

Updates on Wellington Street Capital Projects

Date: August 30, 2021

To: Infrastructure and Environment Committee

From: General Manager, Transportation Services and Chief Engineer and Executive Director, Engineering and Construction Services

Wards: All

SUMMARY

This report responds to City Council's direction to the Chief Engineer and Executive Director, Engineering and Construction Services and the General Manager, Transportation Services to report back to the September 14, 2021 Infrastructure and Environment Committee on the following matters regarding work on Wellington Street East between Yonge Street and Church Street:

- a) outstanding work to complete on Wellington Street East, including a timeline for resolution for individual pieces of work; and
- b) potential options to accelerate outstanding work ahead of June 2022.

In addition, this report responds to City Council's direction to the Deputy City Manager, Infrastructure and Development Services, to coordinate the implementation of construction projects in the vicinity of Wellington Street West and Draper Street (between Portland Street and Spadina Avenue) and report to the Infrastructure and Environment Committee with recommendations for managing and executing the infrastructure projects to a high standard of coordination and design excellence.

Within this area, there is capital work programmed to take place in 2022, with additional projects currently in the planning and design phase for delivery in 2024 and beyond. Further information about the work programmed for construction and the work that is in the planning and design phase for future delivery is included within this report.

The current project extends along Wellington Street East, from Yonge Street to Church Street and includes the intersection of Wellington Street East / Church Street / Front Street East and the eastbound approach on Front Street East to Church Street. The project includes state-of-good-repair improvements and incorporation of Vision Zero, Complete Streets, and Green Streets principles with the following scope:

- Public realm improvements which include wider boulevard areas and pedestrian clearways, street trees, space for patios and bike parking;
- Road safety improvements including traffic signal improvements;

- State-of-good-repair road reconstruction;
- State-of-good-repair removal / replacement of TTC streetcar tracks; and
- Upgrading of Toronto Hydro and telecom infrastructure.

Construction commenced in March 2021 and was scheduled to be completed September 2021. The construction was paused in June 2021, due to several challenges during construction, which are summarized within this report. The pause in construction was put in place, in order to provide City staff and affected utilities, ample time to address and resolve these challenges without causing further disruptions to residents and the business community. Construction is scheduled to resume in spring 2022 and be completed by July 2022.

RECOMMENDATIONS

The General Manager, Transportation Services and Chief Engineer and Executive Director, Engineering and Construction Services recommend that:

1. The Infrastructure and Environment Committee receive this report for information.

FINANCIAL IMPACT

The total contract award for the Wellington Street East project identified in this report is \$9,379,973 including all applicable taxes and charges. Funding was included in the Approved 2020 Capital Budget and the 2021 – 2029 Approved Capital Plans for Transportation Services, Toronto Water and Economic Development and Culture.

As a result of the current pause to construction for the Wellington Street East project, additional design consultant and construction costs will be required in order to complete the project. Additional costs that cannot be accommodated in the current approved capital budget will be submitted as part of the future capital budget and plan submission to be considered alongside other priorities by Council. Once additional budget has been secured, Purchase Order Amendments will be required, where necessary, by the appropriate delegated authority for works to proceed.

The Chief Financial Officer and Treasurer have reviewed this report and agree with the financial impact information.

DECISION HISTORY

On July 14, 2021, City Council directed the Chief Engineer and Executive Director, Engineering and Construction Services and the General Manager, Transportation Services to report back to the September 14, 2021, Infrastructure and Environment Committee on outstanding work to complete on Wellington Street East and potential

options to accelerate outstanding work.

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2021.MM35.17>

On March 10, 2021, City Council directed the Deputy City Manager, Infrastructure and Development Services to coordinate the implementation of construction projects in the vicinity of Wellington Street West and Draper Street and report to the Infrastructure and Environment Committee with recommendations for managing and executing the infrastructure projects to a high standard of coordination and design excellence.

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2021.MM30.14>

On February 24, 2021, Toronto and East York Community Council authorized the installation of a traffic control signal at the intersection of Wellington Street East and Scott Street.

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2021.TE23.70>

On December 9, 2020, the Bid Award Panel awarded the Contract for the Reconstruction of Toronto Transit Commission (TTC) Track Allowance and Landscaping Work for Engineering and Construction Services to the lowest bidder.

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2020.BA113.3>

On March 15, 2017, the Bid Award Panel awarding the Contract (17ECS-TI-04SP) for the Watermain Replacement and TTC Track Reconstruction on Wellington Street for Engineering and Construction Services to the lower bidder.

