

## Report to Civic Works Committee

**To:** Chair and Members  
Civic Works Committee

**From:** Kelly Scherr, P.Eng., MBA, FEC  
Deputy City Manager, Environment & Infrastructure

**Subject:** 2023 Renew London Infrastructure Construction Program  
and 2022 Review

**Date:** March 21, 2023

## Recommendation

That, on the recommendation of the Deputy City Manager, Environment and Infrastructure, the following actions Be TAKEN:

- a) the report concerning the 2023 Renew London Infrastructure Construction Program **BE RECEIVED** for information; and
- b) Civic Administration **BE DIRECTED** to initiate a bylaw amendment to reinstate the temporary traffic diversion arrangement on Dundas Place as a construction mitigation for the 2023 construction season.

## Executive Summary

The purpose of this report is to provide Committee and Council with a review of the 2022 Renew London Construction Program and highlight major City construction projects planned for 2023. This report outlines successes and lessons learned from 2022 and identifies potential risks for the upcoming construction season and the measures planned to mitigate those risks. This report includes the following information.

2.1 – A review of the 2022 Renew London Program including a program overview, discussion of carryover work and budget implications.

2.2 – A look ahead to the 2023 Renew London Program.

2.3 – A summary of emerging construction industry pressures and several initiatives to mitigate potential impacts for 2023.

2.4 – An overview of the various construction mitigation, customer service and communication strategies applied to support Londoners through construction.

Additional supporting information has been included as appendices for reference.

## Linkage to the Corporate Strategic Plan

The annual Renew London infrastructure Program supports several measures under Municipal Council's 2019-2023 Strategic Plan. The program helps in Building a Sustainable City by constructing new infrastructure that supports future development, protects the environment, and manages the infrastructure gap. The program is also related to Growing our Economy by increasing public and private investment in strategic locations. Lastly, the Renew London Construction program strives to Lead in Public Service by providing Londoners with valued customer service, timely communication, and coordination to minimize impacts.

# Analysis

## 1.0 Background information

### 1.1 Previous reports related to this matter

Civic Works Committee – November 2, 2021 – Dundas Place Temporary Traffic Diversion Monitoring and Consultation

Civic Works Committee – January 11, 2022 – Ontario Regulation (O.Reg.) 406/19 On-Site and Excess Soil Management

Corporate Services Committee – January 31, 2022 – Procurement of Goods and Services Policy Revisions Resulting from the Pandemic and Current Business-Related Needs

Civic Works Committee – March 29, 2022 – 20223 Renew London Infrastructure Construction Program and 20212 Review

Civic Works Committee – February 22, 2023 – RFT-2022-311 Dedicated Locate Services Contract Award - Irregular Result

### 1.2 Context

The Renew London Infrastructure Construction Program manages the sustainability of London's infrastructure through a combination of road, bridge, bicycle, sewer, water, sidewalk and intersection improvements. The program addresses existing lifecycle needs, system improvements, and growth-related priorities.

Renew was created to drive efficiency in infrastructure delivery and minimize delays and inconveniences to the public during construction by coordinating annual capital construction projects. As leaders of the program, City staff are responsible for managing City construction projects and providing onsite inspection where required. This oversight helps to ensure projects are well-communicated, completed on time and on schedule, and safely built in accordance with plans, specifications, and City standards.

## 2.0 Discussion

### 2.1 Review: 2022 Renew London Infrastructure Construction Program

#### 2022 Construction program overview

The 2022 Renew London Infrastructure Program constructed many projects to expand and improve City of London infrastructure. 2022 featured key transportation improvement projects that have enhanced road safety, improved traffic flow for motorists, cyclists, pedestrians, and transit users and maintained infrastructure in a state of good repair.

Overall, 2022 was a successful construction season with the reconstruction of 60 lane kilometres of road, 134 kilometres of sanitary and storm sewers, and 7.5 kilometres of watermains. Staff managed a portfolio of Council-approved projects totalling approximately \$190 million.

The cycling network expanded significantly in 2022 with the completion of three important projects: rehabilitating the Fanshawe Park Road boulevard bike lanes, adding protected bike lanes on Brydges and Wavell Streets and completing the East-West

bikeway with the protected bike lane on Queens Avenue. Cycling improvements also occurred at the intersections of Ridout Street and Commissioners Road and William Street and Oxford Street, on Ridout from King Street to Queens Avenue with Phase 2 of the Downtown Loop and by adding cycling facilities on Southdale Road and William Street. These projects make London's roads safer for all users, encourage more emissions-free travel and leverage existing cycling investments by connecting to more people and places. Overall, the cycling network expanded by 11.5 km in 2022.

Appendix A captures details of the 2022 Top 10 infrastructure renewal list and highlights some noteworthy projects from last year.

### **2022 contract carryover work**

Minor finishing touches remain on some 2022 construction projects. This work is often surface work including the top layer of asphalt and installation of permanent pavement markings. These finishing touches are included in 2022 tenders, but generally completed for road reconstruction projects in the subsequent year to optimize material placement in better weather. The top coat of asphalt will be placed on 28 lane-kilometres of road in 2023. Downtown Loop Phase 2 was mostly completed in 2022, with a portion of Queens Avenue between Clarence and Wellington Streets deferred to 2022 along with typical spring clean up work. Carryover work will be coordinated with the 2023 construction program to ensure conflicts with projects in nearby areas are .

### **Budgets and schedules**

The City managed approximately \$190 million in infrastructure construction project work in 2022. The Construction and Infrastructure Services (CIS) Team takes great pride in delivering London's annual construction program on time and on budget. To support this, the team continues to develop tools to monitor performance metrics throughout construction. Project Management Dashboards track and monitor construction project progress against the established budget and estimated working days and ensures all invoices are paid in accordance with prompt payment legislation requirements.

Clear, defensible contract documents, engaged project management and active schedule and budget monitoring are tools used to safeguard awarded contract budgets. Contracts also include a contingency to account for typical issues or change orders that can pop up in any project, often related to unforeseen underground conditions and utility coordination complications.

The impacts of the COVID-19 pandemic have mostly settled over 2022. During COVID, many industries and economic sectors, including municipal construction had observed an increase in the use of contingency funds across all projects. Project teams monitored the issue through 2022 and have seen a decrease in contingency use as compared to 2021. Change orders as a percentage of contract value decreased from 5.41% in 2021 to 3.9% in 2022. Staff will continue to monitor contingency use across all projects.

With an annual construction program of this scale, there can be projects that encounter budget impacts that exceed the available contingency due to challenges that could not have been anticipated by the contractor, consultant, or the City. At the conclusion of 2022, the majority of projects are expected to be completed on or ahead of schedule and remain on budget. Unused contingency funds are returned to program budgets to support additional infrastructure renewal the following year.

The following 2022 projects were impacted by budget pressures that exceeded the awarded contract value:

#### Water and Wastewater Infrastructure Renewal Project

- English Street and Lorne Avenue
- Churchill Avenue and Manitoba Street

The combined value of these contract increase requests reflects an overall budget variance of 0.2%, compared to the estimated 6.1% in net returned contingency overall.

A companion report has been prepared for the projects noted above to recommend contract amendments in accordance with the Purchasing and Services Policy. That report is included for the same March 21, 2023, Civic Works Committee agenda.

Additionally, the budgets for the Pottersburg Phase 1, Victoria Street, and the 2020 Dundas Old East Village projects are being closely monitored as they complete carry over work in 2023. The project teams are evaluating all options to keep these projects within budget and will follow the requirements of the Procurement Policy should additional funds be required at a later date.

## **2.2 2023 Renew London Infrastructure Construction Program**

### **2023 construction program overview**

The 2023 budgets will invest in key priority areas to support the city's growing population needs and make improvements to aging infrastructure. Focus remains on essential infrastructure and investments in replacing or building much-needed roads, water, and wastewater infrastructure.

The City is committing approximately \$200 million in construction improvements in 2023. This 2023 program includes lifecycle renewal investments of \$53 million for road improvements, \$67 million for sewer improvements, and \$42 million for water system improvements.

Development charges and provincial and federal funding also continue to contribute to several important 2023 projects, such as the Colonel Talbot/Southdale Road Roundabout, Downtown Loop Phase 3, Wellington Gateway Phase 1 (Wellington Street) and East London Link Phase 2 (King/Ontario/Dundas). Delivering these investments through integrated projects reduces costs by coordinating underground infrastructure work with the rehabilitation of roads, curbs, and sidewalks. This will improve and extend the lifecycle of London's critical road, water and sewer infrastructure and the reliability of its systems while protecting the environment.

There will be 80 lane-kilometres of road reconstructed, 20 kilometres of sanitary and storm sewers replaced or added, and 12 kilometres of watermain rebuilt in 2023. Over 25 intersections improvements will be constructed to address safety concerns in growing areas. More than 16 kilometres of new bike lanes and 14 kilometres of new sidewalk will be added and about 26 kilometres of existing sidewalks replaced. Cycling and sidewalks infrastructure will be built to improve safety, connectivity and accessibility while supporting the Climate Emergency Action Plan

In addition, 4.5 kilometres of watermain and 8.5 kilometres of sewers will be relined without having to dig trenches. These trenchless programs accomplish the goals of upgrading the infrastructure while allowing for significant capital cost avoidance and minimized social impact to residents and businesses by avoiding open cut construction.



The Top 10 Construction Projects are selected each year to provide an overview of the upcoming year's work and impacts. The 2023 projects involve areas across London, including the Colonel Talbot/Southdale Road Roundabout project, Fanshawe and Richmond Intersection Improvement project, three phases of Rapid Transit, and the second season of construction for the Adelaide Street North Underpass and Victoria Bridge Replacement projects. There are many other essential underground road and underground infrastructure upgrades and continued improvements to the cycling network throughout the city as well.

Appendix B captures details of the 2023 Top 10 projects.

Visit [london.ca/roadconstruction](https://london.ca/roadconstruction) to learn more about the 2023 infrastructure projects and to view an [interactive story map](#) of this year's Top 10 Construction Projects. Communications efforts on the overall 2023 construction program and targeted communications on specific projects are either already underway or will be launching very soon.

