Region of Waterloo

Engineering and Environmental Services

Design and Construction

To:	Sustainability, Infrastructure and Development Committee
Meeting Date:	October 8, 2024
Report Title:	Franklin Boulevard (Regional Road #36) Improvements from Bishop Street to Avenue Road.

---

1. Recommendation

That the Regional Municipality of Waterloo approve the recommended preliminary design alternative for the Franklin Boulevard (Regional Road #36) Improvements from Bishop Street to Avenue Road, as outlined in Report EES-DCS-24-006 dated October 8, 2024.

2. Purpose / Issue:

Seek Council Approval for the preliminary design alternative as outlined in Report EES-DCS-24-006 dated October 8, 2024 and proceed to detailed design and construction,

3. Strategic Plan:

Approval of this preliminary design alternative will support the Climate Aligned Growth, Equitable Services and Opportunities and Homes for All pillars of the 2023-2027 Corporate Strategic Plan. Proposed works will improve traffic operations and foster car alternative options through the addition of roundabouts, multi-use trails and a grade separated pedestrian pathway and support growth by improving roadway capacity and providing new and replacement transmission watermains.

4. Report Highlights:

- This section of Franklin Boulevard from Bishop Street to Avenue Road is the last remaining section to be improved as part of the Original 2010 Environmental Assessment project limits from Pinebush Road to Myers Road.
- The preferred design alternative includes four lanes of traffic (two lanes in each direction), center medians, multi-use trails on both sides of the road and roundabouts at the Franklin Blvd./Can-Amera Pkwy. and Franklin Blvd/Elgin St. – Saginaw Pkwy. intersections. This is consistent with the recently constructed upstream and downstream sections of Franklin Blvd.

- Due to the very high pedestrian volumes crossing at the Franklin Blvd/Elgin St. – Saginaw Pkwy. intersection (primarily on the north side due to St. Benedict High School students), combined with very high traffic volumes at this location, the design proposes the implementation of a grade separated pedestrian pathway under Franklin Blvd, meaning the pedestrian crossing on the north leg will be completely separated from traffic.

- The preferred alternative improves vehicular traffic flow, level of service for pedestrians, supports active transportation with multi-use trails on both sides of Franklin Blvd. and interconnections for pedestrians and cyclists.

- Public Consultation Center was held on April 25, 2024. Attendees generally supported the proposed alternative, with some expressing concerns focused on pedestrian safety at roundabouts and the grade separated pedestrian pathway under Franklin Blvd at night.

- The project construction includes the replacement and new installation of important watermain infrastructure around the Turnbull Reservoir.

- Should the design not be approved and work not completed, the increasing traffic volumes will negatively impact the traffic flow within the corridor and will reduce the level of service at the Franklin Blvd./Can-Amera Pkwy. and Franklin Blvd/Elgin St. – Saginaw Pkwy. intersections. This reduction in the level of service at these intersections will adversely affect the safety of the high volume of pedestrians at the Franklin Blvd/Elgin St. – Saginaw Pkwy. intersection which is primarily students.

5. Background:

The current study limit from Bishop Street to Avenue Road with roundabouts at Can-Amera Pkwy. and Elgin St.- Saginaw Pkwy. was approved as part of the original 2010 Environmental Assessment (EA). However, in 2013 Council deferred the decision on whether the Franklin Blvd./ Elgin St. – Saginaw Pkwy. should remain signalized or altered to a roundabout, citing operational challenges and pedestrian safety concerns experienced with the roundabout in front of St. Mary's High School at Homer Watson Blvd/Block Line Rd. Council’s direction was to conduct operational studies after completion of the Year 1 roundabouts, but to wait until drivers had a minimum one year period to acclimate to the roundabouts. Year 1 improvements included the Franklin Blvd. intersections of Pinebush Rd., Sheldon Dr., Bishop St., Clyde Rd., Savage Dr. and Main St. constructed in 2015 and 2016.

As a potential decision to maintain a signalized intersection at Franklin Blvd./Elgin St. - Saginaw Pkwy. could have an impact on the upstream and downstream corridor design, including nearby intersections, the design of the entire section of Franklin Boulevard

between Avenue Road and Bishop Street has been on hold since the August 2013 Council meeting.

Between 2017 and 2020, the Region monitored the operational performance of the Year 1 roundabouts while also completing construction of the Franklin Blvd. Year 2 roundabouts at the intersections of Avenue Rd., Main St. and Champlain Blvd. along with the construction of the Franklin Blvd. Extension to McQueen Shaver Blvd. (MSB) with roundabouts at Myers Rd. and MSB.

In 2021, Staff began the Preliminary Design Study of this section, which included further operational review of the other Franklin Blvd. roundabouts as well as extensive stakeholder and public communication.

6. Communication and Engagement with Area Municipalities and the Public

Area Municipalities:

City of Cambridge Staff have been involved in the study since the commencement as project team members. They have participated in development and evaluation of all alternatives and are supportive of the recommended alternative.

