Evaluation Summary for Dufferin Street Alternative Designs

Downsview Major Streets Phases 3-4
Environmental Assessment

Stage 2 Public Consultation

June 2026

TORONTO

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1. Purpose of this Evaluation Summary

This document is supplementary material for the Stage #2 Public Consultation on the Downsview Major Streets Phases 3-4 Environmental Assessment (EA) study.

It documents the Alternative Design Concepts for Dufferin Street, the evaluation framework, scoring results against the final evaluation criteria, and provides a summary of the evaluation and key decision points on how each preferred Alternative Design Concept was selected. Full evaluation details will be included in the final report.

For more information on the project overall and details on the evaluation of Alternative Design Concepts for the other major streets, please visit the project website at www.toronto.ca/DownsviewEA.

2. Evaluation Framework

The evaluation framework for the Downsview Major Streets Phases 3-4 EA study consists of five main categories, each with related criteria and considerations. The draft evaluation criteria were presented during the first public consultation stage in June 2025 and were then refined based on feedback received. The final evaluation criteria are presented in Table 1 through Table 5.

Table 1. Evaluation Criteria – Category 1: Connectivity and Technical Viability

Criteria	Considerations
Mobility network performance and traffic impacts	• Geometric designs and lane configurations that meet acceptable traffic operations while also balancing safety of all road users. • Impacts to bus operations, bus delay, passenger delay and travel times, and transit impacts in a mixed traffic condition. • Traffic impacts to adjacent neighbourhoods.
Connections to existing and planned transportation	• Logical continuity of existing and planned streets, active transportation, and transit infrastructure to support connectivity and efficiency of networks. • Transit network and providing opportunities for transit expansion, routes and access.
Feasibility and constructability	• Key technical challenges and construction complexity (e.g. grading, staging, construction impacts).
Prioritize multi-modal/non-auto travel and safety	• Creation of urban streets that promote roadway safety through design and physical elements. • Safety and comfort for vulnerable road users. Includes sufficient widths to accommodate various design users (e.g. cargo bikes, electric bikes, electric scooters, etc.); separation of uses and conflict points. • Accessibility and all ages and abilities requirements and best practices. • Alignment with City Transportation policies, standards and guidelines.
Stormwater management and green infrastructure (GI)	• Opportunities to implement GI that achieves the most co-benefits (e.g. increases biodiversity, addresses urban heat island, enhances air quality, etc.). over traditional stormwater management strategies, with a priority on GI that requires less maintenance and upkeep. • Area for GI to meet stormwater management modelling requirements. • Potential for integration with landscaping and plantings.
Utility impacts	• Utility impacts due to servicing expansion, road widening and green infrastructure.
Metrolinx and rail coordination	• Aligns with Metrolinx design standards and guidelines, allowing for easier Metrolinx approvals. • Impacts to the rail corridor and rail operations. • Opportunities for future plans for the rail corridor crossing.

Table 2. Evaluation Criteria – Category 2: Socio-Economic Environment

Criteria	Considerations
Construction impacts	• Temporary construction impacts on surrounding areas such as noise, dust, duration of construction, particularly to any sensitive uses. • Impacts to private/commercial accesses during construction.
Streetscaping and community benefits	• Streets as public spaces that contribute to street vibrancy, sense of place, and well being. • Opportunities for public open spaces/gathering spaces within the road ROW.
Integration with surrounding uses	• Impacts on adjacent uses and suitability to existing/planned uses.
Aligns with Downsview Secondary Plan (DSP) and District Planning	• Alignment with Downsview Secondary Plan. • Street design supports existing and proposed adjacent land uses and the vision of each District, including development potential. • Alignment with right-sizing ROW principles for the Downsview area.
Noise impacts	• Impacts to existing and future sensitive areas including residential and institutional uses. • Complexity of noise mitigation measures (if required).
Air quality impacts	• Impacts to existing and future sensitive areas including residential and institutional uses. • Space dedicated towards street trees to potentially improve air quality.
Property impacts	• Property impacts due to servicing expansion and road widening. • Impacts to existing accesses and driveways.

Table 3. Evaluation Criteria – Category 3: Natural Environment

Criteria	Considerations
Natural environmental features	• Extent of potential impacts to natural environmental features, including wildlife, SAR, habitat, woodlands, water features, etc. • Opportunity to create or improve natural environmental areas including for trees, vegetation, and wildlife habitat.
Street trees	• Impacts to existing trees. • Opportunity to create a comfortable street canopy that supports street tree health.
Environmental sustainability and resilience	• Alignment with City Green Streets standards and guidelines and TransformTO strategies. • Climate change resiliency through managing stormwater sustainably and resistance to extreme weather events. • Reduction in greenhouse gases.
Inclusion of environmental input from Indigenous perspectives	• Potential impacts to plant species of Indigenous interest, which have significance for medicinal, cultural and crafting purposes. • Opportunities for renaturalization / replanting of native species of Indigenous interest. • Opportunities for the natural environment to deliver cultural and socio-economic benefits from an indigenous perspective.

Table 4. Evaluation Criteria – Category 4: Cultural Environment

Criteria	Considerations
Built cultural heritage resources	• Impacts on built heritage resources (i.e. avoid, modify, relocate or demolish and commemorate).
Archaeological resources	• Extent of impacts in areas of archaeological potential.
Impacts on Aboriginal and Treaty Rights and use of Land / Resources for Traditional purposes	• Enables and supports a culture of environmental stewardship and cultural uses of the land. • Opportunities to mitigate impacts and accommodate Indigenous values such as through renaturalization, commemoration, or inclusion through art, design, etc.

Table 5. Evaluation Criteria – Category 5: Costs

Criteria	Considerations
Costs (e.g., capital costs, operational costs, maintenance costs)	• Capital costs. • Operational costs (i.e. TTC surface routes). • Maintenance costs (i.e. degree of maintenance requirements, training requirements).
Property costs	• Land acquisition costs.

Each alternative was evaluated using the 5-level "circle" sliding scale, as shown graphically in Figure 1. A level 1 on the scale, i.e., an empty circle, indicates that the alternative does not meet criteria. A level 5 on the scale, i.e., a full circle, indicates the alternative best meets the criteria. Criteria bolded in black represent the most significant criteria within their category and are weighted more strongly as part of the evaluation.

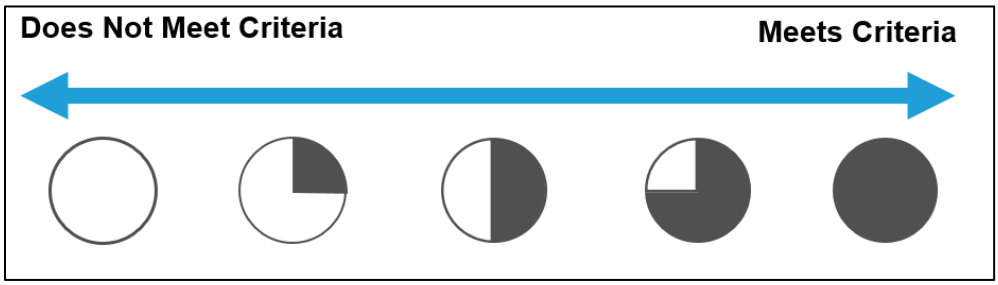

Figure 1. Evaluation Criteria Rating System

3. Development of Alternative Design Concepts

Phase 3 of the EA process involves identifying and evaluating Alternative Design Concepts to recommend a preferred design concept. The Major Streets are separated into distinct segments to allow for more detailed and context-specific evaluations (Figure 2). Alternative Design Concepts are identified and evaluated for each segment.

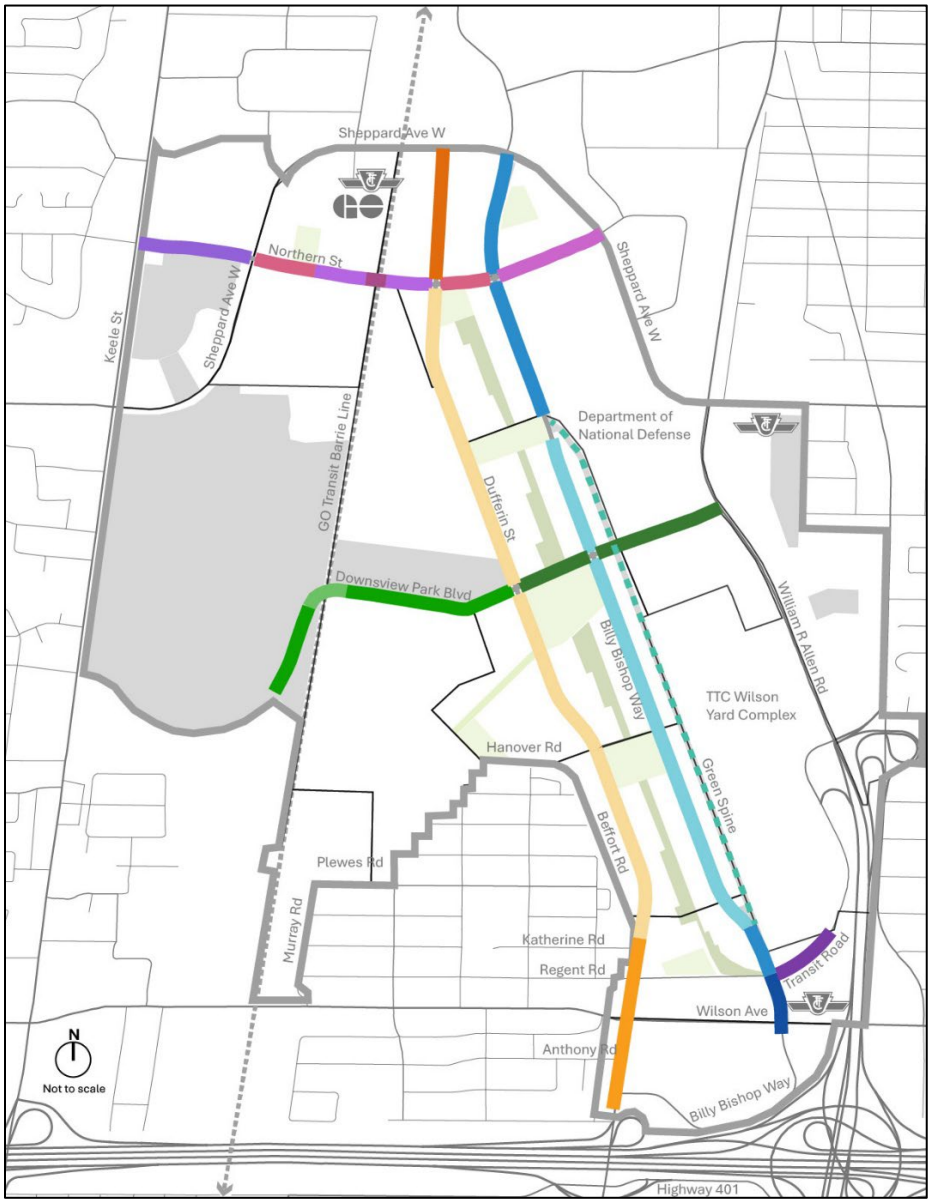

Figure 2. Street Segments Key Plan

4. Dufferin Street – Alternative Design Concepts

This document focuses on the evaluation of Alternative Design Concepts for Dufferin Street. Dufferin Street was identified in the Master Environmental Servicing Plan (MESP) as a north-south major street, connecting the existing Dufferin Street from Highway 401 in the south to Sheppard Avenue West, just east of the GO Barrie Line, to the north. Complete Street upgrades are recommended on the existing Dufferin Street portion from Highway 401 to Beffort Road. Dufferin Street was assessed using the following distinct segments as shown in Figure 3:

