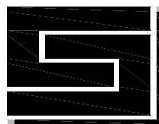


FLAMBOROUGH QUARRY HAUL ROUTE STUDY:
LAND USES REPORT
ST. MARYS CEMENT (CANADA) INC.

Prepared By: Glen Schnarr & Associates Inc.

October 2008



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FLAMBOROUGH QUARRY HAUL ROUTE STUDY: LAND USES REPORT

TABLE OF CONTENTS

| | <u>PAGE</u> |
|----------------------------------------------------------------------------------------------------------|-------------|
| 1.0 Introduction | 6 |
| 2.0 Description of Glen Schnarr & Associates Inc. | 6 |
| 3.0 Description of the Alternative Haul Routes | 7 |
| 3.1 Description of the Land Use Environment along Alternative Haul Routes | 12 |
| 3.1.1 (LINK 23, 24, 25) Highway 6 (between Hwy 401 and Hwy 403) | 13 |
| 3.1.2 (LINK 11) Campbellville Rd. (between Hwy 6 and Centre Road) | 17 |
| 3.1.3 (LINK 13) Campbellville Rd. (between Milborough Ln and Twiss Rd.) | 18 |
| 3.1.4 (LINK 17, 18) Concession 11 (between Hwy 6 and Milborough Ln.) | 18 |
| 3.1.5 (LINK 1) Centre Road (between Conc. 11 and Campbellville Rd) | 19 |
| 3.1.6 (LINK 5) Milborough Line (between Conc. 11 and Campbellville Rd.) | 20 |
| 3.1.7 (LINK 26) Twiss Road (between Campbellville Rd and Reid Sdrd) | 21 |
| 3.1.8 (LINK 27) Reid Sideroad (between Twiss Road and Guelph Line) | 22 |
| 3.1.9 Guelph Line (between Reid Sideroad and Highway 401) | 22 |
| 4.0 Analysis Criteria and Indicators | 23 |
| 5.0 Analysis | 25 |
| 5.1 Data Sources | 25 |
| 5.2 Analysis of Criteria #1 (Potential For Removal of Existing Land Uses Due to Road Improvements) | 25 |
| 5.2.1 Assumptions | 25 |
| 5.2.1.1 Highway 6 | 25 |
| 5.2.1.2 Rural vs. Urban Cross Section Design and Analysis | 26 |
| 5.2.1.3 Rural Cross Section Analysis | 28 |
| 5.2.2 Methodology | 31 |

| | | |
|---------|-------------------------------------------------------------------------------------------------|----|
| 5.2.3 | Analysis | 34 |
| 5.2.3.1 | Haul Route 1 | 34 |
| 5.2.3.2 | Haul Route 2 | 36 |
| 5.2.3.3 | Haul Route 3 | 38 |
| 5.2.3.4 | Haul Route 4 | 40 |
| 5.2.3.5 | Haul Route 5 | 41 |
| 5.2.4 | Results of Analysis of Criteria #1 | 43 |
| 5.3 | Analysis of Criteria #2 (Potential for Disruptive Effects to Sensitive Planned Land Uses) | 44 |
| 5.3.1 | Assumptions | 44 |
| 5.3.2 | Methodology | 44 |
| 5.3.3 | Analysis | 45 |
| 5.3.3.1 | Flamborough Power Centre | 45 |
| 5.3.3.2 | Bridlewood Estates | 45 |
| 5.3.3.3 | Chestnut Grove Estates | 46 |
| 5.3.4 | Results of Analysis of Criteria # 2 | 47 |
| 5.4 | Analysis of Criteria # 3 (Conformity with Applicable Plans and Policies) | 47 |
| 5.4.1 | Assumptions | 47 |
| 5.4.2 | Methodology | 48 |
| 5.4.3 | Analysis of Official Plan Conformity | 49 |
| 5.4.3.1 | Haul Route No. 1 | 40 |
| 5.4.3.2 | Haul Route No. 2 | 50 |
| 5.4.3.3 | Haul Route No. 3 | 51 |
| 5.4.3.4 | Haul Route No. 4 | 53 |
| 5.4.3.5 | Haul Route No. 5 | 54 |
| 5.4.4 | Degree of Conformity with PPS and Greenbelt Plan | 56 |
| 5.4.5 | Degree of Conformity with Niagara Escarpment Plan | 61 |
| 6.0 | Summary and Conclusions | 62 |

LIST OF FIGURES:

