

To: Development Services Committee

From: Warren Munro, HBA, RPP, Commissioner,
Development Services Department

Report Number: DS-22-28

Date of Report: February 2, 2022

Date of Meeting: February 7, 2022

Subject: Environmental Assessment Study - Windfields Farm Drive
Connection

Ward: Ward 2

File: 03-05

1.0 Purpose

The purpose of this Report is to provide an overview of the conclusions and recommendations reached in the Windfields Farms Drive Connection Environmental Assessment Study ("Environmental Assessment") and to seek Council approval to move forward with the process of obtaining the necessary property to construct the road connection. The Ultimate Recommended Plan is for a Collector Road between Windfields Farm Drive West and Winchester Road West.

Attachment 1 shows the Executive Summary from the Environmental Assessment.

Attachment 2 shows the location of the collector road and the existing zoning in the area.

Attachment 3 is the Interim- Phase 1 Recommended Plan. Owing to its size the Interim Phase 1 Recommended Plan is not attached to this report but can be viewed by visiting <https://www.oshawa.ca/city-hall/resources/Engineering/2---Project-File-Report---Final.pdf>.

Attachment 4 is the Ultimate Recommended Plan prepared by BT Engineering Inc. (B.T.E.).

2.0 Recommendation

That the Development Services Committee recommend to City Council:

1. That, pursuant to Report DS-22-28 dated February 2, 2022, Attachment 3 be adopted as the City's preferred Ultimate Recommended Plan for the Collector Road between Windfields Farm Drive West and Winchester Road West.

2. That, pursuant to Report DS-22-28 dated February 2, 2022, staff be directed to initiate the property acquisitions necessary to advance the Ultimate Recommended Plan for the portion of the Collector Road south Winchester Road West and report back to the Development Services Committee on the results.

3.0 Executive Summary

Not applicable.

4.0 Input From Other Sources

The study was carried out by B.T.E. consistent with the requirements of the Municipal Class Assessment Act and included consultation with Durham Region, Hydro One, external agencies, property owners and the public. The consultation included the following:

- One (1) Public Information Centre was held on October 30, 2019 at the Delpark Homes Centre where residents were able to review display boards and background reports; speak to members of the study team, ask questions and submit comment sheets;
- Liaison with external agencies (including Ontario Hydro and Infrastructure Ontario); and,
- Liaison with Indigenous Peoples.

Positive feedback was received on the evaluation and selection of the Technically Preferred Plans through this consultation. Refinements were made based on this input following the Public Information Centre to minimize travel delay from the public travelling from Windfields Farm Drive West. The final study recommendations reflect an iterative process, with input from the public and the Region of Durham. All parties provided input into an overall plan that involved a substantial number of stakeholders.

The Project File was available to the public, stakeholders and agencies for a 30-day review period from July 12, 2021 to August 10, 2021. The study completion notice was posted on the City website.

5.0 Analysis

5.1 Background

This Study followed the Municipal Class Environmental Assessment (2015) processes for a Schedule B Study. The schedule was chosen based on the scope and complexity of the project as well as the estimated capital cost of the project (including construction cost adjustment for annual inflation).

The Study approach followed the following Ministry of the Environment, Conservation and Parks guiding principles:

- Consider all reasonable alternatives;

- Provide a comprehensive assessment of the environment; and
- Provide clear and concise documentation of the decision-making process and the public consultation program.

5.2 Analysis and Evaluation

Based on the existing conditions and built environment, several cross section and intersection alternatives were developed for the proposed connection. All alternatives require a crossing of four (4) Hydro One transmission lines and an Enbridge pipeline.

