








Virtual Public Information Centre No. 2

Municipal Class Environmental Assessment Study for Road Improvements near Derry Road East and Alstep Drive: Alternative Design Evaluation Summaries
































Alternative Designs for Alstep Drive & Bramalea Road

Evaluation Criteria		Alternative 1: Extend Alstep Drive to Bramalea Road, with 2-lane unsignalized intersection at Bramalea Road		Alternative 2: Extend Alstep Drive to Bramalea Road, with 2-lane signalized intersection at Bramalea Road		Alternative 3: Extend Alstep Drive to Bramalea Road, with 3-lane signalized intersection at Bramalea Road
 Planning and Transportation Summary	○	Alternative 1 is least preferred because it provides the least improvement to traffic operations along Bramalea Road and limited traffic safety improvements.	○	Alternative 2 is moderately preferred because it improves traffic operations along Bramalea Road and traffic safety compared to Alternative 1, but less than Alternative 3.	●	Alternative 3 is preferred because it provides the greatest traffic operations performance along Bramalea Road and optimizes safety through the use of a traffic signal.
 Healthy Community Summary	○	All three alternatives generally have similar impacts from a Healthy Community perspective. However, Alternative 1 is slightly less preferred because a pedestrian crossing for Bramalea Road by Alstep Drive is not provided.	●	All three alternatives generally have similar impacts from a Healthy Community perspective. However, Alternatives 2 and 3 are most preferred because they provide a pedestrian crossing across Bramalea Road by Alstep Drive.	●	All three alternatives generally have similar impacts from a Healthy Community perspective. However, Alternatives 2 and 3 are most preferred because they provide a pedestrian crossing across Bramalea Road by Alstep Drive.
 Natural Environment Summary	●	All three alternatives are equally preferred from a Natural Environment perspective.	●	All three alternatives are equally preferred from a Natural Environment perspective.	●	All three alternatives are equally preferred from a Natural Environment perspective.
 Socio-Economic Environment Summary	●	All three alternatives are equally preferred from a Socio-Economic Environment perspective.	●	All three alternatives are equally preferred from a Socio-Economic Environment perspective.	●	All three alternatives are equally preferred from a Socio-Economic Environment perspective.
 Cultural Environment Summary	●	All three alternatives are equally preferred from a Cultural Environment perspective.	●	All three alternatives are equally preferred from a Cultural Environment perspective.	●	All three alternatives are equally preferred from a Cultural Environment perspective.
 Technical Summary	●	Alternative 1 is preferred from a technical perspective, as the lack of a traffic signal installation improves the ease of construction.	○	Alternatives 2 and 3 are equally less preferred than Alternative 1 due to the traffic signal's increased construction complexity.	○	Alternatives 2 and 3 are equally less preferred than Alternative 1 due to the traffic signal's increased construction complexity.
 Cost Summary	●	Alternative 1 is preferred from a cost perspective, as it will have lower capital and maintenance costs due to a lack of traffic signals.	○	Alternatives 2 and 3 are similarly less preferred compared to Alternative 1 from a cost perspective, as the installation of traffic signals will result in higher capital and maintenance costs.	○	Alternatives 2 and 3 are similarly less preferred compared to Alternative 1 from a cost perspective, as the installation of traffic signals will result in higher capital and maintenance costs.
Overall Summary	○	<p>Alternative 1 is least preferred because it provides the least improvements of traffic operations and traffic safety compared to Alternatives 2 and 3.</p> <p>While Alternative 1 does have the least construction complexity and lower capital and maintenance costs compared to Alternatives 2 and 3, they are not to the extent that they outweigh optimized traffic operations and safety.</p>	○	<p>Alternative 2 is moderately preferred because it provides greatest improvements to traffic operations and traffic safety compared to Alternative 1, but less than Alternative 3.</p> <p>While Alternative 2 does have some increased construction complexity and capital and maintenance costs compared to Alternative 1, these are not to the extent that they outweigh the improvements to traffic operations and safety.</p> <p>Alternative 2 has similar construction complexity and capital and maintenance costs compared to Alternative 3, but it does not improve traffic operations and traffic safety to the same extent.</p>	●	<p>Alternative 3 is most preferred because it will provide the greatest improvements to traffic operations and traffic safety compared to Alternatives 1 and 2.</p> <p>While Alternative 3 does have some increased construction complexity and capital and maintenance costs compared to Alternative 1, these are not to the extent that they outweigh the improvements to traffic operations and safety.</p>

Virtual Public Information Centre No. 2

Municipal Class Environmental Assessment Study for Road Improvements near Derry Road East and Alstep Drive: Alternative Design Evaluation Summaries




