- Figure 1: Alternative Haul Route 1
- Figure 2: Alternative Haul Route 2
- Figure 3: Alternative Haul Route 3
- Figure 4: Alternative Haul Route 4
- Figure 5: Alternative Haul Route 5
- Figure 6: Alternative Haul Routes Identified by iTrans Consulting Inc.
- Figure 6B: Alternative Haul Routes by Identifying LINK Number
- Figure 7: Municipal Official Plan Jurisdiction Overlay on Alternative Haul Routes
- Figure 8: Alternative Haul Routes Overlay on County of Wellington Official Plan
- Figure 9: Morriston Urban Centre (Puslinch)
- Figure 10: Alternative Haul Routes Overlay on City of Hamilton Official Plan
- Figure 11: Waterdown Sportsman's Club Site Specific Area R-12 (Hamilton)
- Figure 12: Harper's Corner Site Specific Area R-6(j) (Hamilton)
- Figure 13: Freelon Rural Settlement Area (Hamilton)
- Figure 14: Millgrove Rural Settlement Area (Hamilton)
- Figure 15: Alternative Haul Routes Overlay on City of Burlington Official Plan
- Figure 16: Alternative Haul Routes Overlay on Niagara Escarpment Plan
- Figure 17: Chestnut Grove Site Specific Area R-6(a) (Hamilton)
- Figure 18: Alternative Haul Routes Overlay on Region of Halton Official Plan
- Figure 19: Alternative Haul Routes Overlay on Town of Milton Official Plan
- Figure 20: Stonebury Place Site Specific Area R-6(d) (Hamilton)
- Figure 21: Timberrun Site Specific Area R-6(b) (Hamilton)
- Figure 22: Hamlet of Campbellville (Milton)
- Figure 23: Type 1 Rural Cross Section
- Figure 24: Type 1 Urban Cross Section
- Figure 25: Type 3 Rural Cross Section
- Figure 26: Type 3 Urban Cross Section
- Figure 27: Three Representative Rural Cross-Section Types
- Figure 28: Alternative HR 1, 2 and 3 Showing Preferred Rural Cross-Section Type
- Figure 29: Alternative Haul Route No. 4 Showing Preferred Rural Cross-Section Type
- Figure 30: Alternative Haul Route No. 5 Showing Preferred Rural Cross-Section Type
- Figure 31: Typical Dwelling Elevation, Bridlewood Estates
- Figure 32: Bridlewood Estates Site Plan
- Figure 33: Chestnut Grove Estates Site Plan
- Figure 34: Chestnut Grove Estates House

LIST OF AIR PHOTOS:

| | |
|-------------------|--------------------------------------------------------------------------------------------|
| Air Photo 1 to 9: | Air Photo Road Segment (LINKS 23, 24, 25) – Highway 6 |
| Air Photo 10: | Air Photo Road Segment (LINK 11) – Campbellville Rd (west of Centre Rd) |
| Air Photo 11: | Air Photo Road Segment (LINK 1) – Centre Road |
| Air Photo 12: | Air Photo Road Segment (LINK 17) – 11 th Concession (West) |
| Air Photo 13: | Air Photo Road Segment (LINK 18) – 11 th Concession (East) |
| Air Photo 14: | Air Photo Road Segment (LINK 5) – Milborough Line |
| Air Photo 15: | Air Photo Road Segment (LINKS 13, 26, 27) – Campbellville Rd, Twiss Rd, Reid Sdrd |

LIST OF TABLES:

| | |
|----------|------------------------------------|
| Table 1: | Haul Route 1 Cross-Section Summary |
| Table 2: | Haul Route 2 Cross-Section Summary |
| Table 3: | Haul Route 3 Cross-Section Summary |
| Table 4: | Haul Route 4 Cross-Section Summary |
| Table 5: | Haul Route 5 Cross-Section Summary |

LIST OF CHARTS:

| | |
|----------|---------------------------------------------------------------------|
| Chart 1: | Potential Road Allowance Widening Land Use Summary for Haul Route 1 |
| Chart 2: | Potential Road Allowance Widening Land Use Summary for Haul Route 2 |
| Chart 3: | Potential Road Allowance Widening Land Use Summary for Haul Route 3 |
| Chart 4: | Potential Road Allowance Widening Land Use Summary for Haul Route 4 |
| Chart 5: | Potential Road Allowance Widening Land Use Summary for Haul Route 5 |

Flamborough Quarry Haul Route Study:
Land Uses Report
ST. MARYS CEMENT (CANADA) INC.

1.0 Introduction

St. Marys Cement (Canada) Inc. has proposed to develop a Dolostone Quarry on Part of Lots 1, 2 and 3, Concession 11, Geographic Township of East Flamborough, in the City of Hamilton. The property is located on the north side of 11th Concession, just west of Milborough Line.