5.2.1 Cross-section Alternatives

Four (4) cross section alternatives were investigated for the new road connection to Winchester Road West as detailed below:

- Alternative 1: Two-Lane Rural with Multi-Use Path
- Alternative 2: Two-Lane Rural with Paved Shoulders
- Alternative 3: Two-Lane Urban with Multi-Use Path and Sidewalk
- Alternative 4: Two-Lane Urban with Bike Lanes and Sidewalks

5.2.2 Intersection Alternatives

The Study also considered the intersections of the proposed Windfields Connection with both Winchester Road West and Windfields Farm Drive West. Winchester Road West is under the jurisdiction of the Regional Municipality of Durham. Alternatives evaluated at each location include:

1. Winchester Road West
 - Alternative 1: Unsignalized Left-Turn Lane and Right-Turn Lane
 - Alternative 2: Signalized Left-Turn Lane and Right-Turn Lane
 - Alternative 3: Roundabout
2. Windfields Farm Drive West
 - Alternative 1: Unsignalized 3-Way Stop
 - Alternative 2: Signalized Intersection
 - Alternative 3: Roundabout

5.3 Technically Preferred Plan and Analysis of Refinements

The initial technical recommendations were presented to the public at the Public Information Centre. These recommendations included:

- Cross Section Alternative 1: Two-Lane Rural with Multi-Use Path;
 - Winchester Road West: Stop Control (with potential flexibility to convert to a future roundabout or conventional signalized intersection)
- Windfields Farm Drive West Alternative 3: Roundabout.

The stop control intersection recommendation at Winchester Road West was based on a three-legged intersection and unknown timing for the development of the lands to the north. The focus of the comments from the public was to reduce delays associated with the interim stage of stop control.

Based on these comments, staff and the lead consultant reviewed the inclusion of the lands to the north of Winchester Road West and the associated future traffic to assess the warrant for traffic signals or roundabout control at Winchester Road West. This confirmed the warrant for signals or roundabout control. The evaluation of traffic signals and roundabout control, including the employment lands to the north, selected roundabout control as the preferred design at this location in the ultimate configuration (4-lanes on Winchester Road plus roundabout).

It is recommended that the interim-Phase 1 configuration be a signalized intersection. The Interim-Phase 2 configuration, could be a traffic signal or roundabout intersection at Winchester Road once the north leg of the intersection is built, subject to approvals from the Region of Durham and a future environmental assessment process.

5.4 Recommended Plan

The Recommended Plan will include a new collector road connecting Windfields Farm Drive West and its new residential community to Winchester Road West. The new collector roadway will be built as a rural cross section [26 metre (85.3 ft.)] width) including a separate multi-use path connecting to Winchester Road West. The new road will have a 50 km/h posted speed. Parking will be prohibited owing to the proximity to the Hydro One transmission towers and the possibility of electric or magnetic induction.

At Winchester Road West, the interim intersection control is proposed to be a new signalized intersection which will provide a high-quality connection while also minimizing delays to the arterial roadway. This intersection will provide a significant secondary access to the western portion of the Windfields Part II Plan.

The Recommended Plan also includes property acquisition for a future/ultimate 2-lane roundabout at Winchester Road West. This recommendation is to accommodate the Region of Durham's plans for Winchester Road (beyond 2031) as well as protection for a future fourth leg of the Winchester Road West/Windfields Connection to employment lands, as designated in the Region's Official Plan.

5.5 Next Steps

The 30-day review period has ended and there were no objections to the project. The City may proceed with detail design and construction of the Recommended Plan, subject to availability of funding and construction priorities. The works may be phased or built as a single project.

The acquisition of lands is required to build this connection. This Report recommends that staff be authorized to initiate the property acquisition process with the appropriate Provincial agencies (Infrastructure Ontario and Hydro One) and report back to the Development Services Committee.

6.0 Financial Implications

The cost to complete the Environmental Assessment was \$182,900 and was funded from the Development Charge Reserve.