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2017.BA14.1>

COMMENTS

Wellington Street East - Background (2017 Construction)

The concept for public realm improvements in this area was initiated by the St. Lawrence Market Neighbourhood Business Improvement Area (BIA) through the preparation of a Public Realm Master Plan in 2015. Among other things, the Master Plan sought to support economic growth and improve the pedestrian experience for the increasing number of people living, working and recreating in this area. Public realm improvements identified included wider boulevard areas and pedestrian clearways, street trees, space for patios and bike parking.

The design of public realm improvements to implement the enhancements identified in the St. Lawrence Market Neighbourhood BIA - Master Plan along Wellington Street East between Yonge Street and Church Street was initiated in mid-2015 to be incorporated as a component of a larger capital project (Contract No. 17ECS-TI-04SP) for watermain replacement and road rehabilitation on Wellington Street West from York Street to Church Street, and TTC track removal and replacement from Bay Street to York Street. This work was substantially completed August 2017.

During the preliminary design of that project it was identified that the Toronto Hydro underground infrastructure in the section of Wellington Street East between Yonge

Street and Church Street constructed in 1938, was at end of service life and in urgent need of being upgraded. In order to allow Toronto Hydro to upgrade its existing aged infrastructure, it was determined that the Toronto Water component of the project from York Street to Church Street would proceed and that the above-grade work (TTC track and streetscape improvements) between Yonge Street and Church Street would be postponed until the Toronto Hydro work was completed. Construction was sequenced as follows: watermain replacement, followed by Toronto Hydro upgrade and consolidation, and finally streetscape and TTC track replacement, i.e. all underground work completed, before above ground construction initiated.

Toronto Hydro used the time the watermain replacement project was under construction to design the upgrades for its infrastructure. Transportation Services and Economic Development and Culture Division staff worked with Toronto Hydro and their contractor, and the other utilities, to prepare an integrated design for below grade and above grade improvements.

Construction of the Toronto Hydro upgrade and consolidation project was started following the watermain replacement project and completed in spring 2021. In addition to upgrading its assets to current standards, the Toronto Hydro project consolidated all of the new electrical chambers on the south side of Wellington Street East; the old chambers were located on both sides. Thus creating a vacant corridor on the north side providing opportunity for the future installation of a double row of street trees on the north side of Wellington Street East. In addition, given the limited right-of-way available and extensive underground utility assets in this area, this vacant corridor was also used to construct a joint use utility trench and duct bank. The joint use duct bank which requires considerably less right-of-way width compared to accommodating each utility separately with their own horizontal and vertical separation distances was a key element of this approach.

Wellington Street East - Project Scope (2021to 2022 Construction)

The current project (Contract No. 20ECS-TI-20SP) extends along Wellington Street East, from Yonge Street to Church Street and includes the intersection of Wellington Street East / Church Street / Front Street East and the eastbound approach on Front Street East to Church Street (see Attachment A).

The scope of the project includes:

- Construction of a wider, unobstructed pedestrian clearway;
- Shorter pedestrian crossing distances;
- Traffic signal improvements at Wellington Street East/Church Street/Front Street East intersection;
- Additional and improved street lighting;
- State-of-good-repair road reconstruction;
- State-of-good-repair streetcar track removal/replacement on Wellington Street East and Church Street;
- A curbside transit stop at Yonge Street;
- New street trees on the south side of Wellington Street East and a double row on the north side with passive stormwater capture;
- Permanent and upgraded patio space; and

- Increased spaces for bike parking and a bike share station.

Additional scope being considered includes new traffic signals at the intersection of Wellington Street East and Scott Street.

Wellington Street East - Current Project Status

Construction commenced in March 2021, with an original completion date scheduled for September 30, 2021. The construction was paused in June 2021, due to several challenges during construction, which necessitated changes to the design, as summarized below. Construction Notice Updates were issued in June and July to update the community on the status of the project and temporary restoration efforts. Email updates will continue as a means of communicating about restoration efforts and the project's progress.

Staff are currently working with Toronto Hydro, TTC, Enbridge, Rogers, Bell, Zayo and the St. Lawrence Market Neighbourhood BIA to resolve conflicts and revise the design accordingly. Construction is scheduled to resume in spring 2022 and be completed by July 2022.