### **Downtown construction and Dundas Place**

The Downtown core will experience focused investments again in 2023 with Phase 3 of the Downtown Loop project on Wellington Road and continuation of Phase 2 Downtown Loop project on portion of Queens Ave. Phase 2 of the East Link on King Street will start in Old East Village in the spring this year and will be closely coordinated with the other Core projects. While the 2023 projects have been scheduled to minimize disruptions to traffic, commuting around the city will be impacted. Residents are encouraged to plan ahead and exercise patience when traveling around construction zones. After significant investments in the core in recent years, there will be less construction activity planned in and around the core after 2023.

With the aim to support Dundas Place as a gathering place for patios, entertainment and events, as well as an important east-west connection for cyclists and pedestrians, administration is recommending reinstatement of the temporary traffic diversion arrangement on Dundas Place as a construction mitigation for the 2023 construction season.

This is yet another year of significant construction downtown which could subject Dundas Place to high volumes of cut-through traffic. This approach has been applied during the last two core construction seasons after previous consultation, evaluation and reporting to Civic Works Committee. The arrangement reduces cut-through traffic on Dundas Place by restricting motor vehicle in-flow at Wellington and Ridout Streets and encouraging drivers to access Dundas Place via Talbot, Richmond, and Clarence Streets to reach their destination. The detailed implementation throughout the area would be subject to adaptation based on construction impacts, traffic and Dundas Place operations.

For the longer-term, a Dundas Place operational review will consider various aspects including traffic management and the traffic diversion as one of several considerations for the ongoing management of Dundas Place.

## 2.3 Emerging construction industry pressures

2023 is on track to surpass 2022 as the City of London's largest construction season in terms of both the number of projects and the value of the work. The construction industry in London and across Ontario is going through a period of considerable change with new standards, legislative requirements, and market conditions. There are several risks for the upcoming construction season that may impact project budgets, schedules, staff resources.

### General trends

#### Excess soil management regulation

The Ministry of Environment, Parks and Conservation (MECP) has finalized amendments to O. Reg. 406/19: On-Site and Excess Soil Regulation ("Excess Soil Regulation") requiring soil sampling and testing, as well as documentation, tracking and registration of excess soil leaving construction sites. Contractors will be required to identify potential re-use sites for excess soil in their bids and complete additional post-contract award soil sampling and testing before construction can proceed in full.

Initially implemented January 1, 2022, MECP paused the regulation provisions in April 2022 to help provide more time for understanding and refining the regulation. Amendments were made to make the Excess Soil Regulation more practical and focused on higher-risk movements of soil by removing requirements for low-risk projects and by providing more flexibility when storing excess soil. The amended requirements have now come back into effect as of January 1, 2023.

The schedule and budget implications of excess soil sampling on City contracts remain untested until the industry has experienced one or two construction seasons under the new provincial regulations. Excess soil sampling and testing activities required prior to starting site excavation have the potential to add weeks to an already-constrained construction season. Industry engagement has also flagged concerns for potential backlogs at environmental testing laboratories and potential shortages in qualified staff for these facilities. The impacts to projects are difficult to assess without experience applying the new regulations on specific projects. London's early 2023 projects have experienced some budget implications. In the interim, extra contingency costs are being incorporated into project budgets, particularly for larger projects requiring significant excavation. It is anticipated that, as the industry adapts to the new regulations, anticipated costs to specific projects will be better defined during the planning and design process. Staff will monitor the budget and schedule implications of this regulation over the coming construction seasons.

#### Intersection work

On all construction projects, the City aims to minimize impacts on the travelling public, nearby residents and transit, while completing the work efficiently and on budget. If a signalized intersection will be impacted by construction, the Highway Traffic Act requires that a paid duty officer is in place for traffic control or a full intersection closure is necessary. The switching to temporary traffic signals and activating permanent traffic signals requires the scheduling of several parties (contractor, City's traffic signal maintenance contractor, consultant staff, city staff and off-duty police) which can influence the schedule of subsequent work.

Recognizing that full intersection closures are more impactful, the City typically works with London Police to determine if an officer available for traffic control. If an officer is

not available to perform traffic control on a specific date, the City considers other options, which could include:

- Adapting construction plans to shift the date for intersection work to one where an officer is available
- Completing the work during off-hours or through the night, when a full intersection closure is less impactful on the travelling public and transit

In cases where it is not possible to adapt construction plans without significant schedule or cost implications, the City will consider a full intersection closure as a last resort. In 2022, there were several instances where a full intersection closure was required, including for work in intersections on Brydges Street, at Commissioners Road and Ridout Street, and on Dundas Street. Where possible, intersection closures happened during off-hours or at night to reduce the impacts on the public.

### Security of Construction Sites

City construction sites have been experiencing increased challenges related to security and safety of job sites. After-hours security is becoming an increasing necessity for several reasons with reported incidents of vandalism, trespassing and material theft becoming more brazen. Tender items for private security are being added to some contracts, particularly in the core, and staff regularly emphasize to contractors the need to secure the site and safely store loose construction materials as much as is practical. Project teams also continue to coordinate with Community Informed Response (CIR) when responding to social issues in and around construction sites.

### **Schedule pressures**

Infrastructure renewal and growth projects have become increasingly complex in recent years with servicing partners seeking to align multiple renewal needs, utility coordination and innovative design elements requiring specialized sub-trades all of which can impact the length of a construction contract. As is, many of these projects require a full construction season to complete the required works, often with finishing touches and cleanup work carrying over into the spring. Supply chain interruptions, labour shortages and industry capacity have the potential to create additional pressures to the construction window in 2023 and beyond.

### Supply chain interruptions

The City has seen firsthand in the marketplace the impacts of global supply chain interruptions. Most capital projects require the contractor to source materials, which delays the purchase until the contracts are awarded. Pre-ordering can be challenging for those materials requiring 'shop drawings' from the awarded contractor. Pre-ordering construction materials also requires careful consideration for storage and inventory while maintaining care-and-control of the items. It is critical that successful contractors are provided as much time as possible to order project materials to reduce the impacts of supply chain concerns. Global supply chain issues will continue to be a significant risk in 2023, impacting the supply of vehicles and equipment, steel and plastic products, electronics and other necessary materials and equipment.

### Labour shortages

Labour shortages and increasing costs for skilled labour can add risk, which generally equates to increased project costs and longer project schedules. Many industries, including construction, are facing labour shortage issues as they struggle to return to regular working capacity post-COVID-19. Elevated rates of staff turnover and

vacancies have also been affecting local consultants and City teams, which City staff manage with strong mentoring programs to quickly onboard new staff so they can hit the ground running.

### Industry capacity

2023 is the City of London's largest construction season to date, with senior government funds contributing to several "mega-projects" on top of the usual slate of critical infrastructure renewal and growth projects. At the same time, the residential building industry remains busy with many local contractors and subcontractors also working to support expanding new developments across London. It will be important to monitor and coordinate across projects, particularly later in the season when multiple jobs will be looking for temperature-dependant asphalt, concrete and pavement-marking work to complete or stabilize projects prior to freeze-up.

### **Budget pressures**

City staff continue to keep a close watch of economic pressures influencing project budgets and projects teams were successful in limiting our budget exceedances in 2022. Still, we know that the factors impacting the cost of these projects are not going away anytime soon.

Inflationary pressures for consumers and businesses have been well-documented over the last year and construction is no exception. One indicator of the impacts of inflation on construction pricing is the Statistics Canada Non-Residential Building Construction Price Index, which increased 12.5% over the last 12 months. The Building CPI is useful to track overall national economic trends.

Meanwhile, surging interest rates over the last six months and the resultant ballooning carrying costs of borrowing has added a new element of risk and profit erosion to the great proportion of construction businesses reliant on debt.

### Material costs

Supply chain interruptions have the potential to drive material costs over the duration of the construction season. Price increases have already been observed for items such as personal protective equipment (PPE), steel, copper, aluminum, lumber, paper products, electronics (micro chip shortages which also impact vehicle and heavy equipment deliveries and prices), plastics, utilities and fuel. Tender bid prices may also increase due to late or uncertain construction start dates associated with supply chain delays.

### Asphalt cement index

The City of London experienced almost \$450,000 in extra costs for placing asphalt on projects in 2022 associated with projects tendered in 2021 and 2022. This cost is related to the Asphalt Cement (AC) Index charge to the project. The AC charge is the price the road authority pays for asphalt cement and is directly linked to the published price index of the commodity, as set out by the Ministry of Transportation. In many cases, the cost of asphalt increased dramatically between the time of contract tendering and asphalt paving. This cost increase was unpredictable and is not within the City's control to mitigate, noting AC impacts on 2023 projects will be closely monitored to better inform future project budgets. Projects could see savings if the AC price index drops post-tender, however the rise in the price of petrochemicals being experienced globally due to the situation in Ukraine may escalate AC charges in 2023.

### Late season construction costs

The above-noted schedule pressures have the potential to delay the start of construction, ultimately driving more projects later into the construction season and possibly pushing some works to the following year. There is also potential for additional charges if contractors need to perform work too far into the fall or winter (“winter heat charges”). While cleanup and deficiency work in the spring is normal, pushing larger components of the contract to the following year can have direct project costs and extend the impacts on residents and businesses.

### **2023 Infrastructure renewal program mitigations**

Over the last three years, the COVID-19 pandemic and global supply chain interruptions have significantly impacted many industries and economic sectors, including municipal construction. While the complex and ever-shifting conditions make it challenging to anticipate implications for the 2023 construction season with precision, the team continues to monitor industry trends and implement measures to minimize likely risks, disruptions and financial pressures. The goal is to continue prioritizing flexible planning and mitigation strategies to appropriately respond to emerging issues.

Several initiatives and actions have already been implemented in an effort to alleviate the potential impacts of anticipated schedule and budget pressures.

### Locate services

The timely provision of utility locates are a critical first step for any construction project to help ensure construction schedules are met, eliminate the potential for standby charges resulting from late locates, and provide additional flexibility when planning or making changes to the work plan.

