met and exceeded in this study. The public consultation program included two Public Information Centres (PICs), a stakeholder workshop, meetings with individual stakeholders, and associated notices and letters advertising the study. In addition the City of Toronto's website provided a link to the

EA Study and provided all pertinent information related to the Study and contact information.

A half-day stakeholders workshop was held on January 30, 2007 to review and build on the preliminary alternative solutions developed by the Technical Advisory Committee (TAC). This workshop engaged a wide variety of interested stakeholders, including property owners, property managers, transit agencies and members of the Union Station Revitalization Public Advisory Group (USRPAG).

A Notice of Study Commencement and information pertaining to PIC #1 was provided through direct mailings to stakeholders contained in the project's contact database, and through newspaper advertisements in NOW Magazine on Thursday, February 15, 2007 and Thursday, February 22, 2007.

The first PIC was held on February 26, 2007 at Union Station to review the problem/opportunity statement and the evaluation of alternative solutions, and to provide attendees with the opportunity to offer their comments and discuss them directly with representatives from the City of Toronto, GO Transit and the EA Study consultants. In addition four (4) display boards from the first PIC were placed in the Union Station GO East (Bay Street) Concourse for information until March 15, 2007 along with a request for comments on the project.

A notice of PIC #2 was provided through direct mailings to those stakeholders contained in the project's contact database, and through newspaper advertisements in NOW Magazine on Thursday, June 28, 2007 and Thursday, July 5, 2007.

The second PIC was held on July 10, 2007 at Union Station to introduce the Alternative Design Concepts for underground routes and at-grade public realm improvements, and to provide attendees with the opportunity to offer their comments and discuss them directly with representatives from the City of Toronto, GO Transit and the EA Study consultants.

Approximately 150 people attended the PIC's. At the meetings, attendees were encouraged to provide written comments on comment sheets provided at the PIC. The project team received nine (9) comment sheets during the commenting period. A majority of comments received verbally from attendees and through the comments sheets supported the York Street underground alternative combined with at-grade improvements to the pedestrian realm.

A series of meetings were also held with property owners within the study area including representatives of Fairmont Royal York Hotel, The Cadillac Fairview Corporation Limited, The Toronto Club, Strathcona Hotel, Toronto Parking Authority, Brookfield Properties Corporation; Oxford Properties and 33 University.

A full description of the public consultation program is contained in the ESR document.

Environmental Assessment Findings

(1) Identification of the Problem / Opportunity

The projected pedestrian volumes at Union Station and in particular the pedestrian demands anticipated in the vicinity of Front Street and York Street/University Avenue have been examined previously as input to the Master Plan and District Plan studies, with the key objective of providing additional capacity, amenity and routing options to accommodate and effectively disperse station related pedestrian activity.

Approximately 14,000 pedestrians currently exit northbound from Union Station to Front Street during the morning peak commuter period. During the same time, approximately 19,000 pedestrians use the existing PATH system. Future (2021) northbound exiting pedestrian volumes to Front Street are projected to increase to approximately 24,000 morning peak hour movements. Existing PATH demand is forecast to increase to more than 36,000 hourly movements. Significant pedestrian volume increases are also anticipated at other peak times.

Of the 24,000 morning peak hour pedestrians that are forecast to exit to Front Street, approximately 13,000 are expected to continue travelling north, of which an estimated 4,700 to 6,100 will be oriented to the north and west.

The current facilities and operations will not adequately meet projected pedestrian demands nor provide any opportunity for redistribution of other existing PATH users who may be oriented north and west of the Station. Based on the results of the pedestrian studies, there is a clear need for a new northwest PATH connection to relieve current congestion and provide increased pedestrian capacity and routing options between Union Station and the downtown core. A full description of existing and future pedestrian demand is contained in the ESR document.

Additional pedestrian facilities, comprising an underground connection to the existing PATH network with parallel surface improvements, is the most comprehensive solution to the challenge of accommodating increasing pedestrian volumes at Union Station.

There is also an opportunity to effectively coordinate the construction of new public infrastructure in the area. In particular, GO Transit's expansion program (GO TRIP) is proceeding with a number of important projects being planned for and developed at Union Station. GO Transit has indicated that the construction of the new northwest PATH pedestrian connection will be critical to the phasing of various projects, including the opening of a new York Street GO concourse area (targeted for 2012), and must move forward to design and implementation on an urgent basis.

Other work in the area that provides a coordination opportunity includes the Toronto Transit Commission's (TTC) $90 million Second Platform Project at Union Subway Station, and the Front Street Reconfiguration Environmental Assessment study (York

Street to Bay Street) which is currently being initiated pursuant to Council's direction in consideration of the Union Station District Plan. The construction activities resulting from these projects provide an opportunity for the City to undertake street level and subsurface work in a coordinated approach that will minimize construction cost and disturbance to pedestrians and automobiles, and provide new pedestrian and transit infrastructure in a planned and efficient manner.

(2) Identification and Evaluation of Alternative Planning Solutions

To address the projected pedestrian demands, six alternatives were generated and evaluated. A brief description of these alternatives and the results of the evaluation are provided below.

Alternative 1: Do Nothing: As the name implies this solution makes no interventions whatsoever in the study area. In accordance with EA requirements, this alternative was included in the evaluation process primarily to highlight the potential of the other solutions to improve conditions within the study area.