In April 2006 Dillon Consulting Limited prepared Terms of Reference for the Quarry Haul Route Evaluation on behalf of the City of Hamilton. Components of the Terms of Reference require that Alternative Haul Routes are identified, the existing baseline conditions of each alternative route are described, and a comparative analysis and evaluation is carried out. iTRANS Consulting Inc. have identified five Alternative Haul Routes, that are described and analyzed in the following report in the context of Land Uses.

This report documents the consultant team, generally describes the land use environment, defines the analysis criteria and indicators, reports the analysis and results, and offers recommendations and mitigating measures.

2.0 Description of Glen Schnarr & Associates Inc.

Glen Schnarr & Associates Inc. is an urban and regional land development consulting firm providing professional planning services to developers and landowners in the Southern Ontario region since 1986.

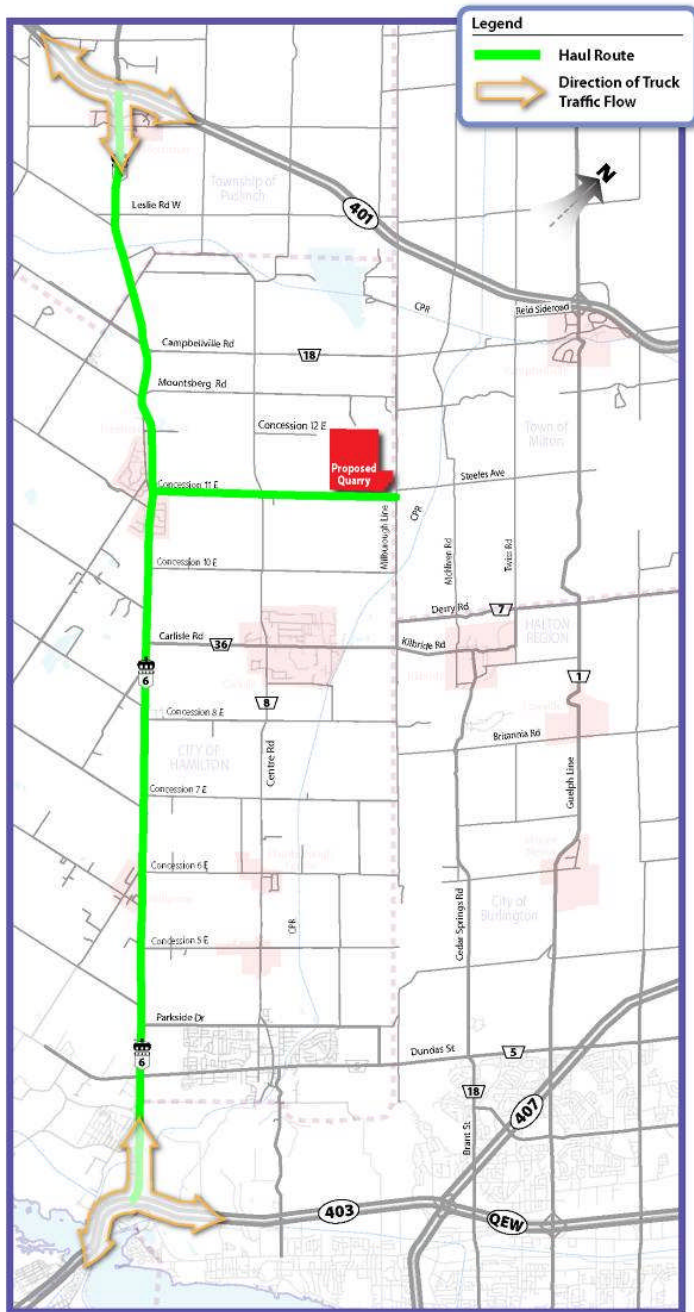
Glen Schnarr & Associates Inc. (GSAI) have the expertise and staff resources to complete a variety of projects. GSAI are comprised of a team of professional land use planning consultants and planning technicians who bring expertise in planning residential, commercial, industrial, institutional and recreational development projects to our clients. GSAI are the land use planning consultants representing St. Marys Cement (Canada) Inc. in connection with the proposed St. Marys Flamborough Quarry.

Glen Schnarr is the company President with over 30 years of professional planning experience in a wide variety of urban planning and development projects in Southern Ontario. Glen is a member of the Canadian Institute of Planners (MCIP), and is a registered professional planner (RPP).

Karen Bennett is a Senior Planner with GSAI and has over ten years of experience as a Planner. Karen is a member of the Canadian Institute of Professional Planners (MCIP), and is a registered professional planner (RPP).

