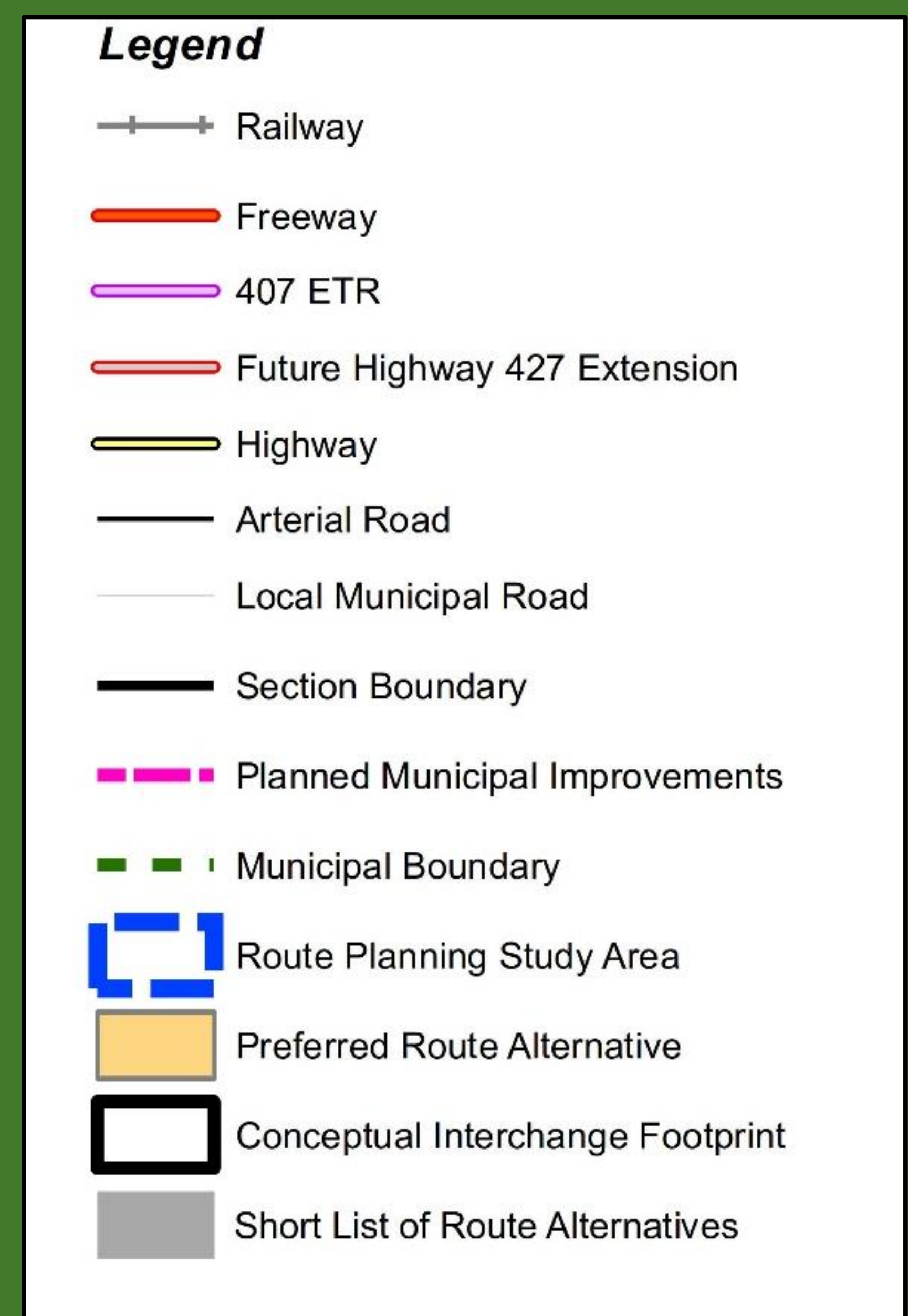
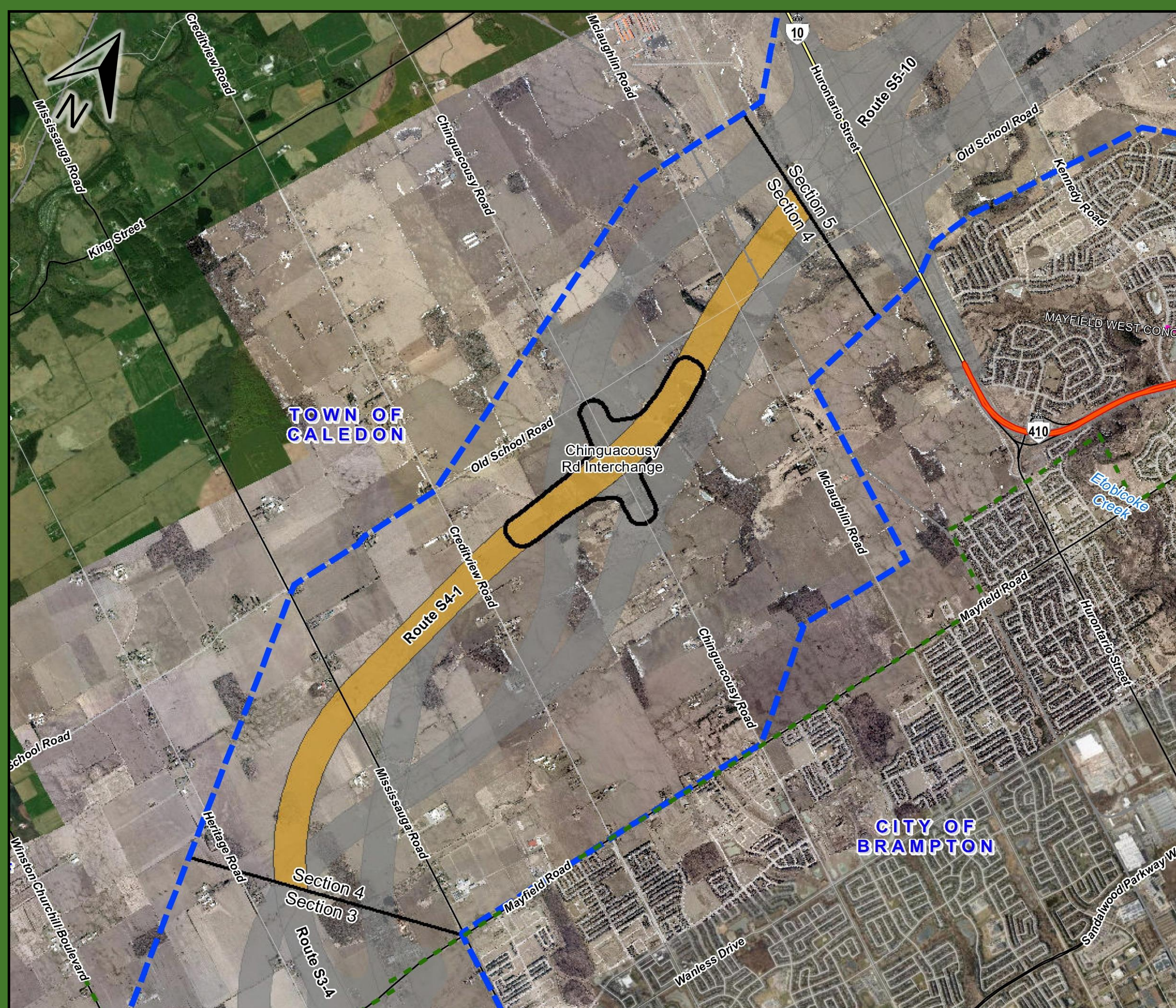
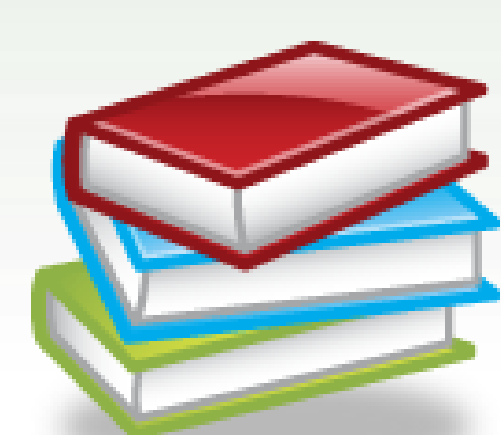