Alternative 2: At -Grade or Surface Routes with Streetscape Improvements: Improvements would include sidewalk widening, traffic signal timing adjustments, and streetscape enhancements such as plantings. Consideration would have to be given to ensuring that pedestrians have good access to street level from Union Station.

Alternative 3: Improvements to Existing Underground Routes: Efforts would be made to expand the existing capacity of the PATH connections, including those through the Fairmont Royal York, Citigroup Place and the RBC Tower.

Alternative 4: New Underground Routes: This solution proposes the construction of an entirely new, entirely underground connection to the existing PATH network. The potential alignments for such a solution are varied, but the issues for any application of this solution are substantially the same.

Alternative 5: New Underground Routes Connecting to Surface Improvements: This solution would involve the construction of a new underground route that would at some point ascend to an improved surface route.

Alternative 6: New Underground Routes in Parallel with Surface Improvements: This solution proposes both a new underground connection to the existing PATH network with parallel surface improvements.

Each alternative was analyzed and evaluated in detail utilizing five criteria groups:

- Policy and Planning Environment: this criteria considered conformity of the proposed solutions with existing policies and municipal government directives;

- Transportation: this criteria considered the likely success of each proposed solution in accommodating existing and projected peak-period pedestrian traffic at Union Station;

- Geotechnical/Engineering: this criteria considered technical issues such as impacts to utilities, construction costs, maintenance and traffic impacts;

- Socio-economic Environment: this criteria considered the effects on the surrounding area during and after the implementation of any solution; and

- Cultural Environment: this criteria considered the effects of the proposed solutions on the historic fabric of the study area.

The assessment and evaluation identified Alternative 6, a new underground route in parallel with surface improvements, as the preferred alternative solution. This solution supports current City Council direction and policy, provides expanded pedestrian capacity and effectively accommodates a range of pedestrian demands (more effective distribution and connectivity, weather protection and directness of routes).

The evaluation of the alternative solutions is fully documented in the ESR document.

(3) Identification and Evaluation of Alternative Design Concepts

To implement the Preferred Alternative (new underground route in parallel with surface improvements), various alternative design concepts were developed. These concepts addressed both underground routes and at-grade public realm improvements.

Underground Alternative Design Concepts

Given the current structure of the PATH network, building-to-building connections were examined in detail with representatives of the properties identified. However, it became evident early in the process that a number of factors including current building operations (e.g. back-of house operations, mechanical rooms, building cores), structural limitations and historical designations significantly limited the opportunity to retrofit an underground PATH below and through existing buildings in the study area. In some cases, property owners specifically requested not to be linked with a new PATH facility. As a result, the project team was not able to develop a feasible building-to-building PATH retrofit option.

The underground routes that were identified and considered are all predominantly or exclusively within publicly owned rights-of-way (streets) with the potential for underground connections to private buildings where both desired and technically feasible.

Underground Alternative 1 - Do Nothing: This alternative maintains the existing conditions and proposes no changes to the underground PATH network.

Underground Alternative 2a - University Avenue: Connects to the Citigroup Place building and incorporates the existing parking garage structure underneath University Avenue. Under this design concept, the parking garage structure would be converted to a pedestrian walkway to provide a new PATH connection leading to St. Andrew subway station and the existing PATH network. The garage structure would need extensive upgrading/retrofitting in order to serve as a pedestrian corridor, and would result in the loss of up to 325 short term parking spaces serving the immediate area.

Underground Alternative 2b - University Avenue: Alternative 2b varies from alternative 2a in that this connection would connect directly to the northwest corner of Union Station.

Underground Alternative 3 - York Street: Connects to the northwest corner of the Union Station property and runs north below York Street. At Wellington Street, the new PATH tunnel would potentially connect to the existing underground PATH system at two locations – at the PATH level at 70 York Street and immediately south of the property located at 100 Wellington Street.

Underground Alternative 4a - Royal York Hotel to York Street: Provides a new connection between the concourse level of the Royal York Hotel and Union Station. The Royal York Hotel concourse level that presently connects to the existing PATH system to the east would be connected at the west to a new PATH tunnel constructed below York Street.

Underground Alternative 4b - Existing Royal York Hotel: Involves the restoration and modification of the existing Royal York connection to Union Station. The existing tunnel would need to be significantly reconfigured to improve or meet accessibility requirements. The Royal York Hotel concourse level that presently connects to the existing PATH system to the east would be connected at the west to a new PATH tunnel constructed below York Street.

The assessment methodology for evaluating the underground alternative design concepts is similar to methodology used for evaluating the alternative planning solutions. Evaluation criteria, indicators, and measures were developed based on the criteria used for the evaluation of alternative planning solutions. These criteria were chosen as a result of their ability to identify the potential environmental effects of each alternative and distinguish their strengths/weaknesses. In keeping with the evaluation of the concept alternatives, the intent of the comparative evaluation was to clearly identify the net effects of each alternative on the environment after the application of mitigation measures so that the advantages and disadvantages of each alternative could be compared.

The results of the evaluation identified **Alternative 3 - York Street** as the preferred alternative underground design concept. A full description of the evaluation of the Underground Alternative Design Concepts is contained in the ESR document.

At-Grade or Surface Alternative Design Concepts

The alternative planning solution proposes that surface or at-grade public realm improvements be undertaken in parallel to the underground solution. As such, the following four (4) design concepts were carried forward for consideration on York Street. These design concepts are exclusively within the publicly owned right-of-way (streets) with the potential for connections to the new PATH tunnel below York Street where both desired and technically feasible.

