

June 30, 2023

Reference No.: 476047113-001

To: City Council  
From: Kent Snyder, Branch Manager, Planning and Environment Services  
Subject: **Arterial Roadway Assessment**

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At the March 14/15 2023 City Council meeting, the following motion was passed:

*That Administration provide a report with an assessment of arterial roadway/intersection improvements in developing areas that are City responsibility to identify top locations based on operational and strategic considerations.*

A second part to this motion was passed:

*Provide a memo identifying any work planned in 2023 for the completion of vehicular infrastructure that is the responsibility of the City and include actions planned from a safety and/or capacity perspective.*

This memo answers the second part of this motion along with providing high-level insight into how Administration will assess arterial roadways/intersection improvements in developing areas from a safety and/or operational perspective.

Below is a brief overview of the type of network improvements that occur within developing areas. Developing areas in this memo are defined as the areas outlined within the [Arterial Roads for Development Bylaw \(Bylaw 14380\)](#).

Attachments 1 and 2 list planned developing area network improvements that are City-led and developer-led respectively, in more detail. Attachment 3 provides a visual representation of the locations of these developing area network improvements.

### **City-Driven Network Improvements**

#### *Safe Crossings Program*

Through the [Safe Crossings Program](#), pedestrian crossing improvements are implemented at many locations across the city, including arterial roadways in developing areas. The projects within the Safe Crossings Program address pedestrian safety on arterial roadways by providing an overhead amber flasher, rapid flashing beacon, pedestrian half signal or new full signal. The locations within the program have

been prioritized based on an evaluation of collision history, vehicle and pedestrian volume, feedback from residents' on lived experience, assessment of safety risk, alignment with The City Plan and equity. The improvement types identified are subject to change based on further review before the implementation.

#### *City-Driven Arterial Improvements*

City-driven arterial roadway construction and upgrades are prioritized and funded through the City's capital budget. The 2023-2026 budget cycle did not include any new City-led projects for design or delivery of arterial infrastructure expansion within the developing areas. However, there are several renewal projects and one ongoing growth project for this budget cycle within the developing areas as outlined in Attachment 1.

### **Developer-Driven Network Improvements**

#### *Developer-Funded Arterial Improvements*

Developer-driven and funded arterial roadway construction and upgrades are dependent on the pace and staging of development. There is one developer-led network improvement identified for 2023. The remaining planned developer-led network improvements are expected between 2024-2026.

Improvements for arterial roadways generally include the following upgrades depending on the stage of development:

- Greenfield first stage - development of the first two lanes of arterial roadway in a new area
- Urbanization - conversion of a previous rural cross-section to an urban style cross-section
- Two to four lane widening - expansion of an arterial roadway to accommodate four total lanes of travel with two lanes in each direction
- Construction of rail, creek and wildlife crossings

#### *Developer-Funded Traffic Signals*

Administration assesses the need for new traffic signals or modifications to existing signals as a result of new development in the city and traffic volume impacts. The following types of network improvements are provided:

- New traffic signal - installation of a new traffic signal at an intersection
- Existing signal modification - modifications to existing signals or relocation of other signal infrastructure

At this time, only the projects for 2023 are known. The locations identified for 2023 are based on estimated timelines of work projects advancing in 2023 and may be subject to change (see Attachment 2).

## Approach for Assessment of Arterial Roadways

The approach to be taken in 2023 to assess the arterial roadways under City responsibility, as per the motion, will include the following:

- Identify areas of concern from a safety and capacity lens (as per the motion) within developing areas that are City responsibility
- Identify areas of concern that can be addressed through planned network improvements as noted in this memo
- Consider alignment with previous strategic work completed for the Mobility Network Analysis to align with City Plan
- Develop and use criteria to assess locations through a safety and capacity lens as per City Council's motion
- Identification of top areas of concern to be provided to City Council for information

If you have any questions or require further information, please contact General Supervisor Mobility, Pablo Orozco [pablo.orozco@edmonton.ca](mailto:pablo.orozco@edmonton.ca).