Wellington Street East - Challenges During Construction

A number of challenges arose during construction, due to inconsistencies between the design drawings as they were tendered, and the actual location of existing infrastructure, including new streetlights installed by Toronto Hydro post-tender, the discovery of a large underground oil tank, an unexpected areaway adjacent to the Flat Iron Building, and locations of sewer laterals. Additional scope for a new traffic signal installation at Wellington Street East and Scott Street also necessitated design revisions and recirculation for review and approvals. Further details on each of these challenges is summarized below.

The previous watermain replacement completed in 2017, followed by a Toronto Hydro upgrade and infrastructure consolidation completed in early 2021, significantly changed the pre-existing underground infrastructure for the current project. In order for construction of the public realm improvements to proceed in 2021, a detailed design was undertaken in 2020, while the Toronto Hydro upgrade and infrastructure consolidation work and joint use duct back were still under construction. Design of the above-grade work relied on the 'as built' drawings provided by Toronto Hydro's contractor. This was identified as a reasonable approach, as the changes to these services had only recently been completed.

The tender documents for the current project were issued in September 2020 and the contract awarded in December 2020. Following the initiation of construction, the following conflicts were encountered between the tendered design drawings and existing infrastructure:

- Temporary streetlighting (installed by Toronto Hydro in January 2021 post-tender);
- Several ducts that had been abandoned by utilities and relocated to the new joint use duct bank still indicated as 'live lines' on utility locates; while two utilities had not yet relocated their cables; and

- Other underground conflicts within the public right of way were identified including an abandoned oil tank, areaway and the location of sewer laterals.

Resolving these conflicts required time to daylight a number of locations, in order to determine the precise nature and extent of the conflicts, and engagement with the various project partners.

In addition, in February 2021, Toronto and East York Community Council approved the installation of traffic control signals at the intersection of Wellington Street East and Scott Street. Given that this intersection is within the project area, and the new signal represents a safety improvement, the design and installation of the traffic signal at Wellington Street East and Scott Street will be considered as additional work into the current contract.

Resolution of the conflicts created by the installation of temporary streetlighting, underground infrastructure separation requirements, and the integration of a new traffic signal at Wellington Street East and Scott Street into the project, required a new set of design drawings to be prepared and re-circulated to utilities including Toronto Hydro for review and approvals.

The City's Contractor was initially able to adjust their construction schedule and work around the conflicts encountered. However, as the project advanced, the conflicts between the design drawings and the actual location of underground infrastructure made it impossible for the Contractor to continue. In June 2021, after consultation with the Contractor and Toronto Hydro, Transportation Services and Engineering and Construction Services made the decision to pause the work until spring 2022, in order to provide City staff and affected utilities ample time to address and resolve these challenges, without causing further disruptions to residents and the business community.

Wellington Street East - Lessons Learned and Next Steps

A number of delays were the result of a breakdown in coordination among the various project partners.

The decision to complete and issue the tender for this project while Toronto Hydro was still completing its upgrades was intended to facilitate completion of this work in 2021. In hindsight, waiting for Toronto Hydro to complete its project would have provided time to confirm the 'as-built' drawings and identify conflicts (e.g. with the temporary streetlighting). However, the tender would then not have been issued until mid- to late-2021, with construction not beginning until 2022.

In addition, the incorporation of the new traffic signal installation at Wellington Street East and Scott Street (adjacent to Berczy Park) was a late additional scope request to the current contract, following Community Council approval of this traffic signal in February 2021. An earlier staff report to Community Council, regarding this recommended traffic signal location, may have meant that the design of the new traffic signal could have been incorporated into the tendered project contract. Alternatively, a separate design and tender for this new traffic signal at a later date would have delayed

installation of an important road safety measure to a later date, and required relatively new streetscape to be excavated shortly after it was constructed.

Transportation Services and Economic Development and Culture, Engineering and Construction Services have established timely and cost-effective processes for the delivery of roadway and streetscape work in the City of Toronto that have proven successful over many years. The Wellington Street East project deviated from these established processes for well-intentioned reasons, such as issuing the tender documents for public realm improvements, while Toronto Hydro was completing its upgrade and consolidation work.

Staff have now engaged with all project partners and re-established a collaborative and coordinated process, including regular communication to the key community stakeholders, including businesses, residents and resident associations. The milestone date of October 31, 2021 is the completion deadline for the necessary redesign work. This date will allow the Contractor sufficient time to review the revisions, discuss impacts on project costs, and procure the required materials to resume construction in spring 2022.

Ahead of resuming construction, the City will form a Construction Liaison Committee, comprised of representatives from local residential groups, condominium boards, property managers, and local business interests to communicate directly with local stakeholders throughout construction.

