

2024 Capital Construction Update

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Report Summary

This report and presentation provide Council with a summary of 2023 capital accomplishments and projects that are planned to be delivered in 2024 under the Capital Construction Program. These projects are required to meet the changing needs of the community and to maintain the City's assets in a state of good repair.

Relationship to the Strategic Plan, Health Impact Assessment and Climate Action Plans

Delivering the annual Capital Construction program supports Council's Strategic Plan Goal Area of Asset Management and Service Excellence by effectively optimizing the service life of the City's assets through the application of maintenance programs, rehabilitation, or replacement to extend the useful service life of the asset. The Program has also been successful in maximizing the value of the City's relationships with senior levels of government to secure funding from both the Provincial and Federal Governments that directly supports community infrastructure goals outlined in the City's approved master plans.

Financial Implications

There are no financial implications associated with this report.

Background

The Capital Construction Program ('Program'), delivered by Engineering Services, supports the City's strategic vision of being a centre of excellence and opportunity, while remaining focused on fiscal, social, and environmental responsibility for current and future generations. All capital investments in linear infrastructure and water/wastewater facilities align with approved infrastructure Master Plans and reflect Council's support for improving the quality of municipal infrastructure and maintaining assets.

The program is made up of two main types of projects: those required to meet projected growth needs and those essential for the renewal of the City's extensive portfolio of existing assets, which have an estimated replacement value of \$10.88 billion. While the present Capital Construction Program is heavily weighted towards asset renewal, it maintains strategic investments in ensuring Greater Sudbury is future-ready and positioned to capitalize on opportunities for economic growth.

2023 Capital Construction Accomplishments:

In 2023, the Capital Construction Program delivered approximately \$74 million in infrastructure improvements at a total of 168 locations across the municipality.

To date, the City has been successful in maximizing existing relationships and securing funding from senior levels of government to support implementation of the Capital Construction Program. In 2023, approximately 44%, or nearly \$32.5 million, was provided through Provincial and Federal grants for various project categories, including nearly \$10.2 million for the City's Bridge Rehabilitation program.

While the bulk of the City's program is focused on maintaining existing assets, the growth-oriented capital projects play an important role in ensuring the City is future-proofing its infrastructure to support economic development and job creation. In 2023, development charges of \$2.9 million were applied to development-driven capital projects across the City, to upgrade water and sewer capacity and to further improve stormwater management and the operations of two major intersections. Development charges are critical to ensuring that growth pays for growth and to minimize any additional pressure on the tax levy to deliver municipal servicing projects specifically directed at supporting development by private landowners.

The following list provides a summary of roads, water, sewer, stormwater, and active transportation capital construction accomplishments by the numbers:

- Installed 6,650 m of active transportation infrastructure, including sidewalk and trails at 13 locations
- Completed 27,050 sq. m. of large asphalt patches at 18 locations
- Installed 9,830 m of concrete curb and gutter at 15 locations
- Installed 2,490 m of new guide rail at 14 locations
- Installed 72 new streetlights
- Rehabilitated 5 bridges
- Performed 1,150 m of watermain lining at 6 locations
- Replaced 1,320 m of watermain at 4 locations
- Installed 15,700 new Advanced Metering Infrastructure (AMI) meters
- Completed nearly 4,000 m of sanitary lining at 20 locations
- Replaced 5,360 m of sanitary sewer at 4 locations
- Tendered 4 new W/WW facility projects
- Replaced 2,020 m of storm sewer at 12 locations
- Installed 850 m of culverts at 22 locations
- Rehabilitated 9 sports courts

Major Project Highlights:

Kingsway (Falconbridge Road to Silver Hills Drive)

Ongoing construction on the Kingsway, to be completed in 2024, will deliver upgrades to two of the City's highest-volume intersections, including at Barry Downe Road and at Falconbridge Road. Other improvements include new asphalt, the addition a cycle track within the boulevard on the Kingsway between Silver Hills Drive and Falconbridge Road thereby connecting the cycling network to Second Avenue and the addition of sidewalks to both sides of the road to improve connectivity and access for people who walk or take transit in this area.

Nighttime construction work was carried out to complete underground stormwater improvements through the intersection of the Kingsway and Barry Downe Road, in so doing minimizing traffic disruptions at an intersection that sees over 45,000 vehicles per day. While traffic delays were significantly reduced during peak times, completing construction work at night resulted in a 40% cost premium for the City.

Paris-Notre Dame Bikeway (Wilma Street to Van Horne Street)

Upon completion of the current cycling infrastructure project on Notre Dame Avenue and Paris Street (from Wilma Street to Van Horne Street), approximately 67% of the Paris-Notre Dame Bikeway will be implemented, connecting cyclists from Lasalle Boulevard in the north, through Bell Park, to Walford Road in the south. This project has been exceptional at leveraging the City's investment in building a connected cycling network to access millions of dollars in grants from senior levels of government, including \$3.3 million in Federal funding for the 2.3 km segment currently under construction.