1. Highway 401 to Wilson Avenue (existing Dufferin Street)
2. Wilson Avenue to Beffort Road (existing Dufferin Street)
3. Beffort Road to Northern Street
4. Northern Street to Sheppard Avenue West

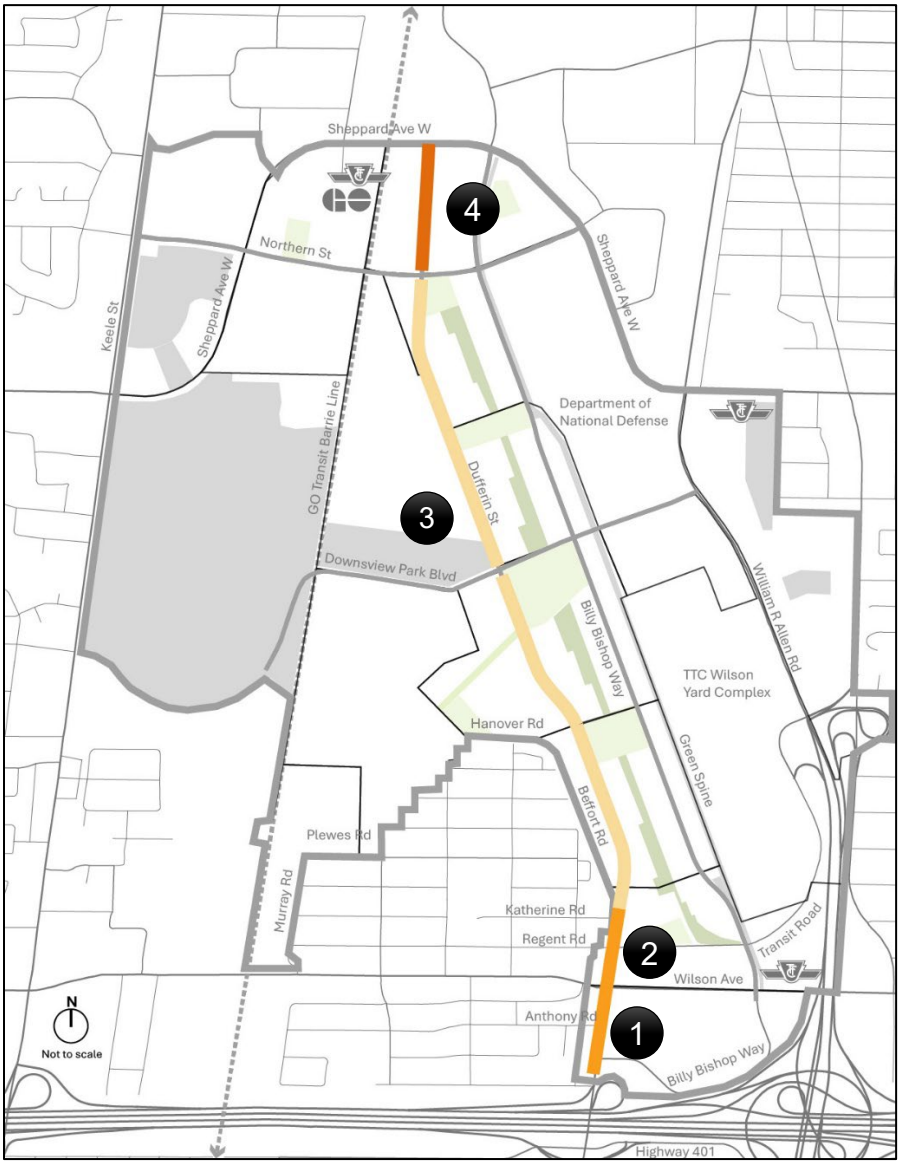

Figure 3. Dufferin Street Segment Key Plan

4.1. Existing Dufferin Street (Highway 401 to Wilson Avenue)

This segment of existing Dufferin Street extends approximately 410m from Highway 401 to Wilson Avenue (Figure 4). This segment is more constrained due to the existing uses of the surrounding lands.

Figure 4. Existing Dufferin Street (Highway 401 to Wilson Avenue)

4.1.1. Alternative Design Concepts

Three cross-section options were assessed for this segment (refer to Figure 5 through Figure 7 below):

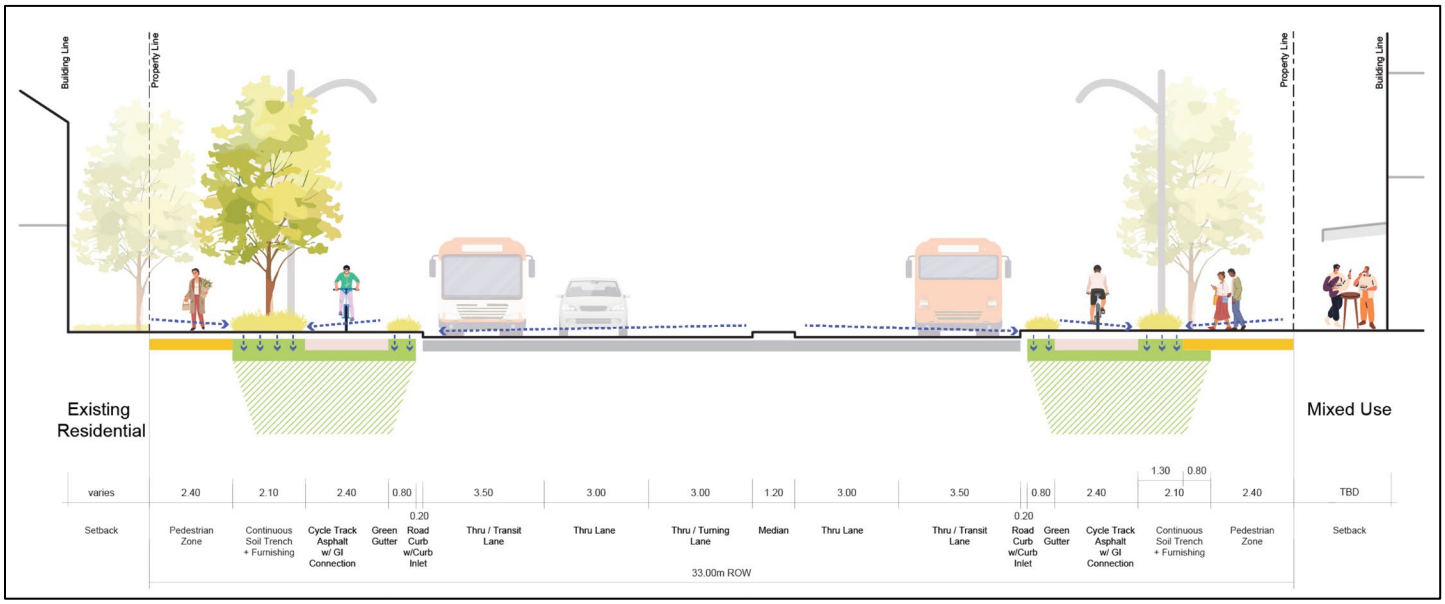

Figure 5. Existing Dufferin Street (Highway 401 to Wilson Avenue) Cross-Section - Option 1

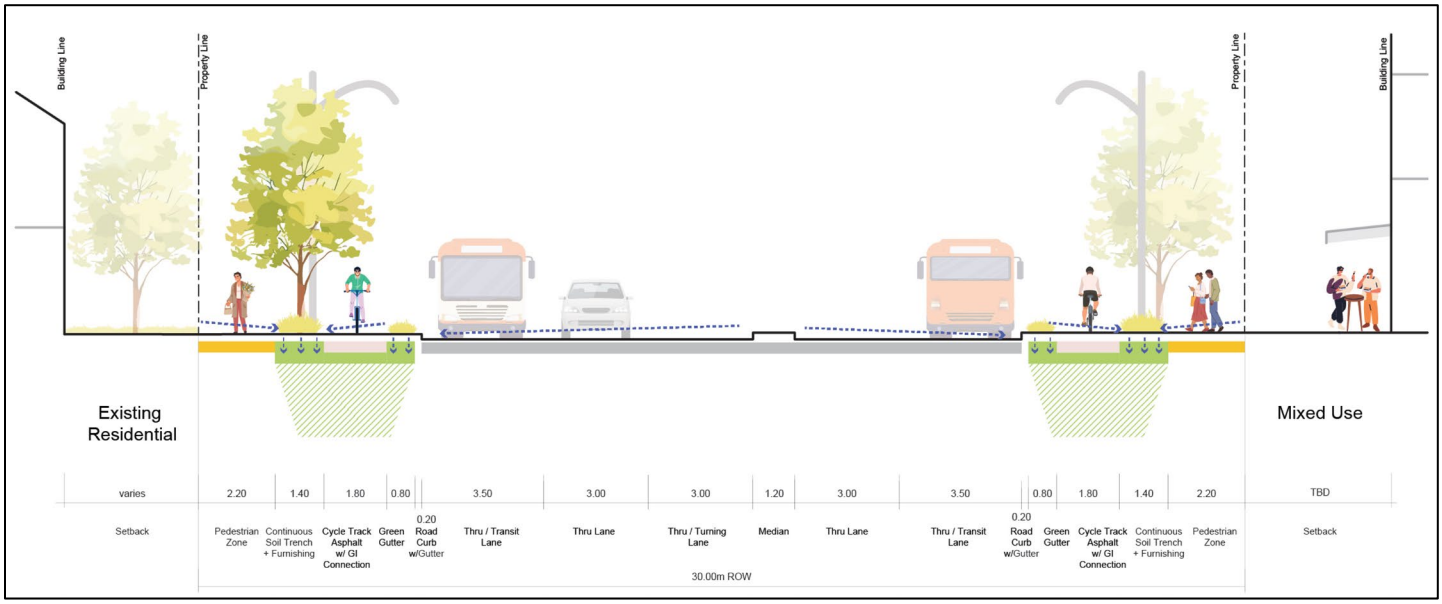

Figure 6. Existing Dufferin Street (Highway 401 to Wilson Avenue) Cross-Section - Option 2