3.0 Description of the Alternative Haul Routes

Alternative Haul Route 1



In the case of Alternative Haul Route 1, truck traffic destined for Highway 401 east would travel west on Concession 11 E, and then north on Highway 6 to the Highway 401 eastbound on-ramp.

Truck traffic destined for Highway 401 west would travel west on Concession 11 E, and then north on Highway 6 to the Highway 401 westbound on-ramp.

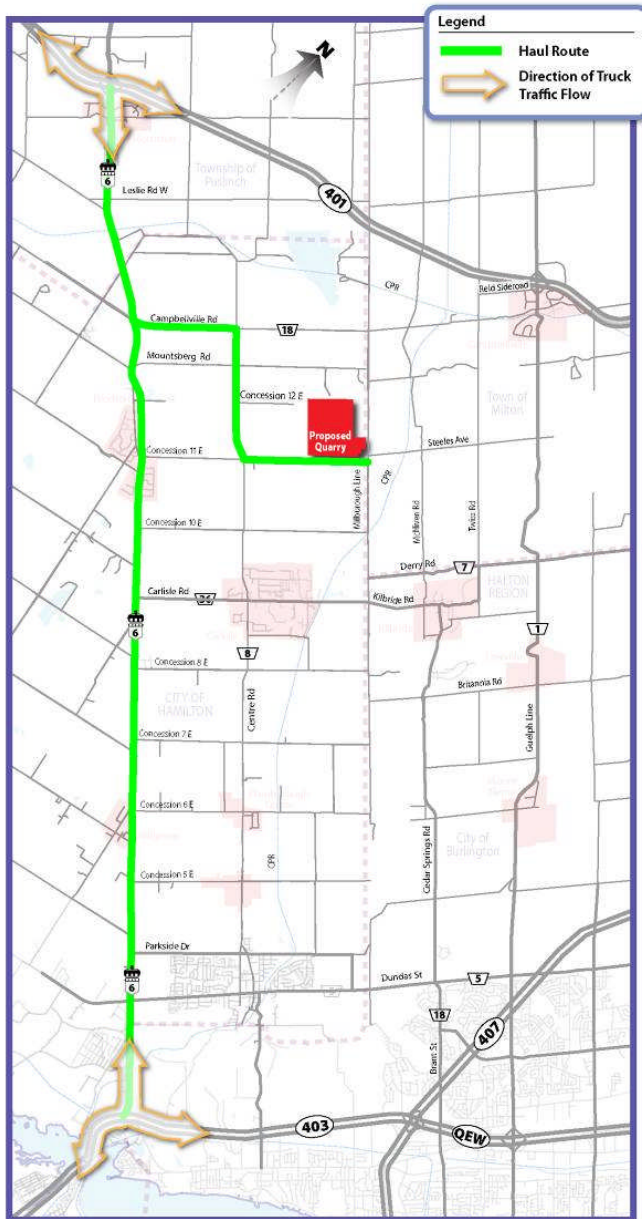
Truck traffic destined for Highway 403 east would travel west on Concession 11 E, and then south on Highway 6 to the Highway 403/QEW eastbound on-ramp.

Finally, truck traffic destined for Highway 403 west would travel west on Concession 11 E, and then south on Highway 6 to the Highway 403/QEW westbound on-ramp.

Figure 1: Alternative Haul Route 1

Alternative Haul Route 2

In the case of Alternative Haul Route 2 truck traffic destined for Highway 401 east would travel west on Concession 11 E, then north on Centre Road, west on Campbellville, and north on Highway 6 to the Highway 401 eastbound on-ramp.



Truck traffic destined for Highway 401 west would travel west on Concession 11 E, then north on Centre Road, west on Campbellville, and north on Highway 6 to the Highway 401 westbound on-ramp.