Section 4 Preferred Alternative: S4-1

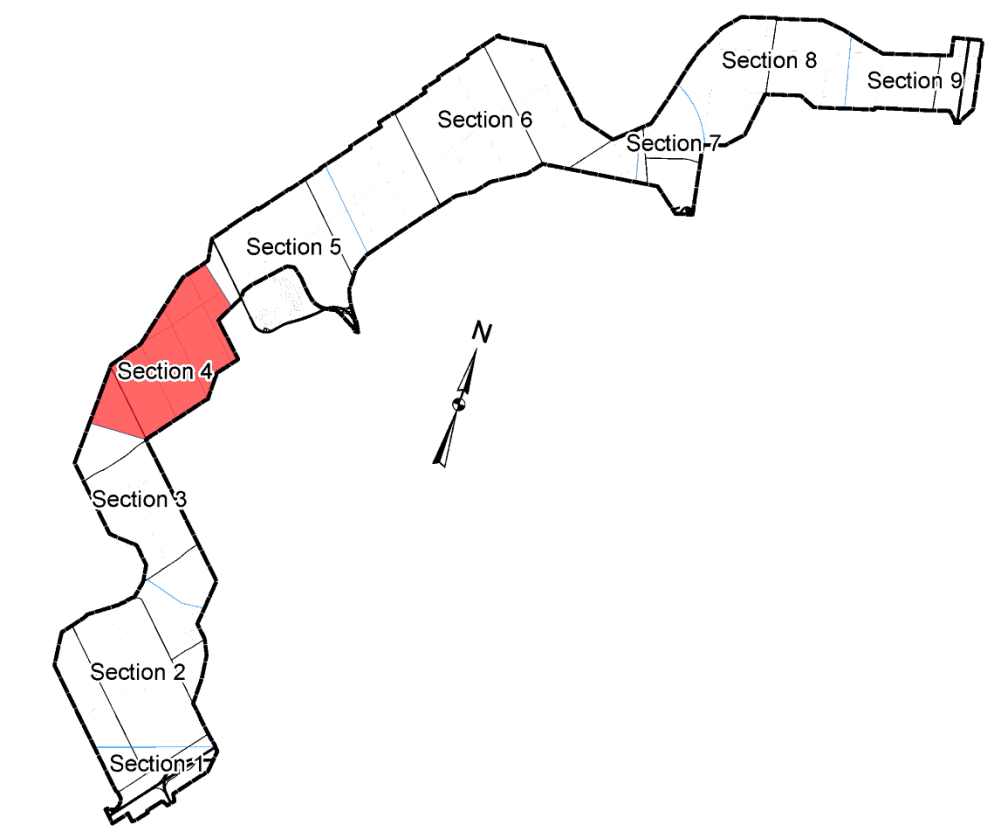


Alternative S4-1 is preferred from a Natural Environment, Land Use / Socio-Economic Environment, Cultural Environment and Transportation perspective:

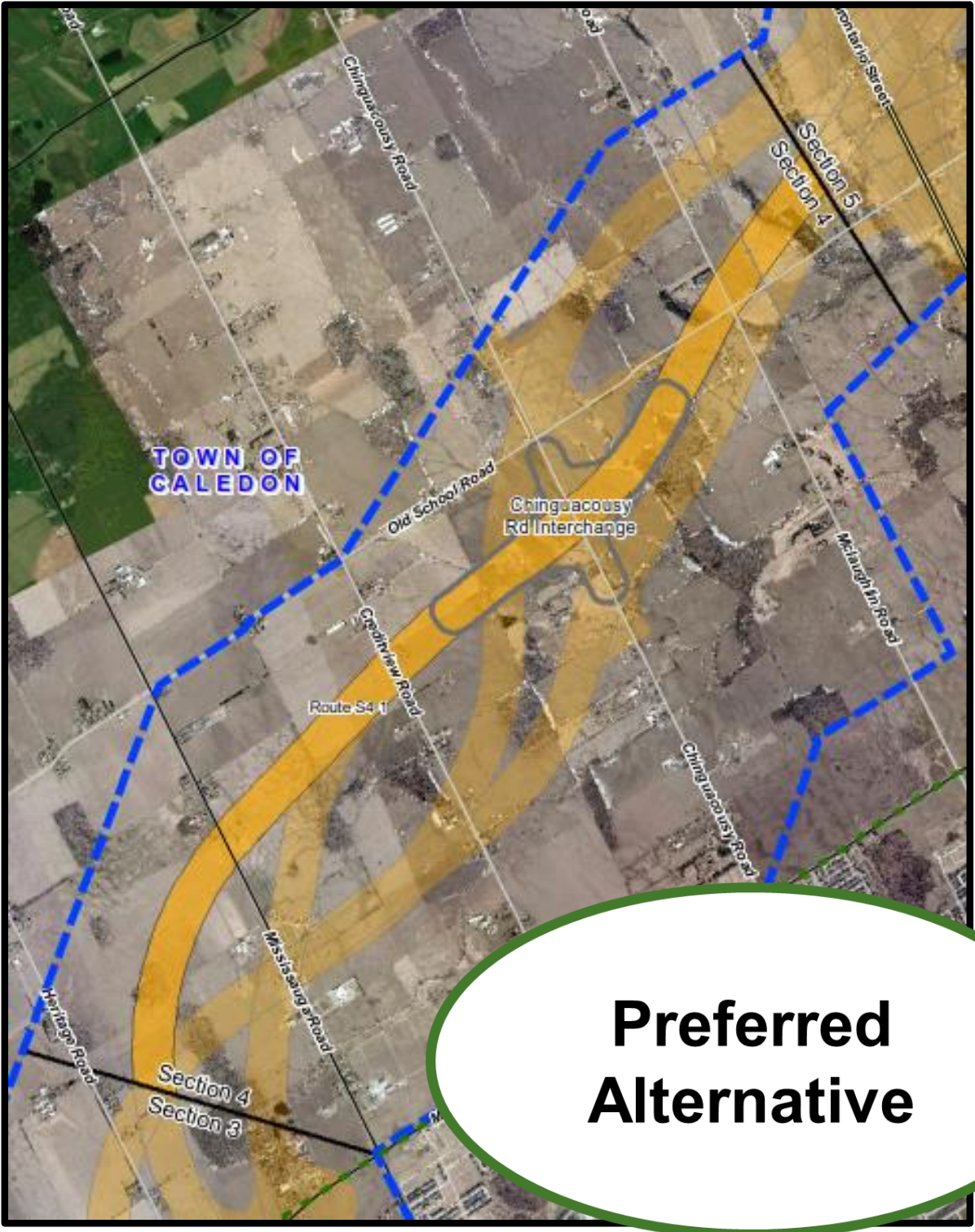



- Minimizes impacts to watersheds and sub-watersheds, wetlands, woodlands and designated areas (e.g. Greenbelt)
- Has the fewest residential impacts, in terms of both direct impacts and secondary noise impacts
- Most preferred from an agricultural perspective as it has the lowest overall impacts. This is significant given the rural context of Section 4
- Connects well with the preferred Section 3 alternative
- Has similar cost, traffic operations and level of constructability as the other well ranked alternatives