Some capital projects over the last few years experienced extended waits for underground utility locates stemming from a combination of locate service providers having difficulty retaining staff through the pandemic combined with significantly higher than anticipated demand as both growth and public infrastructure investment hit record or near-record levels

Building on the success of the City’s 2022 trial Dedicated Locator program, the City will again provide the Dedicated Locate Service for its construction projects in 2023 using the now available Provincial Dedicated Locate program administered by its regulator, Ontario One Call. Utilizing the Provincial program simplifies administration yet meets all of the City’s requirements to provide the superior locate service needed to help meet project schedules and control construction costs.

### Early tender calls

The City’s multi-year budgeting approach allows for better planning and provides greater certainty to the construction industry. Early notice of construction plans ensures the City can secure contractors and achieve value for money for taxpayers. The tender list is shared with the industry in the fall so they can thoroughly prepare and bid on upcoming projects, mitigating the risk of price increases, and delivering the best possible value for taxpayers. Earlier tendering and timelier contract award yields significant efficiencies and cost savings. Earlier tendering creates a more competitive bidding environment and streamlines the process for road reconstruction and underground infrastructure renewal projects.

## **2.4 Delivering construction excellence for London**

The establishment of the Core Construction Program in 2018 represented a fundamental shift in the way the City approaches construction projects. The teams managing construction projects have continued to build on that approach by expanding resources and communications to ensure it is providing “above and beyond” service to business and community stakeholders affected by construction.

This annual Renew London report is more than a review of the current and previous year’s Infrastructure Construction Programs. It also provides an opportunity to highlight the many construction mitigation, customer service and communication strategies applied to support Londoners through construction.

In 2022, the annual Renew London report transitioned to capturing these fundamental strategies in supporting appendix documents. This year and going forward, this section of the Renew report will continue to highlight key lessons learned from the previous construction season to be incorporated into these strategy summaries year over year. This section also highlights planned initiatives to support continuous improvement in the delivery of the City’s annual construction program.

### **Construction mitigation strategies**

2022 was a record year for construction with a major focus in the core area to improve connections through Downtown and Old East Village, resulting in significant traffic changes for drivers, transit riders, cyclists and pedestrians throughout the construction season. Project teams have continued to develop an understanding of the social challenges and the need for business relations and extensive public engagement and stakeholder outreach before and during construction.

Daily deliveries, commercial and residential access, sidewalk access, and security are all important issues to consider when constructing projects in these urban environments. Courtesy wayfinding signage was installed to assist drivers in reaching key commercial areas and attractions. Project teams learned about managing the growing need for enhanced security to keep City and Contractor property safe. Maintaining pedestrian access throughout construction zones with regard for AODA requirements to support people with disabilities continues to be a major priority for all construction sites.

In 2022, the City continued to support temporary courtesy park and pick-up locations downtown for customers and food delivery drivers when making quick food and parcel pickups. These short-term are being reviewed to see where they can be made permanent or would benefit from modification. Additionally, staff continue to scrutinize the core for additional opportunities to implement additional on-street parking to mitigate project impacts and support businesses.

Maintaining road access is not possible for all construction zones. Traffic control plans are established at the start of projects and consider all modes, including vehicles, transit, cyclists and pedestrians. Detour signs are installed to help road users navigate the project area and traffic changes and road restrictions are informed in advance through Public Service Announcements (PSAs), email notifications, social media and direct outreach to impacted stakeholders. City-branded wayfinding signs are installed around construction zones in the core area to help pedestrians navigate through and around construction zones safely.

Appendix C contains a more comprehensive description of measures used to mitigate the impacts of construction for all Londoners.

## **Communications and customer service strategies**

In 2022, the City continued to prioritize strong communications efforts to support local businesses and keep Londoners informed during construction, especially in the core area.

Working closely with core area BIAs – and relying on valuable feedback from residents and businesses gathered through recent Core Construction surveys and public outreach – the team continued to prioritize communications tools and resources that provide the most value to stakeholders.

From having a dedicated, on-the-ground business relations coordinator, to enhancing wayfinding signage and advertising, the team applied a variety of traditional and digital tactics to support businesses through construction of two rapid transit projects – Downtown Loop Phase 2 and East London Link Phase 1 – as well as Victoria Bridge and the Adelaide Underpass projects.

Strong, evidence-based communications efforts will continue to be applied this year to support businesses in the core area. At the beginning of 2022, 96 businesses who participated in the Core Construction survey continued to identify personal interactions with City staff, online resources, signage, and parking accommodations as the most effective initiatives to support them in serving customers during construction – so these will continue to be areas of focus. Innovative tactics designed to help the team share construction information in a more timely manner are also being explored.

Appendix D contains a detailed description of communications efforts used to keep the community informed before and during construction.

## **Construction and Infrastructure Services: planned initiatives**

The corporate restructuring in 2021 established Construction and Infrastructure Services (CIS) which brought together the Construction Administration, Major Projects, and Geomatics Divisions to create a “centre of excellence” around construction infrastructure support services. The CIS team is involved in the administration, coordination and communication of delivering the majority of the City’s capital construction program on an annual basis.

### Standard Contract Document annual review – process update

London’s Standard Contract Documents (LSCD) define the basis of all City construction contracts including both parties' roles, responsibilities, and detailed description of the work or service such as drawings, specifications, procedures, any other conditions, etc.

Each year, the City undertakes a collaborative LSCD review with input from local contractors and consultants to continuously improve contract language and maintain clear, organized standards. This process is also used to identify potential cost efficiencies in both work methods or materials. As a result of this annual, collaborative process to continuously improve the City’s standard contract language, London is recognized in the province as providing clear, organized, quality standard contract documents.

In 2022, staff worked with industry partners to review the LSCD annual process to further enhance engagement and issue resolution, develop improved document templates and formalize the process schedule and deliverables.

### Explore options for a “Good Neighbour” constructor program

London is fortunate to have strong local and regional industry that has supported the City’s ongoing efforts to enhance construction administration for the annual infrastructure program. Building on that relationship, CIS has established a working group focused on developing a program that captures best practices contractors can use to be a “good neighbour” in the communities they are working in. Principles of a good neighbour constructor might include:

- Supporting robust communications with affected neighbours
- Keeping a clean and tidy job site
- Maintaining an accessible site and helping those with disabilities navigate it easily
- Demonstrating a respectful workplace
- Respecting the environment
- Engaging and supporting local businesses

Once developed, this program could be branded and promoted to the public as a symbol of how the City and its contractors take pride in their job sites.

### Enhanced street-level engagement

Through development of the Neighbourhood Connectivity Plan Engagement Strategy Pilot, staff have heard a clear desire for earlier engagement at the street level when the work is impactful to the streetscape, such as addition of a new sidewalk or tree removals. Whether the City is seeking input on various design scenarios or there is only one viable design solution, it is important to provide residents an opportunity to learn about design considerations and share their views in advance of a finalized design. CIS is continuing the Neighbourhood Connectivity Plan pilot into 2023 with the specific goal of further developing a consistent approach for street-level engagement that can be implemented by project managers across all projects, regardless of the delivery program.

### Community employment benefits (CEB)

As a requirement of the Investing in Canada Infrastructure Program (ICIP) funding, all projects with over \$10 million in federal contributions are required to participate in the Community Employment Benefits (CEB) initiative. The goal of the initiative is to leverage infrastructure investments to benefit the communities and neighbourhoods where that infrastructure is built. Projects featuring CEB in 2022 include the three Rapid Transit Phases and the Adelaide Grade Separation.

The 2022 ICIP projects saw the employment of three CEB employees qualified under the Recent Immigrant and Youth categories and that were enrolled in Fanshawe College’s Construction Engineering Technology program. They have benefited through hands-on experience with a large construction project and had the opportunity to practice their English skills in a professional setting. Rapid Transit construction is slated to continue to 2027 with multiple contracts per year and we look forward to seeing more and more CEB employees hired through this program.



## Conclusion

The Renew London Construction Program manages the sustainability of London's infrastructure through a combination of road, bridge, bicycle, sewer, water, sidewalk and intersection improvements. The annual program is planned to address asset needs for infrastructure lifecycle renewal while at the same time ensuring that the growth requirements of the community are met in a timely manner.

2022 was a successful construction season with a portfolio of Council-approved projects totalling approximately \$190 million. In spite of persistent economic pressures stemming from labour shortages, pricing escalations, and global supply chain impacts, the majority of 2022 projects are expected to be completed on or ahead of schedule and remain on budget. A companion report has been included on this agenda for those projects in which budget pressures exceeded the awarded contract value.

The 2023 proposed construction portfolio is currently estimated at just over \$200 million. The program will reconstruct 80 lane-kilometres of road, add or replace 20 kilometres of sanitary and storm sewers, rebuild 12 kilometres of watermain and remove approximately 0.25 kilometres of combined sewer. Over 25 intersections will be improved along with adding more than 16 kilometres of new bike lanes, 14 kilometres of new sidewalk will be added and replacing about 26 kilometres of existing sidewalks. A robust communications plan for the overall 2023 program has already begun and targeted plans for individual projects are either underway or launching shortly.

Emerging market conditions and new regulations will continue to place pressure on project schedules and budgets. Advance measures have been taken to help mitigate these potential project risks, such as offering a Dedicated Locator Service for City projects, and early tender posts for the largest projects. While it is challenging to predict how global and local pressures may affect the 2023 construction season, the team continues to monitor industry trends and prioritize flexibility and mitigation strategies in order to appropriately respond to emerging issues and ongoing pandemic impacts.

The City strives offer robust construction mitigations as well as sustained, sincere, and strategic communications as part of its annual construction program. Lessons learned from 2022 projects and anticipated risks associated with the 2023 construction season have been communicated to project managers to support design and future project planning.