As part of the design development, City staff are considering the implementation of a roundabout at the Saginaw Pkwy./Green Vista Dr. to enhance traffic flow and reduce vehicular-pedestrian conflict points by adding a raised centre median on Saginaw Pkwy. and improvements to the pedestrian crossing locations.

Public:

Public/Stakeholder Engagement

The following stakeholder groups were part of the project team, participating in the development and evaluation of all alternatives, arriving at the preferred design alternative together;

- Region/City staff
- Consultants
- City/Region Councillors
- St. Benedict Highschool staff (VP)
- School Board staff
- Student Transportation Board staff
- Cambridge Accessibility Committee
- Persons within the low to no vision community
- Local Neighbourhood Association groups
- School Parent groups

Region staff also consulted with the public in a Public Consultation Centre, with a sign-in attendance of 77 individuals. There may have been more in attendance who did not

sign-in.

In addition, Region staff communicated through EngageWR, newspaper ads, on-site signage boards, and social media. An Engage Page public survey was also conducted.

The majority of the public that provided feedback and/or filled out the Engage Page public survey supported the roundabout design along with the grade separated pedestrian pathway under Franklin Blvd., citing improved traffic flow and the separation of pedestrians from live traffic.

The most common comments for consideration were the right turn slip lanes at the roundabouts with a concern that they will cause too much speeding and prevent vehicles from properly stopping for pedestrians. Additionally, there were safety concerns regarding the grade separated pedestrian crossing, particularly during the evening and nighttime hours.

During detailed design, the project team will investigate design refinements to the right turn slip lanes at the roundabouts. The pedestrian underpass will be wide and well lit. During detailed design, the project team will explore the feasibility of other potential measures to further enhance safety at the grade separated pedestrian crossing.

7. Financial Implications:

The Region's approved 2024-2033 Transportation Capital Program includes a budget of $786,000 in 2024 and $15,460,000 in 2025-2029 to be funded from the Roads Regional Development Charges Reserve Fund (Proj. No. 6416). It is currently estimated that the preferred design will require an overall budget increase of $5,620,000. These increases will be accommodated through the 2025 capital budget process.

There are several reasons for the projected increase of $5,620,000. One of the drivers of this increase has been the costs associated with the preferred alternative containing the grade separated pedestrian crossing carrying a higher cost compared to other short-listed alternatives. This more specialized alternative was not previously anticipated in the budget. Other drivers for the cost increase are escalation in both land and construction costs. It is important to note that cost was one of the major factors in the alternative evaluation, along with Transportation, Environmental and Social impacts.

8. Conclusion / Next Steps:

Subject to Regional Council approval of the recommended Preliminary Design Alternative, staff will proceed to detailed design, land acquisition, potential utility relocations, with the start of construction currently anticipated in 2027.

9. Attachments:

Appendix A: Key Plan

Appendix B: Project Team Recommended Design Alternative (Cross-Sections)

Appendix C: Project Team Recommended Design Alternative (Plan)

Appendix D: Renderings

Prepared By: Boris Latkovic, Senior Engineer Design and Construction

Jim Ellerman, Head, Design and Construction

Reviewed By: Frank Kosa, Director, Design and Construction

Mike Henderson, Director, Transportation

Approved By: Jennifer Rose, Commissioner, Engineering and Environmental Services

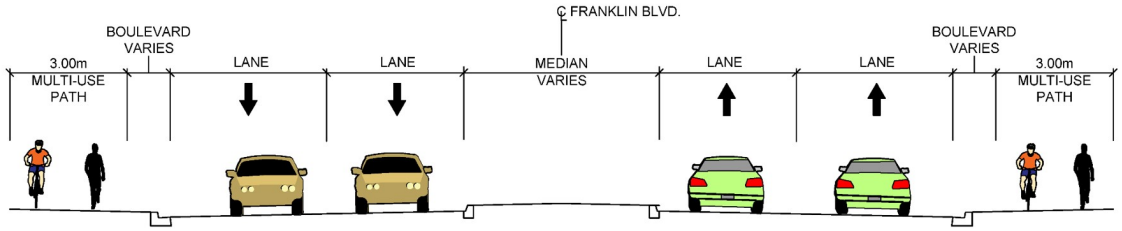
Doug Spooner, Acting Commissioner, Transportation Services



