

Biehn Drive EA

December 2, 2025 Council Presentation

Biehn Drive

- Biehn Drive is in Ward 4, found to the south of Huron Road in the Bridgedoon neighborhood
- Biehn Drive, to its current terminus was constructed in 1986, much of this neighborhood was constructed in the same time frame
- Biehn was planned, designed, and built as a Major Collector Road (identified as such in our Official Plan)
- North/South traffic generated from outside of the immediate area currently uses Caryndale Drive
- Caryndale is classified as a Minor Collector Road
- Collector roads function connect local streets to arterial roads



Project Background

- Identified in the Official Plan, Transportation Master plan, the Bridgedoon Community plan, in numerous transportation studies and most recently in the completed EA for the Robert Ferrie Extension
- The Biehn Drive extension project (EA, design and construction) has been included in the City's DC Background Study since 2009
- The City initiated a Schedule C Environmental Assessment in March of 2021 to determine a preferred solution
- This EA was conducted to determine the need for the road extension and if so a preferred alignment. A trunk sewer extension and new watermain is part of this project

What is an Environmental Assessment

- An Environmental Assessment (EA) is the provincial planning process for public infrastructure projects in Ontario.
- EAs are governed by the Ontario Environmental Assessment Act.
- EAs provide a framework for assessing the impacts of a project on the natural, socio-economic and cultural environments. Decision making and project outcomes are influenced by feedback provided by the public, stakeholders and Indigenous communities

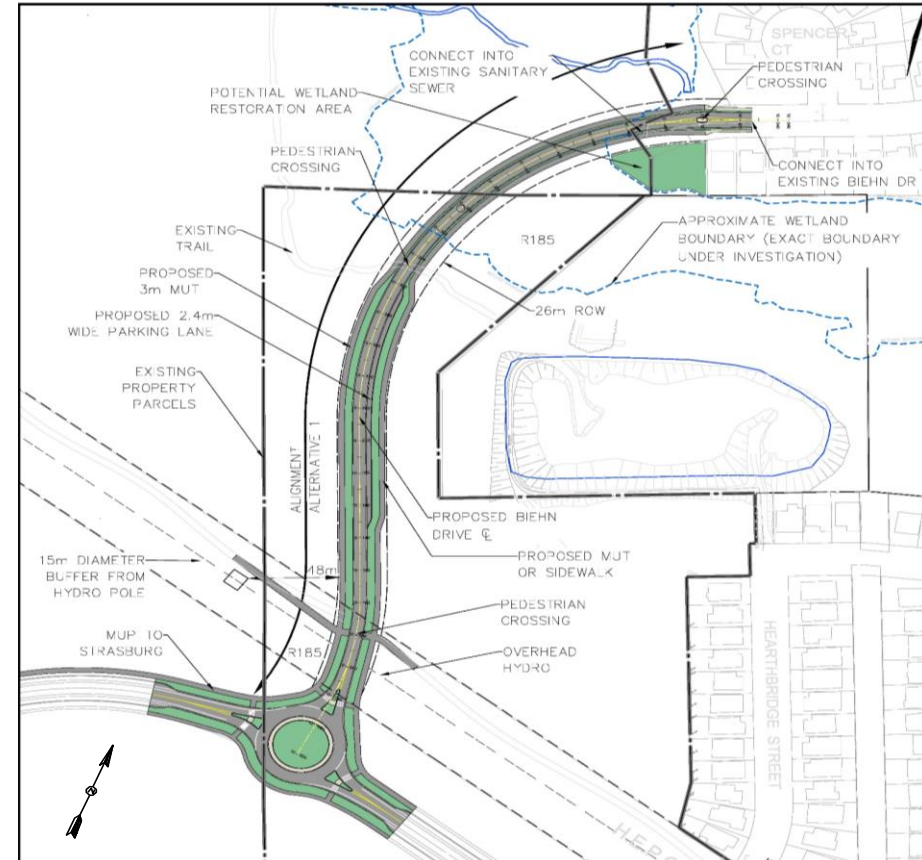
Problem Statement

- The planned extensions of Strasburg Road and Robert Ferrie Drive combined with new development will result in changes to the traffic demands and patterns within the Doon South and Brigadoon communities. To address those changes, the City of Kitchener Transportation Master Plan and Official Plan have identified an extension of Biehn Drive from its current terminus to Robert Ferrie Drive. The Study has revisited the need for an extension of Biehn Drive and evaluated potential alignment alternatives if an extension of Biehn Drive is still recommended. The Study has considered the natural, social environments and the future land use in the Study Area. The study is assessing the road network to provide safe, reliable transportation access to communities within Doon South and Brigadoon considering vehicular, pedestrian, cycling and truck routes. The road project is being completed as a Schedule C undertaking.