Future phases of the project are also funded through the City's Development Charges Background Study and are included in the City's 2022 Capital budget and 2023-2031 nine-year forecast as follows:

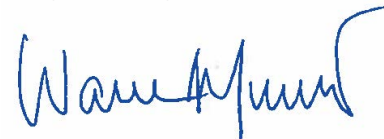
- 2022, \$232,000. Detailed engineering design
- 2022-2024, \$250,000. Property acquisition
- 2025, \$2,061,000. Construction
- 2027, \$332,000. Surface Asphalt

7.0 Relationship to the Oshawa Strategic Plan

This project aligns with the Accountable Leadership, Social Equity, Environmental Responsibility and Economic Prosperity and Financial Stewardship goals of the Oshawa Strategic Plan.



Anthony Ambra, P.Eng., Director,
Engineering Services



Warren Munro, HBA, RPP, Commissioner,
Development Services Department

Executive Summary

E1 EA Project

The City of Oshawa (City) conducted this Harmonized Category B Public Work Class Environmental Assessment / Schedule B Municipal Class Environmental Assessment Study for a proposed Windfields Farm Drive Connection from Windfields Farm Drive West to Winchester Road West. The public consultation and decision-making have met the requirements of both Class Environmental Assessments. The two Class Environmental Assessments were considered because the road will be a municipal road (Municipal Class Environmental Assessment) and is crossing Ontario Hydro One property (which has triggered the Infrastructure Ontario Class Environmental Assessment). However, should the Ontario Hydro lands be leased for the crossing, then the requirement to follow the Infrastructure Ontario Class Environmental Assessment may not apply.

E1.1 Project Limits

The Study Area is located within in the City of Oshawa, as illustrated in **Figure E1**.

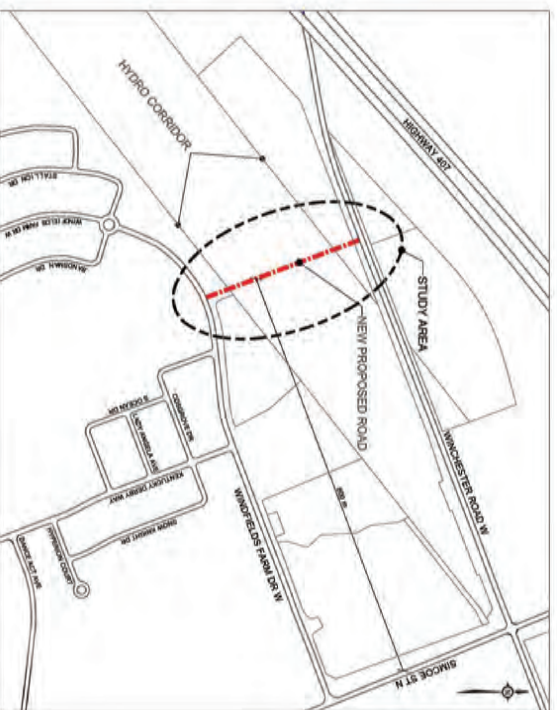


Figure E1: Study Area

E1.2 Consultation

The study was carried out in consultation with the City, Durham Region (Region), Hydro One external agencies, property owners and the public. The consultation included the following:

- One (1) Public Information Centre
- Liaison with external agencies (including Ontario Hydro and Infrastructure Ontario)
- Liaison with Indigenous Peoples

Positive feedback was received on the evaluation and selections of the Technically Preferred Plan through this consultation. Refinements were made based on this input following the Public Information Centre to minimize travel delay from the public travelling from Windfields Farm Drive West. The final study recommendations reflect an iterative process, with input from the public and the Region of Durham in the development of the Intersection Control Study for Winchester Road. All parties provided input into an overall plan that involved a substantial number of stakeholders. The final Recommended Plan includes roundabout control at both Windfields Farm Drive West and at Winchester Road West.

The Project File (this document) will be available to the public, stakeholders and agencies for a 30-day review period from July 12, 2021 to August 10, 2021. The study completion notice was posted on the City website and advertised in the City News Oshawa.

E2 Indigenous Peoples Engagement

The study included Indigenous Peoples engagement. Each Indigenous Peoples community was offered a meeting, separate from the Public Information Centre, if they so desired. A log of all Indigenous Peoples engagement was maintained throughout the Environmental Assessment.