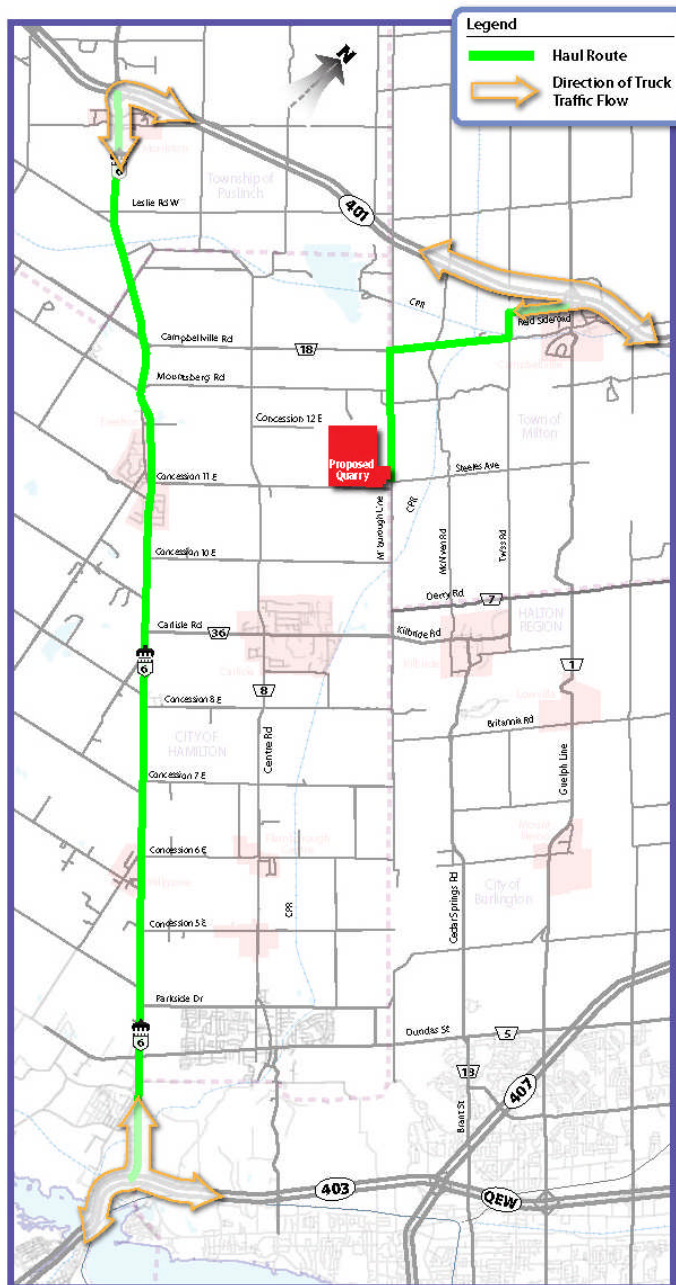
Truck traffic destined for Highway 403 east would travel west on Concession 11 E, then north on Centre Road, west on Campbellville, and south on Highway 6 to the Highway 403/QEW eastbound on-ramp.

Finally, truck traffic destined for Highway 403 west would travel west on Concession 11 E, north on Centre Road, west on Campbellville, and south on Highway 6 to the Highway 403 /QEW westbound on-ramp.

Figure 2: Alternative Haul Route 2

Alternative Haul Route 3

In the case of Alternative Haul Route 3, truck traffic destined for Highway 401 east would travel north on Milborough Line, then east on Campbellville Road, north on Twiss Road, and east on Reid Side Road to the Highway 401 eastbound on-ramp.



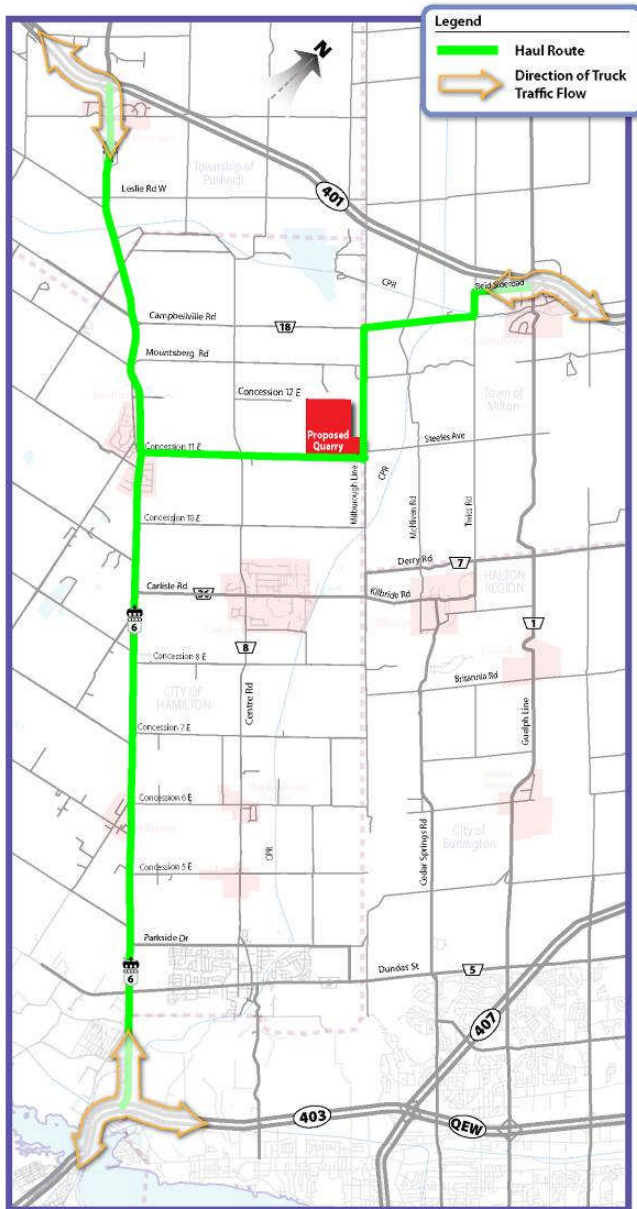
Truck traffic destined for Highway 401 west would travel north on Milborough Line, then east on Campbellville Road, north on Twiss Road, east on Reid Side Road and north on Guelph Line to the Highway 401 westbound on-ramp

