Trafalgar Road Municipal Class Environmental Assessment (MCEA) Public Information Centre #2 – Development of Preliminary Design Alternatives (Video 2) – Text Description

Slide 9: Introduction

Welcome to Trafalgar Road Municipal Class Environmental Assessment – or "M-C-E-A" – Study from Highway 407 (ETR) to Steeles Avenue. This video will present the Development of Preliminary Design Alternatives.

For an overview of the study, including the study area, process, and schedule; what we heard in Public Information Centre #1 and the process for developing the recommended solution, please view Video #1 – Introduction. To learn about the Preliminary Preferred Design, please view Video #3. For a Review of Next Steps, view Video #4.

Slide 10: Design Considerations and Opportunities

A number of design considerations and opportunities were considered based on the Trafalgar Road Corridor character and needs, including:

- A planned 47-metre right-of-way per Halton Region's Transportation Master Plan from 2011;
- A multi-modal transportation corridor for all users of all abilities;
- Cycling facilities to connect with the broader network based on the growing urban context;
- Protection of space for future transit priority corridor infrastructure;
- Integration with future development and land uses;
- Stormwater conveyance, management, and outlets;
- Minimization of impacts to businesses and residential properties;
- Existing rail, creek structures, and utilities;
- Integration of changes with Highway 401 and Highway 407 (ETR) interchanges;
- Stable top-of-bank erosion hazard limit at watercourses;
- Regulatory flood plain hazards (with no negative impact to the flood plain), erosion hazards, and wetlands; and
- Minimization of impacts to natural features and areas.

Slide 11: Study Area Segments

Based on the existing conditions along Trafalgar Road, the corridor was divided into two main segments for the evaluation of alternatives. Segment A runs from Highway 407 (ETR) to Britannia Road. Segment B continues from Britannia Road to Steeles Avenue and was further separated into two focus areas: Segment B1, which covers the section adjacent to the Redhill Church Cemetery, and Segment B2, which encompasses the CPKC rail corridor.

Slide 12: Design Alternatives Overview

To address the preferred solution for Trafalgar Road, design alternatives were developed, analyzed, and evaluated for:

- Road Widening: identifying widening opportunities to determine the best fit and minimize impacts to the social, cultural, and natural environments; and
- Active Transportation Facilities: providing a separated and enhanced space within the boulevard for pedestrians and cyclists of all ages and abilities.

The following slides will present the design alternatives carried forward for analysis and evaluation.

Slide 13: Evaluation Criteria

The design alternatives were evaluated based on the following criteria:

- **Transportation**, which includes the ability to accommodate future travel demand, active transportation, safety, and emergency services;
- **Socio-Economic Environment**, including existing and planned land uses, property impacts, traffic noise, air quality, etcetera;
- **Cultural Environment**, including archaeological and cultural heritage resources;
- **Natural Environment**, which includes surface water and groundwater, minimizing impacts to flooding, natural heritage features such as designated areas, vegetation, wildlife, aquatic habitats, and species at risk; and
- **Preliminary Cost**, which covers construction-related costs.

Slide 14: Road Widening Alternatives

The following alternatives were considered for the widening of Trafalgar Road from four to six lanes:

- Alternative 1: Widen about the Centreline. Improvements are balanced on both sides of Trafalgar Road to balance impacts;
- Alternative 2: Widen to the East. Improvements are shifted to the east; and
- Alternative 3: Widen to the West. Improvements are shifted to the west.

Please note that the design alternatives for active transportation facilities were reviewed and evaluated separately and will be presented later in this video.

Slide 15: Road Widening Evaluation – Segment A (Highway 407 (ETR) to Britannia Rd)

The next few slides summarize the assessment of the road widening alternatives for each segment of Trafalgar Road. For Segment A of Trafalgar Road from Highway 407 (ETR) to Britannia Road, Alternative 1: Widen about the Centreline is recommended. This option:

- Maximizes improvements within the existing right-of-way;
- Balances impacts to adjacent properties and natural environment features; and
- Avoids cultural heritage impacts.

Slide 16: Road Widening Evaluation – Segment B (Britannia Rd to Steeles Ave)

For Segment B of Trafalgar Road from Britannia Road to Steeles Avenue, Alternative 1: Widen about the Centreline is recommended. This option:

- Maximizes improvements within the existing right-of-way;
- Balances impacts to adjacent properties and natural environment features; and
- Avoids cultural heritage impacts.

Slide 17: Widening Evaluation – Segment B1 (Redhill Cemetery)

For Segment B1: Redhill Church Cemetery, Alternative 2: Widen to the East is recommended. This option:

- Maximizes improvements within the existing right-of-way;
- Avoids encroachment on cemetery lands;
- Avoids cultural heritage impacts; and
- Avoids impact on listed heritage property on the west side.

Slide 18: Widening Evaluation – Segment B2 (CPKC Railway Crossing)

For Segment B2: the CPKC Railway Crossing, Alternative 3: Widen to the West is recommended. This option avoids encroachment on the hydro corridor and existing retaining wall.

Slide 19: Summary of Alternative Evaluation

Overall, the Preliminary Preferred Design will be developed with a best fit approach. The road will be widened about the centreline except at Segment B1: Redhill Church Cemetery, where it will be widened to the east, and at Segment B2: the CPKC Railway Crossing, where it will be widened to the west.

Slide 20: Active Transportation Alternatives

The following alternatives were considered to best accommodate cyclists and pedestrians in the Trafalgar Road corridor:

- Alternative A: In-Boulevard Cycle Track and Sidewalks on both sides;
- Alternative B: Bi-directional Cycle Track on the east side, and a sidewalk on the west side; or

- Alternative C: Multi-Use Paths on both sides.

Slide 21: Active Transportation Evaluation

This chart summarizes the evaluation of the active transportation alternatives for Trafalgar Road.

Alternative A: In-Boulevard Cycle Track and Sidewalks on both sides is recommended as it:

- Provides dedicated and separate facilities for pedestrians and cyclists; and
- Minimizes potential conflicts at intersections and driveways.

Alternative C is recommended at constrained locations to avoid impacts on cultural properties, natural heritage features, and utilities.

Slide 22: Active Transportation Summary of Recommendations

Overall, Alternative A: In-Boulevard Cycle Track and Sidewalks on both sides is recommended for the entire corridor, except in constrained segments where Alternative C: Multi-Use Paths on both sides is recommended.