Alternative Designs for Derry Road East & Menkes Drive/Telford Way

Evaluation Criteria		Alternative 1: Extend paved surface of Menkes Drive to the east		Alternative 2: Extend paved surface of Menkes Drive on both sides		Alternative 3: Extend paved surface of Menkes Drive to the west
 Planning and Transportation Summary		All three alternatives are equally preferred from a Planning and Transportation perspective.		All three alternatives are equally preferred from a Planning and Transportation perspective.		All three alternatives are equally preferred from a Planning and Transportation perspective.
 Healthy Community Summary		All three alternatives have similar impacts with respect to the healthy community criteria. However, Alternatives 1 and 3 provide a greater increase to the crossing distance across Menkes Drive compared to Alternative 2.		All three alternatives have similar impacts with respect to the healthy community criteria. However, while Alternative 2 has a slightly greater increase in crossing distance compared to Alternative 3, Alternative 2 provides greater flexibility for road and boulevard adjustment due to extension of the pave on either side of the street.		All three alternatives have similar impacts with respect to the healthy community criteria. However, Alternatives 1 and 3 provide a greater increase to the crossing distance across Menkes Drive compared to Alternative 2. It also does not provide the same flexibility for road and boulevard adjustment that Alternative 2 does.
 Natural Environment Summary		In general, there is little difference in environmental impacts between the three alternatives. However, Alternatives 1 and 3 do not provide the same opportunity for the conservation of existing boulevard trees as Alternative 2.		In general, there is little difference in environmental impacts between the three alternatives. However, Alternative 2 provides greater opportunity for the conservation of existing boulevard trees than Alternatives 1 and 3.		In general, there is little difference in environmental impacts between the three alternatives. However, Alternatives 1 and 3 do not provide the same opportunity for the conservation of existing boulevard trees as Alternative 2.
 Socio-Economic Summary		Alternative 1 is less preferred than Alternative 2 because Alternative 1 provides less flexibility for streetscaping opportunities along Menkes Drive.		Alternative 2 is preferred because it provides greater flexibility for streetscaping opportunities on either side of Menkes Drive. While there are potentially some additional property requirements for the sidewalk, this is negligible, given that property will also be required for the upgraded MUP. Further, the requirement for property for the sidewalk could potentially be minimized during detailed design.		Alternative 3 is less preferred than Alternative 2 because Alternative 1 provides less flexibility for streetscaping opportunities along Menkes Drive.
 Cultural Environment Summary		All three alternatives are equally preferred from a Cultural Environment perspective.		All three alternatives are equally preferred from a Cultural Environment perspective.		All three alternatives are equally preferred from a Cultural Environment perspective.
 Technical Summary		Alternative 1 has adequate construction feasibility, but lacks the flexibility to optimize constructability and minimize impacts to utilities that Alternative 2 provides.		Alternative 2 is feasible for construction, and allowing expansion of the paved surface on either side provides a flexibility to optimize constructability and minimize impacts to utilities that the other alternatives lack.		Alternative 3 has the least construction feasibility due to construction impacts along Derry Road and potential impacts to the hydro pole on the south west traffic island.
 Cost Summary		Alternative 1 is most preferred with respect to the Cost category due to the lower capital and property costs.		Alternative 2 is less preferred with respect to the Cost category, as its capital and property costs are anticipated to be slightly more than Alternative 1.		Alternative 3 is least preferred with respect to the Cost category, as it would have the highest capital and property costs.
Overall Summary		Alternative 1 is less preferred to Alternative 2 because it lacks the design flexibility of Alternative 2. While Alternative 1 likely has a lower capital and property cost than Alternative 2, this amount is likely not substantial and does not offset the advantages of Alternative 2.		While Alternative 2 may have slightly more capital and property costs than Alternative 1, it is most preferred because extending the pavement on both sides on Menkes Drive provides increased flexibility in the redesign of the street. This flexibility provides the opportunity to minimize potential impacts along Menkes Drive to sidewalk separation from the roadway, boulevard trees along the street, and utilities. It also provides flexibility with respect to streetscaping opportunities.		Alternative 3 is least preferred due to its potential impacts on major utilities and associated costs.

Virtual Public Information Centre No. 2





Municipal Class Environmental Assessment Study for Road Improvements near Derry Road East and Alstep Drive: Alternative Design Evaluation Summaries