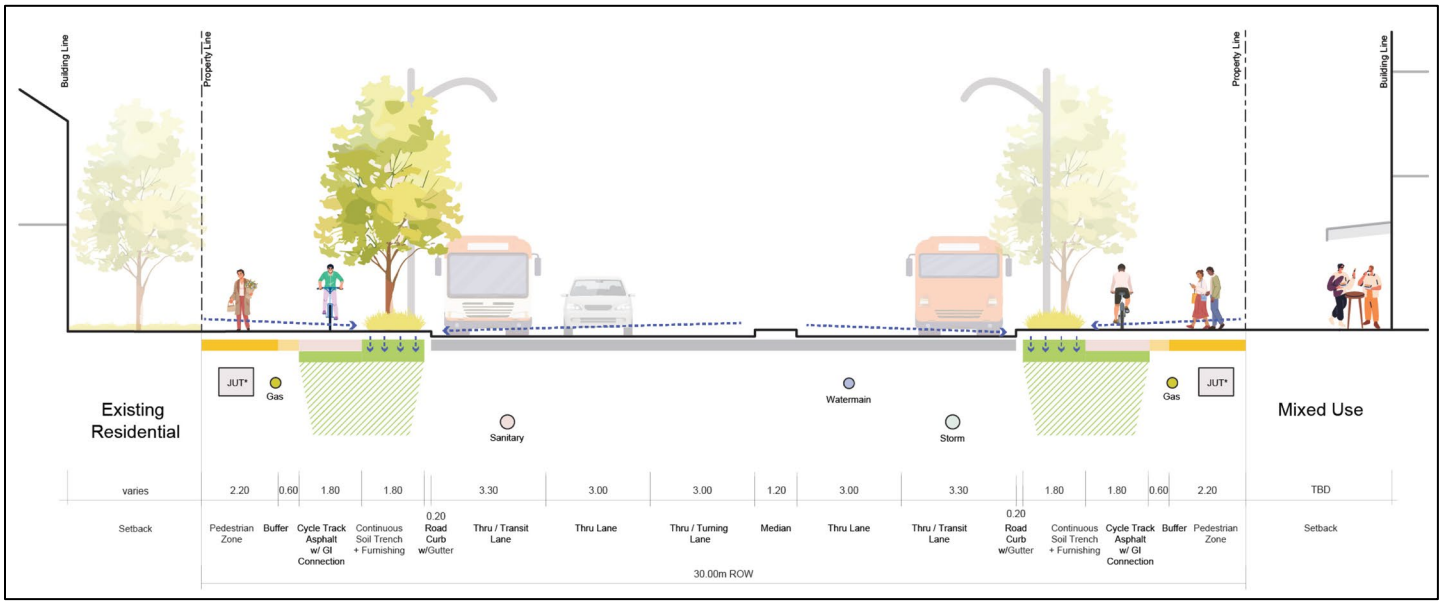

Figure 7. Existing Dufferin Street (Highway 401 to Wilson Avenue) Cross-Section - Option 3

Table 6 below describes key components of each cross-section option.

Table 6. Cross-Section Options for Existing Dufferin Street (Highway 401 to Wilson Avenue)

Option	Right of Way Width	Vehicle Lanes	Pedestrian Clearway (Both Sides)	Cycle Track (Both Sides)	Green Infrastructure and Furnishing Zone (Both Sides)
1	33.0m	• Three general purpose through lanes (3.0m) • 1.2m median • Two dedicated bus lanes (3.5m)	2.4m	2.4m	2.1m
2	30.0m	• Three general purpose through lanes (3.0m) • 1.2m median • Two dedicated bus lanes (3.5m)	2.2m	1.8m	1.4m
3	30.0m	• Three general purpose through lanes (3.0m) • 1.2m median • Two dedicated bus lanes (3.3m)	2.2m	1.8m	1.8m (curbside)

4.1.2. Evaluation Summary

Table 7 summarizes the evaluation results for the three cross-section options for Dufferin Street (Highway 401 to Wilson Avenue).

Table 7. Existing Dufferin Street (Highway 401 to Wilson Avenue) Evaluation Summary

Category	Weight	Option 1 33.0m ROW	Option 2 30.0m ROW	Option 3 30.0m ROW
Category 1: Connectivity and Technical Viability	High	◕	◕	◕
Category 2: Socio-Economic Environment	High	◑	◕	●
Category 3: Natural Environment	Medium	●	◕	●
Category 4: Cultural Environment	Medium	●	●	●
Category 5: Costs	Medium	◕	●	●
Overall		◕	◕	●
				Preferred

Key Considerations for **Preferred Alternative Design Option 3**:

- This is a constrained section that considers the tie-in to Highway 401, the need for 5-6 vehicular lanes to accommodate heavier traffic needs in this segment, minimizing property impacts and safety for active transportation. While green infrastructure was considered, places where it can be implemented are limited.
- Due to the constrained nature of this segment, narrower facilities and lanes are appropriate to minimize impacts to surrounding lands.
- Option 3 has the lowest anticipated capital cost.

4.2. Existing Dufferin Street (Wilson Avenue to Beffort Road)

This segment of existing Dufferin Street extends approximately 280m from Wilson Avenue to Beffort Road (Figure 8). This segment is more constrained due to the existing uses of the surrounding lands.

Figure 8. Existing Dufferin Street (Wilson Avenue to Beffort Road)

4.2.1. Alternative Design Concepts

Six cross-section options were assessed for this segment (refer to Figure 9 through Figure 14 below):

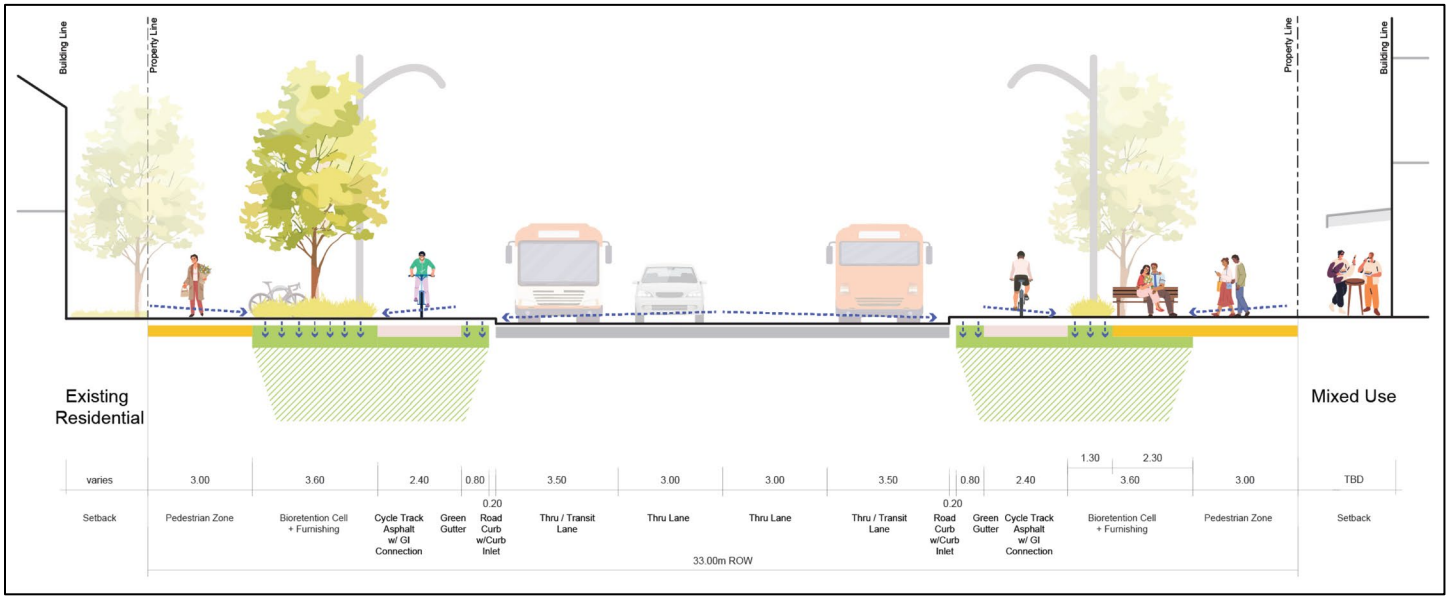

Figure 9. Existing Dufferin Street (Wilson Avenue to Beffort Road) Cross-Section - Option 1