E3 Harmonized Public Work and Municipal Class EA Process

This Study followed both the Infrastructure Ontario Public Work Class Environmental Assessment (2012) and the Municipal Class Environmental Assessment (2015) processes for a Category B and Schedule B Study, respectively. The category and schedule were chosen based on the scope and complexity of the project as well as the estimated capital cost of the project¹ (including construction cost adjustment for annual inflation).

The Study approach followed the Ministry of the Environment, Conservation and Parks guiding principles for EA studies, namely:

- Consider all reasonable alternatives;

¹¹ Municipal Class Environmental Assessment, Municipal Engineers Association, 2015 "Municipal Road Projects"

- Provide a comprehensive assessment of the environment; and
- Provide clear and concise documentation of the decision-making process and the public consultation program.

The Class Environmental Assessment Process was undertaken in a series of phases commencing with problem identification and culminating in the filing of a Project File. The Municipal Class Environmental Assessment Process is illustrated in **Figure E2** and the Public Works Class Environmental Assessment Process is illustrated in **Figure E3**. The Class Environmental Assessment process includes an evaluation of all reasonable alternatives and the selection of a preferred alternative(s) with acceptable effects (including avoidance and mitigation of any residual effects) on the natural and social/cultural environments.

The following is the breakdown of tasks for this Schedule B Municipal Class Environmental Assessment project:

- **Phase 1:** Identify the Problem
- **Phase 2:** Alternative Solutions
- **Phase 3:** Alternative Design Concepts for Preferred Solution (does not apply for a Schedule B study)
- **Phase 4:** Environmental Study Report (does not apply for a Schedule B study)
- **Phase 5:** Implementation (Construction to follow)

The following is the breakdown of tasks for this Category B Public Work Environmental Assessment project:

- **Step 1:** Describe the Undertaking
- **Step 2:** Description of Environmental Effects, Mitigation and Monitoring
- **Step 3:** Consult with Directly Affected Agencies and Public
- **Step 4:** Reporting
- **Step 5:** Confirmation of Category B
- **Step 6:** Notice of Completion and 30 Calendar Day Review
- **Step 7:** Category Elevations and "Part II Order" Requests, if any

NOTE: This flow chart is to be read in conjunction with Part A of the Municipal Class EA