Alternative Designs for Derry Road East & Bramalea Road

Evaluation Criteria		Alternative 1: Extend paved surface of Bramalea Road to the east and on Derry Road to the north		Alternative 2: Extend paved surface of Bramalea Road to the west and on Derry Road to the north		Alternative 3: Extend paved surface of Bramalea Road on both sides and on Derry Road to the north		Alternative 4: Modify intersection using a hybrid approach
 Planning and Transportation Summary		Alternatives 1, 2 and 3 are less preferred than Alternative 4, primarily due to the improved safety conditions with Alternative 4.		Alternatives 1, 2 and 3 are less preferred than Alternative 4, primarily due to the improved safety conditions with Alternative 4.		Alternatives 1, 2 and 3 are less preferred than Alternative 4, primarily due to the improved safety conditions with Alternative 4.		Alternative 4 is preferred because it improves traffic safety compared to the other alternatives.
 Healthy Community Summary		All four alternatives generally have similar impacts from a Healthy Community perspective. However, Alternatives 1 and 3 are slightly more preferred because they add roughly 1 metre less to the north side crossing of Bramalea Road compared to Alternatives 2 and 4.		All four alternatives generally have similar impacts from a Healthy Community perspective. However, Alternatives 2 and 4 are slightly less preferred because they add roughly 1 metre more to the north side crossing of Bramalea Road compared to Alternatives 1 and 3.		All four alternatives generally have similar impacts from a Healthy Community perspective. However, Alternatives 1 and 3 are slightly more preferred because they add roughly 1 metre less to the north side crossing of Bramalea Road compared to Alternatives 2 and 4.		All four alternatives generally have similar impacts from a Healthy Community perspective. However, Alternatives 2 and 4 are slightly less preferred because they add roughly 1 metre more to the north side crossing of Bramalea Road compared to Alternatives 1 and 3.
 Natural Environment Summary		All four alternatives will similarly have minimal impacts to the natural environment.		All four alternatives will similarly have minimal impacts to the natural environment.		All four alternatives will similarly have minimal impacts to the natural environment.		All four alternatives will similarly have minimal impacts to the natural environment.
 Socio-Economic Summary		All four alternatives generally have similar impacts from a Socio-Economic perspective. However, Alternatives 1 and 4 are most preferred because they allow for sidewalks with the least amount of encroachment on private property.		All four alternatives generally have similar impacts from a Socio-Economic perspective. However, Alternative 2 is least preferred because it requires the most encroachment on private property to provide a sidewalk on the west side of Bramalea Road south of Derry Road.		All four alternatives generally have similar impacts from a Socio-Economic perspective. However, Alternative 3 is less preferred because it requires some encroachment on private property to provide a sidewalk on the west side of Bramalea Road south of Derry Road.		All four alternatives generally have similar impacts from a Socio-Economic perspective. However, Alternatives 1 and 4 are most preferred because they allow for sidewalks with the least amount of encroachment on private property.
 Cultural Environment Summary		All four alternatives are equally preferred from a Cultural Environment perspective.		All four alternatives are equally preferred from a Cultural Environment perspective.		All four alternatives are equally preferred from a Cultural Environment perspective.		All four alternatives are equally preferred from a Cultural Environment perspective.
 Technical Summary		Alternative 1 is less preferred from a technical perspective because it would have less impact on existing public and private utility infrastructure than Alternatives 2 and 3, but more than Alternative 4.		Alternative 2 is not preferred due to its significant impacts on existing public and private utility infrastructure.		Alternative 3 is not preferred due to its significant impacts on existing public and private utility infrastructure.		Alternative 4 is preferred from a technical perspective because it would have the least impact on existing public and private utility infrastructure.
 Cost Summary <i>{note: It is anticipated that the relocation of utilities will be the main cost driver for all four alternatives.</i>		As Alternative 1 has the second least impact on existing public and private utility infrastructure for the four alternatives, it will have the second lowest cost impact and is therefore less preferred from a cost perspective.		As Alternatives 2 and 3 have the greatest impact on existing public and private utility infrastructure, they will have the highest cost impact and are therefore not preferred from a cost perspective.		As Alternatives 2 and 3 have the greatest impact on existing public and private utility infrastructure, they will have the highest cost impact and are therefore not preferred from a cost perspective.		As Alternative 4 has the least impact on existing public and private utility infrastructure, it will have the lowest cost impact and is most preferred from a cost perspective.

Virtual Public Information Centre No. 2

Municipal Class Environmental Assessment Study for Road Improvements near Derry Road East and Alstep Drive: Alternative Design Evaluation Summaries

Evaluation Criteria	Alternative 1: Extend paved surface of Bramalea Road to the east and on Derry Road to the north	Alternative 2: Extend paved surface of Bramalea Road to the west and on Derry Road to the north	Alternative 3: Extend paved surface of Bramalea Road on both sides and on Derry Road to the north	Alternative 4: Modify intersection using a hybrid approach
Overall Summary	<p> Alternative 1 is less preferred because, while it provides some improvements to traffic safety, it has less cost and fewer impacts on existing utilities than Alternatives 2 and 3 but more than 4.</p> <p>The impacts to healthy communities, the natural environment, and the cultural environment are not significantly different among the four alternatives.</p>	<p> Alternatives 2 and 3 are not preferred because they provide less optimization traffic safety than Alternative 4 but have higher cost and greater impacts on existing utilities. They also have slightly greater encroachment into private property for the installation of the sidewalk on the west side of Bramalea Road, south of Derry Road.</p> <p>The impacts to healthy communities, the natural environment, and the cultural environment are not significantly different among the four alternatives.</p>	<p> Alternatives 2 and 3 are not preferred because they provide less optimization traffic safety than Alternative 4 but have higher cost and greater impacts on existing utilities. They also have slightly greater encroachment into private property for the installation of the sidewalk on the west side of Bramalea Road, south of Derry Road.</p> <p>The impacts to healthy communities, the natural environment, and the cultural environment are not significantly different among the four alternatives.</p>	<p> Alternative 4 is preferred because it optimizes traffic safety compared to the other alternatives while minimizing cost and impacts on existing utilities.</p> <p>The impacts to healthy communities, the natural environment, and the cultural environment are not significantly different among the four alternatives.</p>