Updated

Timeline of the Biehn Drive Extension EA

- Engineering staff initiated the EA in March 2021
- Two public information sessions were held, one to introduce the project and one to present the findings
- Studies and evaluation work were completed, alternatives evaluated, and the final report prepared
- Engineering presented the preferred alternative to council in February 2023



Timeline of the Biehn Drive Extension EA

- Council requested two additional studies be completed and considered in the evaluation of the alternatives
- The additional studies were completed
- Presented the updated information to the public in June 2024
- Finalized the report and evaluation of alternatives
- Presenting the updated results of the EA and preferred alternative

Additional Work and Studies Completed Since February 2023

- Completed the two additional studies
- Addressed changes to Species At Risk classifications
- Staff revisited the alternatives carrying forward options that included the installation of the sewer and watermain with no road, extension of the road, and installation of a multiuse trail instead of the road
- Adjusted the scoring matrix to provide a more transparent and even scoring
- In June of 2024 hosted a third PIC to present the updated study to the public
- Staff engaged with an independent consultant to review the steps followed while completing the EA
- Staff have circulated the provincial department responsible for EA's and have confirmed compliance with the EA Act

Updated Studies Outcomes

- The updated Transportation Study returned a recommendation that the Biehn Drive be extended. While traffic volumes alone do not warrant the extension, extension of the road addresses:
 - insufficient emergency access,
 - a proper distribution of traffic to the greater area,
 - it diverts traffic away from Caryndale Road (currently acting in a classification that exceeds its designated use) and
 - provides a proper transportation linkage to the south.
- The Geotechnical Study confirmed that trenchless installation of the sewer and watermain should be feasible