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**Submitted by:** **Jennie Dann, P.Eng., Director, Construction and Infrastructure Services**

**Recommended by:** **Kelly Scherr, P. Eng., MBA, FEC, Deputy City Manager, Environment and Infrastructure**

APPENDIX A – 2022 Renew construction program top 10 list and project highlights

APPENDIX B – 2023 Renew construction program top 10 list

APPENDIX C – Construction mitigations strategies

APPENDIX D – Communications and customer service strategies

cc: Accessibility Community Advisory Committee  
Integrated Transportation Community Advisory Committee  
London Transit Commission  
Downtown London Business Improvement Association  
Old East Village Business Improvement Association

## APPENDIX A – 2022 Renew construction program list

The chart below identifies the Top 10 City projects in 2022, the status and tendered contract amount.

Three noteworthy 2022 construction projects, noted in the 2022 project highlights below, implemented exciting new infrastructure and various transportation projects made big achievements in further expanding London’s cycling network.

| <b>Project</b>   | <b>Tendered contract amount (millions)</b> | <b>Status</b>   |
|--|--|---|
| <b>Adelaide Street North Underpass: Improved mobility and road improvements</b>                                | \$60.19 M                                  | 3-year project<br>2022 site work included building temporary diversion road   |
| <b>Downtown Loop Phase 2 and Municipal Infrastructure Improvements (Queens Avenue and Ridout Street North)</b> | \$17.2M                                    | 2-year project.<br>Phase 2 mostly completed in 2022 with streetscape, sidewalks to be completed in 2022 and portion of Queens between Clarence and Wellington deferred to 2022. Phase 3 scheduled for 2022. |
| <b>East London Link Phase I (King Street)</b>  | \$20.9M                                    | 2-year project<br>Phase 1 mostly completed in 2022 with streetscape, sidewalks to be completed in 2023.<br><b>Phase 2 scheduled for 2023</b>  |
| <b>Southdale Road West Improvements</b>  | \$10.5 M                                   | 2-year project<br>Project mostly complete in 2022 with sidewalk work and noise wall scheduled for 2023  |
| <b>Victoria Bridge Replacement</b>   | \$22.8 M                                   | 2-year project<br>Truss bridge removed in 2022 and foundation work for new structure underway.<br>Bridge components and new arch structure to be installed in 2023.   |
| <b>Mud Creek Phase 2</b>   | \$9 M<br>(estimated)                       | 2-year project<br>Deferred to fall 2023 into 2024.  |
| <b>Kilworth Bridge Rehabilitation</b>  | \$ 500k<br>(estimate)                      | 1-year project<br>Deferred to 2023.   |
| <b>Queens Avenue Road and Cycle Rehabilitation</b>   | \$1.65 M                                   | 1-year project<br>Majority of project complete in 2022 with permanent line markings to be placed 2023   |
| <b>Pottersburg Phase I Reconstruction</b>  | \$5.8 M                                    | 1-year project<br>Construction in 2022 mostly complete with minor streetscape elements in 2023  |
| <b>Brydges Street</b>  | \$5.9M                                     | 2-year project<br>Project mostly complete with minor streetscape elements in 2023   |

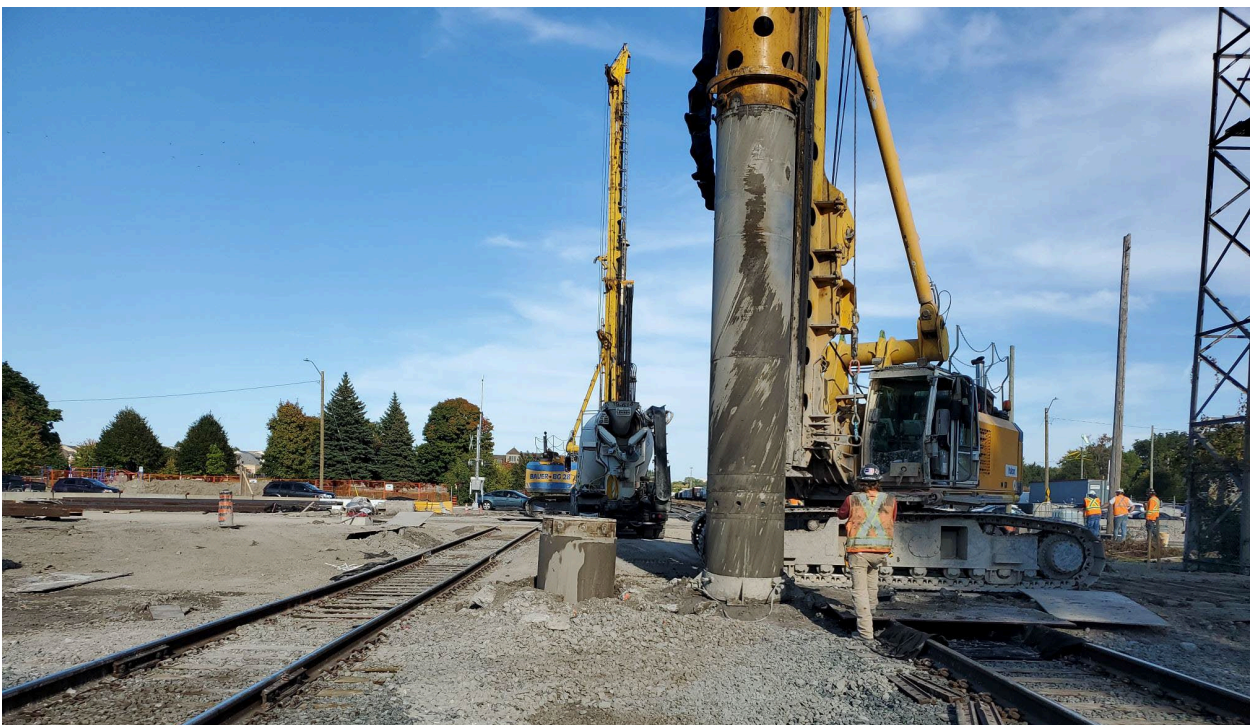
## 2022 project highlight: Adelaide Street North Underpass

The Adelaide Street Underpass is a complex multi-year project. Reconstruction of Adelaide Street North from Elias Street to 80m north of McMahan Street, as well as Central Avenue from William Street to Elizabeth Street started in Spring 2022 and is anticipated for completion in Fall 2025. In 2022, the focus has been on preparatory work to advance the major excavation of the actual underpass in 2023. This included replacing underground services and infrastructure on surrounding streets and constructing a temporary detour road around the excavation area.



*Above: Aerial view of the Adelaide Underpass construction site.*

Installation of a groundwater cut-off wall was also completed to prevent groundwater from entering the underpass, the groundwater cut-off wall is formed by constructing a series of intersecting reinforced concrete piles. Drilling and pouring of piles started early summer and was completed by mid-September of 2022.





*Above: Drilling operations to install a cut-off wall for groundwater on Adelaide Street North.*

Completing the groundwater cut-off-wall system was critical as a portion of it runs underneath where the Canadian Pacific Railway tracks cross Adelaide Street and needed to be replaced to sustain the temporary rail bridge that is required while the contractor builds the permanent abutment and steel girder structure.



*Above: Overnight operations to install a temporary rail bridge to support Canadian Pacific railway operations during construction of the Adelaide Underpass.*

## 2022 project highlight: Victoria Bridge Replacement

Another massive and complex project that is underway is the replacement of the Victoria Bridge on Ridout Street between Thames Park and Horton Street. The existing bridge will be replaced with a new “through arch” structure, which will include a widened deck surface to better accommodate bicycle traffic, pedestrians, and improved connectivity with the Thames Valley Parkway.

The work started in 2022 with the installation of a temporary active transportation bridge that also supports temporary active utilities relocated from the demolished bridge.



*Above: Installation of a temporary active transportation bridge to support pedestrian and cycling connections across the Thames River during construction.*

Removal of the existing concrete bridge deck and steel truss frame has also been completed in 2022. Currently, construction of the new arch foundation that will support the bridge at its four corners is underway on the northwest side. Below photos shows the work progress between August and December of 2022.





*Above: Aerial view of construction works at the Victoria Bridge on Ridout Street North.*



*Above: Winter works at the Victoria Bridge site.*

There was also sensitive in-water work that required a high degree of environmental sensitivity in the approach to removing materials from this part of the Thames River, which is home to several Species At Risk, including 'Rayed Bean' and 'Round Pigtoe' mussels, as well as the 'Silver Shiner' and 'Black Redhorse' fish species.



*Above: Crews completing sensitive in-water works required to protect several at risk species, including 'Rayed Bean' and "Round Pigtoe" mussels that are part of the Thames River ecosystem.*

## Downtown Loop Phase 2 and East London Link Phase 1 Rapid Transit Projects

Phase 1 of the Downtown Loop was built in 2021, with some finishing touches completed in 2022 on King Street. Most of Phase 2 was constructed in 2022 along Queens Avenue and Ridout Street North.

Phase 2 of the Downtown Loop was especially complex as it required extensive underground work to separate aging sewers, install new infrastructure, watermains and utilities. The 2022 Downtown Loop contract is the largest core project to be undertaken in a single construction season, covering more than six blocks of infrastructure work.