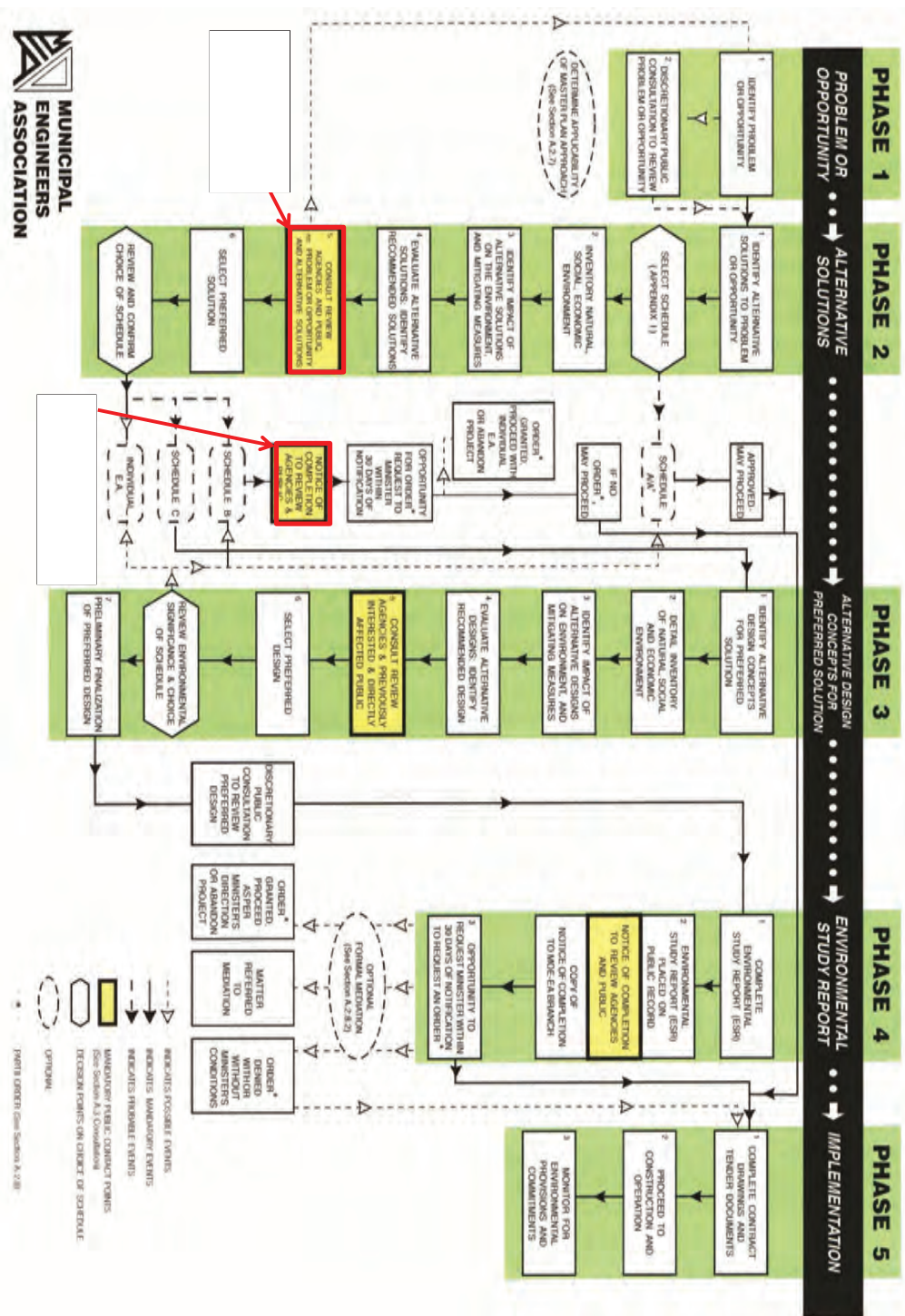
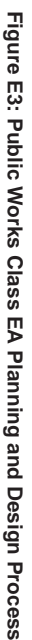


Figure E2: Municipal Class EA Planning and Design Process



E4 Analysis and Evaluation

Based on the existing conditions and built environment, several cross section and intersection alternatives were developed for the proposed connection. These alternatives require a crossing of four (4) Hydro One transmission lines and an Enbridge pipeline.

E4.1 Cross-section Alternatives

Four (4) cross section alternatives were investigated for the new road connection to Winchester Road West:

- Alternative 1: Two-Lane Rural with Multi-Use Path
- Alternative 2: Two-Lane Rural with Paved Shoulders
- Alternative 3: Two-Lane Urban with Multi-Use Path and Sidewalk
- Alternative 4: Two-Lane Urban with B ke Lanes and Sidewalks

E4.2 Intersection Alternatives

The Study also considered the intersections of the proposed Windfields Connection with Winchester Road West and Windfields Farm Drive West. Alternatives evaluated at each location include:

1. Winchester Road West
 - Alternative 1: Unsignalized Left-Turn Lane and Right-Turn Lane
 - Alternative 2: Signalized Left-Turn Lane and Right-Turn Lane
 - Alternative 3: Roundabout
2. Windfields Farm Drive West
 - Alternative 1: Unsignalized 3-Way Stop
 - Alternative 2: Signalized Intersection
 - Alternative 3: Roundabout

E5 Technically Preferred Plan and Analysis of Refinements

The initial technical recommendations were presented to the public at the Public Information Centre. These recommendations included:

- Cross Section Alternative 1: Two-Lane Rural with Multi-Use Path;
- Winchester Road West: Stop Control (with potential flexibility to convert to a future roundabout or conventional signalized intersection)
- Windfields Farm Drive West Alternative 3: Roundabout.