At-Grade or Surface Alternative 1 - Do Nothing: This base condition is intended to reflect existing conditions on the roadway network. No changes to the public realm or existing conditions are proposed for this alternative.

At-Grade or Surface Alternative 2 - Two Travel Lanes (one-way northbound): Considers closing the two easterly northbound lanes on York Street from Front Street to Wellington Street to increase sidewalk capacity, resulting in two travel lanes (one way northbound) in conjunction with intersection configuration modifications.

At-Grade or Surface Alternative 3 - Two Travel lanes (one-way northbound) with lay-by: Considers closing the eastern most northbound lane on York Street from Front Street to Wellington Street to increase sidewalk capacity, in conjunction with intersection configuration modifications.

At-Grade or Surface Alternative 4 - Full Closure: Alternative 4 considers closing all four lanes of York Street to vehicular traffic and having York Street function as a pedestrian promenade from Wellington Street to Front Street.

The assessment methodology for evaluating the at-grade improvements alternative design concepts is similar to methodology used for evaluating the alternative planning solutions. These criteria were chosen as a result of their ability to identify the potential environmental effects of each alternative and distinguish their strengths/weaknesses. In keeping with the evaluation of the concept alternatives, the intent of the comparative evaluation was to clearly identify the net effects of each alternative on the environment after the application of mitigation measures so that the advantages and disadvantages of each alternative could be compared.

The assessment and evaluation resulted in **Alternative 3 - Two Travel lanes (one-way northbound) with lay-by**, being carried forward as the preferred alternative design. The evaluation of the at-grade Alternative Design Concepts is fully documented in the ESR document.

Public/Agency Concerns

Throughout the public consultation process a wide variety of valuable comments were received from the public, adjacent property owners and review agencies which assisted in

the development and evaluation of the alternatives. Public/agency comments are fully documented in the ESR document.

For the most part, this initiative has been well received by the public. Concerns raised during the EA process were mostly site specific issues related to building access, loss of private parking spaces and impacts on building operations and utilities. These issues and concerns have been taken into account during the evaluation process and have been reflected in the recommended design.

Property Impacts

The proposed tunnel is situated primarily within the City of Toronto York Street road right-of-way, with the exception of some sub-strata property required for tunnel construction located below the boulevard on the west side of the Royal York Hotel. The amount of sub-strata property required from the Royal York Hotel site is approximately 400 square metres.

Property implications of other optional connections to private properties will be investigated during later design stages (depending on the interests of the owners in pursuing the connections at that time) including 70 York Street, 1 University Avenue, 60 York Street and 33 University Avenue.

Representatives of properties that may or will be impacted were consulted over the course of the study. It was agreed that the details of property acquisition would be addressed in design implementation plans to be developed once the ESR has received final approval.

Commitment to Further Action

As the project moves forward to later design stages there will be a need to gather additional information.

With the authorization of Council, the Chief Corporate Officer, in consultation with the General Manager, Transportation Services and the Acting Chief Planner and Executive Director, City Planning, will undertake discussions with other government agencies and private sector stakeholders to secure commitments and related agreements to fund the construction and maintenance of a new Union Station northwest PATH pedestrian connection. Cost sharing agreements may also be required with the affected utility companies for the relocation of existing utilities in conflict with the undertaking.

With the authorization of Council, the General Manager, Transportation Services will report back during the 2009 Capital Budget process on the results of the funding discussions and 2009-2013 Capital Budget impact associated with construction of a new northwest PATH pedestrian connection, as well as on the ownership of the facility and associated maintenance and security arrangements. Such agreements will likely be

modelled on existing PATH system protocols and agreements. Detailed design would commence following Council approval of these matters.

Construction Cost

The EA Study indicates that the cost to complete the new PATH tunnel is approximately $62.5 million. The cost to construct the at-grade or surface public realm improvements is within the range of $2.5 million. These costs include provision for an urban design strategy that incorporates high-quality materials and treatments consistent with design standards articulated in the Union Station District Plan. Project costs also include a dedication of one per cent (1%) to public art. Opportunities to co-ordinate construction of new public infrastructure in the area will be pursued. Construction activities resulting from a number of planned projects in the area will provide an opportunity for the City to undertake street level and subsurface construction work in a coordinated manner that will minimize construction cost and disturbance to pedestrians and automobiles and provide new infrastructure in a planned and efficient manner.

Next steps

Pending approval of this report by City Council, the ESR will be filed in the public record for a minimum 30-day period. Once EA approval is received, discussions can be finalized to secure agreements related to funding arrangements and any related matters. Following further reporting to City Council concerning the Capital budget implications of this project, design and construction of the preferred alternative may proceed.

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Attachments:

Attachment 1:	Executive Summary – New Northwest PATH Connection (Union Station to Wellington Street) – Schedule "C" Municipal Class Environmental Assessment Study
Attachment 2:	Recommended Alternative Design – Underground PATH Tunnel
Attachment 3:	Recommended Alternative Design – At-Grade Surface Improvements - York Street Public Realm

Attachment 1: Executive Summary – New Northwest PATH Connection (Union Station to Wellington Street) – Schedule "C" Municipal Class Environmental Assessment Study – Arup Canada Inc.