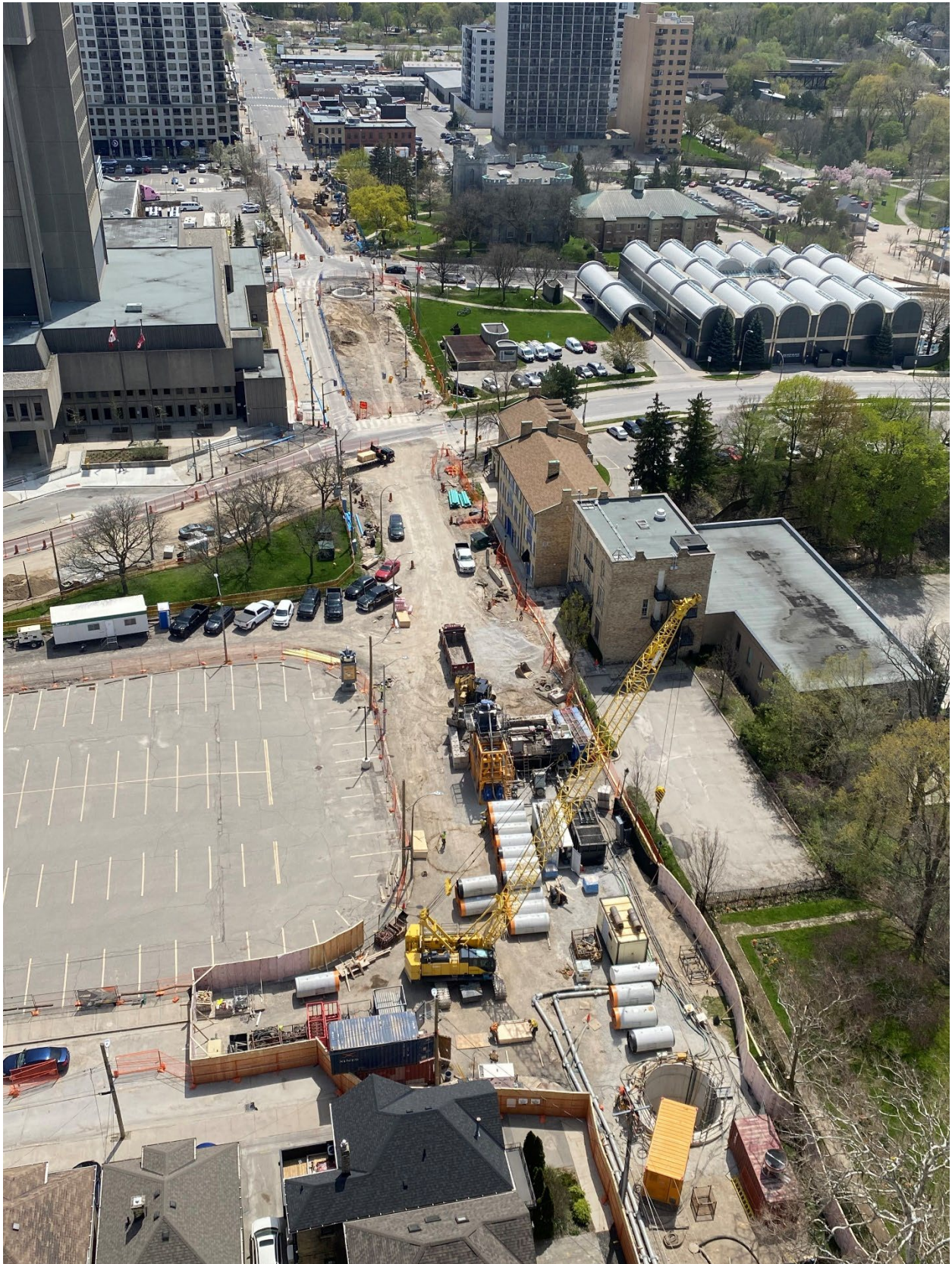
An exciting part of Downtown Loop Phase 2 was the micro-tunneling work on Ridout Street North. This work required 24-hour drilling operations to install a new deep, large sanitary sewer that would have been incredibly impactful to construct with an open trench. Working around the clock was needed because once the drilling works began, the micro-tunneling equipment had to operate continuously until they reached the end of the receiving pit near the Dundas Street intersection. The drilling was completed successfully in about a week and a half.

Further mitigation measures were in place during the micro-tunneling operations to minimize impacts to residents and businesses, including installing vibration monitors and sound barriers to reduce noise and dust while crews completed this important work.



*Above: Downtown Loop Phase 2 construction site at Queens Avenue between Richmond Street and Talbot Street.*





*Above: Aerial view of the micro-tunneling operations at Ridout Street North for the Downtown Loop Phase 2 project. The Launching Pit is visible at the bottom of the picture and the Receiving Pit can be seen at the top of the picture near Ridout and Dundas.*

Phase 3 of the Downtown Loop project will occur in 2023 along Wellington Street from Queens Avenue to York Street. Some planned carry-over work will occur in 2024 to add permanent red bus-only lane markings and bus stop shelter infrastructure, which will follow under a separate contract.

This multi-year project will add transportation and transit improvements above ground, while repairing and replacing aging sewers, watermains and other underground infrastructure.





*Above: Aerial view the Downtown Loop Phase 2 construction site at the Queens Avenue and Richmond Street intersection.*

The Downtown Loop is the first of London's new rapid transit system, with the aim of providing Londoners with safer, more efficient transit operations. Once the Downtown Loop is complete, it will serve as a hub for future east and south legs of rapid transit extending across London, including the East London Link and Wellington Gateway.

Reconstruction work on Phase 1 of the East London Link Rapid Transit project has also begun in 2022. The first phase of the East London Link started on King Street from Lyle Street to Wellington intersection. This project included 7 blocks of full road reconstruction and underground servicing upgrades.

The overall strategy has been to work in multiple blocks at once which has kept the project efficient and helped complete the bulk of this work in one construction season.



*Above: East London Link Phase 1 construction site at King Street.*





*Above: Aerial view of the East London Link Phase 1 construction site at the King Street and Wellington Street intersection.*

### **Cycling infrastructure improvement projects**

The final project of the East-West Bikeway was completed on Queens Avenue, incorporating a full road rehabilitation between Quebec Street and Maitland Street. The locations of the existing westbound bike lane and parking lane were swapped to provide a protected cycling facility that provides the westbound connection for cyclists from Old East Village to William Street.

There were other cycling projects that started in 2021 and completed in 2022. The second phase of Brydges Street was completed adding bike lanes between Egerton Street and Highbury Avenue. The protected bike lanes east of Hale Street on Brydges Street, Wavell Street and bike lanes on Saskatoon Street were completed and offer a comfortable cycling facility connecting to the Kiwanis Park pathway, East Lions Community Centre, and two elementary schools.

The Fanshawe Park Road Boulevard Cycling Lane project rehabilitated the sixth phase of the existing boulevard cycling lanes on Fanshawe Park Road between Wonderland Road and Adelaide Street. As part of the larger road rehabilitation project on Fanshawe Park Road further west, the boulevard cycling lanes were also rehabilitated between



Hyde Park Road and Dalmagarry Road. Both of these projects also included accessibility measures to support AODA requirements and improved waiting areas at bus stops.

A protected intersection at Ridout Street & Commissioners Road was completed that improves safety for all road users and completed a missing link in the Upper Queen Street and Ridout Street bike lanes. At William Street and Oxford Street, a new walking and cycling crossing was added that allows pedestrians and cyclists to cross Oxford Street, to connect neighbourhoods, bus stops and provide a cycling alternative to Adelaide Street.



*Above: New parking-protected bike lanes on Queens Avenue*



*Above: New protected bike lanes on Wavell Street*





*Above: New protected intersection at Ridout Street & Commissioners Road*



*Above: New walking and cycling crossing at Oxford Street & William Street*

## APPENDIX B – 2023 Renew construction program list & Top 10

The 2023 City's Top 10 Construction Projects are selected each year to provide an overview of the upcoming year's work and impacts. City staff have identified the Top 10 projects that will take place during the 2023 construction season.


The Top 10 are selected based on the following criteria:

- Scope of work (e.g., complete utility and sewer rebuild, asphalt resurfacing)
- Construction duration
- Location in relation to other nearby projects and the expected future benefits
- Road classification
- Road user impact
- Transit impact
- Impact to neighbours
- Proximity to events, schools, community centres, parks, cycle routes
- Economic impact and Government funding
- Supply chain exposure
- Excess Soil

### 2023 City's Top 10 construction projects

1





## Adelaide St North Underpass




**Work Type:** Improved Mobility.  
Road Improvements


**Tender:** \$60.2M

**Benefits:** Improved mobility, new sewer infrastructure, and enhanced lighting.

-  Temporary sidewalk closures
-  LTC route impacts
-  Road closure
-  Road closure



Website: [getinvolved.london.ca/adelaide](https://getinvolved.london.ca/adelaide)



Above: Adelaide Street North Underpass

## Downtown Loop Phase 3

(Wellington Street from Queens Avenue to York Street)






**Work Type:** Rapid Transit and Municipal Infrastructure Improvements

**Tender:** \$13.6M

Public Transit Infrastructure Stream (PTIS)

**Benefits:** Improved mobility, connectivity to transit, streetscaping and water and sewer infrastructure upgrades to accommodate future growth.

-  Temporary sidewalk closures
-  LTC route and stop impacts
-  Phased road and lane restrictions



Website: [getinvolved.london.ca/downtownloop](https://getinvolved.london.ca/downtownloop)



*Above: Downtown Loop Phase 3*

## Wellington Gateway Phase 1

(Wellington Street from York Street to north of the Thames River)






**Work Type:** Rapid Transit and Municipal Infrastructure Improvements

**Tender:** \$14.9M

Public Transit Infrastructure Stream (PTIS)

**Benefits:** Improved mobility, connectivity to transit, streetscaping and water and sewer infrastructure upgrades to accommodate future growth.

-  Temporary sidewalk closures
-  LTC route and stop impacts
-  Phased road and lane restrictions



Website: [getinvolved.london.ca/wellingtongateway](https://getinvolved.london.ca/wellingtongateway)



*Above: Wellington Gateway Phase 1*



## East London Link Phase 2

(King Street, Ontario Street and Dundas Street)







**Work Type:** Rapid Transit and Municipal Infrastructure Improvements

**Tender:** \$16.9M

Public Transit Infrastructure Stream (PTIS)

**Benefits:** Improved mobility, connectivity to transit, active transportation improvements, streetscaping and water and sewer infrastructure upgrades to accommodate future growth.