KS/po

c: Executive Leadership Team  
Aileen Giesbrecht, City Clerk, Office of the City Clerk

Attachment(s):

- Attachment 1: Planned Projects - City Responsibility
- Attachment 2: Planned Projects - Developer Responsibility
- Attachment 3: Map of Planned Projects

<b>Planned Project List - City Responsibility</b>					
<b>Year</b>	<b>Area*</b>	<b>Location</b>	<b>Rationale**</b>	<b>Type</b>	<b>Description</b>
2023	South	30 Avenue SW and Allard Link SW / Cunningham Drive	Safety	Intersection	Amber Flasher
2023	South	Terwillegar Drive from Rabbit Hill Road to Anthony Henday Drive	Capacity	Link	Arterial Expansion
2023	South	141 Street SW and Paisley Road SW	Safety	Intersection	Pedestrian Signal
2023	South	38 Avenue and 21 Street	Safety	Intersection	Pedestrian Signal
2023	South	25 Avenue SW and Orchards Link / Savaryn Drive SW (West of) Midblock	Safety	Intersection	Rapid Flashing Beacon
2023	South	30 Avenue SW and 111 Street SW (West of) Midblock	Safety	Intersection	Rapid Flashing Beacon
2023	South	66 Street SW and Shaw Way SW (North of) Midblock	Safety	Intersection	Rapid Flashing Beacon
2023	West	199 Street and Hammond Gate / Hays Drive NW	Safety	Intersection	Rapid Flashing Beacon
2024-2026	North	18 Street and Horsehills Creek	Renewal	Bridge	Bridge Replacement
2024-2026	North	66 Street and 163 Avenue	Safety	Intersection	Full Signal
2024-2026	North	153 Avenue and 45 Street	Safety	Intersection	Pedestrian Signal
2024-2026	North	167 Avenue and 88 Street	Safety	Intersection	Pedestrian Signal
2024-2026	North	82 Street and 162 Avenue	Safety	Intersection	Pedestrian Signal
2024-2026	North	153 Avenue and 134 Street	Safety	Intersection	Rapid Flashing Beacon
2024-2026	North	167 Avenue and North Pointe Church	Safety	Intersection	Rapid Flashing Beacon
2024-2026	North	167 Avenue NW and 123 Street NW	Safety	Intersection	Rapid Flashing Beacon
2024-2026	North	50 Street and 162A Avenue	Safety	Intersection	Rapid Flashing Beacon
2024-2026	North	50 Street and 162A Avenue (North of)	Safety	Intersection	Rapid Flashing Beacon
2024-2026	North	66 Street and 163 Avenue (North of) Midblock	Safety	Intersection	Rapid Flashing Beacon
2024-2026	South	17 Street from Whitemud Drive to Maple Ridge Drive	Renewal	Link	Arterial Renewal
2024-2026	South	167 Street and Whitemud Creek	Renewal	Bridge	Bridge Replacement

2024-2026	South	127 Street and 152 Avenue	Safety	Intersection	Pedestrian Signal
2024-2026	South	170 Street SW and Old Ellerslie Road SW	Safety	Intersection	Pedestrian Signal
2024-2026	South	50 Street and 52 Avenue	Safety	Intersection	Pedestrian Signal
2024-2026	South	50 Street and 67 Avenue	Safety	Intersection	Pedestrian Signal
2024-2026	South	Ellerslie Road SW and 105 Street SW	Safety	Intersection	Pedestrian Signal
2024-2026	South	Rabbit Hill and Leger Boulevard	Safety	Intersection	Pedestrian Signal
2024-2026	South	Rabbit Hill and Leger Way	Safety	Intersection	Pedestrian Signal
2024-2026	South	Rabbit Hill Road and Andrews Gate	Safety	Intersection	Pedestrian Signal
2024-2026	South	17 Street and 28 Avenue (North of) Midblock	Safety	Intersection	Rapid Flashing Beacon
2024-2026	South	30 Avenue SW and 111 Street SW	Safety	Intersection	Rapid Flashing Beacon
2024-2026	South	66 Street SW and Ellerslie Road (South Of) Midblock	Safety	Intersection	Rapid Flashing Beacon
2024-2026	South	Ellerslie Road SW and 178 Street SW / Wright Drive SW	Safety	Intersection	Rapid Flashing Beacon
2024-2026	South	Rabbit Hill Road SW and Glenridding Ravine Road SW	Safety	Intersection	Rapid Flashing Beacon
2024-2026	West	184 Street and 105 Avenue	Safety	Intersection	Pedestrian Signal
2024-2026	West	199 Street and 70 Avenue	Safety	Intersection	Rapid Flashing Beacon
2024-2026	West	199 Street and 70 Avenue (North of) Midblock	Safety	Intersection	Rapid Flashing Beacon
2024-2026	West	199 Street and Graham Gate (South of) Midblock	Safety	Intersection	Rapid Flashing Beacon
2024-2026	West	62 Avenue and 205 Street	Safety	Intersection	Rapid Flashing Beacon
2024-2026	West	62 Avenue and Getty Gate	Safety	Intersection	Rapid Flashing Beacon
2024-2026	West	Lewis Estates Boulevard and Orchards Link / Savaryn Drive SW (West of) Midblock	Safety	Intersection	Rapid Flashing Beacon
2024-2026	West	Suder Greens Drive and Lewis Estates Boulevard (East of) Midblock	Safety	Intersection	Rapid Flashing Beacon
2024-2026	West	Suder Greens Drive and 88 Avenue/Potter Green	Safety	Intersection	Rapid Flashing Beacon

**Notes:**

**\*Area is defined as follows:**

- North: Developing areas that are North of the North Saskatchewan River and East of 170 Street.
- South: Developing areas that are South of the North Saskatchewan River.
- West: Developing areas that are North of the North Saskatchewan River and West of 170 Street.