Background

This Environmental Study Report (ESR) describes the planning process followed and conclusions reached for the Municipal Class Environmental Assessment Study (Schedule "C") for a New Northwest PATH Connection (Union Station to Wellington Street) undertaken by the City of Toronto. GO Transit has been an integral partner in the Study process, providing both financial and staff support.

The purpose of this new PATH connection will be to relieve congestion and support future downtown growth and pedestrian activities generated by GO Transit's service expansion over the next twenty years. A new northwest PATH connection will also serve to more effectively disperse underground pedestrian activity in the PATH system which is currently oriented to the north east quadrant of Union Station. This redistribution will occur in conjunction with the development of a new GO west concourse that will mirror the existing GO east concourse. The development of a new Northwest PATH connection is recognized as a key element of Station revitalization.

The study area for this project is bounded by Front St. to the south, King St. to the north, Simcoe St. to the west, and Bay St. to the east (see Figure 1). The Study Area is a heavily urbanized area within Downtown Toronto's Central Area which facilitates the concentration of Canada's highest living and working population density as well as key public, cultural, financial, sports and entertainment facilities and destinations.

Problem or Opportunity Statement

The current pedestrian facilities and operations will not meet projected pedestrian demands nor provide any opportunity for redistribution of other existing PATH users who may be oriented north and west of the Station. Based on the results of pedestrian studies, there is a clear need for new northwest pedestrian connections to relieve current congestion and provide increased pedestrian capacity to accommodate the proposed new GO west concourse and destinations northwest of Union Station. Numerous planning documents also support the need for these connections, including the City of Toronto Official Plan, Secondary Plans for the Central Waterfront and Railway Lands East, and the District Plan and Master Plan for Union Station.

New northwest pedestrian connections would serve to provide alternate routes from the planned GO Transit west concourse, thereby providing operational redundancy and flexibility in the PATH network. These connections would also reduce the peak-period bottleneck effect that currently exists at various locations throughout the PATH while serving to disperse underground pedestrian activity that is currently oriented to the east.

Description of the Alternative Solutions

Six alternative solutions, or functionally different ways of addressing the problem or opportunity described above, were considered during Phase 2 of the Municipal Class EA. These alternatives are:

Alternative 1 - Do Nothing

As the name implies this solution makes no interventions whatsoever in the study area. In accordance with EA requirements, this alternative was included in the evaluation process to highlight the potential of the other solutions to improve conditions within the study area.

Alternative 2 - Surface Routes with Streetscape Improvements

Improvements would include sidewalk widening, traffic signal timing adjustments, and streetscape enhancements such as plantings. Effort would have to be given to ensuring that pedestrians have good access to street level from Union Station.

Alternative 3 - Improvements to existing underground routes

Efforts would be made to expand the existing capacity of the PATH connections, including those through the Fairmont Royal York, Citigroup Building, and the RBC Tower. As the pre-existing structures are private property or historically listed it is anticipated that there is very little room for improvements on these routes.

Alternative 4 - New Underground Routes

This solution proposes the construction of a new, underground connection to the existing PATH network from Union Station.

Alternative 5 - New Underground Routes Connecting to Surface Improvements

This solution would involve the construction of a new underground route that would at some point ascend to an improved surface route.

Alternative 6 - New Underground Routes in Parallel with Surface Improvements

This solution proposes both a new underground connection to the existing PATH network with parallel surface improvements. This solution is the most comprehensive solution to the problem of expanding pedestrian demand/volumes at Union Station.

Selection of a Preferred Solution

The assessment and evaluation (presented in Tables 3 and 4 on pages 36 and 37of this report) resulted in Alternative 6 - a new underground route in parallel with surface improvements being carried forward as the preferred alternative solution. Alternative 6:

- supports current City Council direction and policy;
- provides expanded pedestrian capacity and effectively accommodates a range of pedestrian demands (more effective distribution and connectivity, weather protection and directness of routes)
- provides pedestrians with a safe and comfortable environment for commuting to and from Union Station; and
- maximizes public amenity opportunities and potential benefits to adjacent private properties.

Description of Alternative Design Concepts for an Underground PATH Connection

In order to implement the Preferred Alternative Solution (new underground route in parallel with surface improvements), various Alternative Design Concepts were developed. These concepts addressed both underground routes and at-grade or surface public realm improvements.

The underground routes are all predominantly or exclusively within publicly owned rights-of-way (streets) with the potential for underground connections to private buildings where both desired and technically feasible. They include:

Underground Alternative 1 – Do Nothing

This alternative maintains the existing conditions and proposes no changes to the underground. The "do nothing" alternative was included as a benchmark to compare the other alternatives.

Underground Alternative 2a – University Avenue

Alternative 2a would connect to the Citigroup Place, where Union Station would be connected by the existing PATH Citigroup tunnel. This alternative would cross below Front Street just southwest of the Front Street and York Street intersection and incorporate the existing parking garage structure underneath University Avenue, which would be converted to a pedestrian walkway.

Underground Alternative 2b – University Avenue

Alternative 2b is different from alternative 2a in that this connection would connect directly to the northwest corner of Union Station. The new PATH tunnel would cross below Front Street immediately southeast of the Front Street and York Street intersection and run parallel to the east side of University Avenue with a new connection to the parking structure underneath University Avenue, which would be converted to a pedestrian walkway.