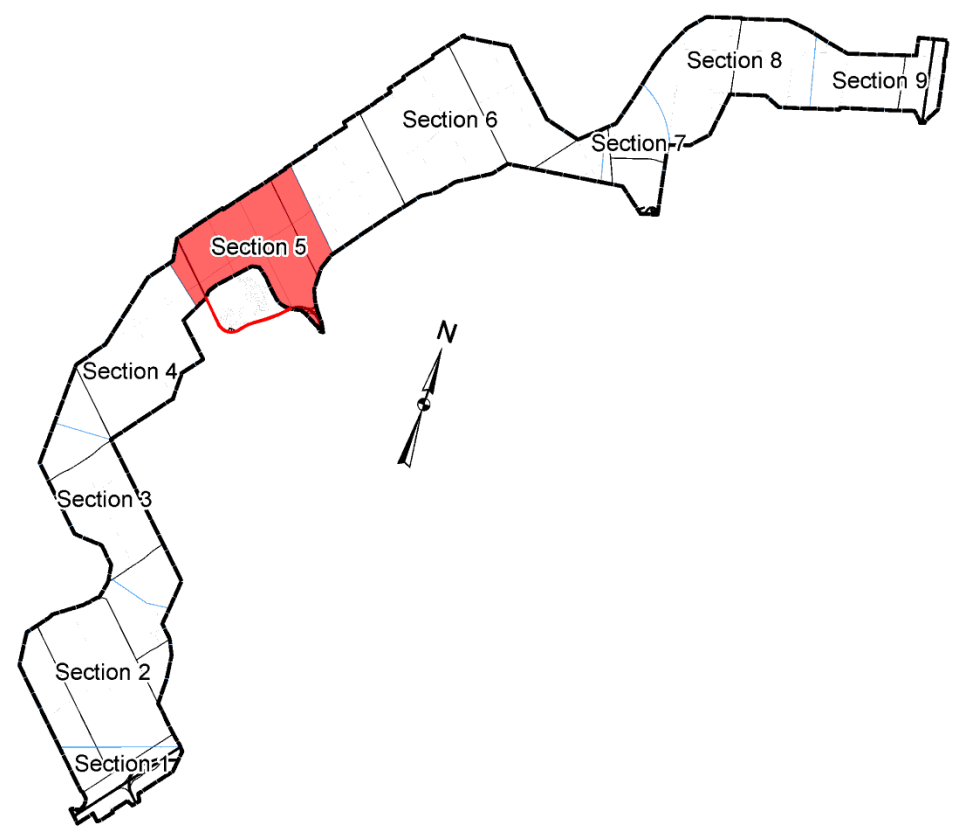


Visit the Reference Table to review the detailed Evaluation Tables

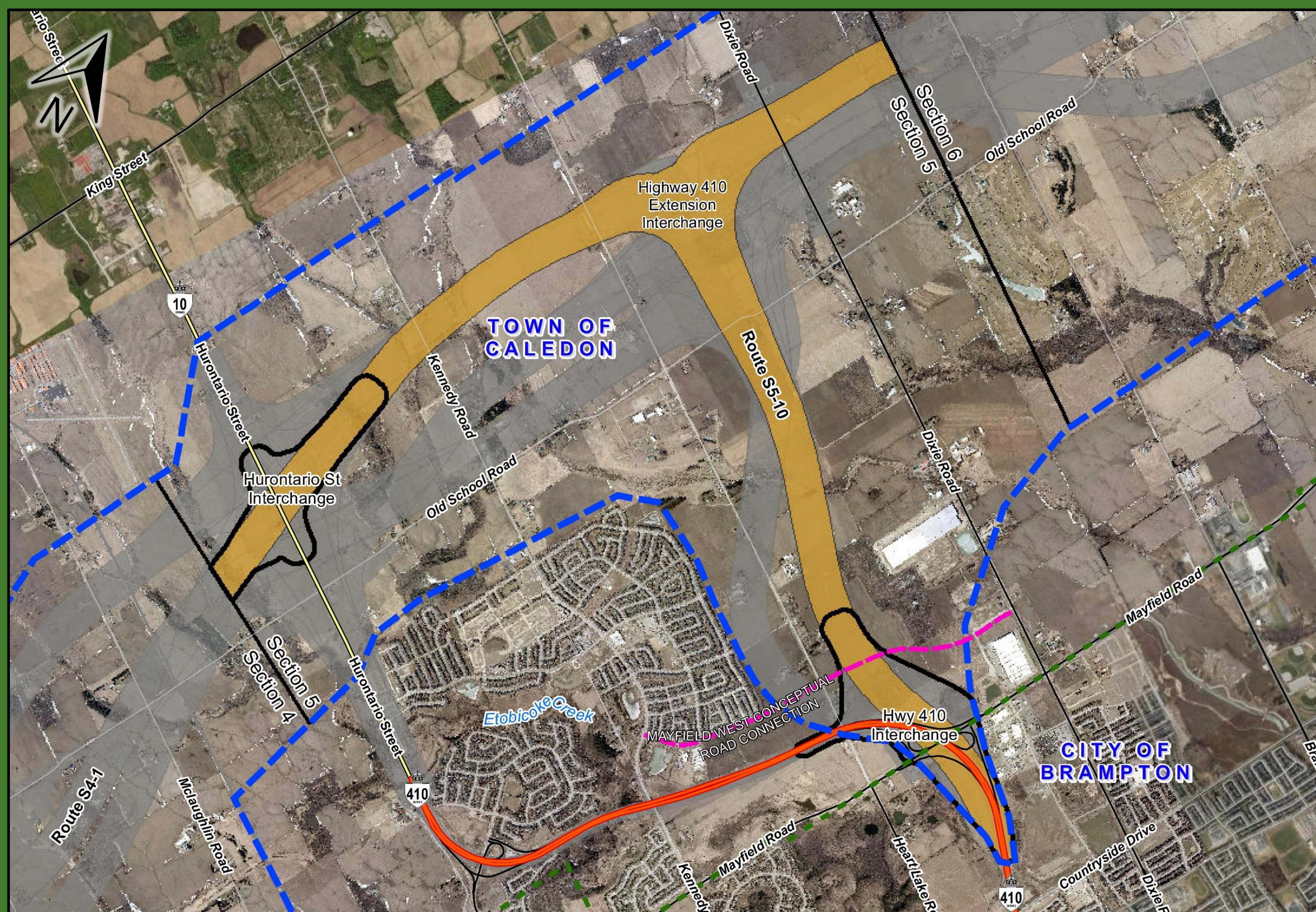


Section 4 Assessment and Evaluation

Alternative	Assessment
S4-1  Preferred Alternative	Natural Environment <ul style="list-style-type: none">Low to moderate impacts to fish and fish habitat, wildlife and wildlife habitat, wetlands, woodlands and vegetation, designated areas (e.g. Greenbelt), and watersheds Land Use / Socio-Economic Environment <ul style="list-style-type: none">Most preferred from an agricultural perspective as it impacts the fewest high-investment farming operations (impacts land only)Fewest residential impacts, in terms of both direct impacts and secondary noise impactsLeast impacts to contaminated properties Cultural Environment <ul style="list-style-type: none">Moderate impacts to built heritage resources and cultural heritage landscapes Transportation <ul style="list-style-type: none">S4-1 is tied with S4-3 and S4-4 as most preferred from a transportation perspective in all criteria
S4-2 	Natural Environment <ul style="list-style-type: none">Low to moderate impacts to fish and fish habitat, watersheds, and wildlife habitat and woodlands but results in high impacts to wetlands and designated areas Land Use / Socio-Economic Environment <ul style="list-style-type: none">Least preferred from an agricultural perspective as it impacts the largest area of Class 1-3 soils, livestock operations and high-investment farming operationsSimilar to S4-1 in terms of residential impacts but least preferred from a noise perspective Cultural Environment <ul style="list-style-type: none">High impacts to built heritage resources, cultural heritage landscapes and cemeteries Transportation <ul style="list-style-type: none">Least preferred from a transportation perspective due to less desirable geometry for road realignments and highest construction cost
S4-3 	Natural Environment <ul style="list-style-type: none">Least preferred from a fisheries perspective and moderate impacts to wetlands and designated areasHigh impact to wildlife and wildlife habitat, and woodlands and vegetation Land Use / Socio-Economic Environment <ul style="list-style-type: none">Not preferred from an agricultural perspective as it impacts a large number of high-investment farming operations and livestock operationsHighest residential impacts and least preferred from a noise perspective Cultural Environment <ul style="list-style-type: none">Moderate to high impacts to built heritage resources and cultural heritage landscapes Transportation <ul style="list-style-type: none">S4-3 is tied with S4-1 and S4-4 as most preferred from a transportation perspective in all criteria
S4-4 	Natural Environment <ul style="list-style-type: none">Low to moderate impacts to fish and fish habitat, wildlife habitat, wetlands, designated areas but results in high impacts to woodlands and vegetation Land Use / Socio-Economic Environment <ul style="list-style-type: none">Minimizes impacts to high-investment farming operations, but results in the greatest loss of agricultural buildingsModerate residential and noise impacts Cultural Environment <ul style="list-style-type: none">High impacts to built heritage resources and moderate impacts to cultural heritage landscapes Transportation <ul style="list-style-type: none">S4-4 is tied with S4-1 and S4-3 as most preferred from a transportation perspective in all criteria