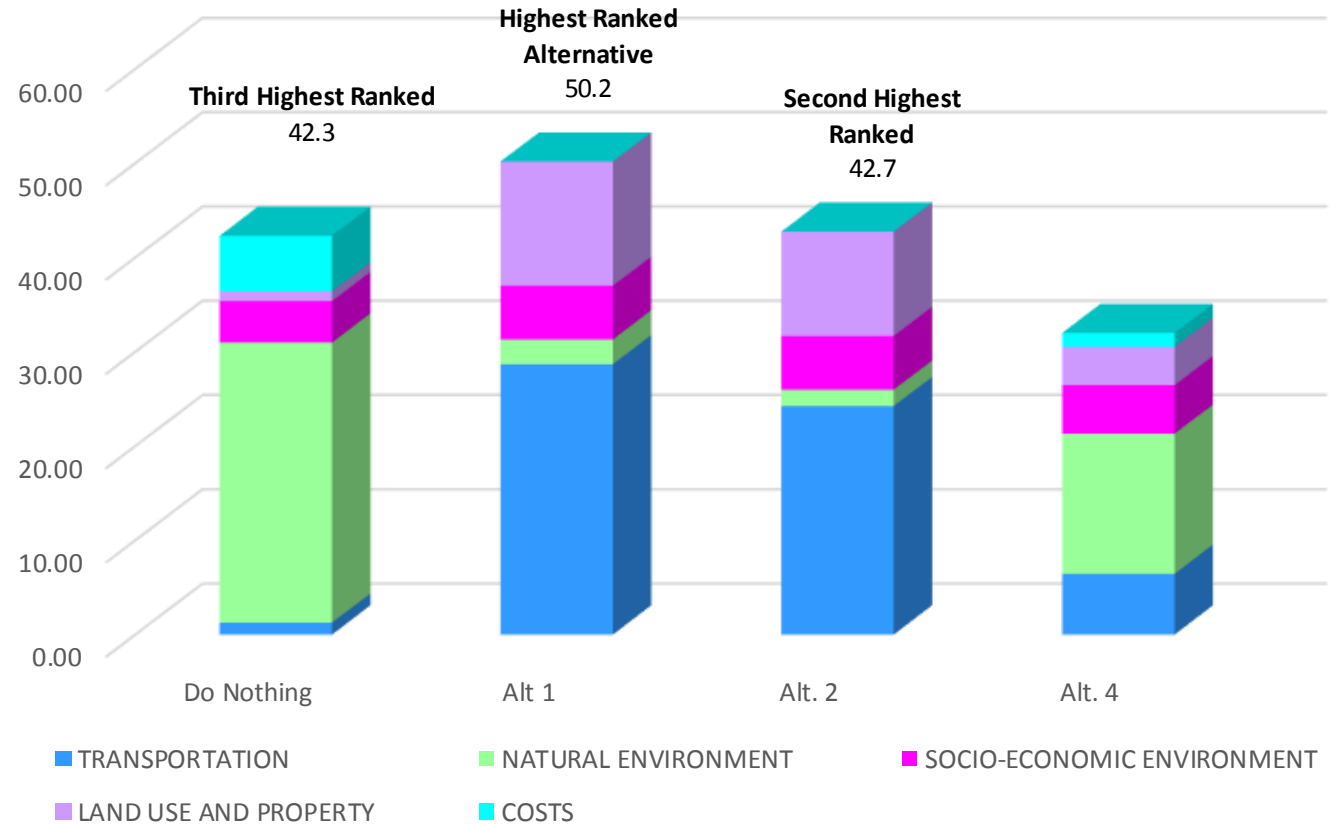
What are the outcomes of the updated EA

- We were able to disconnect the need for road from the need for the sewer and watermain
- Four options were evaluated
- A “do nothing” option was carried through and used as a benchmark for the other options
- Two options for alignment of a road
- Included an option for an active transportation link in lieu of a road

Evaluation of the Alternatives

- Do nothing (but install sewer and watermain)
- Extend the road along alignment 1 (install sewer and watermain) *preferred*
- Extend the road along alignment 2 (install sewer and watermain)
- Construction a multi-use trail instead of the road (install sewer and watermain)

(Average Weights of Evaluation Team)