Underground Alternative 3 – York Street

Alternative 3 essentially runs north-south, with the southern connection on the southeast corner of Front Street West and York Street (Union Station), crossing below Front Street West and running north below York Street to Wellington Street. At Wellington Street, potential connections can be made to the existing PATH network through private building connections and/or within the public right-of-way.

Underground Alternative 4a – Royal York Hotel to York Street

Alternative 4a would envision a new connection below Front Street West east of the intersection of Front Street West and York Street connecting to the concourse level of the Royal York Hotel. The Royal York Hotel concourse would then be connected on the west side to a new north /south PATH tunnel located below York Street to Wellington Street. At Wellington Street, potential connections can be made to the existing PATH network through private building connections and/or the public right-of-way.

Underground Alternative 4b – Royal York Hotel to York Street

Alternative 4b would involve the restoration and modification of the existing Royal York connection to Union Station. The existing tunnel would need to be significantly reconfigured to improve or meet accessibility requirements. The Royal York Hotel concourse would then be connected on the west side to a new north /south PATH tunnel located below York Street

to Wellington Street. At Wellington Street, potential connections can be made to the existing PATH network through private building connections and/or the public right-of-way.

Selection of a Preferred Design Concept for an Underground PATH Connection

The assessment and evaluation resulted in **Alternative 3 – York Street** - being carried forward as the preferred alternative design concept. The York Street Alternative Design:

- Supports current City Council direction and policy;
- Provides expanded pedestrian capacity and effectively accommodates a range of pedestrian demands (more effective distribution and connectivity, weather protection and direct route to demand areas northwest of Union Station);
- Provides pedestrians with a safe and comfortable environment for commuting to and from Union Station;
- Meets all accessibility requirements;
- Minimizes long-term negative effects on adjacent and surrounding businesses;
- Seeks to minimize potential disruptions and impacts to utilities, vehicular and transit operations; and
- Maximizes public amenity opportunities and potential benefits to adjacent private properties.

Description of Alternative Design Concepts for Surface Improvements

The following surface improvements design concepts were carried forward for consideration on York Street. These design concepts are exclusively within the publicly owned right-of-way (streets) with the potential for connections to the new PATH tunnel under York Street where both desired and technically feasible.

Surface Improvements 1 – Do Nothing

This base condition is intended to reflect existing conditions on the roadway network. The “do nothing” alternative was included as a benchmark to compare the other alternatives. No changes to the public realm or existing conditions are proposed for this alternative.

Surface Improvements 2 – Two Travel Lanes (One-way Northbound)

Alternative 2 considers closing the two easterly northbound lanes on York Street from Front Street to Wellington Street resulting in two travel lanes (one way northbound) with widened sidewalks (as a result of reduced traffic lanes).

Surface Improvements 3 – Two Travel Lanes (One-way northbound) with lay-by

Alternative 3 considers closing the eastern most northbound lane on York Street from Front Street to Wellington Street. The north leg of the York Street / Front Street East / University Avenue will be reduced from three receiving lanes to two lanes with additional lay-by facilities with widened sidewalks (as a result of reduced traffic lanes).

Surface Improvements 4 – Full Closure

Alternative 4 considers closing all four lanes of York Street to vehicular traffic and having York Street function as a pedestrian promenade from Wellington Street East to Front Street.

Selection of a Preferred Design Concept for Surface Improvements

The assessment and evaluation (presented in Tables 10, 11 and 12 on pages 63, 64 and 65 of this report) resulted in **Alternative 3 –Two Travel lanes (One-way northbound) with lay-by** being carried forward as the preferred alternative design concept. This particular York Street Alternative Design:

- Supports current City Council direction and policy;
- Minimizes negative effects on service levels;;
- Reduces pedestrian crossing distances at intersections;
- Readily accommodates increased pedestrian traffic and increase business attractiveness as a result
- Provides public realm enhancements through design and landscaping improvements; and
- Maximizes public amenity opportunities and potential benefits to adjacent private properties.

It should be noted that the proposed alternative design concept for at-grade or surface improvements are subject to further detailed engineering and traffic operations review.

Description of the Preferred Undertaking

A summary of the York Street undertaking is provided below:

Below-Grade - Tunnel Component

- Construct a new five metre wide by three metre high concrete PATH tunnel using an open cut and cover method with 9 metre deep excavations, using temporary support for excavations to prevent any negative impact on the existing infrastructure. The heavy congestion of existing utilities within the project area presents a serious challenge for co-ordinating all the relocations and temporary supporting that would be required in order to construct the tunnel. For the purposes of this EA, preliminary discussions were held with all major utilities, which allowed them to provide input into the selection of the proposed tunnel alternative. Further discussions will be required with the various utilities during the next stages of the tunnel design and construction to determine the details regarding mitigation, relocation, costing and support efforts required.

- Align the tunnel so that it starts at the existing stair enclosure building at the northwest corner of Union Station, runs northwest across Front Street over the existing TTC subway tunnel and along the east side of York Street to the intersection with Wellington Street, and turns east to connect to the existing underground PATH tunnel.
- Undertake modifications to the following structures to allow for construction: the existing stair enclosure building on the northwest side of Union Station and the TTC Subway Pumping Station.
- Allows for potential underground connections to the following buildings: 100-120 Front Street West (Royal York Hotel), 1 University Avenue, 33 University Avenue/60 York Street (Strathcona Hotel), and 70 York Street (HSBC Building).
- Use a combination of a cast-in-place concrete structure, which would require 'in situ' work including installation of formwork, placing reinforcing bars and pouring concrete, and pre-cast concrete segments to construct the portion of the underground tunnel that is reinforced concrete founded on native soil/shale bedrock.
- Use pre-cast concrete box with concrete caisson foundations at each end, and pre-cast concrete wall-beams forming tunnel walls that would be erected on top of the pile caps and supported by concrete caisson foundations at each end to construct the 21 metre span across the existing subway structure and adjacent pumping station.