As at the time of writing this report, the major outstanding work items to complete the current project are completing design and securing approvals of temporary and permanent streetlighting and traffic signals; resolution of power supply conflicts; confirmation of the relocation of all utilities and adjustment of some Toronto Hydro chamber elevations. A complete list is included in Attachment B.

Wellington Street West - Project Coordination

In January 2020, City Council approved the updated King-Spadina Secondary Plan. The Secondary Plan recognizes Wellington Place and Draper Street as Areas of Special Identity. It includes policies that promote expanding and enhancing the public realm in all areas of King-Spadina.

In the vicinity of Wellington Street West and Draper Street, there are a series of projects being planned, designed and coordinated for programming over the next few years. The scope of these projects includes construction of a new watermain, roadway state-of-good-repair improvements, road safety improvements, new cycling infrastructure, and streetscape enhancements. There are also plans for "The Well" development (a significant mixed-use development bordering Wellington Street West, Front Street and Spadina Avenue) to include construction of a new City park at 456 Wellington Street West.

Construction of "The Well" is currently underway and streetscape enhancements on the south-side boulevard of Wellington Street West will be implemented by the developer

adjacent to their property and extended east to Spadina Avenue and west to Draper Street.

In 2022, programmed capital work includes state-of-good-repair watermain replacement and road resurfacing on segments of Wellington Street West, road safety improvements (i.e. curb radii adjustments and signal changes) at the intersections of Wellington Street West and Bathurst Street, and Wellington Street West and Niagara Street, cycling infrastructure expansion along Wellington Street West from Strachan Avenue to Blue Jays Way.

State-of-good-repair watermain replacement, state-of-good-repair local road reconstruction, as well as streetscape enhancements are currently being planned and designed for Draper Street, and anticipated to be programmed in 2024.

Interest has been expressed by local community stakeholders in the reconstruction of streetscape on the north-side boulevard of Wellington Street West between Spadina Avenue and Draper Street, and the remainder of the south-side boulevard, west of Draper Street, in keeping with the redesign of the south-side boulevard east of Draper Street currently under construction.

Boulevard reconstruction of these segments of Wellington Street West is not currently in the Transportation Services' planned capital program. City Planning has been working with applicants to secure funding through Section 37 for the redesign and streetscape work along the north side of Wellington Street West between Clarence Square Park and Victoria Memorial Square Park as well as for the programmed streetscape work along Draper Street. Opportunities and timing for the programming of these projects will need to be reviewed in the context of future private development that could be anticipated along these segments.

Given the scale of infrastructure projects and development opportunities within the vicinity of Wellington Street West and Draper Street, City staff recognize that it is important that the design of streetscape improvements are aligned with the overall vision for this area, and that planned work in this area is well-coordinated between City Planning, Transportation Services, Toronto Water, and Engineering and Construction Services.

CONTACT

Jacquelyn Hayward, Director, Project Design and Management, Transportation Services, Telephone: 416-392-5348, Email: Jacquelyn.Hayward@toronto.ca

Mika Raisanen, P.Eng., Director, Design and Construction, Linear Underground Infrastructure, Engineering and Construction Services, Telephone: 416-392-0867, Email: Mika.Raisanen@toronto.ca