The stop control intersection recommendation at Winchester Road West was based on a three-legged intersection and unknown timing of lands to the north. The focus of the comments from the public was to reduce delays associated with the interim stage of stop control.

Based on these comments, the Technical Advisory Committee reviewed the inclusion of the northern lands and the associated future traffic to assess the warrant for traffic signals or roundabout control at Winchester Road West. This confirmed the warrant for signals or roundabout control. The evaluation of traffic signals and roundabout control, including the employment lands to the north, selected roundabout control as the preferred design at this location.

E6 Recommended Plan

The Recommended Plan will include a new collector road connecting Windfields Farm Drive West and its new residential community to Winchester Road West. The new collector roadway will be built as a rural cross section (26 m width) including a separate multi-use path connecting to Winchester Road West. The new road will have a 50 km/h posted speed and will not allow parking due to induction from the Hydro One transmission towers.

At Winchester Road West, the intersection control is proposed to be a new single-lane roundabout which will provide a high-quality connection to the side street while also minimizing delays to the arterial roadway. This recommendation includes illumination from the roundabout to Simcoe Street North. This roundabout will provide a significant secondary access to the Windfields Farm community. Property acquisition is recommended at the intersection (where lands are to be acquired) to accommodate future 4-laning of Winchester Road (beyond 2031) by the Region of Durham.

The Recommended Plan also includes property protection for a future 2-lane roundabout. This recommendation is to accommodate the Region of Durham's plans for 4-laning Winchester Road (beyond 2031) as well as protection for a future fourth leg of the Winchester Road West/ Windfields Connection to employment lands, as designated in the Region's Official Plan.

E7 Next Steps and Phasing

At the end of the 30-day review period, should there be no objections to the project, the City may proceed with detail design and construction of the Recommended Plan, subject to availability of funding and construction priorities. The works may be phased or built as a single project. If phased the improvements on Winchester Road may delay the roundabout until development occurs north of the intersection, until the 4-laning is implemented by the Region or traffic volumes dictate. If phased the operation of the interim intersection should be monitored for safety.