Surface Component

- Following tunnel construction, replace York Street's existing roadway configuration with a configuration consisting of two vehicle travel lanes of 3.5 metres in width, proposed laybys of 3.0 metres to the south of Piper Street on both sides, and a 3.5 metre bay on the west side north of Heenan Place.
- Widen the sidewalks (as a result of reduced traffic lanes) to a minimum of 11.5 metres from Front Street to Piper Street, and 6.4 metres from Piper Street to Wellington Street on the east side, and 4.0 metres from Front to Heenan Place and 3.5 metres from Heenan Place to Wellington Street on the west side.
- Provide curb extensions (reduce pedestrian crossing distances) at the intersections of York Street and Front Street as well as York Street and Wellington Street.
- Provision to provide a staircase accessing the proposed PATH tunnel below York Street in the expanded pedestrian boulevard – potentially adjacent to the Royal York Hotel's west entrance.
- Provide landscaping and urban design enhancements that correspond with the recommendations found in the 2006 Union Station District Plan.

Preliminary Construction

A preliminary construction cost estimate was prepared based on current available unit pricing for material and labour and on plans and specifications produced for the tunnel and surface improvements at a planning level-of-detail. The cost estimates presented below are preliminary and subject to revision.

Project	Cost ($2007)
Surface – Public Realm Improvements on York Street	$ 2,500,000
Surface /Below Grade – Surface Connection Outside Royal York Hotel	$ 1,000,000
Below Grade – Connections to Private Properties	$ 1,000,000
Below Grade – New PATH Tunnel	$ 60,500,000
TOTAL	**$ 65,000,000**

Included in the estimates are allowances for Design and Engineering Services (25%) and Construction Administration (10%).

Summary of Effects and Mitigation

The following chart is a summary of potential effects of construction and mitigation measures that will be undertaken by the City of Toronto:

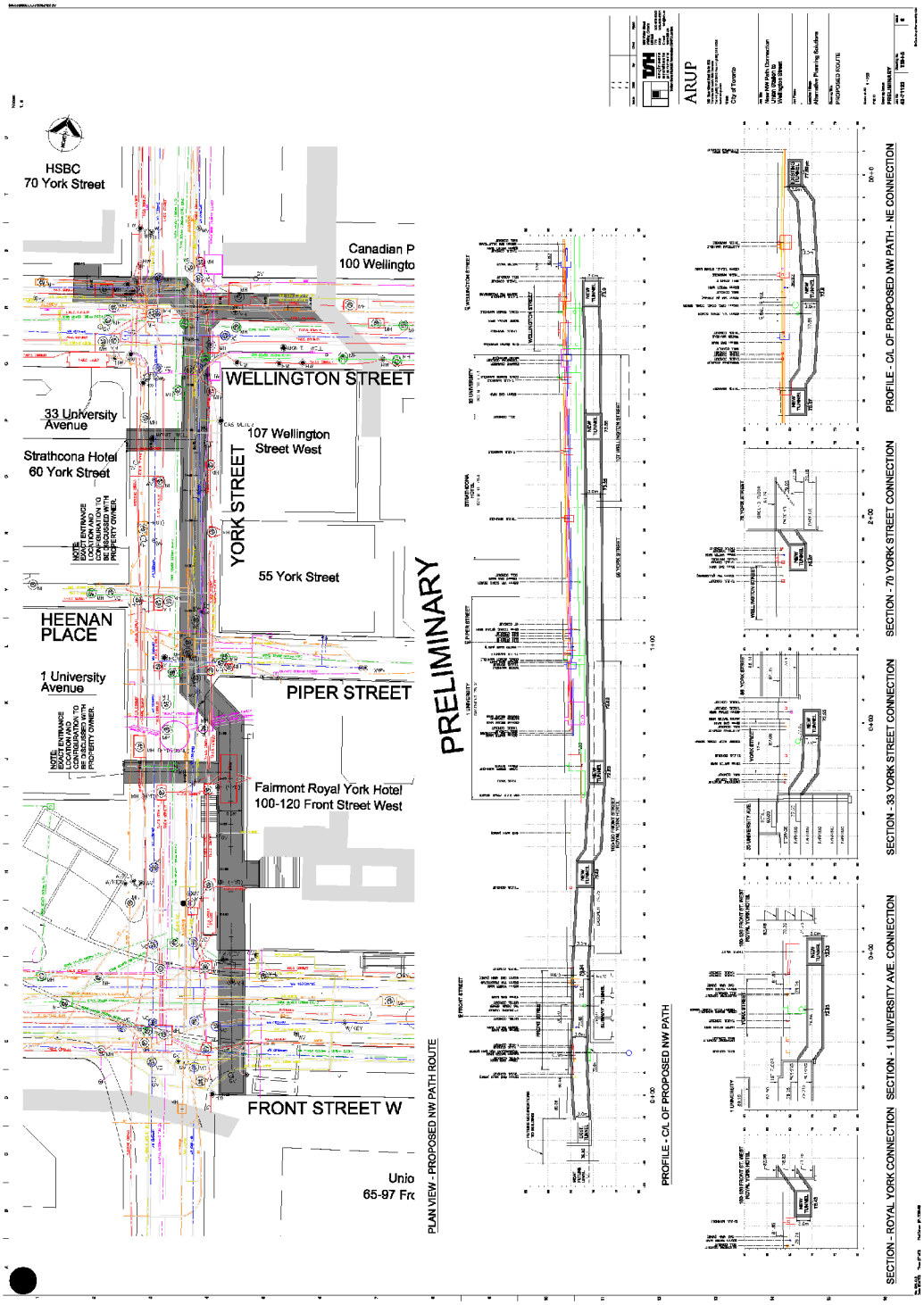
Anticipated Effects	Mitigation / Future Commitments
Modifications to existing structures	Additional study during later design stages to finalize the details of these connections, and in consultation with the owners of the affected properties
Nuisance effects from dust, noise, and vibration	Monitoring dust emissions during construction; use of dust control and suppression measures; avoiding unnecessary idling of construction equipment; employing the City's by-laws and practices regarding hours of construction; preparing traffic management plans to address the redistribution of rerouted traffic; assigning truck routes
Reduced access / visibility for retailers along York Street	Mailing of notices to retailers and other businesses to inform them of the timing of construction, coordination/communications throughout the construction period.
Removal of street trees	Replanting of trees within a continuous root zone trench at a ratio of 2:1
Modifications to built heritage, including existing moat at Union Station	Restoration of condition of moat to the extent necessary to preserve and respect heritage elements.
Relocation of utilities	Further discussion with the various utilities during the next stage of the tunnel design in order to determine the details regarding mitigation, relocation, costing and support efforts required.
Building Settlement and potential for dewatering	In-depth geotechnical and foundations investigations during later stages of the project to verify depth of fill, horizontal layering of silty sand/sandy silt and groundwater conditions, and to provide detailed recommendations related to temporary shoring and dewatering methods
Potential for contaminated soils	Phase 1 Environmental Site Assessment to determine likelihood of soil contamination
Property	Negotiations with affected property owners. Where necessary, undertake property acquisition and compensation in accordance with Ontario Expropriations act.