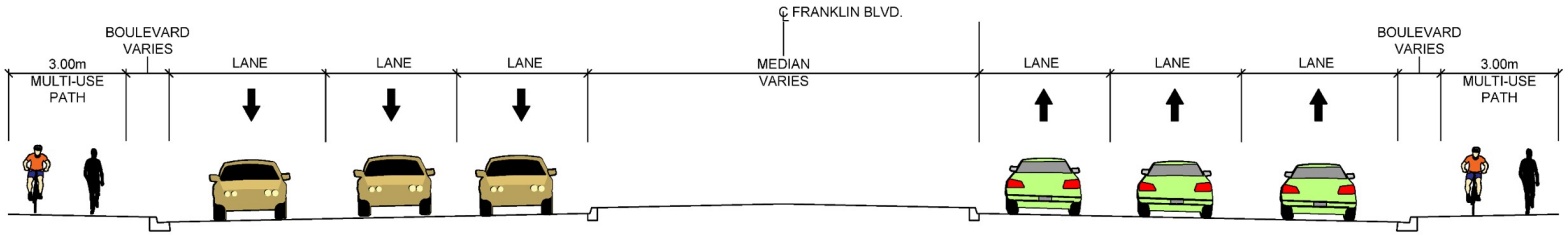
Region of Waterloo

REGIONAL ROAD NO. 36 (FRANKLIN BLVD)
AVENUE RD TO BISHOP ST
CITY OF CAMBRIDGE

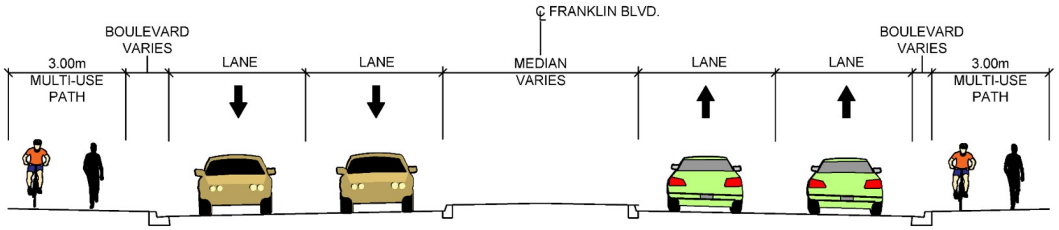
Franklin Boulevard Proposed Cross Sections



Typical Section
North of Can-Amera Parkway

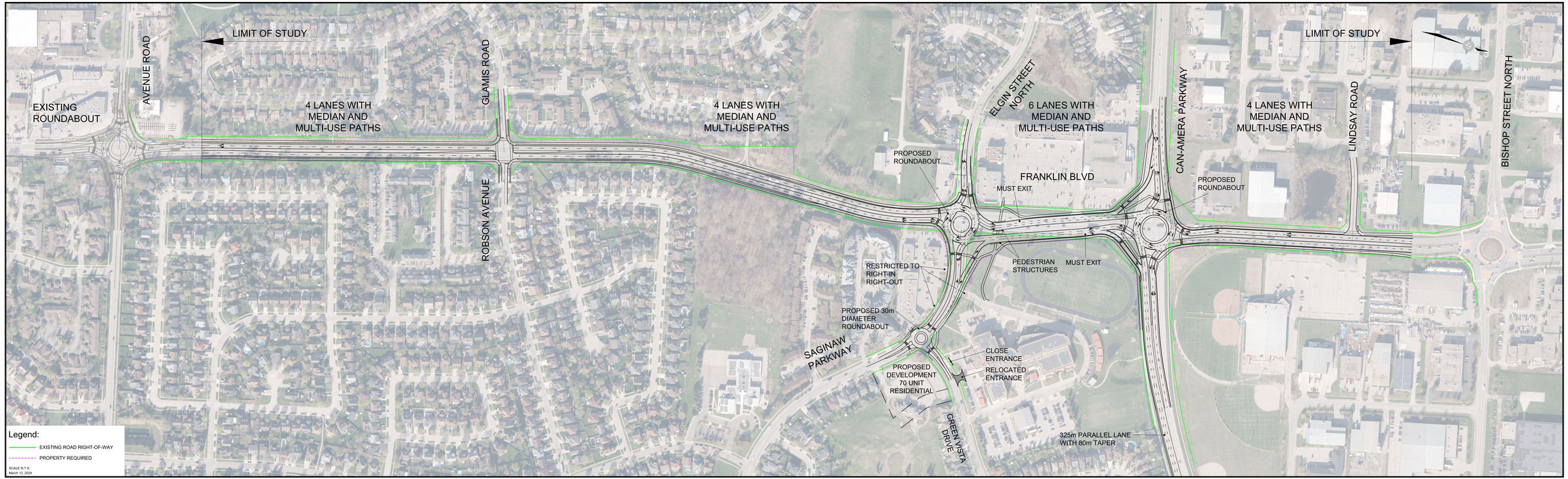


Typical Section
Saginaw Parkway to Can-Amera Parkway



Typical Section
South of Saginaw Parkway

FRANKLIN BOULEVARD
TECHNICALLY PREFERRED PLAN
AVENUE ROAD TO BISHOP STREET NORTH



Franklin Blvd/Saginaw Pkwy.-Elgin St. Roundabout




SHOPPERS
SHOPPERS

Franklin Boulevard Pedestrian Pathway