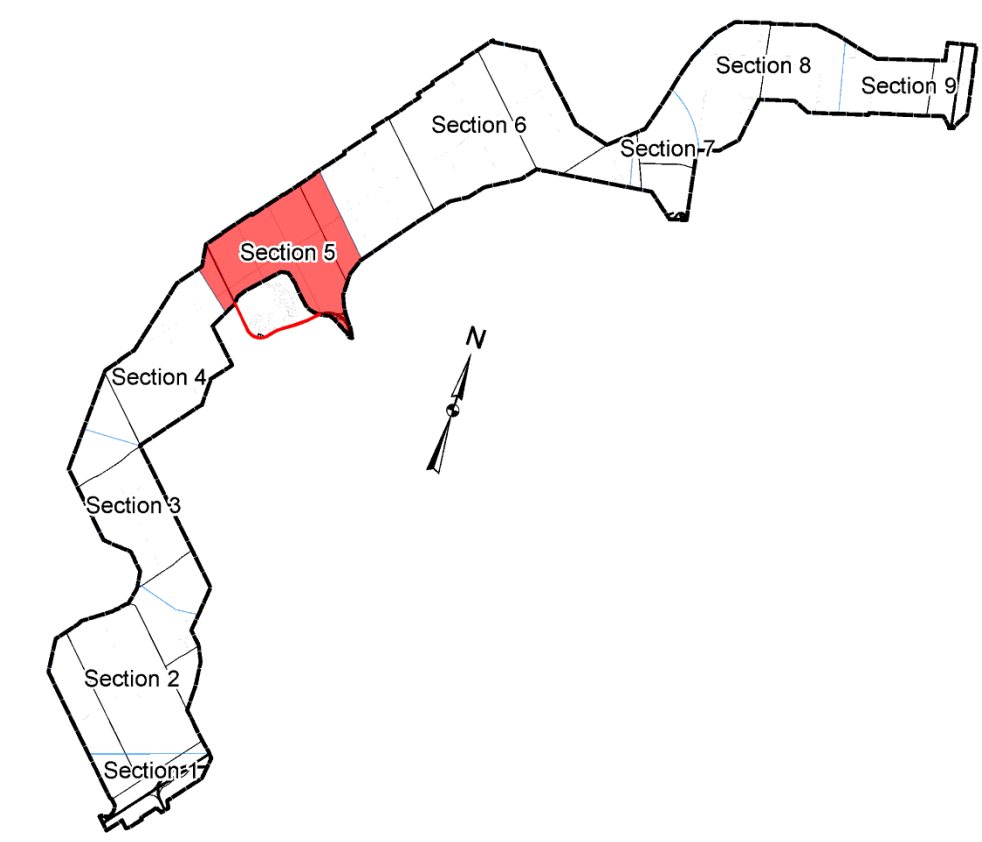


Section 5 Preferred Alternative: S5-10



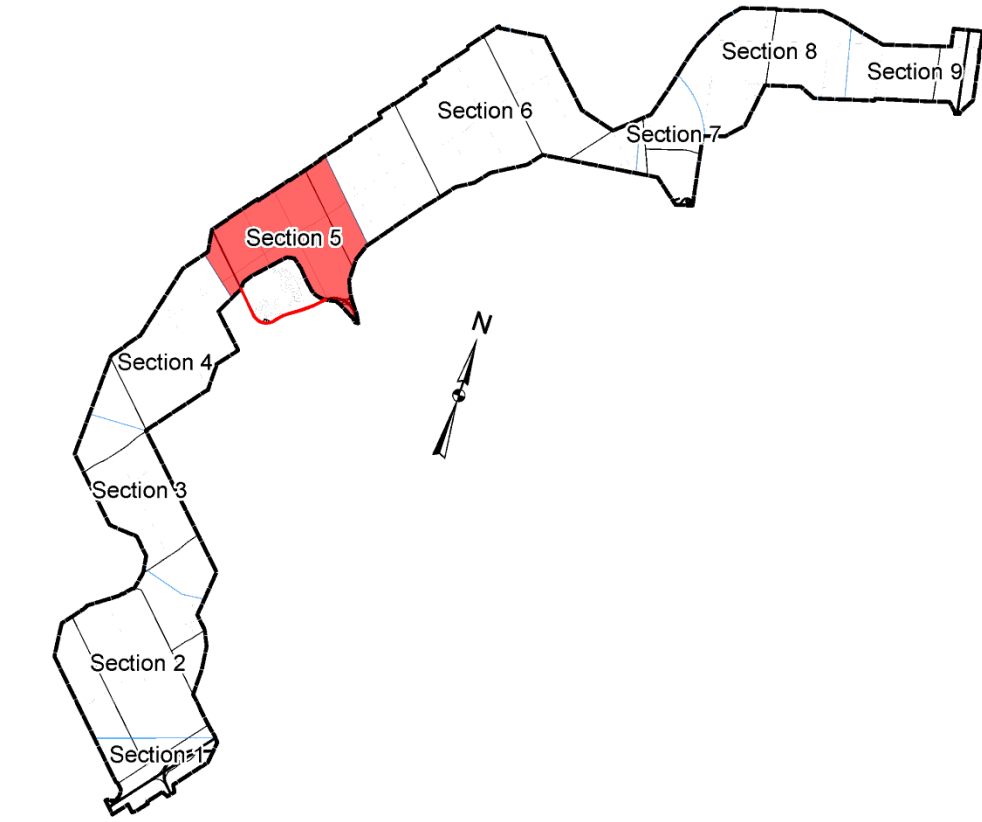
A new Highway 410 alignment was preferred over the existing Highway 10/410. A new alignment to the east was preferred over a new alignment to the west of Heart Lake Road. **Alternative S5-10** is preferred from a Land Use / Socio-Economic Environment and Transportation perspective:

- Minimizes impacts to fish and fish habitat, and wetlands. Potential for restoration/enhancement of the Campbells Cross Creek valley that could enhance local aquatic and terrestrial features
- Avoids impacts to large volume wells
- Avoids existing residential subdivisions in Valleywood (noise and air quality impacts) and minimizes direct residential impacts elsewhere
- Minimizes impacts to agricultural lands and operations (particularly the more long-term and permanent operations)
- Minimizes impacts to built heritage resources
- Avoids impacts to commercial and industrial properties
- Minimizes impacts to future urban development including the Mayfield West planned community and Mayfield West employment lands
- Less complex Highway 410/GTA West freeway-to-freeway interchange design since the connections to Hurontario Street are provided by a separate interchange rather than a combined Highway 410/GTA West/Hurontario Street interchange which is required if existing Highway 10/410 is utilized
- Better ability to implement a transitway in the new Highway 410 corridor compared to existing Highway 10/410
- Supports network compatibility and has a lower relative cost