Anticipated Effects	Mitigation / Future Commitments
Surface Water	Adopt storm water management practices in accordance to municipal and provincial guidelines and practices
Groundwater	Conduct detailed groundwater and soils analysis
Business Disruption	Hold ongoing discussions with property owners and tenants during design development. Implement traffic management plan including signage and temporary parking (if required). Use on-site community liaison staff to communicate with the local businesses during construction.
Aesthetics	Install and maintain fencing and screening at construction sites. Employ good housekeeping practices.
Archaeological Resources	Should any potential archaeological artifacts be uncovered during construction, the Heritage Operations Unit of the Ministry of Culture will be contacted immediately

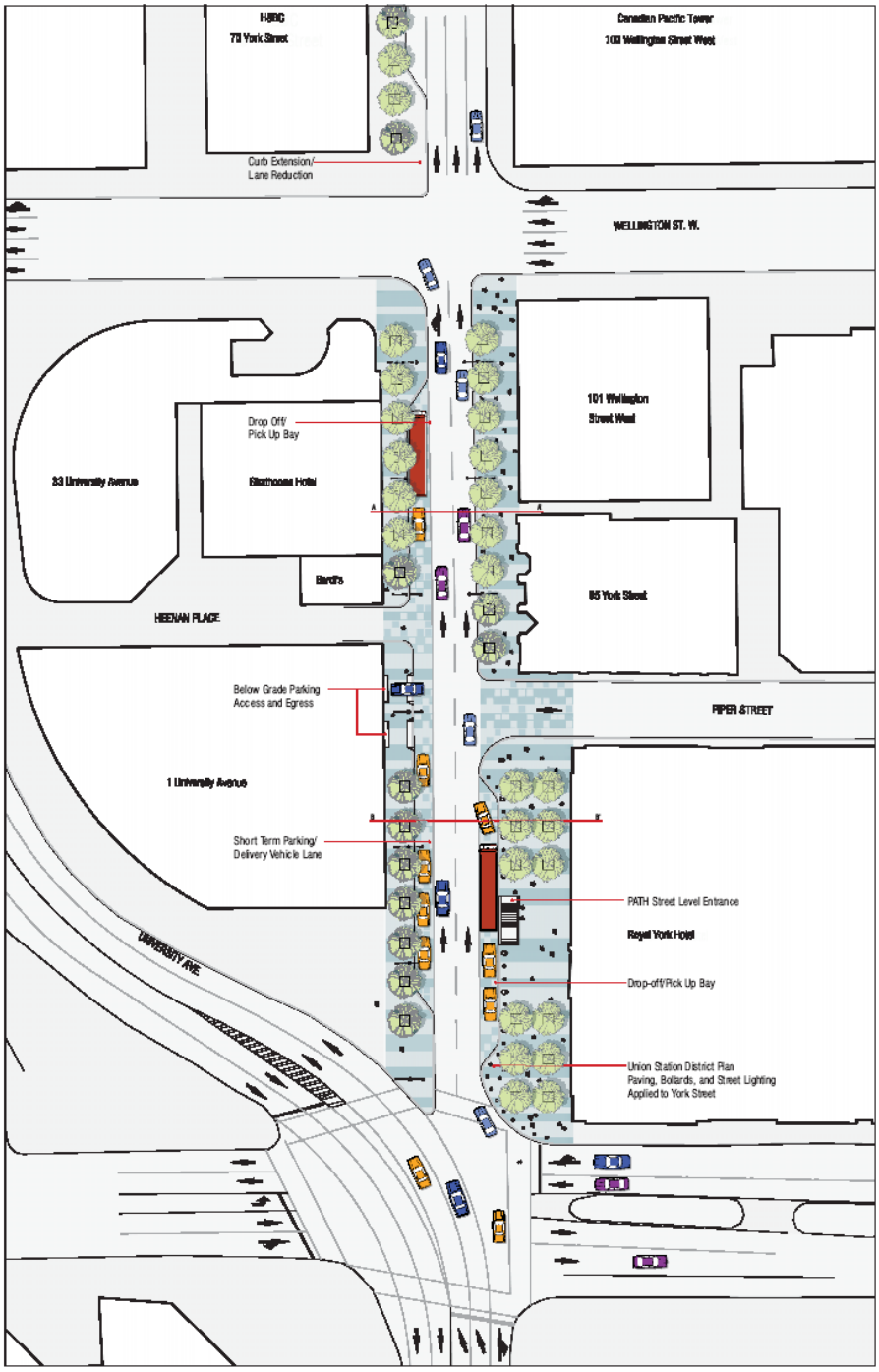
Public Consultation Program