Truck traffic destined for Highway 403/QEW east would travel north on Milborough Line, then east on Campbellville Road, north on Twiss Road, and east on Reid Side Road to the Highway 401 eastbound on-ramp. From here, there are several alternatives to reach the destination including taking the 407 ETR south to Highway 403.

Finally, truck traffic destined for Highway 403 west would travel north on Milborough Line, east on Campbellville Road, north on Twiss Road, and east on Reid Side Road to the Highway 401. From here, there are several alternatives to reach the destination including taking the 407 ETR southwest or Highway 6 south to the 403/QEW.

Figure 3: Alternative Haul Route 3

Alternative Haul Route 4



In the case of Alternative Haul Route 4, truck traffic destined for Highway 401 east would travel north on Milborough Line, then east on Campbellville Road, north on Twiss Road, and east on Reid Side Road to the Highway 401 eastbound on-ramp.

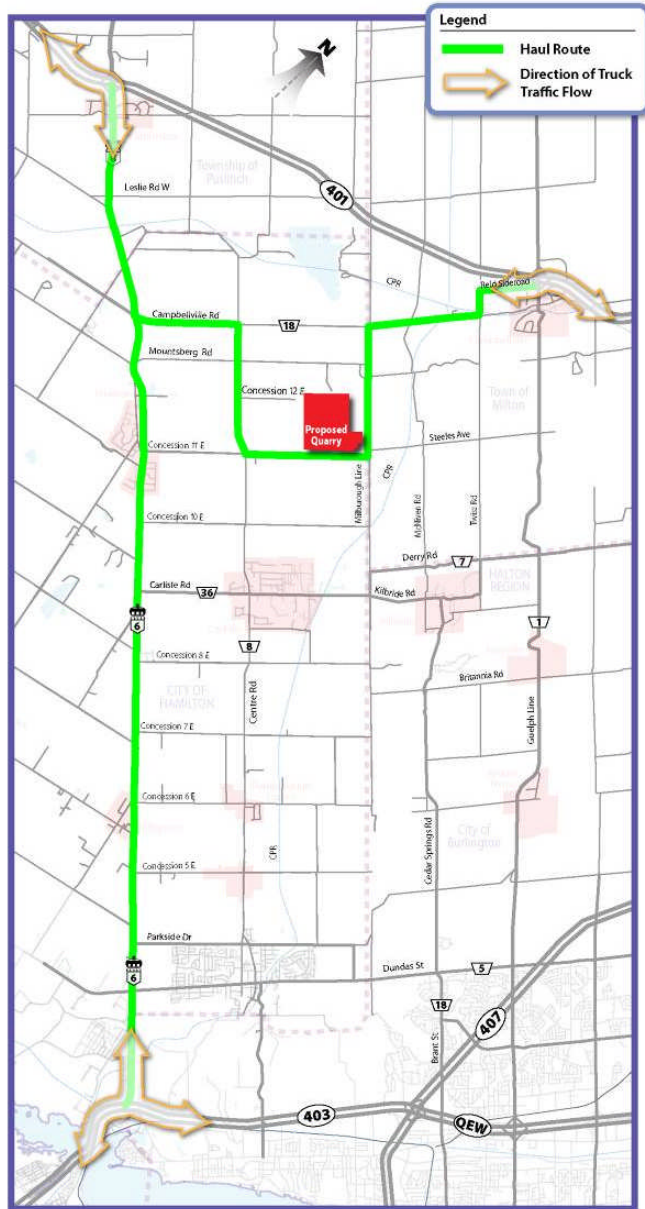
Truck traffic destined for Highway 401 west would travel west on Concession 11 E, and then north on Highway 6 to the Highway 401 westbound on-ramp.