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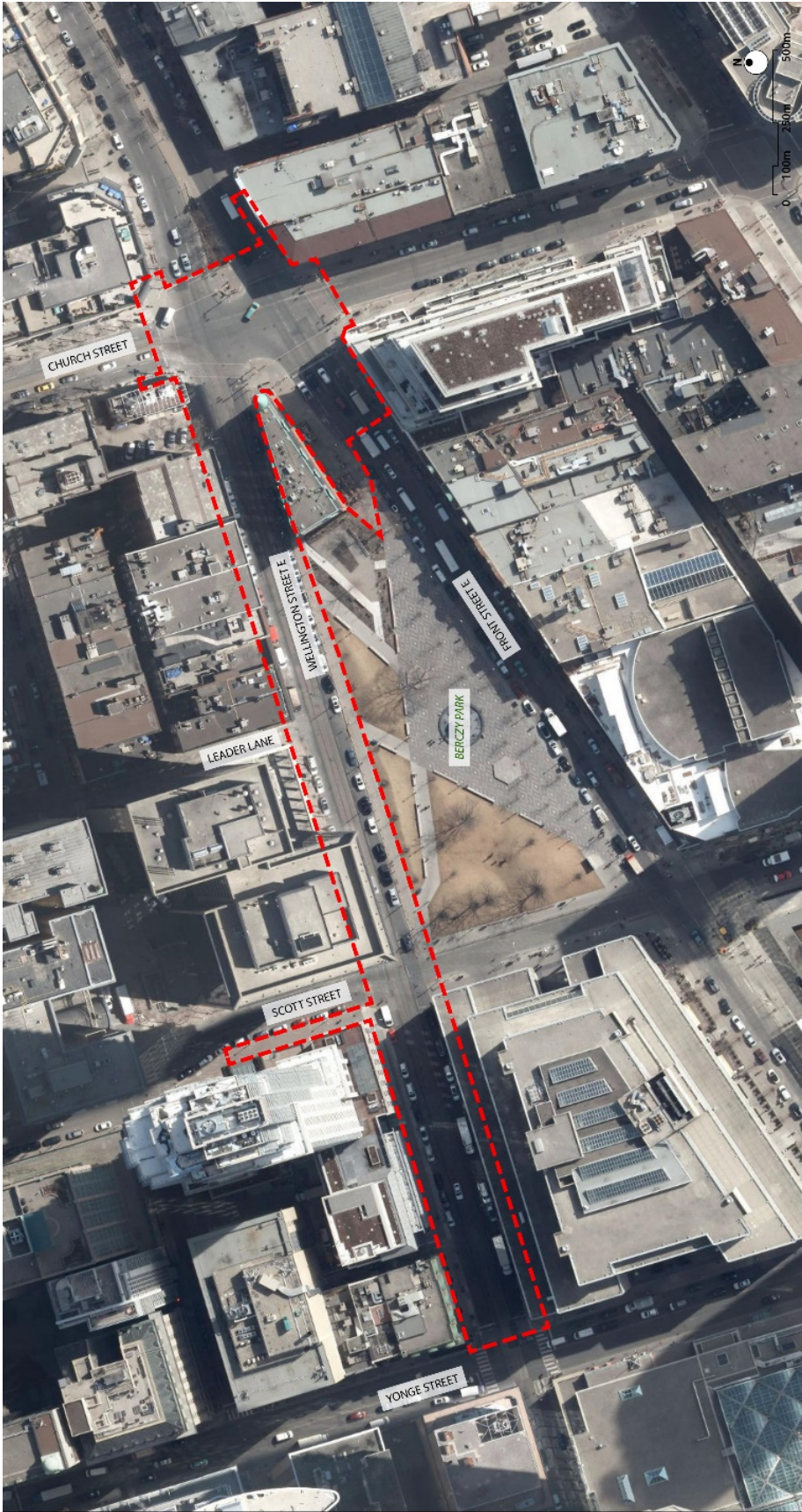
Barbara Gray
General Manager, Transportation Services

Michael D'Andrea, M.E.Sc., P.Eng.
Chief Engineer and Executive Director, Engineering and Construction Services

ATTACHMENTS

Attachment A: Wellington Street East Project - Context Map
Attachment B: Wellington Street East Project - Outstanding Work Items for Resumption of Construction

ATTACHMENT A: Wellington Street East Project - Context Map



ATTACHMENT B - Wellington Street East Project - Outstanding Work Items for Resumption of Construction

DESIGN, INCLUDING RESOLUTION OF CONFLICTS:

- Confirmation of relocation of all utilities and identification of abandoned ducts
- Resolution of proximity conflict with Enbridge infrastructure at Wellington Street East / Church Street / Front Street East intersection
- Revised temporary streetlight design
- Field investigation of light sensors at Wellington Street East / Church Street / Front Street East intersection
- New duct for traffic signal at Wellington Street East and Scott Street
- Shop drawings for new poles (joint use and pendant light and arms)
- Revised final streetscape design including boulevard, streetlighting, traffic signals, street trees and other elements

APPROVALS:

- Temporary streetlighting design, approval by Toronto Hydro
- Resolution of utility conflicts (PUCC), approval by Toronto Hydro
- Shop drawings for street light poles (joint use and pendant light and arms), approval by Toronto Hydro
- Shop drawings for tapbox and relay panel, approval by Toronto Hydro

AGREEMENTS:

- Project Specific Agreement between City and Toronto Hydro
- Negotiation of pricing and schedule of Change Orders with Contractor

INTERIM CONSTRUCTION:

- Adjustment/Correction of electrical chamber elevations by Toronto Hydro
- Installation of new temporary streetlighting, including removal of existing temporary lights