-  Temporary sidewalk closures
-  LTC stop impacts
-  Lane restrictions
-  Lane restrictions

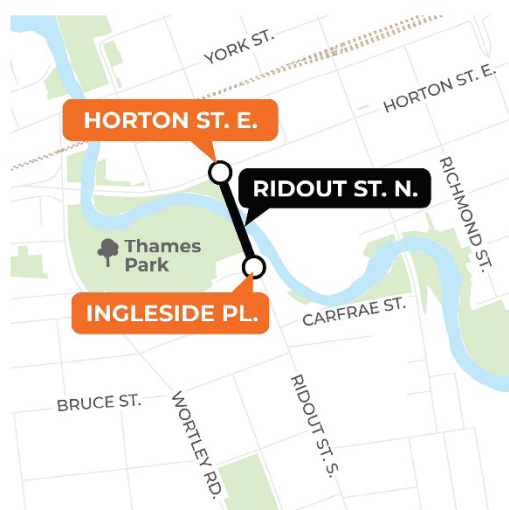


Website: [getinvolved.london.ca/eastlondonlink](https://getinvolved.london.ca/eastlondonlink)



*Above: East London Link Phase 2*





## Victoria Bridge Replacement



**Work Type:** Infrastructure Renewal

**Tender:** \$22.8M

**Benefits:** Replace an aging 1920s truss bridge with new through arch-structure and improve active transportation network with wider sidewalks and extend bike lane connection to Thames Park.

-  Temporary active transportation bridge
-  LTC route impacts
-  Temporary active transportation bridge
-  Road closure



Website: [getinvolved.london.ca/victoriabridge](https://getinvolved.london.ca/victoriabridge)



*Above: Victoria Bridge Replacement*




## Mud Creek Phase 2



**Work Type:** Stormwater Improvement

**Tender:** \$9M (Estimated)

**Benefits:** Alleviate existing and future flooding concerns identified in the Mud Creek Subwatershed Environmental Assessment.

-  Temporary restrictions
-  No LTC impact
-  Road closure
-  Road closure



Website: [getinvolved.london.ca/mud-creek-phase-2](https://getinvolved.london.ca/mud-creek-phase-2)



*Above: Mud Creek Phase 2*





## Fanshawe Park Road and Richmond Street Intersection Improvements



**Work Type:** Municipal Infrastructure and Intersection Improvements

**Tender:** \$14.7M

**Benefits:** Improved mobility to enhance comfort and safety for all road users, asphalt in-boulevard bike paths, new sidewalks, streetscaping and underground infrastructure upgrades to accommodate future growth.

-  Temporary sidewalk closure
-  LTC route and stop impacts
-  Bike path restrictions
-  Lane restrictions

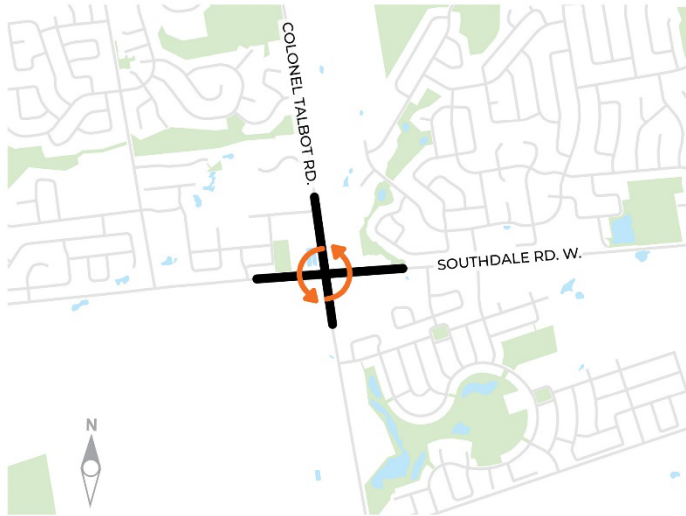


Website: [getinvolved.london.ca/fanshaweandrichmond](https://getinvolved.london.ca/fanshaweandrichmond)



*Above: Fanshawe Park Road and Richmond Street Intersection Improvements*




## Southdale and Colonel Talbot Roundabout



**Work Type:** Municipal Infrastructure and Intersection Improvements

**Tender:** \$8.7M

**Benefits:** Improved comfort and safety for all road users by reconfiguring the intersection as a roundabout, install in-boulevard bike paths and new sidewalks, streetscaping and underground infrastructure upgrades to accommodate future growth.

-  Sidewalk restrictions
-  LTC route and stop impacts
-  Road closures and restrictions



Website: [getinvolved.london.ca/southdaleroundabout](https://getinvolved.london.ca/southdaleroundabout)



*Above: Southdale and Colonel Talbot Roundabout*




## Quebec Street Infrastructure Renewal



**Work Type:** Infrastructure Renewal Project (IRP)

**Tender:** \$6.3M

**Benefits:** Aging infrastructure replacement, installation of new cycling infrastructure and sidewalks, streetscaping and underground infrastructure upgrades to accommodate future growth.

-  Intermittent sidewalk closures
-  LTC route impacts
-  Road closures (local traffic only)



Website: [getinvolved.london.ca/quebec](https://getinvolved.london.ca/quebec)



*Above: Quebec Street Infrastructure Renewal*




## Dingman Drive Improvements



**Work Type:** Municipal Infrastructure Improvements

**Tender:** \$9.7M (estimated)

**Benefits:** Road widening to improve comfort and safety for all road users, new multi-use pathways, streetscaping and underground infrastructure upgrades to accommodate future growth.

-  Sidewalk restrictions
-  LTC route and stop impacts
-  Road closures and restrictions



Website: [getinvolved.london.ca/dingmandrive](https://getinvolved.london.ca/dingmandrive)



*Above: Dingman Drive Improvements*

## **APPENDIX C – Construction mitigation strategies**

The teams managing construction projects are regularly drawing upon lessons learned through the annual Renew Program to raise the bar on public service when supporting business and community stakeholders affected by construction. The following strategies are applied to help mitigate the impacts of construction for Londoners.

### **Project coordination mitigations**

The Renew London Infrastructure Program was created to drive construction efficiency by coordinating capital construction projects across Environment and Infrastructure. There are additional opportunities for City Staff to coordinate projects across internal and private partners to avoid potential overlapping construction impacts.

#### Core Area Construction Coordination Committee (CAC3)

The CAC3 was established in 2018 to better coordinate transportation impacts in the core stemming from known projects and permits in or affecting right-of-way, to inform core construction communications. Coordination of all construction activities in densely developed parts of the city, which are used intensively day and night by multiple diverse users, involves collaboration across several City divisions. Effective communication is paramount internally and with the City's private partners, transit, and emergency services. The committee focuses on anticipating and minimizing impacts and achieving equity in the travel experiences of all road users (pedestrians, cyclists, transit users and motorists) through weekly meetings during the construction season. In 2022, the core-area boundary being monitored by the Downtown Construction Coordination Committee extends from Horton Street to Oxford Street and from the Thames River to Ontario Street.

#### Utility Coordinating Committee

The mandate of the Utility Coordinating Committee (UCC) is to provide advanced planning of infrastructure work in the municipal right-of-way for over 20 different public and private organizations. Coordinating this work is a complex challenge compounded by hundreds of emergency and routine operational repairs undertaken by City Roads, Water, Sewer and Forestry Operation teams annually. There has been a significant increase in project applications for telecom companies which will continue as fibre to the home programs blanket most areas of the city.

Advanced cumulative planning through the UCC allows the City staff to better respond to proposed and unplanned work and helps visualize the effects of all projects relative to others and promotes better definition of specifications around scheduling of contracts. The City's goal is to ensure that construction is planned and sequenced in a manner that minimizes impacts on traffic and disruption to the public.

#### Phasing and staging projects

Through experiences on several recent larger projects, the City has recognized the benefits of splitting large scale projects into phases over multiple years or into stages by location within a single season, where possible. As with most projects there are inevitable challenges that can affect a project's schedule. With a project spread out over multiple years the impact of any delays is minimized and the cost to the City can be significantly reduced and controlled. Phasing projects over multiple years can have benefits, but other factors such as funding, local impacts, and transportation impacts need to be considered when deciding if this approach is appropriate.

## Mobility mitigations

All work is being scheduled to minimize impacts on traffic as much as possible from the perspective of all road users. Construction schedules may vary due to weather and other factors, so it is important that Londoners stay alert and be prepared to adapt to changing conditions.

During construction, the public are advised to plan their travel in advance, consider alternate routes, be aware that street parking may be impacted, obey signage around work zones and be patient while traveling in and around work zones throughout the city. The City takes an active approach to coordinating construction to reduce prolonged disruption to local residents and the travelling public. Where possible, staff consider all the potential construction needs of a particular area and liaise with outside agencies such as the utility companies to coordinate their construction needs and plan how to complete the work together in stages or at the same time.

### Pedestrian impacts

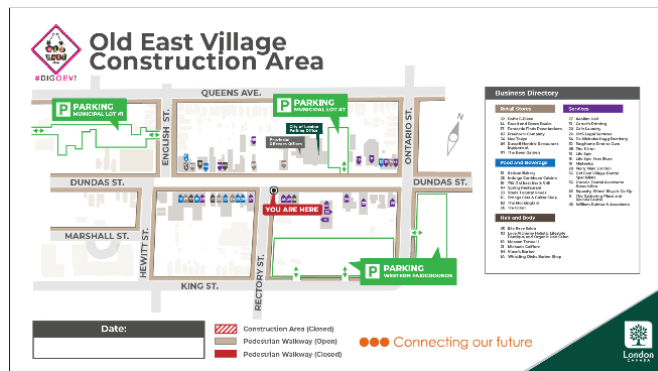
Accessibility around construction projects is a key consideration for all the City's construction activities. City contracts require that an accessible pathway through a construction site be maintained to the extent possible. When encountering certain project and site-specific constraints or disruptions, it is not always possible to continuously provide a safe and accessible route through a construction site. When construction activities require the temporary closure of an existing sidewalk for safety, the public will be notified of the disruption as per O. Reg. 191/11, Part IV.2, s. 80.48 (Accessibility for Ontarians with Disabilities Act, 2005, "AODA"). Where applicable, signage will be installed on site at either end of the work indicating that the sidewalk is closed. This will alert pedestrians to use an alternate route. While this alternate route may not always be most convenient way to reach a particular destination, it will ensure that the public is not entering into an unsafe situation.

Where possible, City projects include requirements to construct temporary hard surface sidewalks and, in some cases, temporary ramps to better facilitate accessible pedestrian movement. Navigational signage is also placed on site around large core area construction projects to support pedestrians and businesses.