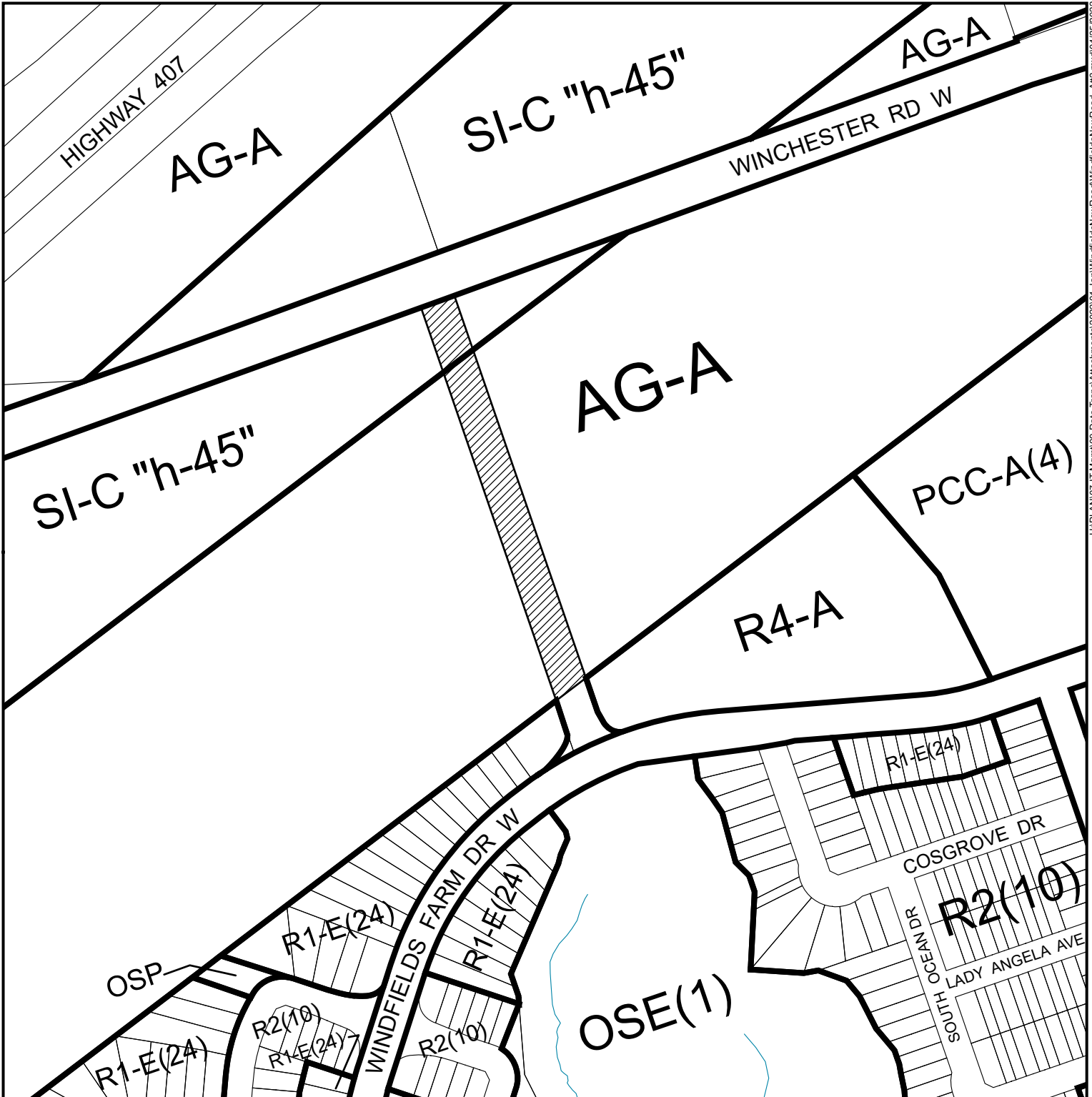
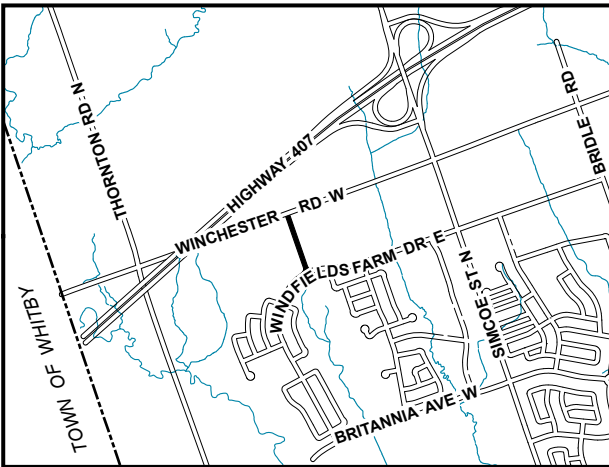
Subject: Environmental Assessment Study -
Windfields Farm Drive Connection