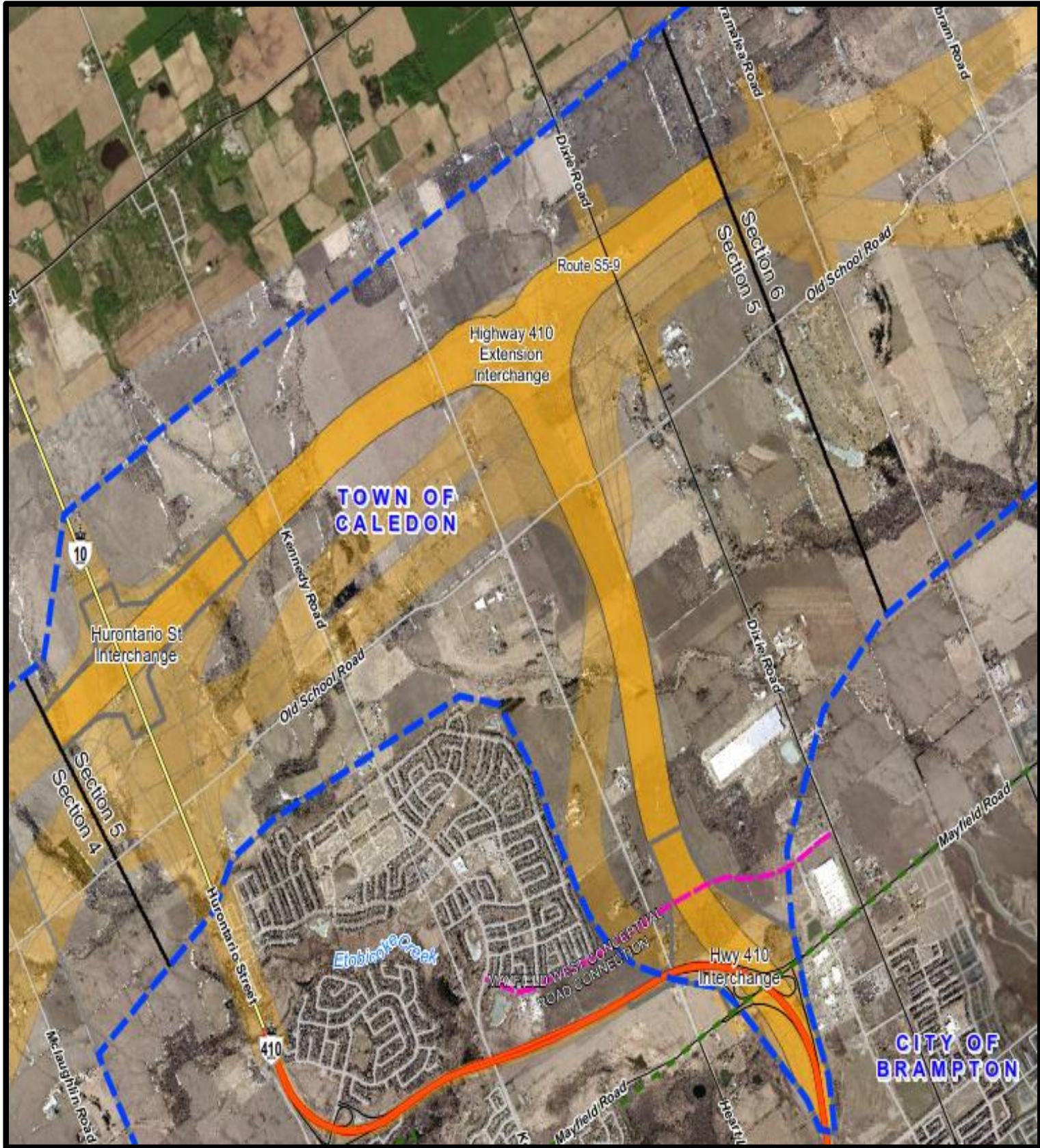
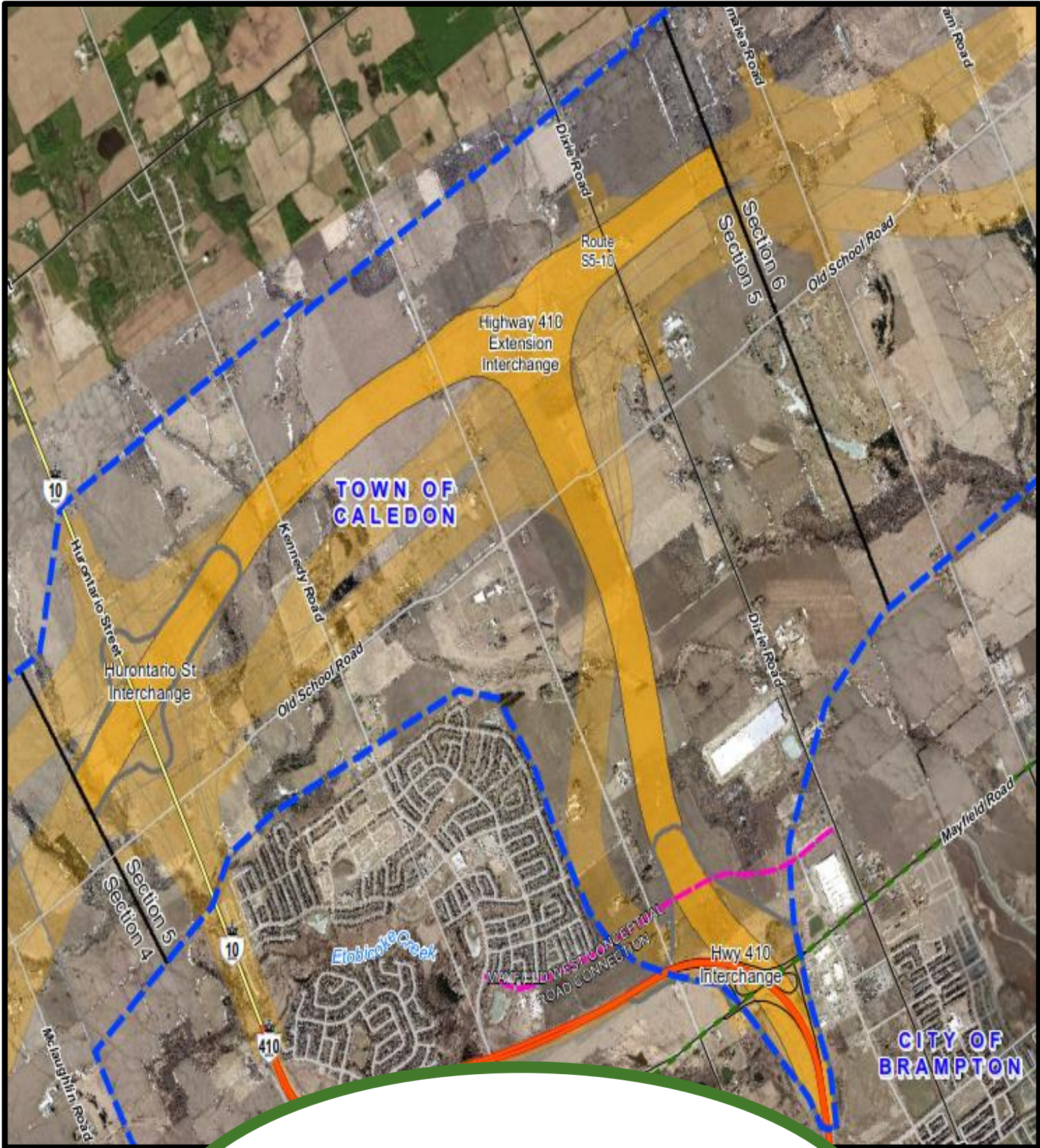