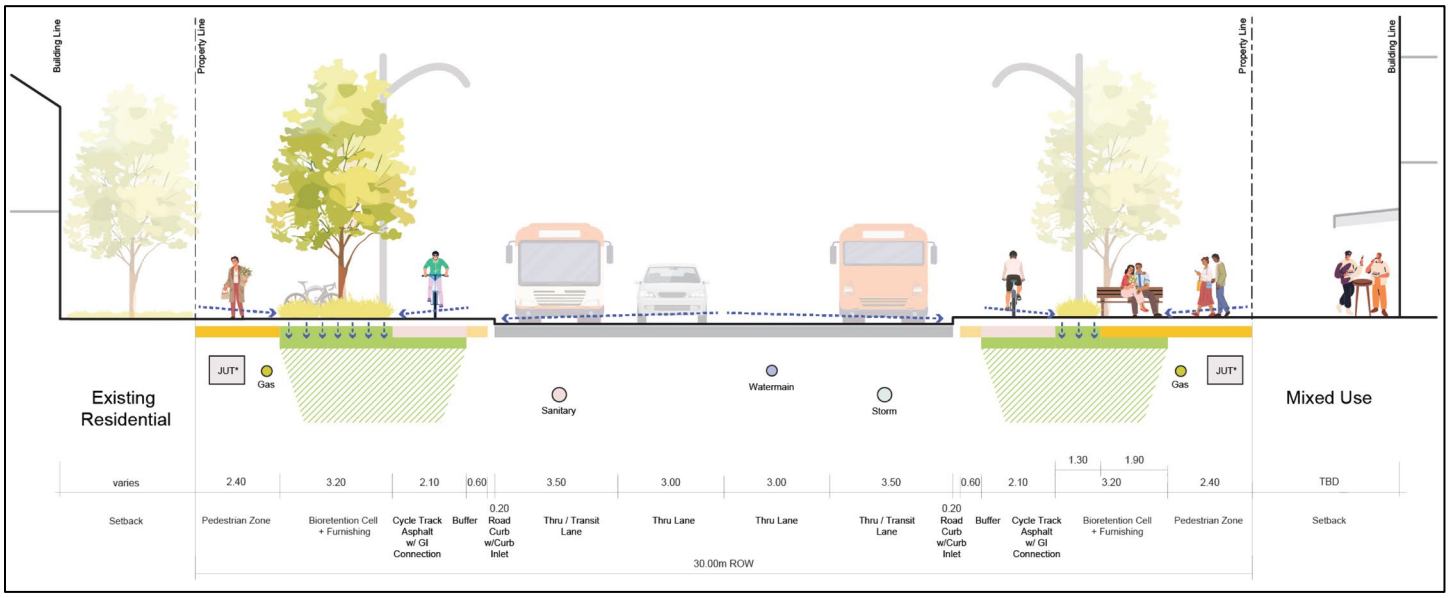

Figure 10. Existing Dufferin Street (Wilson Avenue to Beffort Road) Cross-Section - Option 2

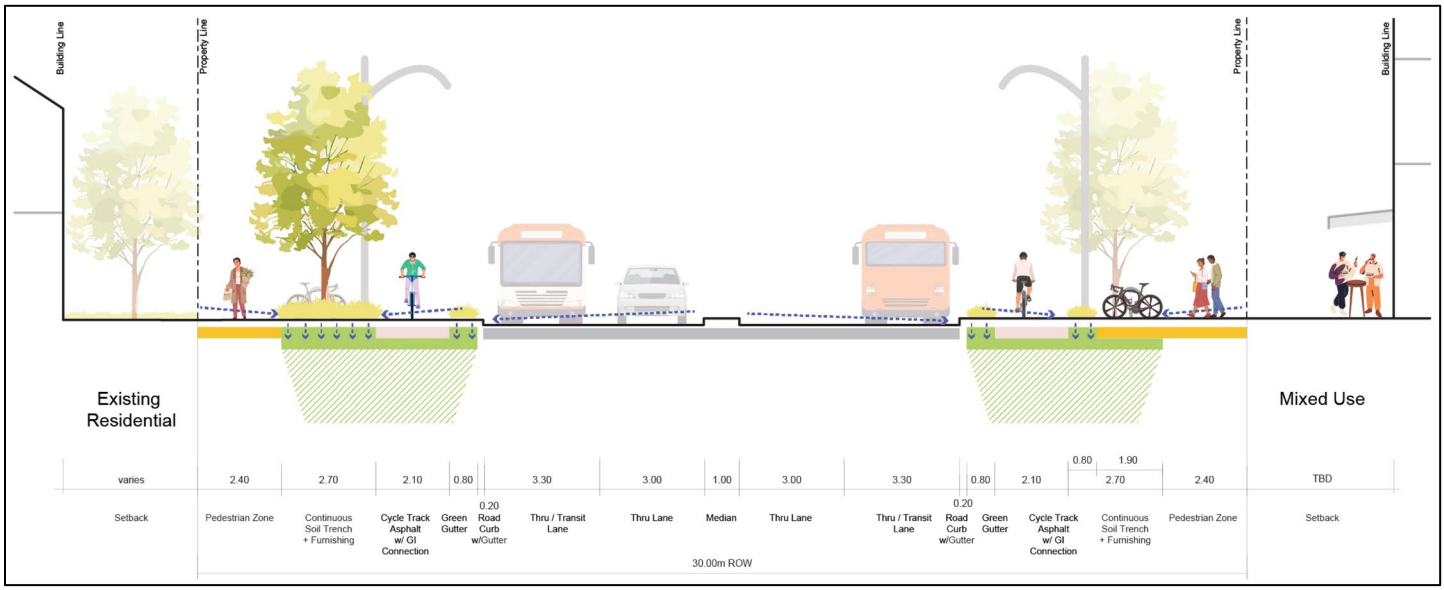

Figure 11. Existing Dufferin Street (Wilson Avenue to Beffort Road) Cross-Section - Option 3

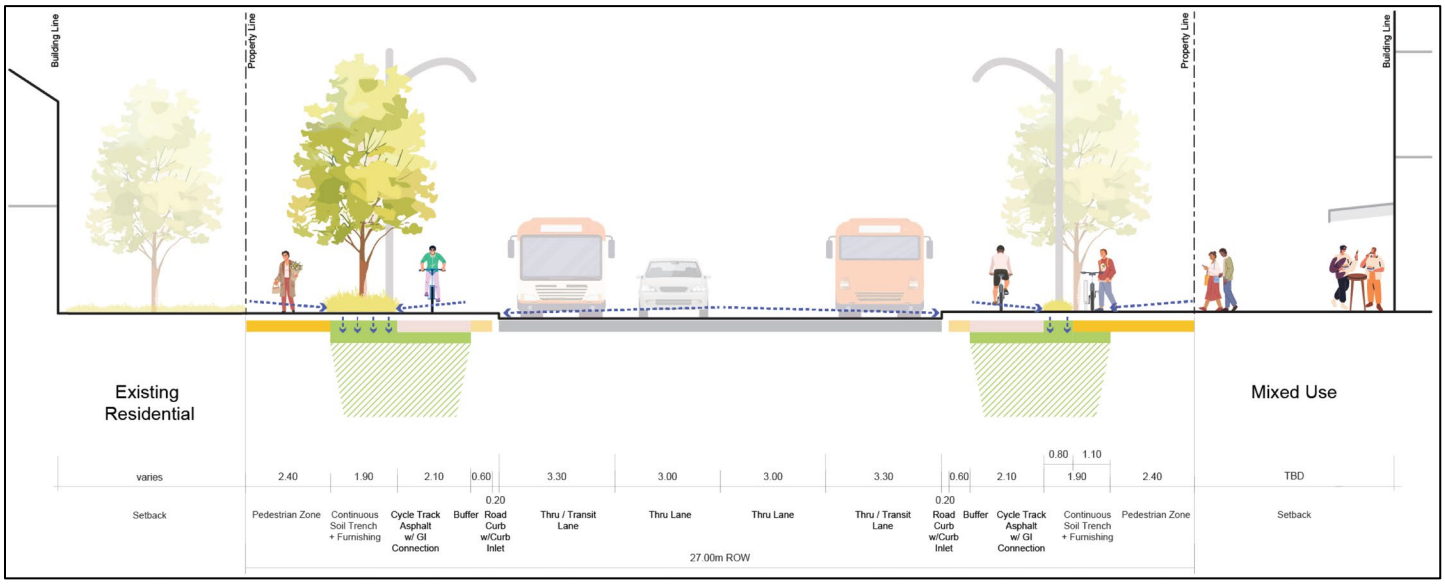

Figure 12. Existing Dufferin Street (Wilson Avenue to Beffort Road) Cross-Section - Option 4

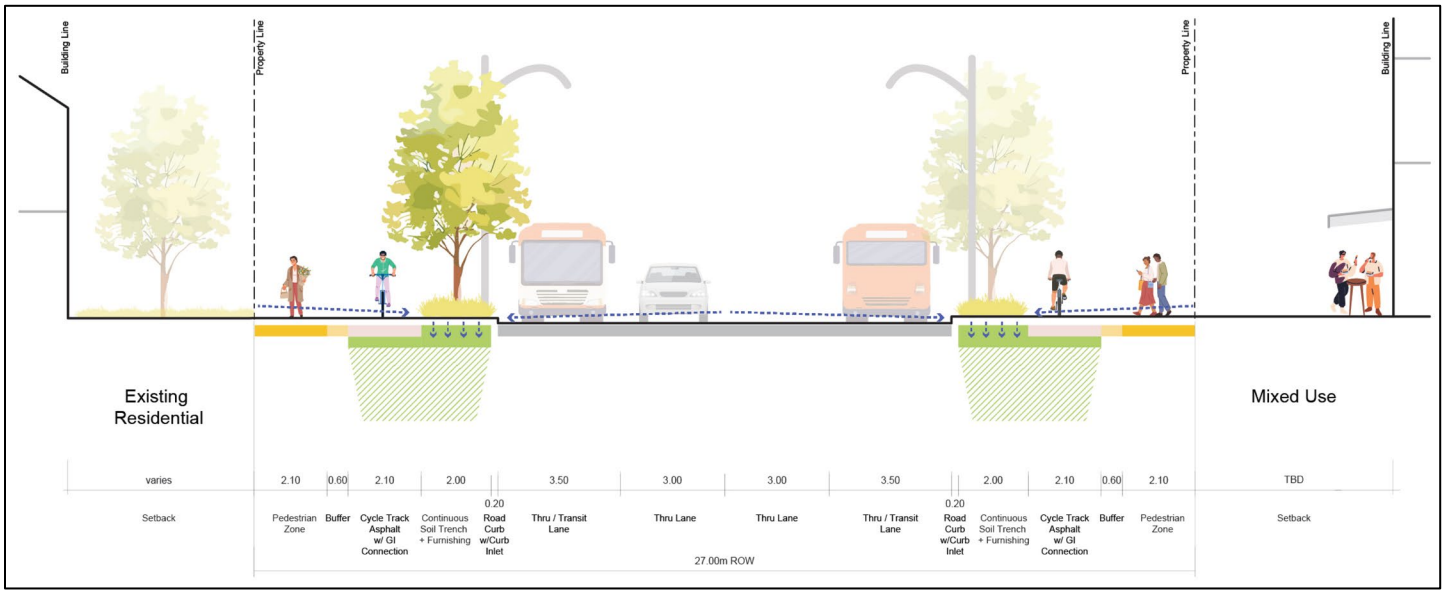

Figure 13. Existing Dufferin Street (Wilson Avenue to Beffort Road) Cross-Section - Option 5