Ward: Ward 2

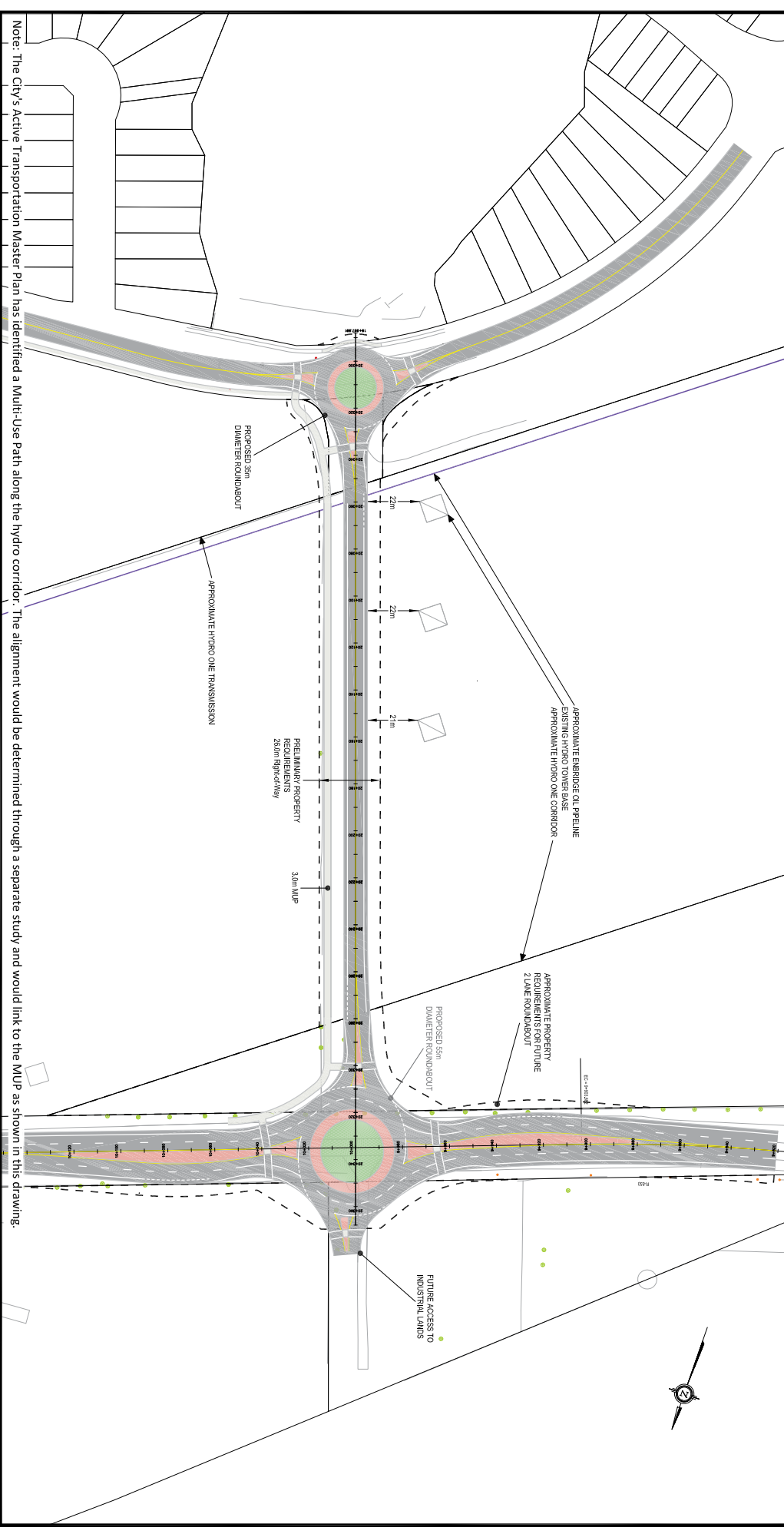
File: 03-05



Subject Site



Title: Ultimate Recommended Plan prepared by BT Engineering Inc. (B.T.E.)
Subject: Environmental Assessment Study - Windfields Farm Drive Connection
Ward: Ward 2
File: 03-05



LEGEND

- EXISTING PROPERTY FABRIC
- PRELIMINARY PROPERTY REQUIREMENTS
- ASPHALT
- LANDSCAPING
- CONCRETE

SCALE
1:1600

ULTIMATE RECOMMENDED PLAN
4 LANES ON WINCHESTER ROAD WEST

CITY OF OSHAWA PROPOSED WINDFIELDS CONNECTION