Truck traffic destined for Highway 403 east would travel west on Concession 11 E, and then south on Highway 6 to the Highway 403 eastbound on-ramp.

Finally, truck traffic destined for Highway 403 west would travel west on Concession 11 E, and then south on Highway 6 to the Highway 403 westbound on-ramp.

Figure 4: Alternative Haul Route 4

Alternative Haul Route 5



In the case of Alternative Haul Route 5, truck traffic destined for Highway 401 east would travel north on Milborough Line, then east on Campbellville Road, north on Twiss Road, and east on Reid Side Road to the Highway 401 eastbound on-ramp.

Truck traffic destined for Highway 401 west would travel west on Concession 11 E, then north on Centre Road, then west on Campbellville, and then north on Highway 6 to the Highway 401 westbound on-ramp.

Truck traffic destined for Highway 403 east would travel west on Concession 11 E, then north on Centre Road, west on Campbellville, and south on Highway 6 to the Highway 403/QEW eastbound on-ramp.

Finally, truck traffic destined for Highway 403 west would travel west on Concession 11 E, then north on Centre Road, west on Campbellville, and south on Highway 6 to the Highway 403 /QEW westbound on-ramp.

Figure 5: Alternative Haul Route 5

3.1 Description of the Land Use Environment along Alternative Haul Routes

As noted above, five Alternative Haul Routes have been identified by iTRANS Consulting Limited (**Figures 1-6**). Each route provides access to Highway 401 and Highway 403. The five Alternative Haul Routes each consist of a grouping of road segments, referred to as LINKS. The LINKS applicable to each Alternative Haul Route are identified below, and are illustrated on **Figure 6B**:

Alternative Haul Route 1:

- **LINK 17 & 18:** Concession 11 (between Highway 6 and Milborough Line)
- **LINK 23, 24, 25:** Highway 6 (between Highway 401 and Highway 403)

Alternative Haul Route 2:

- **LINK 18:** Concession 11 (between Centre Road to Milborough Line)
- **LINK 1:** Centre Road (between Concession 11 and Campbellville Road)
- **LINK 11:** Campbellville Road (between Highway 6 and Centre Road)
- **LINKS 23, 24 & 25:** (Highway 403 to Highway 401)

Alternative Haul Route 3:

- **LINK 5:** Milborough Line (between Concession 11 and Campbellville Road)
- **LINK 13:** Campbellville Road (between Milborough Line and Twiss Road)
- **LINK 26:** Twiss Road (between Campbellville Road and Reid Side Road)
- **LINK 27:** Reid Side Road (between Twiss Road and Guelph Line)

Alternative Haul Route 4 (combination of Route 1 and Route 3):

- **LINK 17 & 18:** Concession 11 (between Highway 6 and Milborough Line)
- **LINK 23, 24, 25:** Highway 6 (between Highway 401 and Highway 403)
- **LINK 5:** Milborough Line (between Concession 11 and Campbellville Road)
- **LINK 13:** Campbellville Road (between Milborough Line and Twiss Road)
- **LINK 26:** Twiss Road (between Campbellville Road and Reid Side Road)
- **LINK 27:** Reid Side Road (between Twiss Road and Guelph Line)

Alternative Haul Route 5 (combination of Route 2 and Route 3):

- **LINK 18:** Concession 11 (between Centre Road to Milborough Line)
- **LINK 1:** Centre Road (between Concession 11 and Campbellville Road)
- **LINK 11:** Campbellville Road (between Highway 6 and Centre Road)

- **LINKS 23, 24 & 25:** Highway 6 (from Highway 403 to Highway 401)
- **LINK 5:** Milborough Line (between Concession 11 and Campbellville Road)
- **LINK 13:** Campbellville Road (between Milborough Line and Twiss Road)
- **LINK 26:** Twiss Road (between Campbellville Road and Reid Side Road)
- **LINK 27:** Reid Side Road (between Twiss Road and Guelph Line)

Existing Land Uses are defined as the spatial arrangement of existing land uses resulting from land use planning. It is important to note that while natural areas represent a sizable portion of the rural landscape, details related to natural heritage features are discussed in the Natural Environment Report prepared by Savanta Inc. for the Haul Route Study. The following represents a summary of the relevant Official Plan Land Use designations along the LINKS in the Alternative Haul Routes, and a summary of Existing Land Uses that exist along each road LINK within these alternative routes.