Lasalle/Frood Roundabout

The Lasalle/Frood Roundabout project transformed a previously signalized intersection serving 25,000 vehicles per day at a lower level of service, to a two-lane, free-flowing roundabout, as part of the final project of Phase 1 of the overall Maley Drive Extension project. The roundabout project was successfully completed ahead of schedule and within approved budget, which was a cost-sharing partnership between all three levels of government, each contributing approximately \$26.7 million to the overall Maley Drive Extension cost of \$80.1 million.

Fielding Road Resurfacing (MR 55 to Hwy 17)

As part of the 2023 budget, Council committed to an interim repair of Fielding Road, while the City continues to develop longer-term solutions to road reconstruction and water and wastewater services in the area to meet business needs. Surface treatment, including a treatment commonly referred to as "chip and tar" and a fog seal treatment were completed on Fielding Road to improve the condition of the driving surface. The expected service life of these combined treatments is up to five years and was delivered at only 15% of the total cost of a full road reconstruction.

Fielding Road has been identified as a Strategic Employment Area as part of the Council-approved Employment Land Strategy and as such, staff will be completing detailed design of servicing improvements for the area to ensure a supply of serviced industrial land is available across the municipality. The short-term repair solution will provide additional time to explore a variety of funding opportunities for the eventual full reconstruction of the road.

Planned 2024 Capital Construction Program:

The City has a planned \$436 million capital investment over the next four years (2024 to 2027 inclusive). A summary of major projects, approved by Council to commence construction in 2024, is presented here.

Major Project Highlights:

Lasalle / Elisabetha Servicing Upgrades - \$19.4 million

The City is increasing its economic competitiveness by investing in itself. Nearly \$20 million will be used to improve existing servicing capacity in the LaSalle/Elisabella Industrial Area, as part of the first phase of implementation of the Employment Land Strategy to support job creation. The project is proceeding in two phases, with Phase 1 beginning in 2024 and includes full road reconstruction with upgrades to water, sanitary and storm sewer for Lasalle Boulevard (Falconbridge Road to 70m west of Elisabetha Street). Construction on Phase 1 is anticipated to take two years and be complete by end of 2025. Phase 2 includes servicing upgrades on Elisabetha Street (Lasalle Boulevard to Lapointe Street) and Lasalle Boulevard (Elisabella Street to Foundry Street) and is expected to begin in 2026.

St. Charles Lift Station - \$19.7 million

The St. Charles Lift Station is being reconstructed and upgraded to minimize operational challenges and to increase the overall capacity of the City's sanitary sewer network in the Flour Mill area. Prior to construction, historic buildings, including the Flour Mill Museum, were relocated to nearby O'Connor Park to allow for the expansion of the existing lift station.

Nelson Street Pedestrian Bridge Replacement - \$3 million

Originally constructed in 1980, the Nelson Street Pedestrian Bridge is nearing the end of its useful service life and requires replacement. This bridge is an important link in both the City's pedestrian and cycling networks, and construction work will see the bridge widened to three meters to better support active transportation by providing adequate space for people who travel by non-motorized means to share the structure.

Pavement Rehabilitation Program Re-Introduction

Over the next four years, a total investment of \$244.3 million will go towards road construction and repairs to maintain the transportation network and includes \$37.1 million of the Accelerated Infrastructure Renewal Levy towards local and arterial/collector road upgrades.

The 2024 budget allowed for enhancements to the pavement rehabilitation program and provides an opportunity to reintroduce different asphalt treatments and technologies to extend the useful service life of our roads. When applied at the appropriate time in the asset replacement cycle, these asphalt treatments can extend the useful service life of the City's roads and improve the overall sustainability of the road's capital program.

Conclusion

The City of Greater Sudbury continues to maximize existing partnerships with senior levels of government and the local development industry to make significant investments in expanding and maintaining the City's roads, water, wastewater and stormwater management systems. With several large projects underway or planned to begin shortly, the City's Capital Construction Program will ensure that assets are properly managed and financially sustainable for generations of residents and businesses to come.

Resources Cited

1. City of Greater Sudbury, City Council Meeting, Report titled "Overview of Nighttime Construction In Greater Sudbury", November 14, 2023
<https://pub-greatersudbury.escribemeetings.com/filestream.ashx?DocumentId=51538>
2. City of Greater Sudbury, City Council Meeting, Report titled "Maley Drive Extension Project Update", July 10, 2023
<https://pub-greatersudbury.escribemeetings.com/filestream.ashx?DocumentId=49993#:~:text=With%20this%20recommendation%2C%20rock%20removal,with%20construction%20completed%20in%202024.&text=In%20the%202023%20budget%2C%20Council,Maley%20Drive%20and%20Falconbridge%20Highway.>