**\*\*Rationale is defined as follows:**

- Safety: Any upgrades to improve pedestrian safety.
- Capacity: Any improvements to address traffic movements from new development or provide upgraded arterial access to new developments.
- Renewal: Addressing infrastructure condition requirements; scope can range from minor renewal to replacement / reconstruction to decommissioning.

<b>Planned Project List - Developer Responsibility</b>					
<b>Year*</b>	<b>Area**</b>	<b>Location</b>	<b>Rationale***</b>	<b>Type</b>	<b>Description</b>
2023	North	167 Avenue from 52a Street to 59a Street	Capacity	Link	2 to 4 Lane Widening
2023	North	153 Avenue and 18 Street	Capacity	Intersection	Existing Signal Modification
2023	North	153 Avenue and 34 Street	Capacity	Intersection	Existing Signal Modification
2023	South	23 Avenue and 17 Street	Capacity	Intersection	Existing Signal Modification
2023	South	56 Avenue and 34 Street	Capacity	Intersection	Existing Signal Modification
2023	South	16 Avenue and 17 Street	Capacity	Intersection	Full Signal
2023	South	23 Avenue and 199 Street	Capacity	Intersection	Full Signal
2023	South	25 Avenue SW and 66 Street SW	Capacity	Intersection	Full Signal
2023	South	25 Avenue SW and Savaryn Drive SW	Capacity	Intersection	Full Signal
2023	South	25 Avenue SW and Shaw Way SW	Capacity	Intersection	Full Signal
2023	South	51 Avenue and 34 Street	Capacity	Intersection	Full Signal
2023	South	Hiller Road SW and 175 Street SW	Capacity	Intersection	Full Signal
2023	South	Roper Road and 34 Street	Capacity	Intersection	Full Signal
2023	South	Savaryn Drive SW and 91 Street SW	Capacity	Intersection	Full Signal
2023	West	Edgemont Boulevard and 199 Street	Capacity	Intersection	Full Signal
2023	West	Edgemont Way and 199 Street	Capacity	Intersection	Full Signal
2023	West	Winterburn Road and Webber Greens Drive (North of) Midblock	Capacity	Intersection	Full Signal
2024-2026	North	167 Avenue and 66 Street	Capacity	Intersection	Roundabout
2024-2026	North	Meridian Street from 153 Avenue to 167 Avenue	Renewal	Link	Rural to Upgraded Rural
2024-2026	North	Meridian Street from Marquis Boulevard to North of the Rail Crossing	Capacity	Link	2 Lane Urbanization

2024-2026	South	Roper Road from 34 Street to 36 Street	Capacity	Link	Greenfield first stage with (5-lane Cross-section)
2024-2026	South	Roper Road from 34 Street to the Altalink Corridor	Capacity	Link	Greenfield first stage
2024-2026	South	17 Street from 23 Avenue to Silverberry Road	Capacity	Link	2 to 4 Lane Widening
2024-2026	South	17 Street from Whitemud Drive to Roper Road	Capacity	Link	2 to 4 Lane Widening
2024-2026	South	Ellerslie Road from Graydon Hill Boulevard to Eco Station Access	Capacity	Link	2 to 4 Lane Widening including new bridge construction
2024-2026	South	34 Street from Whitemud Drive to Roper Road	Capacity	Link	4 Lane Urbanization
2024-2026	West	Lessard Road from 199 Street to 215 Street	Capacity	Link	Greenfield first stage

**Notes:**

\*Year of improvements are subject to change based on the pace and staging of developments.

**\*\*Area is defined as follows:**

- North: Developing areas that are North of the North Saskatchewan River and East of 170 Street.
- South: Developing areas that are South of the North Saskatchewan River.
- West: Developing areas that are North of the North Saskatchewan River and West of 170 Street.

**\*\*\*Rationale is defined as follows:**

- Safety: Any improvements to address pedestrian or vehicle safety.
- Capacity: Any improvements to address traffic movements from new development or provide upgraded arterial access to new developments.
- Renewal - Addressing infrastructure condition requirements; scope can range from minor renewal to replacement / reconstruction to decommissioning.



**Arterial Roadway Improvements in Developing Areas**  
2023 and 2024-2026