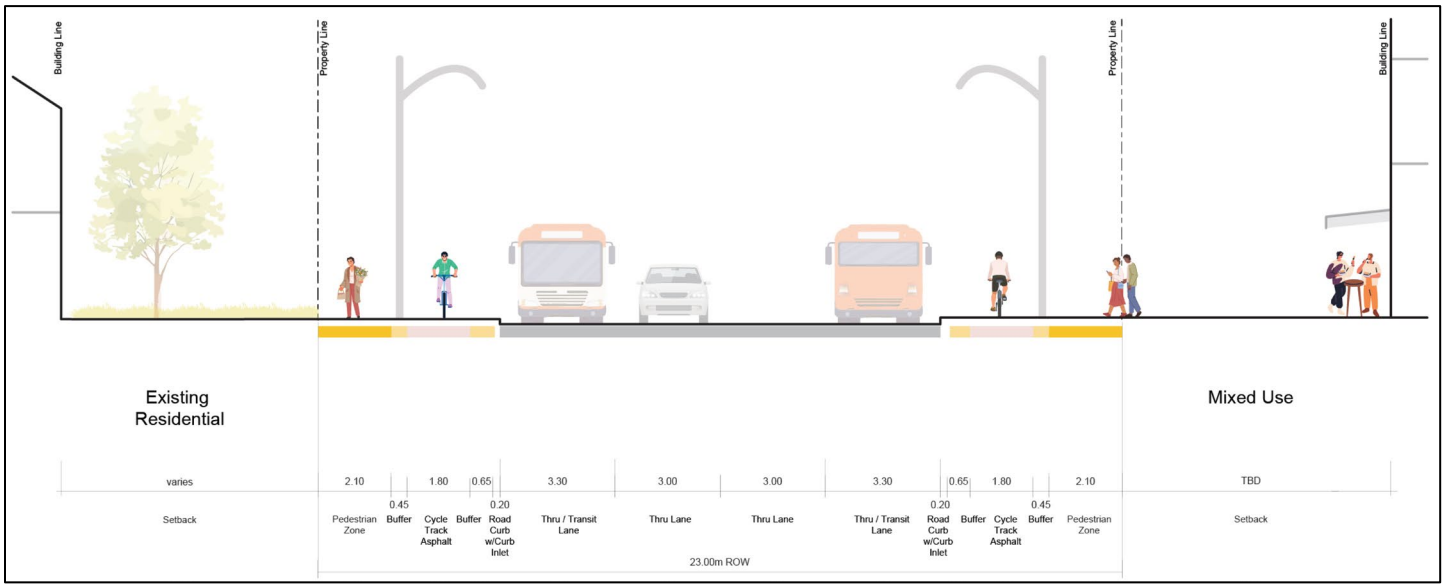

Figure 14. Existing Dufferin Street (Wilson Avenue to Beffort Road) Cross-Section - Option 6

Table 8 below describes each cross-section option.

Table 8. Cross-Section Options for Existing Dufferin Street (Wilson Avenue to Beffort Road)

Option	Right of Way Width	Vehicle Lanes	Pedestrian Clearway (Both Sides)	Cycle Track (Both Sides)	Green Infrastructure and Furnishing Zone (Both Sides)
1	33.0m	• Two general purpose through lanes (3.0m) • Two dedicated bus lanes (3.5m)	3.0m	2.4m	3.6m
2	30.0m	• Two general purpose through lanes (3.0m) • Two dedicated bus lanes (3.5m)	2.4m	2.1m	3.2m
3	30.0m	• Two general purpose through lanes (3.0m) • 1.0m median • Two dedicated bus lanes (3.3m)	2.4m	2.1m	2.7m
4	27.0m	• Two general purpose through lanes (3.0m) • Two dedicated bus lanes (3.3m)	2.4m	2.1m	1.9m
5	27.0m	• Two general purpose through lanes (3.0m) • Two dedicated bus lanes (3.5m)	2.1m	2.1m	2.0m (curbside)
6	23.0m	• Two general purpose through lanes (3.0m) • Two dedicated bus lanes (3.3m)	2.1m	1.8m	N/A

4.2.2. Evaluation Summary

Table 9 summarizes the evaluation results of the six cross-section options for Dufferin Street (Wilson Avenue to Beffort Road).

Table 9. Existing Dufferin Street (Wilson Avenue to Beffort Road) Evaluation Summary

Category	Weight	Option 1 4 lanes, 33.0m ROW	Option 2 4 lanes, 30.0m ROW	Option 3 4 lanes, 30.0m ROW	Option 4 4 lanes, 27.0m ROW	Option 5 4 lanes, 27.0m ROW	Option 6 4 lanes, 23.0m ROW
Category 1: Connectivity and Technical Viability	High	◕	◕	◕	◑	◑	◔
Category 2: Socio-Economic Environment	High	◑	●	◕	◑	◑	◑
Category 3: Natural Environment	Medium	●	◕	◑	◑	◑	○
Category 4: Cultural Environment	Medium	●	●	●	●	●	●
Category 5: Costs	Medium	◑	◕	◑	◕	◕	●
Overall		◑	●	◕	◑	◑	◔
			Preferred				

Key Considerations for **Preferred Alternative Design Option 2:**

- This option offers the best balance between minimizing impacts to adjacent properties while still meeting transportation and drainage needs.
- Due to the constrained nature of this segment, narrower facilities and lanes are appropriate to minimize impacts to surrounding lands.
- A wider sidewalk and green infrastructure provide a better buffer between the existing occupied residential homes and the Ancaster community to the future Dufferin Street.
- Option 2 provides a 3.5m transit lane which is preferred by TTC for bus operations. It also meets the City's requirements for active transportation facilities.

4.3. Dufferin Street (Beffort Road to Northern Street)

This segment of Dufferin Street extends approximately 2.2km from Beffort Road to Northern Street (Figure 15).

Figure 15. Dufferin Street (Beffort Road to Northern Street)

4.3.1. Alternative Design Concepts

Four cross-section options were assessed for this segment (refer to Figure 16 through Figure 19 below):

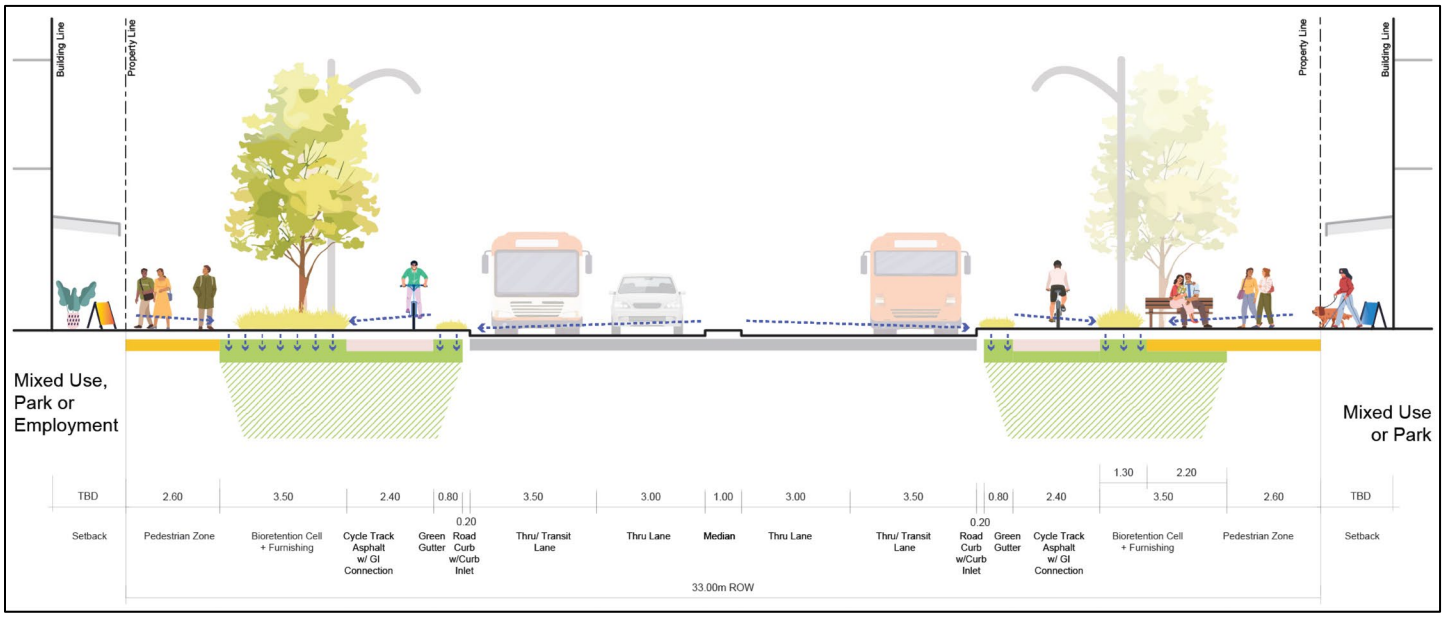

Figure 16. Dufferin Street (Beffort Road to Northern Street) Cross-Section - Option 1

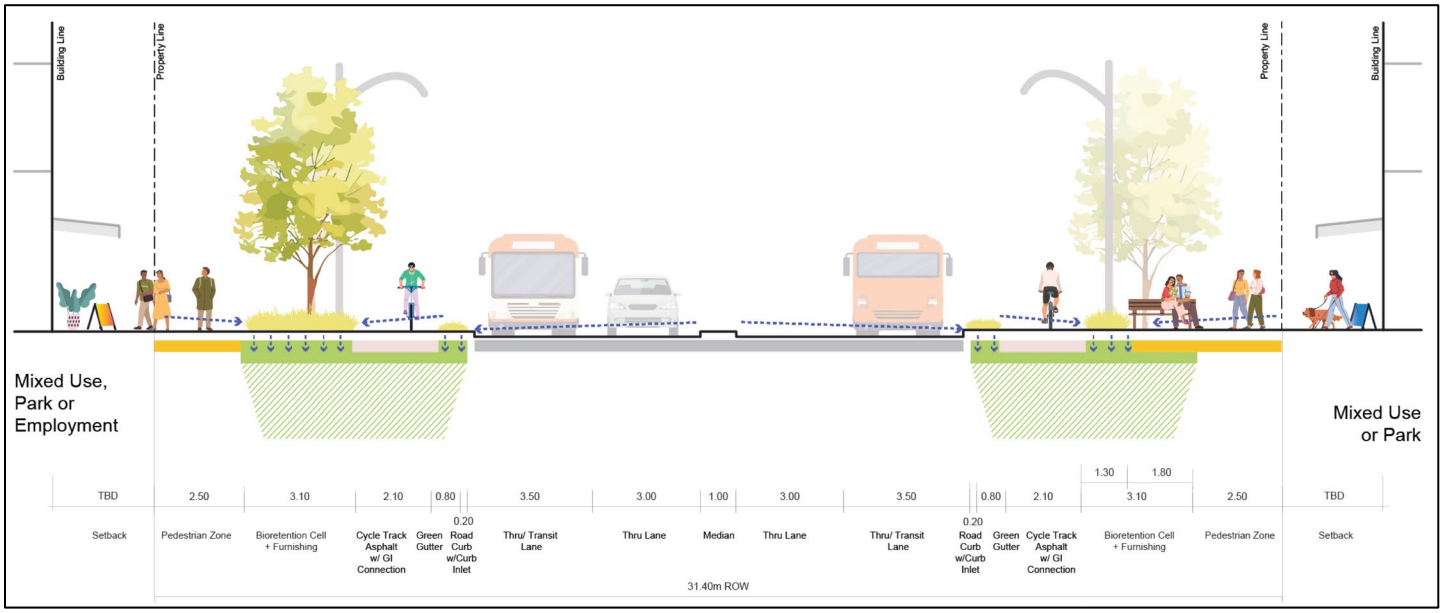

Figure 17. Dufferin Street (Beffort Road to Northern Street) Cross-Section - Option 2