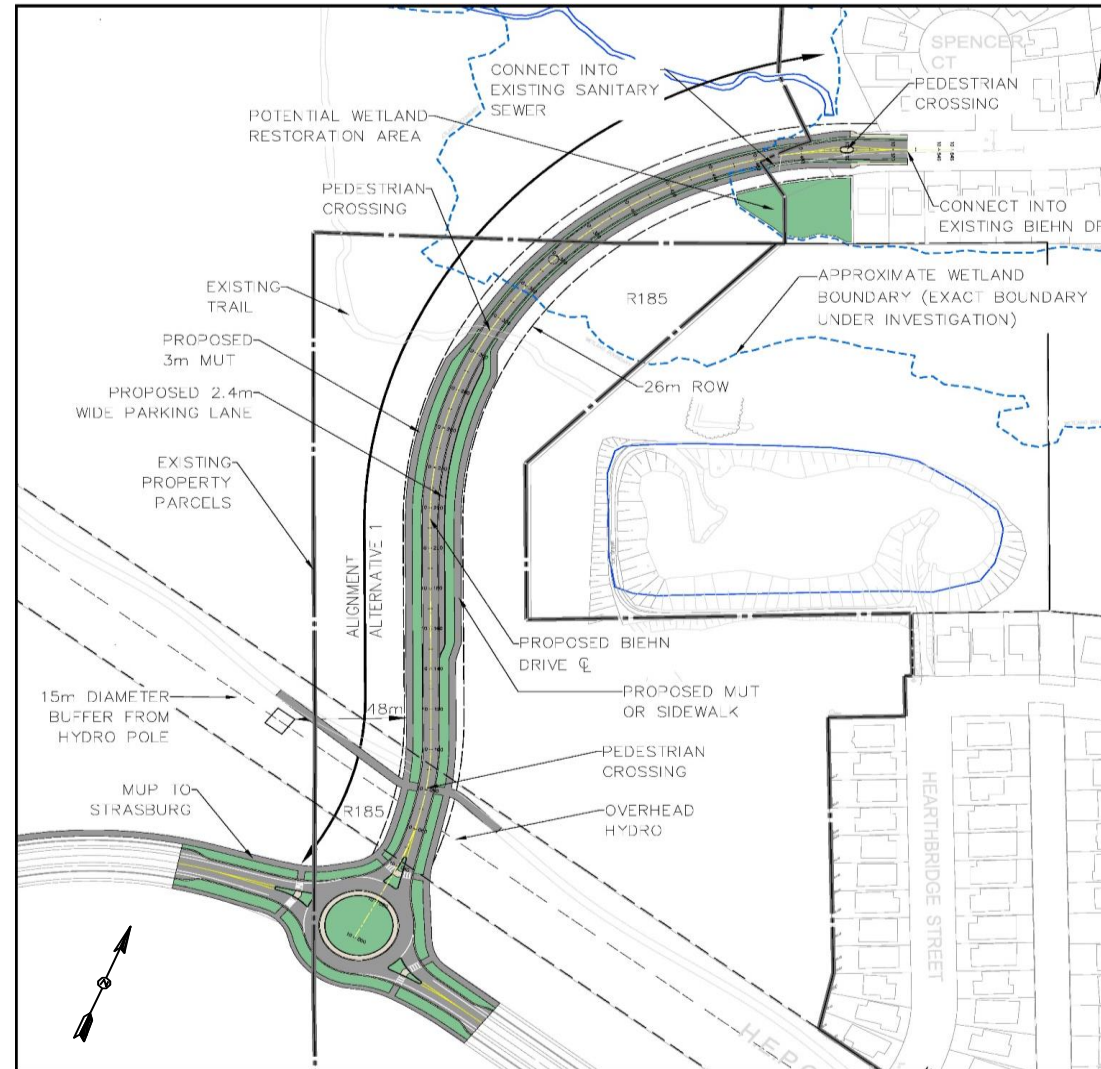


Evaluation

Do Nothing	Alternative 1: Extend Biehn Drive to Robert Ferrie Drive east of Hydro Tower	Alternative 2: Extend Biehn Drive to Robert Ferrie Drive west of Hydro Tower	Alternative 4: Existing Caryndale Drive and a Multi-Use Path crossing the PSW
<p>Not recommended.</p> <p>The Do Nothing alternative fails to address the traffic volume and safety concerns along Caryndale Drive which should be expected to increase when the extension of Strasburg Road to New Dundee Road provides an alternative access to Highway 401. Caryndale Drive will continue to accommodate a higher volume of traffic and forced to function as a major collector street. The limited number of Black Ash trees in the PSW will continue to decline due to the Emerald Ash Borer.</p>	<p>Recommended as the Preferred Design</p> <p>Alternative 1 is the best-balanced alternative. It provides the best transportation performance while minimizing natural and social environmental impacts. A limited number of Black Ash trees have been identified along the corridor however the city's best efforts to combat the Emerald Ash Borer has had limited success. The crossing of a PSW is accepted by the Provincial Policy Statement for transportation and utility corridors.</p>	<p>Not recommended.</p> <p>Although this alternative provides comparable transportation performance to Alternative 1 the environmental impacts are much greater.</p>	<p>Not recommended.</p> <p>Caryndale Drive, classified as a minor neighbourhood collector street, will be forced to function as a major collector street. The neighbourhood was not designed for Caryndale Drive to continue to carry increasing volumes of vehicle traffic.</p>

Preferred Alternative

- Removal of temporary cul-de-sac
- Connection of two lane road to existing end of Biehn
- 26m road ROW – smaller cross-section through the wetland
- Sidewalks and/or MUTs
- Connecting to roundabout at the future Robert Ferrie Road (determined through a separate EA)
- Installation of new trunk sewer and watermain along the road alignment
- Wetland restoration area



Next Steps

- With council endorsement, the EA will be filed for its 30-day commenting period and then be finalized
- Pending completion of this, a design consultant will be retained to:
 - complete detailed design
 - secure permits and approvals including but not limited to species at risk permits, GRCA, and dewatering
- Construction Tendering
- Construction (begin in 2026)

Conclusion

- The EA process is a Provincial process, we are confirmed to have followed this.
- **RECOMMENDATION:**
 - That the Biehn Drive and Trunk Sanitary Sewer Extension Class Environmental Assessment (EA) - Environmental Study Report (ESR), prepared by BT Engineering, dated November 2024, be received; and, that the Biehn Drive and Trunk Sanitary Sewer Extension Environmental Study Report (ESR), be filed with the Ministry of the Environment Conservation and Parks (MECP) for the mandatory thirty (30) day review period as required by the Environmental Assessment (EA) Act.