2022 Core Construction projects such as Phase 2 of the Downtown Loop project on Queens Avenue and Phase 1 of the East London Link on King Street included enhanced site security, improved lighting, additional signage, and enhanced walkways to improve public safety. These improvements for pedestrians were implemented to provide a more comfortable and secure construction environment for residents, businesses, and visitors.



*Above: Examples of navigational signage used around the construction area.*



Above: Example of pedestrian navigation maps to installed around construction sites.

### Cyclist impacts

Cyclists are an important consideration when designing and planning all infrastructure projects. While many projects include building new bike lanes and improving existing bike infrastructure, construction sites themselves are potential hazards for cyclists. City’s bicycle routes should be safely accommodated through or around work zones. When possible, the City creates detour routes for cyclists, posts signage around construction, and shares notices, public service announcements and maps online about closures.



Above: Traffic changes on Dundas Place to support safety and mobility for all during core construction.



Above: Example of bike detour signs to help cyclists navigate construction safely.



## Traffic impacts

Congestion and disruption caused by public and private construction is disruptive to all road users. City staff manage programs to mitigate the impacts as much as possible by reviewing all projects from a traffic and construction detour impact perspective. Some projects will require road closures to complete the planned construction for the safety of the contractor and the public, while others may only require lane restrictions. In any case, a detour to safely redirect traffic around the disturbed areas and permit the work to be completed in a timely manner will be implemented.

To optimize vehicle traffic flow in the areas affected by planned detours, the City may adjust traffic-signal timing, in addition to installing advance warning signage and optimizing apps such as Waze to recognize the closure. The City will have greater ability to adjust traffic signal operation as the Intelligent Traffic Signal project benefits are realized. As an effective and highly visible tool, more electronic Portable Variable Message Signs are being utilized throughout the city to provide drivers with current updates/detour routes digitally, on a larger screen.

Notwithstanding posted detour routes, increased traffic volumes are often observed on some neighbourhood streets near construction areas as drivers look for shortest routes around the closures. In some cases, temporary neighborhood traffic calming measures may be implemented to mitigate this behavior.

The City strives to minimize the disruption to the public during construction and maintain access to the maximum extent possible. Separating a construction project into stages to maintain use is often considered. However, it can often lengthen the duration of a project, creates challenges from a constructability and increased capital cost perspective. A balance needs to be established that satisfies both objectives. City staff believe this balance has been achieved with the 2022 Renew London construction Program.

## Transit impacts

City staff work closely with the London Transit Commission (“LTC”) to identify construction impacts affecting bus routes. LTC prepares and communicates detour routes as needed throughout construction projects. Several projects for 2023 will impact LTC routes, and these route changes will be listed on the Detours section of LTC’s website.

## **Access mitigations**

### Pedestrian/sidewalk access

Maintaining sidewalk access throughout construction zones, especially in the core area, continues to be a challenge when sidewalk work is required. Contractors are asked to maintain clearly labelled pedestrian maps and signage in advance of pathway closures. Where necessary, crews also provide a temporary smooth surface of plywood, asphalt, or concrete within the sidewalk area for pedestrians.

### AODA and supports for people with disabilities

There are many people in our community who due to age, infirmity, injury or other reasons are dealing with mobility challenges and for them a construction zone can present lots of unexpected terrain and obstacles. Strategies to support accessibility during construction include clearly marked pedestrian routes with large signage at eye level to support those using mobility devices and brightly coloured fencing to help those

with low vision. All construction workers are required to have AODA training and are encouraged to keep an eye for anyone that may be struggling and give a little extra assistance.

### Motor vehicle access

While maintaining road access is not possible in all construction zones, two-hour free parking is being offered through the recently approved Core Area Action Plan to incentivize drivers to continue to visit despite the removal of on-street parking in the work zone. The City will also assist visitors through the use of advance warning signs, social media updates and public service announcements.

### Temporary and courtesy park and pick-up locations

To help support businesses during the COVID-19 pandemic and construction, the City added short-term spots throughout the core area for customers and food delivery drivers when making quick food and parcel pickups. Temporary and courtesy park and pick-up locations will continue to be available throughout the 2023 construction season.

### Receiving deliveries

Local businesses rely on the delivery of goods to operate. Understanding this, temporary loading zones have been designated in advance and will be clearly marked for retailers, suppliers, and rideshare services. In exceptional circumstances, new loading areas may be negotiated and installed. Concierge services can also be made available to assist with large or complex deliveries.

### **Service interruption mitigations**

Service interruptions can be extremely disruptive to businesses. Over the past few years, communication has been improved around planned service interruptions in the core area. Bi-weekly emails are sent to businesses from the project manager detailing what work has been completed, and what upcoming work is expected in the area. Tailored email notifications are also shared with impacted businesses at least 24 hours in advance of a service disruption, unless there is an emergency, in which case notice is provided as soon as possible.

### **Site condition mitigations**

#### Cleanliness of work site

Clean work zones are an important factor to deliver on positive experiences during construction. Sidewalk and street sweeping, sharps management, cigarette butt disposal, periodic window-washing, garbage/recycling receptacles for the general public and waste pickup for those living and working in the area will be included in tenders where possible. Coordination at/near key destinations (city-wide) Major closures led by third parties at or near critical destinations, such as hospitals, schools, community and seniors' centres are critical to the community. Though internal training, increased efforts with regards to communication plans in these important locations. This includes increased oversight of third parties such as CN/CP Rail and utility groups.



### Social impacts

The City has continued to develop an understanding of the social challenges of working in a dense and urban environment. Daily deliveries, commercial and residential access, sidewalk access, and security are all important issues to consider when constructing projects in these environments. It is important for the project teams to stay nimble and flexible when it comes to how to implement and stage a project, while continuing to listen to the challenges that local businesses and residents face.

### Security enhancements

In 2022, there was a need for additional security on several projects, to keep City and Contractor property safe during inactive periods of the project. Several incidents on projects also required the involvement of security personnel on site during working hours to assist with the safety of workers. The projects teams have learned when to increase the security presence on site.

## **APPENDIX D – Communications and customer service strategies**

As London experiences larger and more complex construction projects, the City is prioritizing communications to ensure impacted businesses, residents, and property owners are informed before and during construction.

On a typical construction project, stakeholder outreach takes place before work begins to review and discuss potential impacts, such as property access and accessibility, collect contact information, solicit feedback, and share project details. Information gathered during these conversations is essential to shaping communications for each project.

To streamline communications between the City, impacted stakeholders, construction crews, and key private partners – such as London Transit and emergency services – a Construction Project Manager is assigned to each project. The Project Manager’s contact information is shared before construction begins and members of the public are invited to connect with the Project Manager at any time during construction. This role is essential to ensure up-to-date information is always accessible, and to assist with construction inquiries and issues, manage Renew London updates, and keep Communications staff informed.

Anticipating exact impacts and unforeseen situations may be difficult due to the complexity and changing conditions for each project. However, Construction Project Managers work closely with Communications to ensure Londoners and impacted businesses and residents are informed about road closures, lane restrictions, sidewalk disruptions and other construction impacts that may arise. Key private partners and emergency services are kept informed on an ongoing basis through direct communications with Construction Project Managers, public service announcements, and the daily Renew London Road Report email.

### **Communications and correspondence**

While frequency of correspondence may differ depending on the project’s location, scope, duration, and traffic and social impacts, the following communication methods may be used to inform Londoners who live, work, or own property in proximity to a City-led capital construction project:

#### *Road construction projects*

- Construction notice letter
- Direct communication with Construction Project Manager (email, phone, in-person)
- Advance warning and detour signage
- Updates on the Renew London website

#### *Major construction projects*

Any of the tactics above, plus:

- A minimum of three project update letters
- Project-specific web page on london.ca and/or getinvolved.london.ca
- Public engagement webinars and/or pre-recorded presentations
- In-person drop-in sessions
- Public service announcements (PSAs sent to media and posted on london.ca/newsroom) media updates
- Email notifications and updates to project-specific email subscribers
- Social media updates to communicate traffic impacts

### *Core/commercial area construction projects*

Any of the tactics above, plus:

- A Construction Business Relations Coordinator, whose primary focus is on supporting businesses through the construction process. Working closely with core area BIAs, the Business Relations Coordinator becomes a familiar face to impacted businesses through ongoing, in-person and virtual outreach, and ensures business concerns and questions are addressed by the project team. In previous construction seasons, this role was temporary. However, recognizing the value of this dedicated business support position, in 2022, this role was made permanent, and will be an ongoing resource for major construction projects moving forward.
- Ongoing communications and promotions with Downtown London and Old East Village and other BIA's where applicable
- Custom wayfinding signage and navigation maps
- Collateral materials such as construction toolkits and contact cards
- Radio ads and social media advertising

### Navigation

The City continuously promotes the use of the following tools to help Londoners navigate construction safely and efficiently whether they drive, bike, walk, or take transit:

- **Navigation apps:** Londoners continued to be encouraged to use navigation apps such as Waze or Google Maps to find alternative routes during construction.
- **Renew London interactive map:** By visiting [london.ca/roadwork](https://london.ca/roadwork) residents can search by street to learn if their commute will be impacted.
- **Honk app:** Through an official partnership with Honk, drivers can continue to find and pay for parking nearby during construction. This year, core area visitors can take advantage of two-hour complementary parking at designated locations using the Honk app within the promotional period.
- **LTC's online trip planner:** City staff work alongside LTC to promote use of their trip planner and detour updates during construction.

### Core construction program

The City of London has a vision to revitalize the Core Area as the cultural, civic, retail, and economic heart of London, and as a great place to live. Revitalization of the core area is essential to support city growth and mobility in the future. Not only are there several City-led projects planned in the core in 2023, but private development and private utility projects will continue as well.

The core construction program supports area businesses and resident with additional resources such as a construction tool kit, enhanced wayfinding signage, small events, and marketing campaigns all using a consistent tagline "Connecting our future."

Enhanced communications and engagement will continue in 2023 to support construction in the core and surrounding areas. Key projects include the Downtown Loop Phase 3, East London Link Phase 2, Wellington Gateway Phase 1, Victoria Bridge Replacement, and Adelaide Underpass.