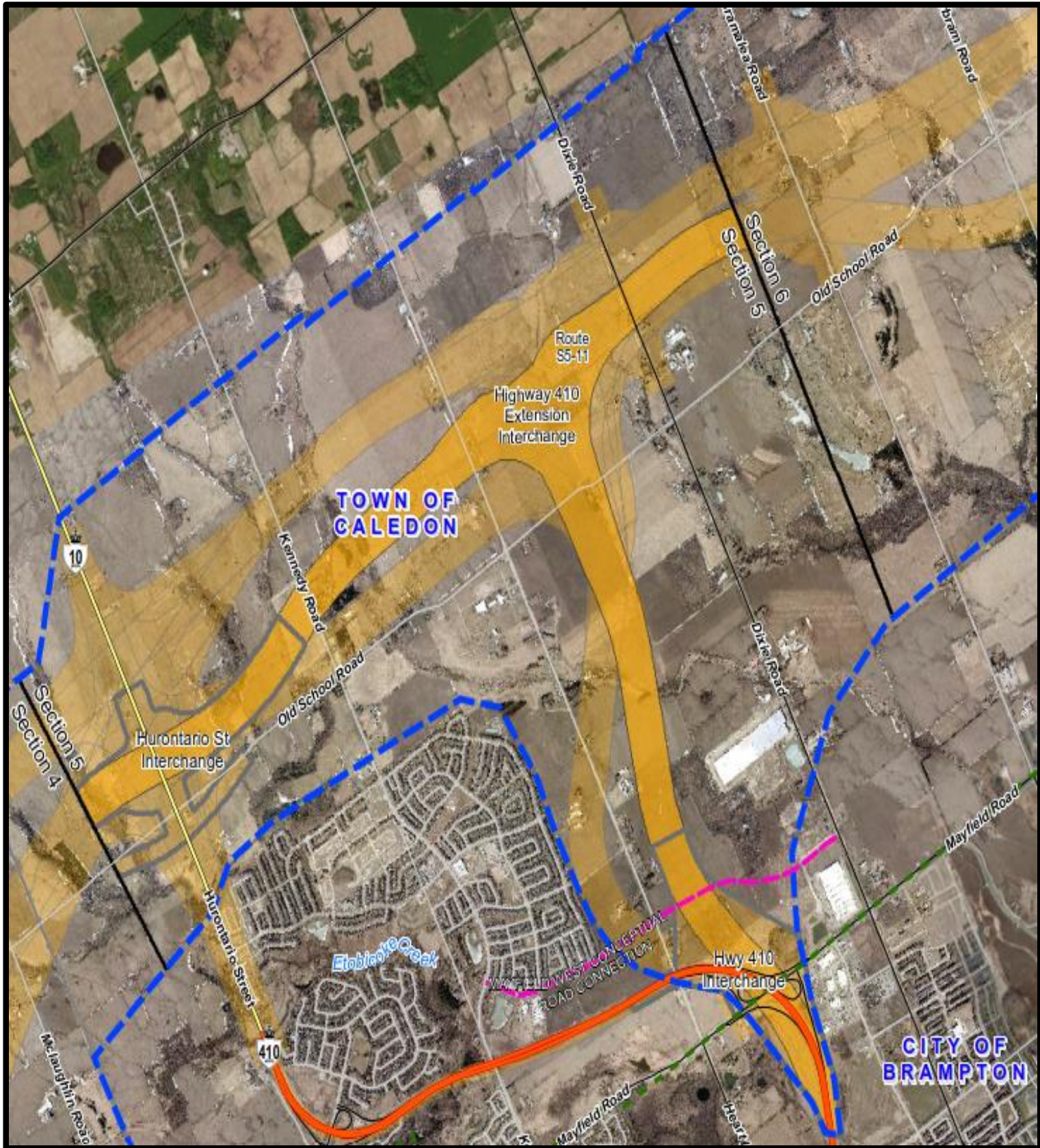
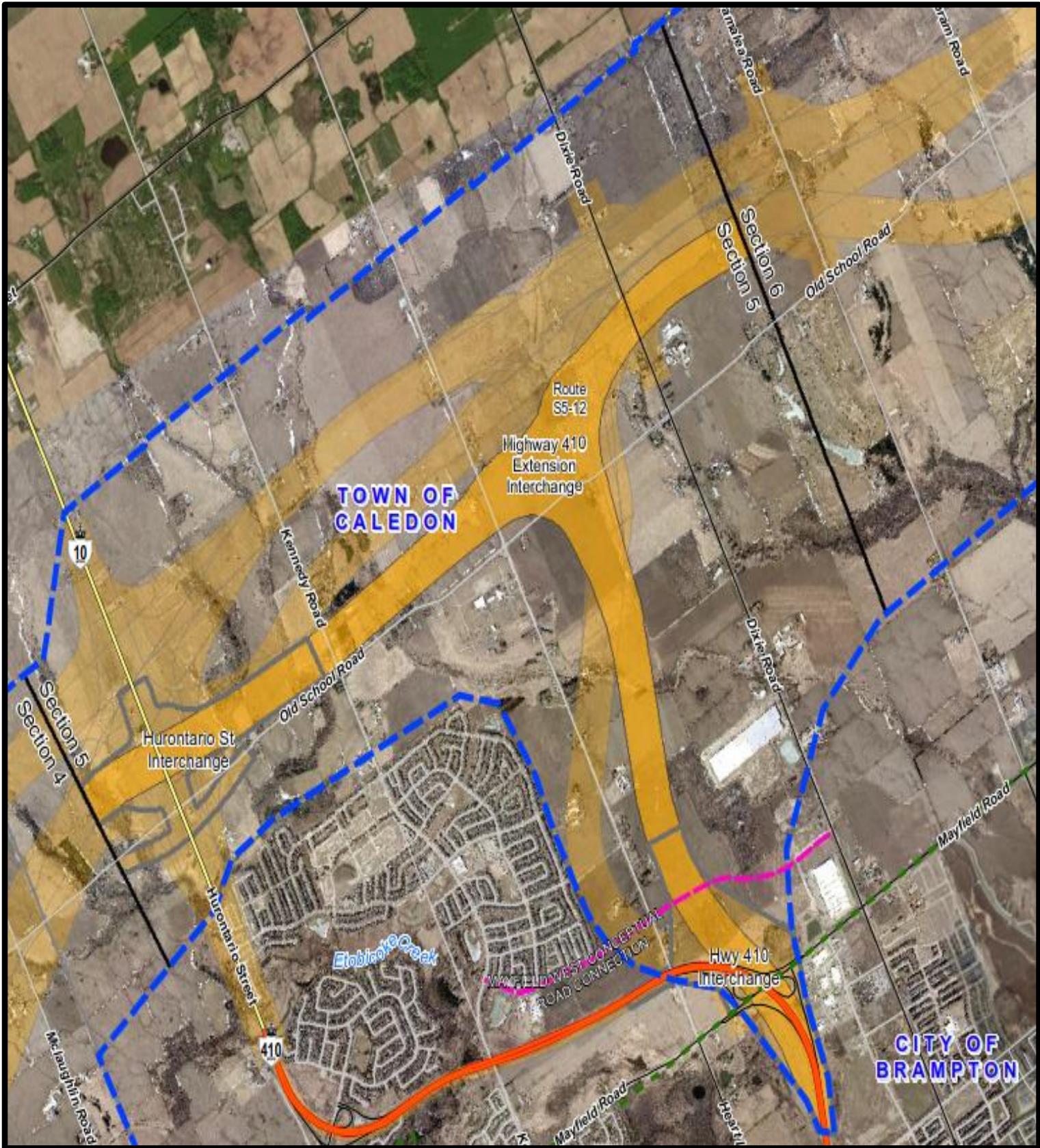