The public consultation program included two Public Information Centres (PICs), a stakeholder workshop, meetings with individual stakeholders, and associated notices and letters advertising the study. Written and verbal comments from the public and stakeholders were taken into consideration by the project team throughout the Environmental Assessment process.

Attachment 2 - Recommended Alternative Design – Underground PATH Tunnel



Attachment 3 - Recommended Alternative Design – At-Grade Surface Improvements - York Street Public Realm



UNION STATION PATH NORTHWEST | CONCEPT DEVELOPMENT | **YORK STREET IMPROVEMENTS**

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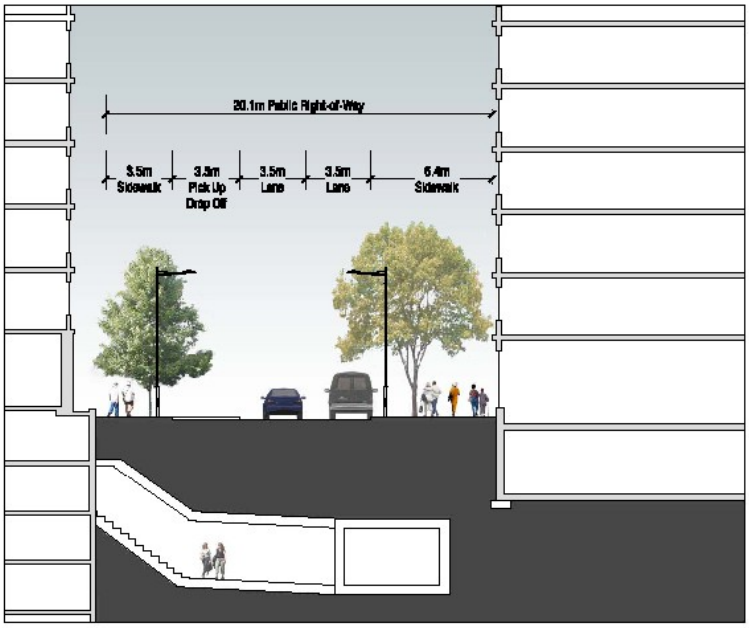
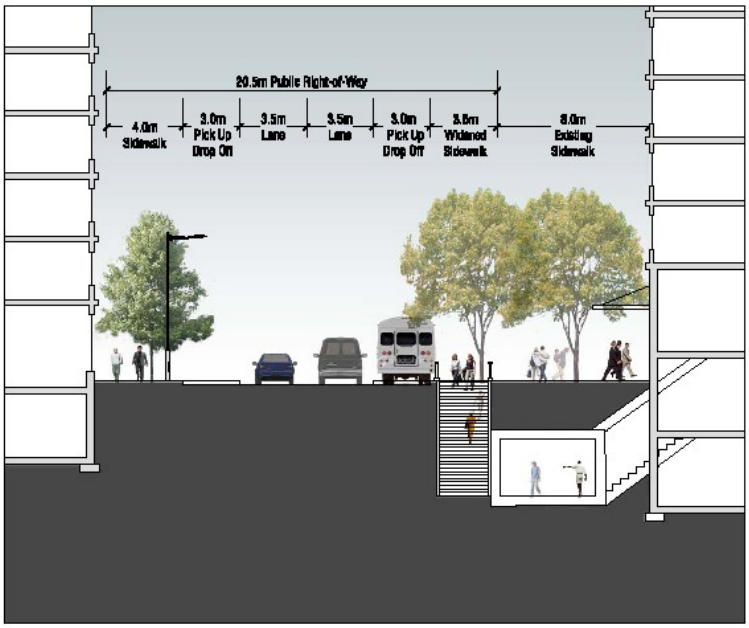
Attachment 3 - Recommended Alternative Design – At-Grade Surface Improvements - York Street Public Realm (Cont'd)



Section A-A': South of Wellington Street



Section B-B': PATH Entrance at Royal York