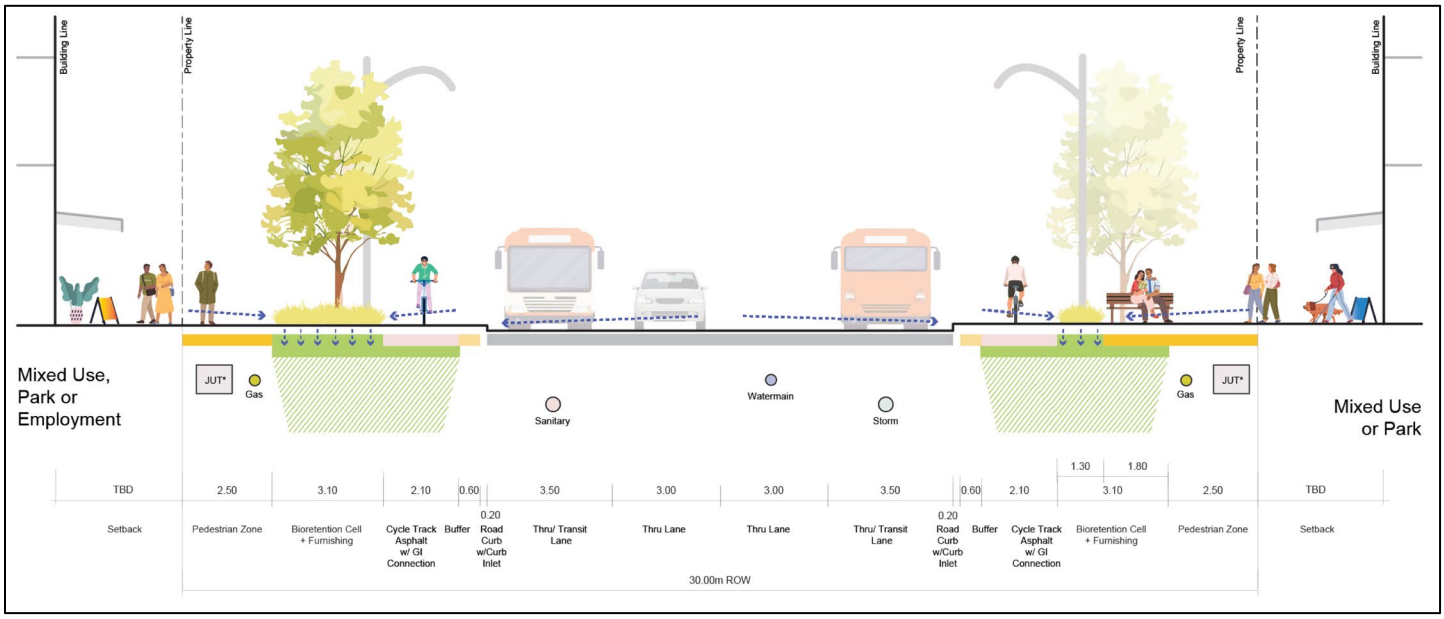

Figure 18. Dufferin Street (Beffort Road to Northern Street) Cross-Section - Option 3

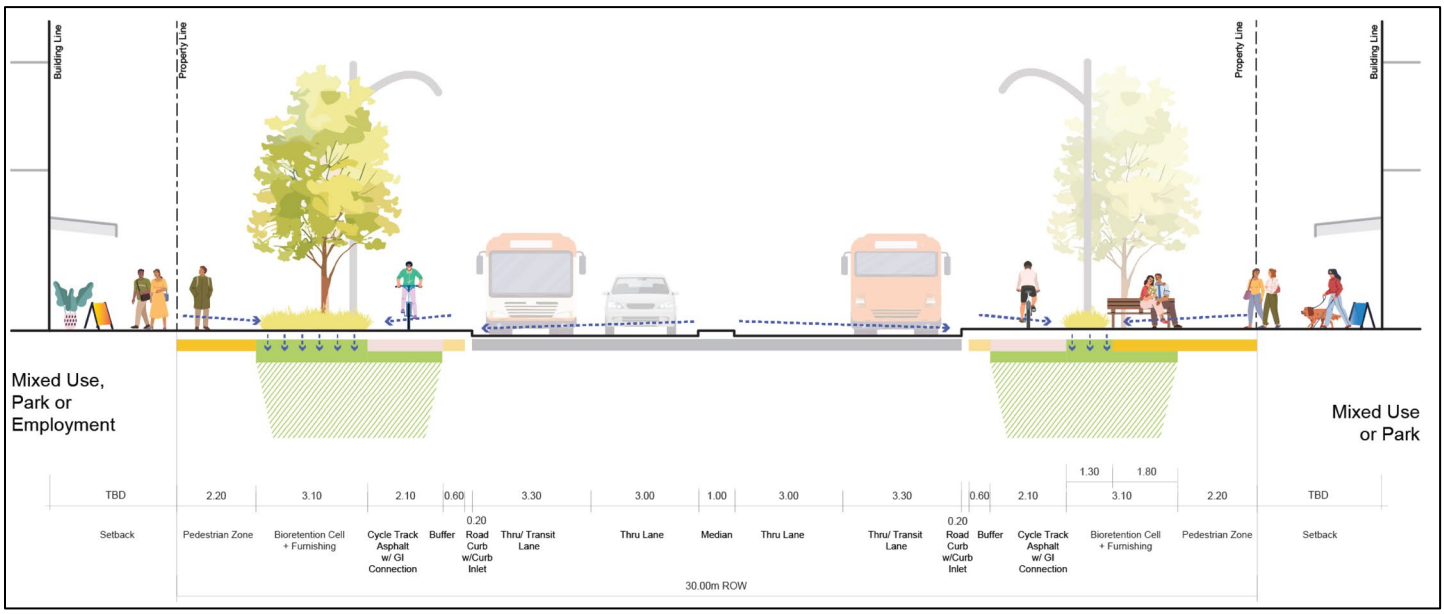

Figure 19. Dufferin Street (Beffort Road to Northern Street) Cross-Section - Option 4

Table 10 below describes key components of each cross-section option.

Table 10. Cross-Section Options for Dufferin Street (Beffort Road to Northern Street)

Option	Right of Way Width	Vehicle Lanes	Pedestrian Clearway (Both Sides)	Cycle Track (Both Sides)	Green Infrastructure and Furnishing Zone (Both Sides)
1	33.0m	• Two general purpose through lanes (3.0m) • 1.0m median • Two dedicated bus lanes (3.5m)	2.6m	2.4m	3.5m
2	31.4m	• Two general purpose through lanes (3.0m) • 1.0m median • Two dedicated bus lanes (3.5m)	2.5m	2.1m	3.1m
3	30.0m	• Two general purpose through lanes (3.0m) • Two dedicated bus lanes (3.5m)	2.5m	2.1m	3.1m
4	30.0m	• Two general purpose through lanes (3.0m) • 1.0m median • Two dedicated bus lanes (3.3m)	2.2m	2.1m	3.1m

4.3.2. Evaluation Summary

Table 11 summarizes the evaluation results of the four cross-section options for Dufferin Street (Beffort Road to Northern Street).

Table 11. Dufferin Street (Beffort Road to Northern Street) Evaluation Summary

Category	Weight	Option 1 4 lanes, 33.0m ROW	Option 2 4 lanes, 31.4m ROW	Option 3 4 lanes, 30.0m ROW	Option 4 4 lanes, 30.0m ROW
Category 1: Connectivity and Technical Viability	High	◕	◕	●	◑
Category 2: Socio-Economic Environment	High	◕	●	●	◕
Category 3: Natural Environment	Medium	●	◕	◕	◕
Category 4: Cultural Environment	Medium	●	●	●	●
Category 5: Costs	Medium	◕	●	●	●
Overall		◕	●	●	◕
				Preferred	

Key Considerations for **Preferred Alternative Design Option 3:**

- This option offers the best balance of providing sufficient transportation facilities and green infrastructure while also taking into consideration the highly urbanized context of the surrounding area. The “main street” design supports the ground floor retail activity and direct access to dedicated bus lanes.
- Having no median for this segment of Dufferin Street is seen as appropriate given that this is a low-speed street (40km/h) and it is effectively a two-lane road for general purpose vehicles with dedicated bus facilities. It is anticipated the street will still function safely without a median.
- Given the redundancy of proposed north/south active transportation routes in the Downsview area (Dufferin Street Extension, The Runway, Billy Bishop Way Extension, and Green Spine), narrower active transportation facilities are appropriate.
- Option 3 has the lowest anticipated capital cost.

4.4. Dufferin Street (Northern Street to Sheppard Avenue West)

This segment of Dufferin Street extends approximately 520m from Northern Street to Sheppard Avenue West (Figure 20).