Section 5 Assessment and Evaluation

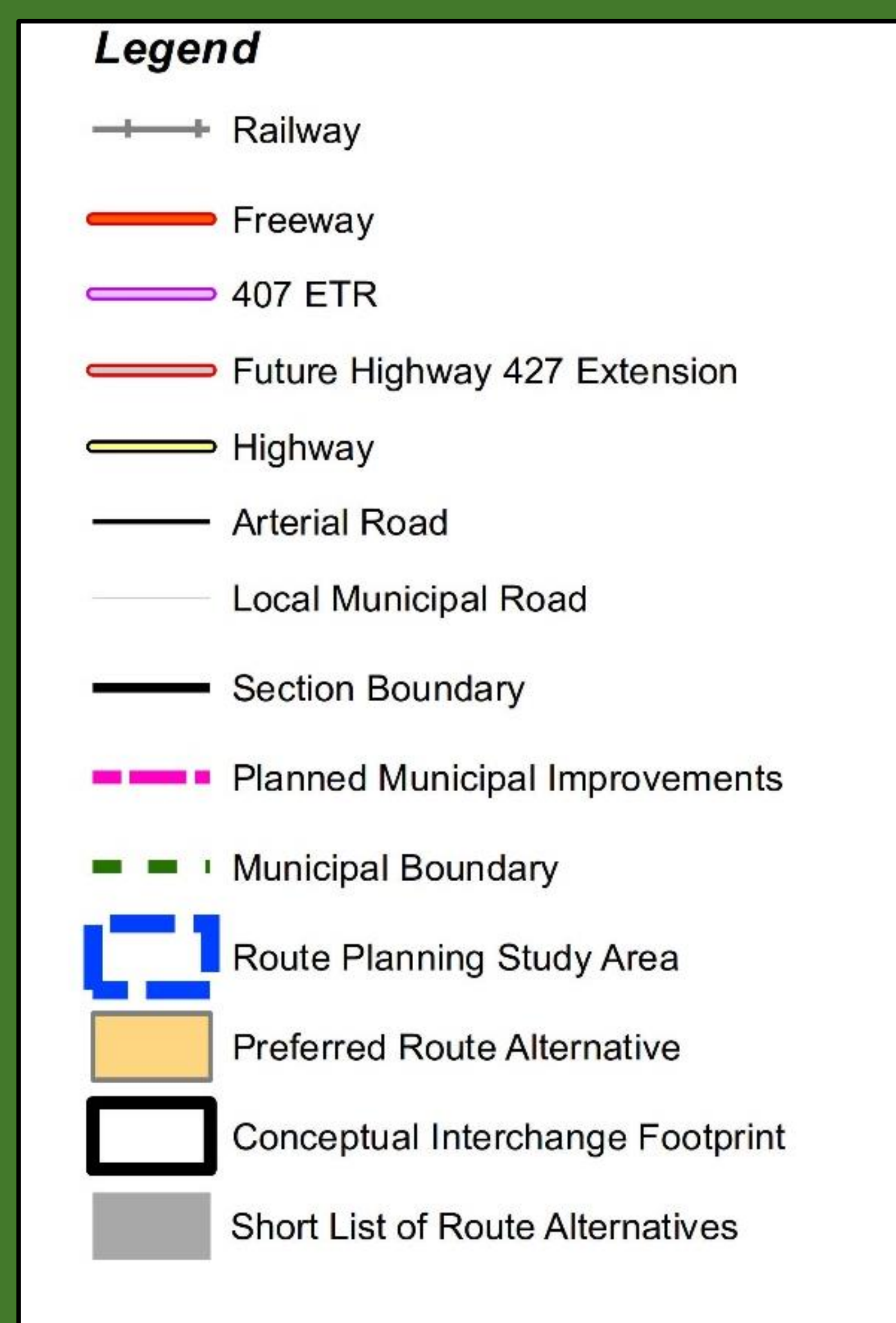
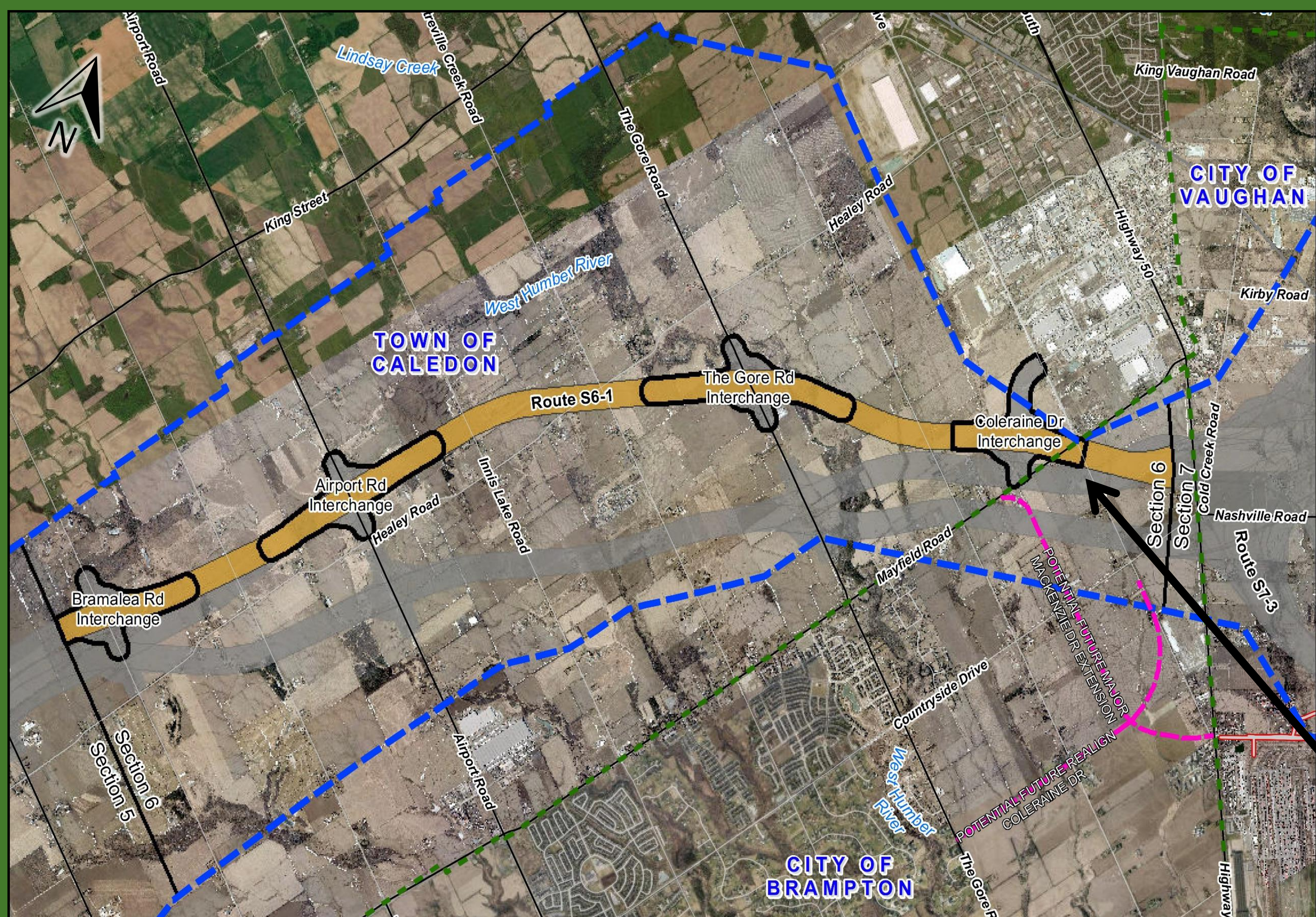
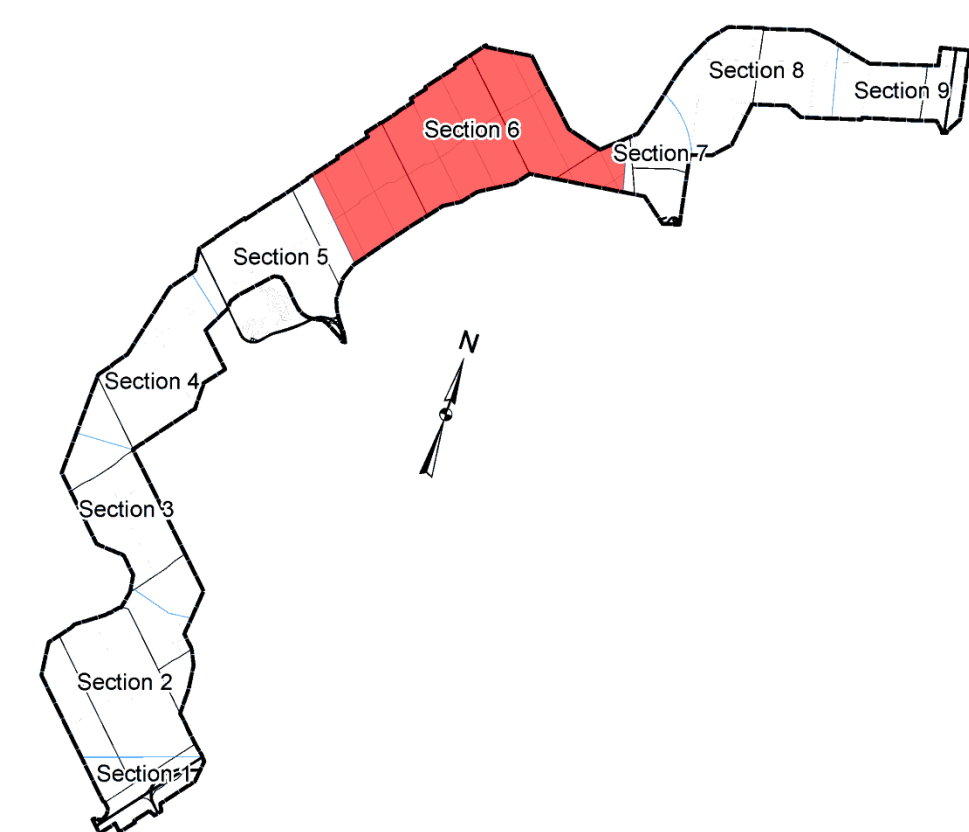
Existing Highway 410 Alternatives		Assessment
<div>S5-1</div> <div>S5-2</div> <div>S5-3</div> <div>S5-4</div>		<div>Natural Environment</div> <ul style="list-style-type: none"> Moderate to high impacts to fish and fish habitat, wildlife and wildlife habitat, wetlands, woodlands and vegetation, designated areas, surface water (particularly near the northern end of Highway 10/410) Low to moderate impacts to groundwater resources Greater air quality impacts to residences compared to S5-9 to S5-12 <div>Land Use / Socio-Economic Environment</div> <ul style="list-style-type: none"> S5-4 results in greater agricultural impacts than S5-1, S5-2 and S5-3 High impacts to provincial and municipal land use planning and residential properties <div>Cultural Environment</div> <ul style="list-style-type: none"> Moderate to high impacts to built heritage resources, and low to moderate impacts to cultural heritage landscapes and areas of archaeological potential <div>Transportation</div> <ul style="list-style-type: none"> More complex freeway-to-freeway interchange May require service roads adjacent to new Highway 410 corridor north of Valleywood Boulevard to provide access to adjacent lands Limited potential for future expansion in the existing Highway 410 corridor Moderate conformity to safety and design standards High construction costs
New Highway 410 Alignment Alternatives, west of Heart Lake Road		Assessment
<div>S5-5</div> <div>S5-6</div> <div>S5-7</div> <div>S5-8</div>		<div>Natural Environment</div> <ul style="list-style-type: none"> Low to moderate impacts to fish and fish habitat, wetlands, designated areas, groundwater and surface water S5-5 and S5-6 have the least impacts to wildlife and wildlife habitat S5-7 has high impacts to woodlands and vegetation Greater air quality impacts to residences compared to S5-9 to S5-12 <div>Land Use / Socio-Economic Environment</div> <ul style="list-style-type: none"> S5-8 results in greater agricultural impacts than S5-5, S5-6 and S5-7 S5-5 to S5-8 have greater direct and noise impacts to residences west of the Highway 410 extension compared to S5-9 to S5-12 Moderate to high impacts to provincial and municipal land use planning, moderate impacts to residential properties <div>Cultural Environment</div> <ul style="list-style-type: none"> Moderate to high impacts to built heritage resources, cultural heritage landscapes and archaeological resources <div>Transportation</div> <ul style="list-style-type: none"> High construction costs and double crossing of Heart Lake Road compared to S5-9 to S5-12