## Community relations

Based on lessons learned early in 2022, the City continues to build its formalized construction mitigation program in the core. This program provides enhanced resources and communications on core construction projects to:

- Provide a positive experience for visitors and locals
- Encourage movement in and around the construction zone
- Enable easy access to City services and staff
- Promote impacted areas and support businesses in partnership with the BIAs
- Prioritize and facilitate project information sharing
- Foster community collaboration where possible

Program elements can be identified by its tagline: Connecting our future.

 Connecting our future.

## Measurement

To better understand the effectiveness of the core construction program, the City launched a post-construction survey in early 2022 targeted towards residents, businesses, and property owners in the core area.

The 2022 survey was issued after significant core construction in 2020 and 2021. The goal of the survey was to help the City understand stakeholders' top concerns and issues related to construction, in order to provide focused communication and construction mitigation efforts where they matter most.

More than 90 impacted stakeholders responded to the 2022 survey, providing invaluable feedback to inform communications efforts in 2022 and 2023 core construction and beyond.

The most effective and well received communications identified through the survey were:

- Email notifications
- Project web page
- Construction letters and notices
- Sidewalk signs
- Information from the BIA
- Conversations with City staff

The survey also identified the top five areas suggested for improvement:

- Pedestrian/sidewalk access
- Motor vehicle access
- Personal and property security
- On-street parking
- Receiving deliveries

City staff are using these survey results to refine the core construction program and are currently exploring ways to incorporate the feedback into other construction projects across London. Recognizing the value of stakeholder input on overall communications efforts, the team intends to continue soliciting feedback through a Core Construction survey at the end of each construction season.

## **Accomplishments**

### Public engagement (city wide)

In 2020, the City launched an improved public engagement website – Get Involved. This platform continues to be the main online space for residents to provide comments, questions, and feedback on different projects across London. The improvements made to the Get Involved website more interactive to allow new and different types of digital engagement opportunities, and the website has been used to host information about multiple construction projects.

As in-person opportunities to meet with residents and businesses are slowly becoming more available, project teams are starting to implement in-person outreach to connect with impacted stakeholders in addition to virtual meetings and events. In-person participation at local events, such as the Home Show and ‘membership mixers’ led by core area BIAs provide an opportunity to engage with residents, businesses and those directly impacted by construction.

It is recognized that not all Londoners are able to access project information online. Project teams also offered a variety of other options and accommodations to ensure that everybody was able to receive this information. This included mailed letters, phone conversations, and printed construction information delivered to residents and businesses.

### Business relations coordinator

To streamline communications between the City, construction crews and businesses, a permanent Construction Business Relations Coordinator role has been created to support core area projects. This role was originally created as a temporary position during Dundas Place and core-area construction in 2018, but has been consistently identified by businesses as an essential one-on-one support. Through this position, businesses have a dedicated resource to assist with high-priority issues like access to their stores and parking, and a trusted conduit who is responsible for sharing – and addressing – their feedback with the project team.

### Email notifications and bi-weekly updates (core area)

All core construction projects provide the added benefit of direct email notifications to residents, business and property owners who choose to subscribe. Through this channel, the Construction Administration team has been able to provide advance notification about service interruptions, work occurring near properties, and major site changes. This method of communication also achieved an above-average open rate of 49% and was identified as the most effective communication tactic in the post-construction survey. Email notifications are being extended this year to share project milestones and updates for the Fanshawe Park Road and Richmond Street Intersection Improvements project as well as the Colonel Talbot/Southdale Road Roundabout project.

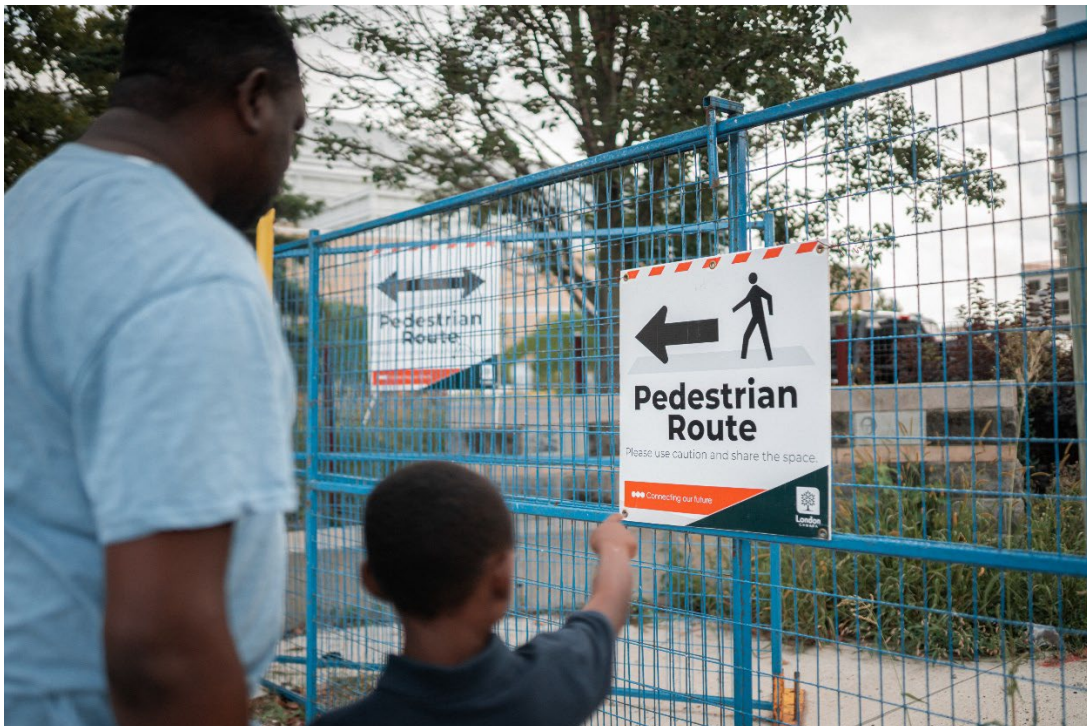
### Construction letters and notices (city-wide)

To equip residents with more accessible, easy-to-read project information, the City of London has made all its construction letters AODA compliant with the goal of improving readability for all. Additional improvements include a reorganization of content where necessary and making information about project impacts, timelines, and options to stay informed more prominent.

### Wayfinding signage (core area)

In 2022, improved construction pedestrian signage was used to help label accessible routes within core construction zones. These additions were received positively by residents and businesses, and they will be applied to 2023's core area projects. When possible, signage will be installed in advance of sidewalk closures and temporary narrow or uneven surfaces. Regularly updated, clearly labeled pedestrian navigation maps will also be produced and posted where applicable. All signs will be carefully designed to clearly state the specific impact without dissuading people from travelling through the area(s) leading up to the closure.

Last year, the City and Downtown London partnered on multiple signage initiatives in the core area to offer some “surprise and delight” within construction zones. Song-themed signs with construction puns garnered a great deal of social media attention, earning thousands of impressions online and drawing more attention to the downtown core during construction. In Old East Village, the City partnered with the BIA to create enhanced wayfinding signage to promote access to nearby businesses. Moving forward, the City will continue to work with BIAs & community members to exercise creativity through signage and other methods.

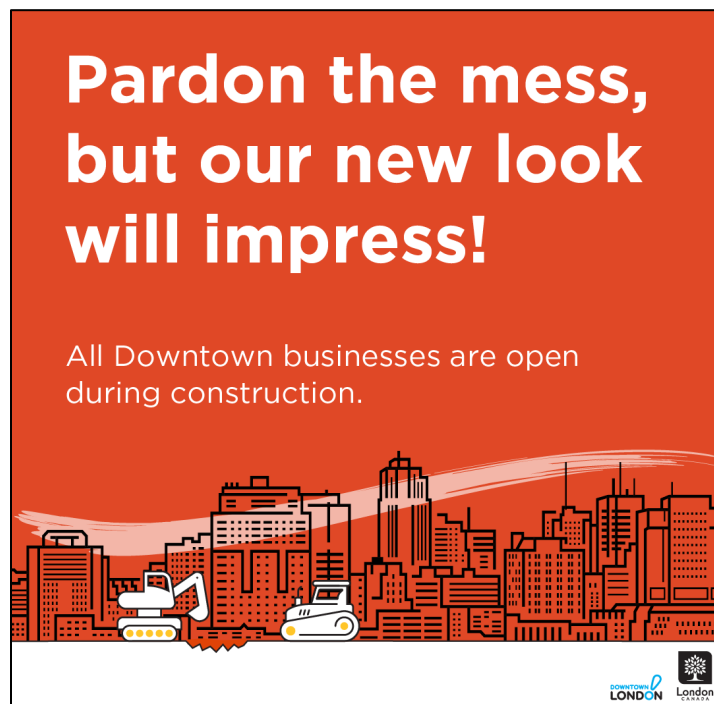


*Above: Navigational sign showing a safe pedestrian route at the Ridout Street North and Dundas Street intersection.*





*Above: 'Business open' sign used downtown to help support businesses during construction.*



*Above: A series of signs and social media graphics created in partnership with Downtown London to promote businesses using construction themed puns.*



*Above: Navigational sign indicating access to properties in Old East Village.*

#### Promotion of the core during construction (core area)

Promoting the core with the help of Downtown London and the Old East Village BIA will continue in 2023. Similar to last year, radio, billboards, social media, and other advertising will be used to communicate construction impacts and support businesses.

Promotional videos were filmed in partnership with Downtown London featuring businesses and the area during construction.

Construction Dollars as part of the Core Area Action Plan were distributed to customers in the form of contest prizes, promotions, and giveaways through the BIAs and their businesses. The Construction Dollars program will continue through 2023 to support businesses impacted by construction in the core area. Similar to last year, Construction Dollars will be distributed by the BIAs through contests, events and other initiatives. Parking promotions and accommodations for customers will continue to be coordinated for 2023. Last year, discount codes for free parking were offered using the Honk app, and temporary park and pick-up locations were made available for customers and delivery drivers.





*Above: Customers using construction dollars at a local business downtown.*



*Above: Courtesy and temporary park and pick-up signs*