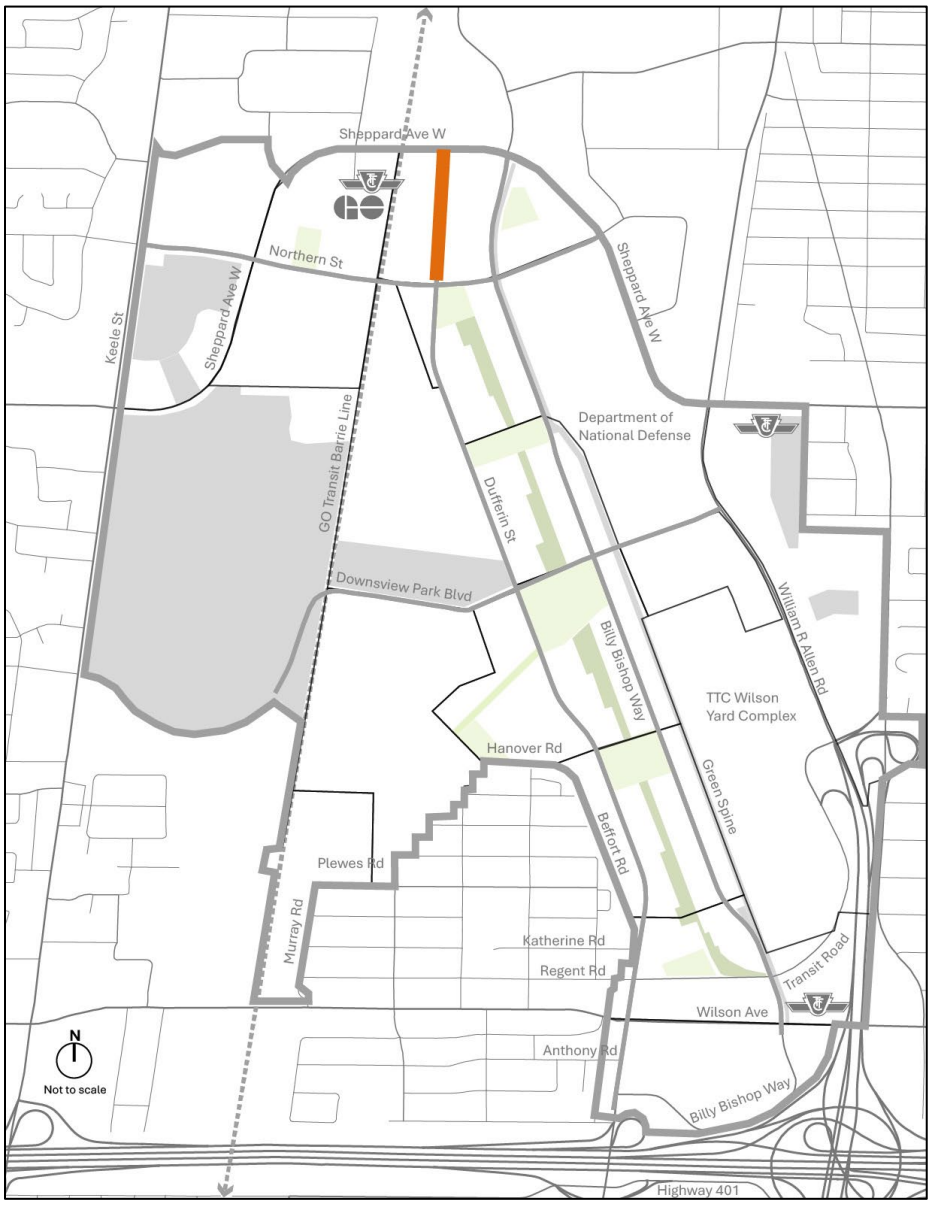

Figure 20. Dufferin Street (Northern Street to Sheppard Avenue West)

4.4.1. Alternative Design Concepts

Five cross-section options were assessed for this segment (refer to Figure 21 through Figure 25 below):

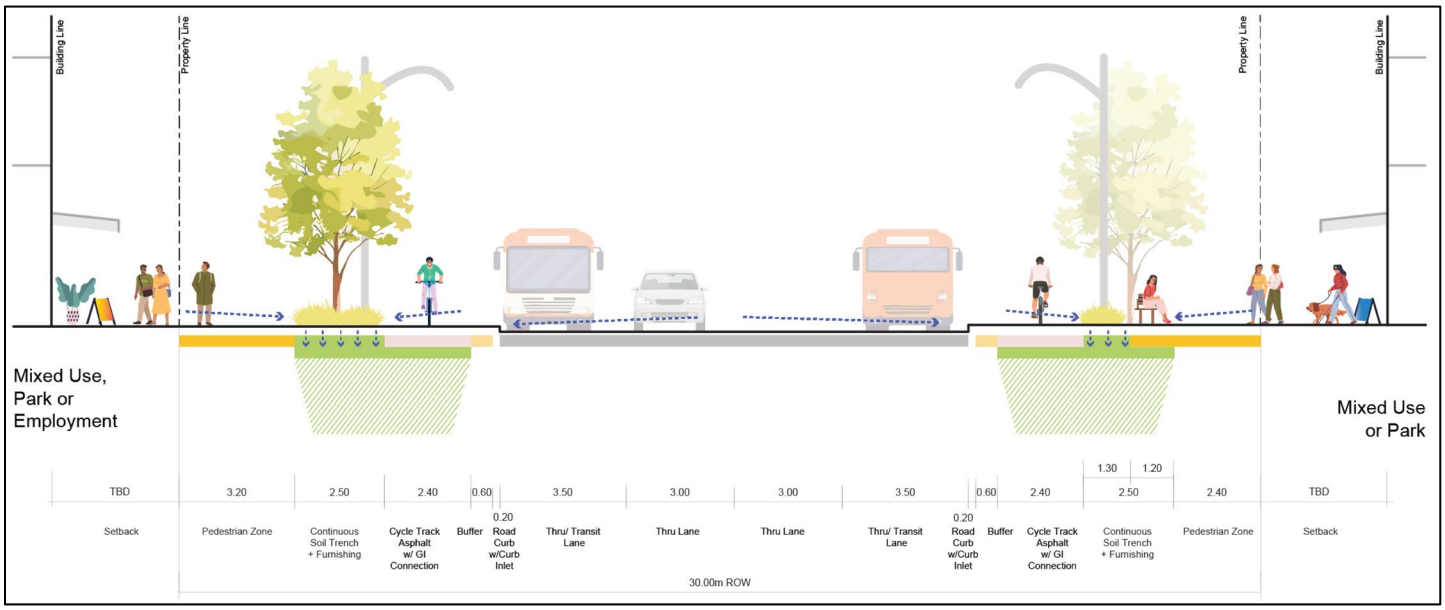

Figure 21. Dufferin Street (Northern Street to Sheppard Avenue West) Cross-Section - Option 1

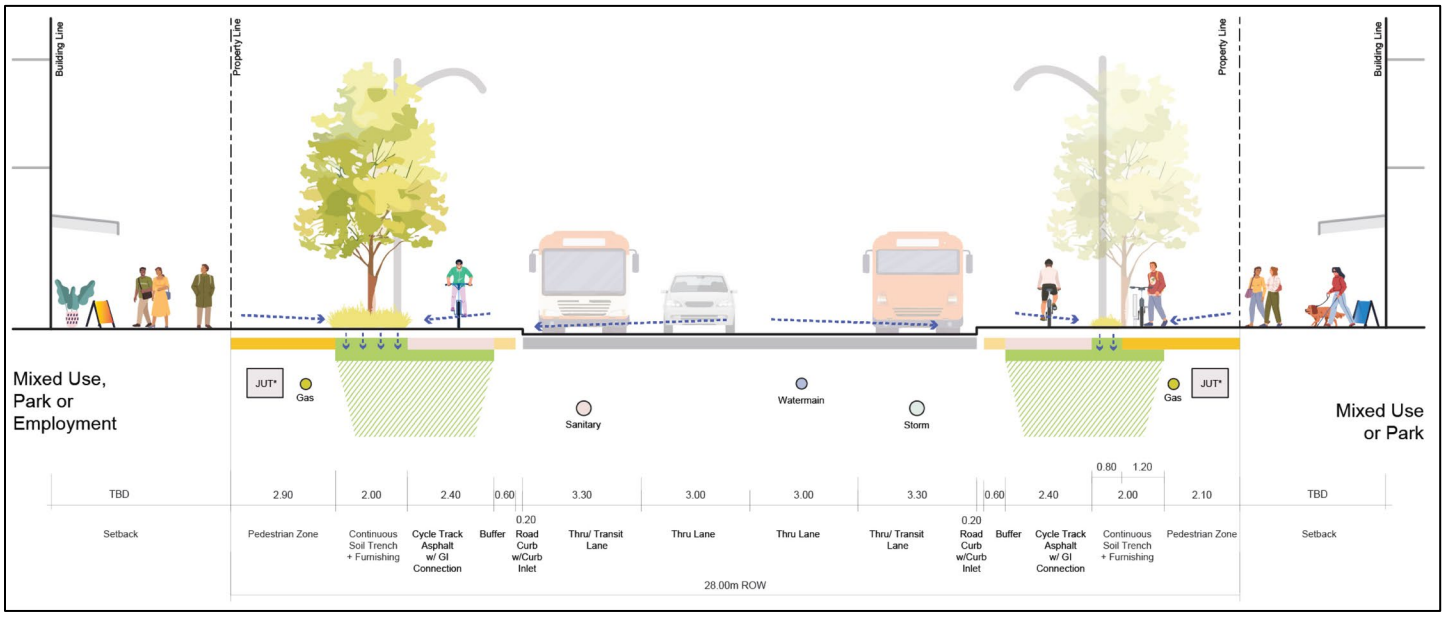

Figure 22. Dufferin Street (Northern Street to Sheppard Avenue West) Cross-Section - Option 2