Section 5 Assessment and Evaluation

New Highway 410 Alignment Alternatives, east of Heart Lake Road		Assessment
<div> <div>S5-9</div>  </div> <div> <div>S5-10</div>  <div>Preferred Alternative</div> </div>		<div> Natural Environment <ul style="list-style-type: none"> Low to moderate impacts to fish and fish habitat, designated areas, wetlands, woodlands and vegetation, groundwater and surface water, except S5-10 has no large volume well impacts S5-9, S5-10 and S-12 have low to moderate impacts on wildlife and wildlife habitat whereas S5-11 has high impacts S5-9 to S5-12 have lower air quality impacts to residences compared to S5-1 to S5-8 </div> <div> Land Use / Socio-Economic Environment <ul style="list-style-type: none"> S5-12 results in greater agricultural impacts than S5-9 to S5-11 S5-12 has moderate impacts to contaminated properties S5-10 avoids impacts to commercial / industrial properties S5-5 to S5-12 avoid impacts to community facilities / institutions S5-9 to S5-12 are preferred over S5-5 to S5-8 as they impact the fewest residential properties and have the lowest noise impacts to residences west of the Highway 410 extension Low to moderate impacts to provincial and municipal land use planning, and development. Although S5-10 impacts a portion of Mayfield West Industrial Park, there is potential to reduce impacts through refinement near Heart Lake Road between Mayfield Road and Old School Road </div> <div> Cultural Environment <ul style="list-style-type: none"> S5-9 to S5-11 have low to moderate impacts to built heritage resources and cultural heritage landscapes Moderate impacts to archaeological resources </div> <div> Transportation <ul style="list-style-type: none"> S5-9 to S5-12 are preferred compared to S5-5 to S5-8 as they do not involve a double crossing of Heart Lake Road Lowest construction costs From a Transportation perspective, Alternatives S5-9 to S5-12 are relatively similar </div>
<div> <div>S5-11</div>  </div> <div> <div>S5-12</div>  </div>		

Section 6 Preferred Alternative: S6-1



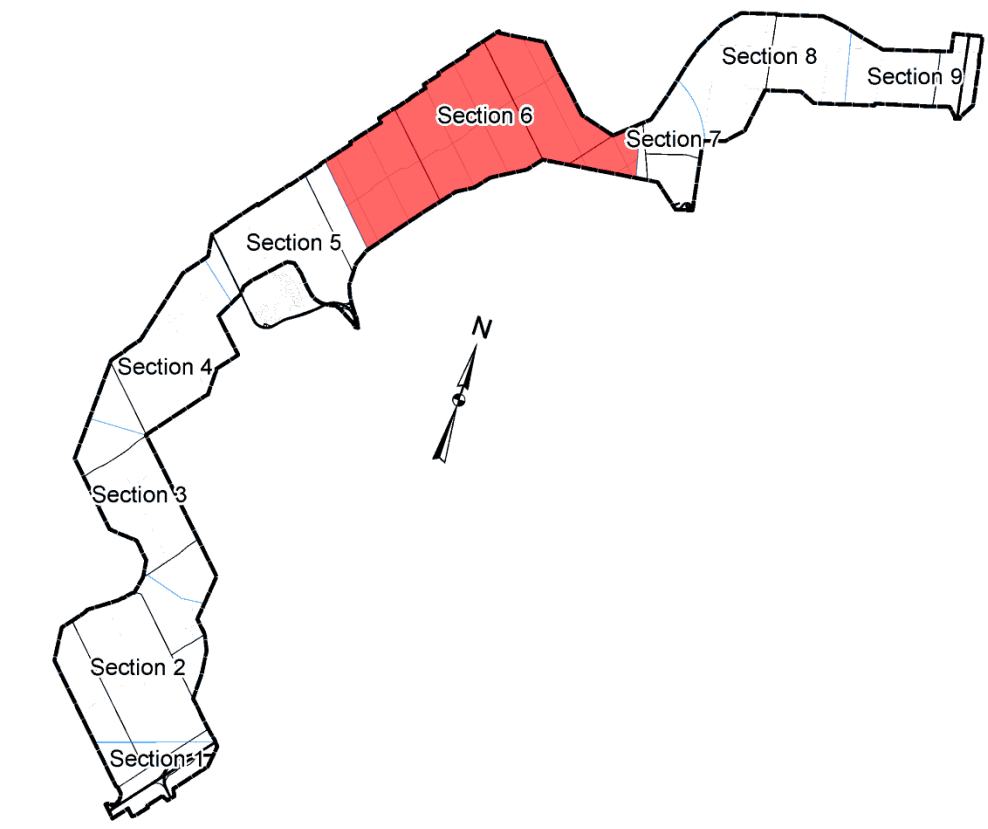
May require some of the interchange footprint and/or modifications to the local road network to extend beyond the limits of the Route Planning Study Area in order to accommodate a standard Parclo A-4 interchange

Alternative S6-1 is preferred from a Natural Environment, Land Use / Socio-Economic Environment and Transportation perspective:


- Least impact to fish and fish habitat, and minimizes impacts to wildlife and wildlife habitat, and wetlands
- Impacts the fewest residential properties and private wells
- Low impacts to commercial/industrial properties and future development
- Avoids impacts to high-investment farming operations, as does S6-4
- Accommodates a full moves interchange in the area of Coleraine Drive (realignment likely required to achieve an acceptable separation distance to the Highway 427 extension)
- Has a moderate relative cost to the other well ranked transportation alternative (S6-4)
- Connects well to the preferred Section 5 alternative (S5-10)



Visit the Reference Table to review the detailed Evaluation Tables



Section 6 Assessment and Evaluation

Alternative	Assessment
<div>S6-1</div> 	<div>Natural Environment</div> <ul style="list-style-type: none"> Least impact to fish and fish habitat, minimizes impacts to wildlife and wildlife habitat, and wetlands. Habitat is generally less diverse/lower quality than the southerly alternatives <div>Land Use / Socio-Economic Environment</div> <ul style="list-style-type: none"> Impacts the fewest number of residential properties Similar commercial/industrial properties impacts as S6-4 Preferred from an agricultural perspective as it avoids high-investment farming operations Minimizes impacts to future development <div>Cultural Environment</div> <ul style="list-style-type: none"> Moderate to high impacts to built heritage, archaeological resources, and cultural heritage landscapes <div>Transportation</div> <ul style="list-style-type: none"> Moderate construction cost
<div>S6-2</div> 	<div>Natural Environment</div> <ul style="list-style-type: none"> Moderate to high impacts to fish and fish habitat, high impacts to wildlife and wildlife habitat, wetlands, and woodlands and vegetation <div>Land Use / Socio Economic Environment</div> <ul style="list-style-type: none"> High impacts to residential properties and has the most impacts to commercial/industrial properties Impacts high-investment farming operations and moderate impacts to future development <div>Cultural Environment</div> <ul style="list-style-type: none"> Moderate impacts to built heritage resources and cultural heritage landscapes, low impacts to archaeological resources <div>Transportation</div> <ul style="list-style-type: none"> Lowest construction cost
<div>S6-3</div> 	<div>Natural Environment</div> <ul style="list-style-type: none"> Moderate to high impacts to fish and fish habitat, high impacts to wildlife and wildlife habitat, and wetlands Shortest corridor length contributing to reduced regional emissions <div>Land Use / Socio Economic Environment</div> <ul style="list-style-type: none"> Impacts the greatest number of residential and commercial/industrial properties Impacts high-investment farming operations and has the largest impact to future development <div>Cultural Environment</div> <ul style="list-style-type: none"> High impacts to built heritage resources, no impacts to cultural heritage landscapes, low impacts to archaeological resources <div>Transportation</div> <ul style="list-style-type: none"> Highest construction cost
<div>S6-4</div> 	<div>Natural Environment</div> <ul style="list-style-type: none"> Moderate impacts to fish and fish habitat Least impact to wildlife and wildlife habitat, and wetlands, with moderate impacts to woodlands and vegetation <div>Land Use / Socio-Economic Environment</div> <ul style="list-style-type: none"> Similar commercial/industrial properties impacts as S6-1 Impacts the second lowest number of residential properties, and minimizes impacts to future development Preferred from an agricultural perspective as it avoids high-investment farming operations <div>Cultural Environment</div> <ul style="list-style-type: none"> High impacts to built heritage resources and cultural heritage landscapes, moderate impacts to archaeological resources <div>Transportation</div> <ul style="list-style-type: none"> Moderate construction cost