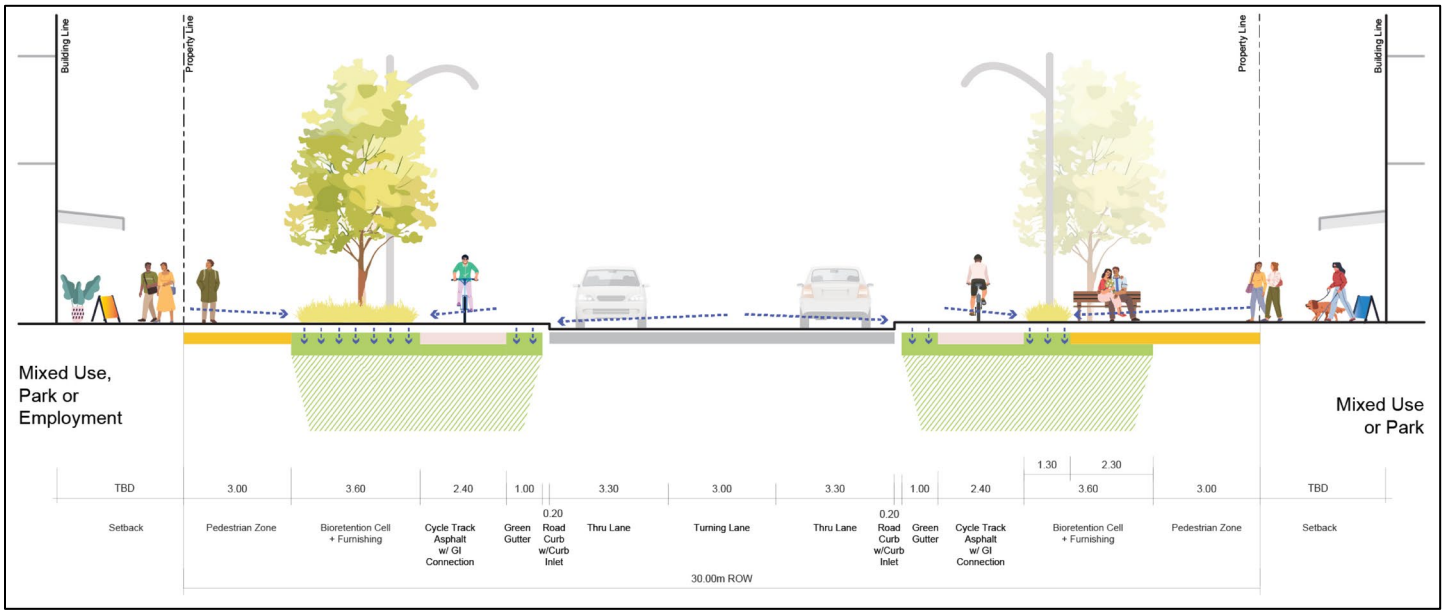

Figure 23. Dufferin Street (Northern Street to Sheppard Avenue West) Cross-Section - Option 3

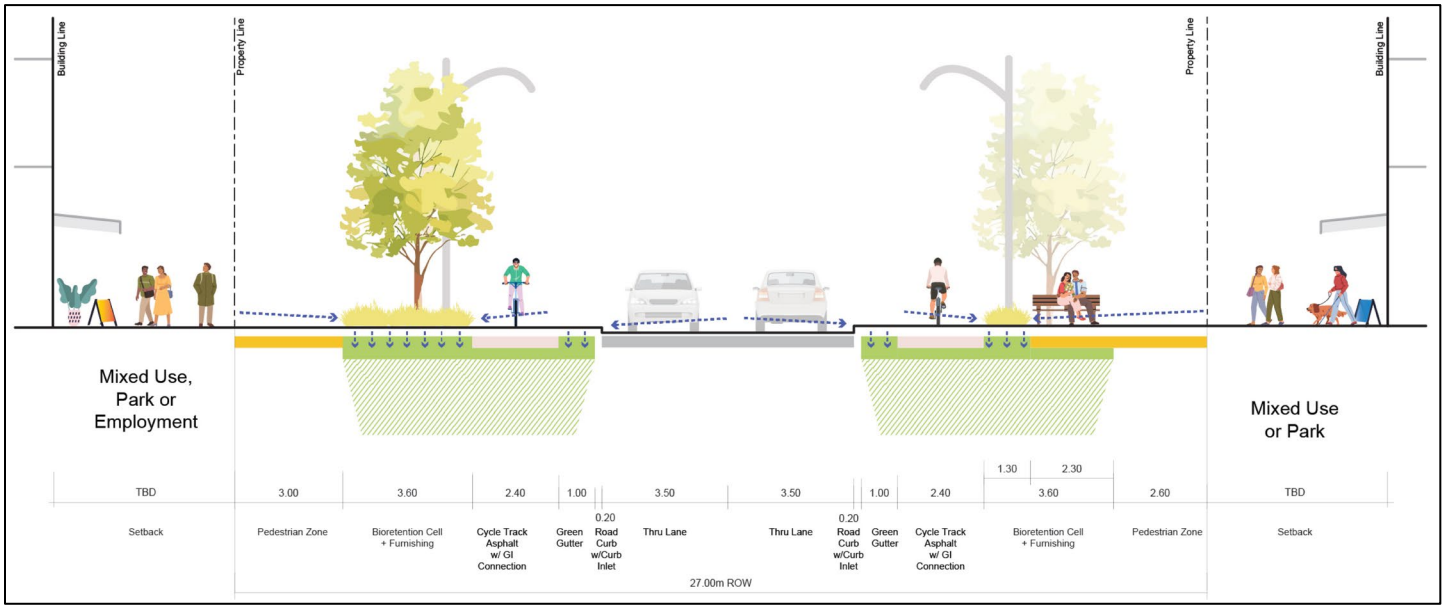

Figure 24. Dufferin Street (Northern Street to Sheppard Avenue West) Cross-Section - Option 4

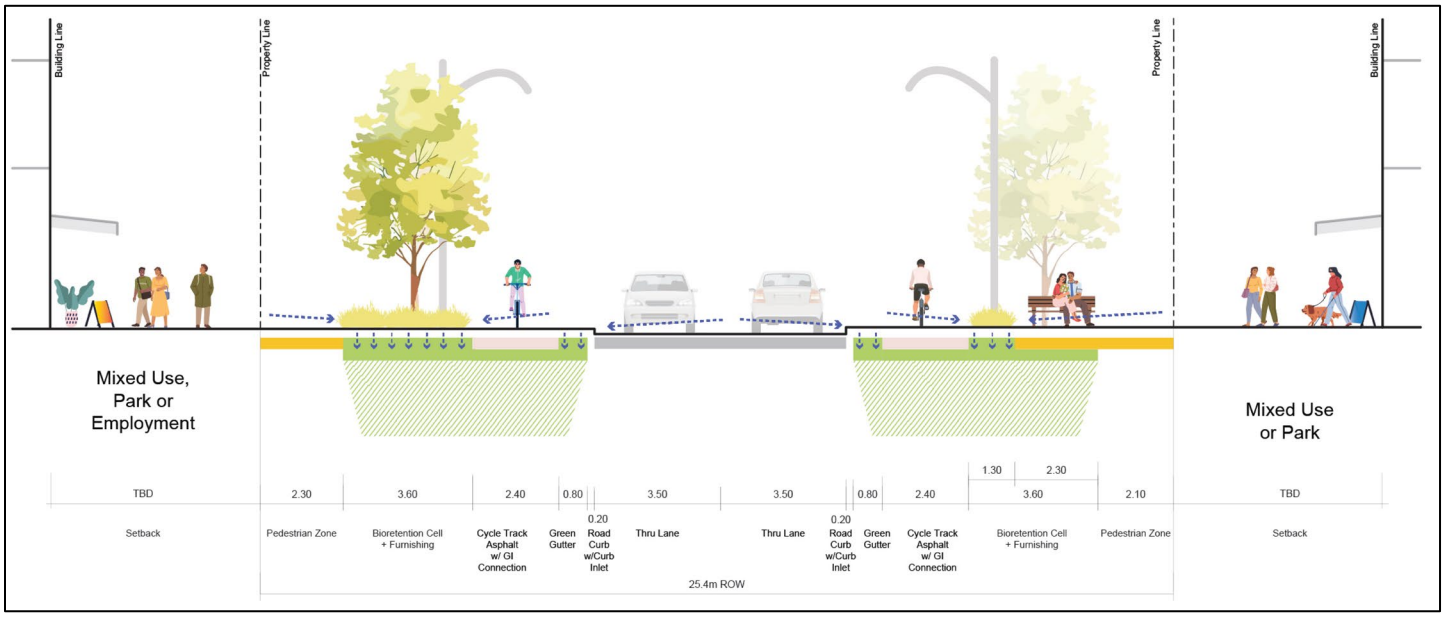

Figure 25. Dufferin Street (Northern Street to Sheppard Avenue West) Cross-Section - Option 5

Table 12 below describes key components of each cross-section option.

Table 12. Cross-Section Options for Dufferin Street (Northern Street to Sheppard Avenue West)

Option	Right of Way Width	Vehicle Lanes	Pedestrian Clearway	Cycle Track (Both Sides)	Green Infrastructure and Furnishing Zone (Both Sides)
1	30.0m	• Two general purpose through lanes (3.0m) • Two dedicated bus lanes (3.5m)	3.2m (west) 2.4m (east)	2.4m	2.5m
2	28.0m	• Two general purpose through lanes (3.0m) • Two dedicated bus lanes (3.3m)	2.9m (west) 2.1m (east)	2.4m	2.0m
3	30.0m	• Two general purpose through lanes (3.3m) • One center turning lane (3.0m)	3.0m on both sides	2.4m	3.6m
4	27.0m	• Two general purpose through lanes (3.5m)	3.0m (west) 2.6m (east)	2.4m	3.6m
5	25.4m	• Two general purpose through lanes (3.5m)	2.3m (west) 2.1m (east)	2.4m	3.6m

4.4.2. Evaluation Summary

Table 13 summarizes the evaluation results for the five cross-section options for Dufferin Street (Northern Street to Sheppard Avenue West).

Table 13. Dufferin Street (Northern Street to Sheppard Avenue West) Evaluation Summary

Category	Weight	Option 1 4 lanes, 30.0m ROW	Option 2 4 lanes, 28.0m ROW	Option 3 3 lanes, 30.0m ROW	Option 4 2 lanes, 27.0m ROW	Option 5 2 lanes, 25.4m ROW
Category 1: Connectivity and Technical Viability	High	◕	●	◕	◕	◑
Category 2: Socio-Economic Environment	High	◕	●	◕	◕	◑
Category 3: Natural Environment	Medium	◕	◕	●	●	●
Category 4: Cultural Environment	Medium	●	●	●	●	●
Category 5: Costs	Medium	◑	◑	◕	●	●
Overall		◕	●	◕	◕	◕
			Preferred			

Key Considerations for **Preferred Alternative Design Option 2:**

- Extending the two dedicated bus lanes to Sheppard Avenue West provides significantly better transit priority for buses compared to mixed traffic conditions. Dedicated bus lanes will provide increased service reliability, faster transit travel times, and opportunities for future service expansion.
- This option provides more direct access to Downsview Park TTC/GO Station and planned rapid transit service on Sheppard Avenue West.
- This option features an asymmetrical design that has wider pedestrian and cycling facilities on the west side to support the higher pedestrian and cyclist volumes expected to access Downsview Park TTC/GO Station.
- Due to the urban nature of the surrounding area, narrower and hardscaped green infrastructure space is appropriate to manage higher pedestrian volumes, as long as it meets performance targets.