3.1.1 LINK 23, 24, 25: Highway 6 (between Highway 401 and Highway 403)

Official Plan Designations:

Highway 6, between Highway 401 and Highway 403, falls within the planning jurisdiction of the County of Wellington (Puslinch), the City of Hamilton, the City of Burlington, and the Niagara Escarpment Commission (**Figure 7**).

County of Wellington (Puslinch):

As shown on **Figure 8**, Schedule A7 (Puslinch Land Use Designations) in the County of Wellington Official Plan, the lands along Highway 6 are designated “Primary Agriculture”, “Secondary Agriculture”, “Core Greenlands”, and “Urban Centre” (Morrison).

Permitted uses within the “Primary Agriculture” and “Secondary Agriculture” designations include agricultural uses, single detached homes, existing uses, forestry, licensed aggregate operations, group homes and kennels. Permitted uses in areas designated “Core Greenlands” are limited to existing natural heritage features and site alterations that are necessary for the management or maintenance of the natural environment. Additional detail related to natural heritage features existing along the alternative haul routes is contained within the Natural Environment Report prepared by Savanta Inc. for the Haul Route Study.

Along Highway 6, just south of Highway 401, is the Urban Centre of Morrison. The Urban Centre of Morrison is identified in the County of Wellington’s Official Plan as having a population of 455 over 160 households in 2007, and the Official Plan anticipates a population of 520 over 185 households by 2012. Lands within the Urban Centre of Morrison are designated “Central Business District”, “Core Greenlands” and “Residential” (**Figure 9**). Within the

“Central Business District” permitted uses include a wide variety of retail, office, service, administrative, religious, cultural and entertainment uses. Further, service uses including restaurants, personal service establishments and financial institutions are permitted. Residential development may be permitted within this designation provided that retail, office or service commercial uses are located at street level. Lands designated “Residential” in Morriston permit a variety of housing types; however, the Official Plan notes that low rise and low density housing forms such as single-detached and semi-detached dwelling units shall continue to predominate. In addition, non-residential uses such as schools, churches, clinics, local convenience stores, home occupations, neighbourhood parks and other public facilities may also be permitted within the “Residential” designation. Garden suites, accessory to existing single detached homes, are also permitted within the “Residential” designation.

City of Hamilton:

The development of a new Official Plan for the City of Hamilton is occurring in two Phases. The first phase culminated in the completion of the Rural Hamilton Official Plan. The next phase will include the development of policies and mapping for the Urban Area. The Official Plan for Rural Hamilton was adopted by Council on September 27, 2006. The adopted Plan has been forwarded to the Minister of Municipal Affairs and Housing for approval and until it is approved, the Region of Hamilton-Wentworth Official Plan and the Town of Flamborough Official Plan are in effect.

This analysis examines the land use designations and policies for lands with Hamilton based on the current Region of Hamilton-Wentworth Official Plan and Town of Flamborough Official Plan, because these are the applicable policies. However, this document also contains an examination of the possible implications of the new Hamilton Rural Official Plan. The analysis looks at the new Plan because it creates a consistent policy framework for the entire Rural Area of the City, and brings the City of Hamilton’s Rural Official Plan policies into conformity with the Greenbelt Plan and the Provincial Policy Statement.

The lands along Highway 6 are designated “Rural Area”, “Rural Settlement”, and “Business Parks” (at the south end near Highway 403) in the Region of Hamilton-Wentworth Official Plan. The lands along Highway 6 are designated “Rural”, “Agricultural”, “Rural Industrial Park”, and “Urban Area” (near Highway 403) in the Town of Flamborough Official Plan. It is important to note that detailed reference to natural areas can be found in Savanta’s Natural Environment Report prepared in connection with the Haul Route.

As shown on **Figure 10**, Schedule D (Rural Land Use Designations) in the Rural Hamilton Official Plan, the lands along Highway 6 are designated “Rural”, “Agricultural”, “Urban Area”, and “Rural Settlement Area”. Permitted land uses within the “Rural” and “Agricultural” designations include agriculturally-related uses, resource-based rural uses, and institutional uses.

Within the “Rural” designation, lands located on the east side of Highway 6, just north of Concession 12, are identified in the Hamilton Rural Official Plan as Site Specific Area R-12 for the Waterdown Sportsman’s Club Mobile Home Park (**Figure 11**). These lands are designated to permit seven existing mobile and manufactured dwelling units, as well as accessory leisure and recreational facilities.

As well, within the “Rural” designation, lands located on the east side of Highway 6, just north of Concession 8, are identified in the Hamilton Rural Official Plan as Site Specific Area R-6(j) (Harper’s Corner) (**Figure 12**). These lands are designated for estate residential development.

At the south end of Highway 6 there are lands designated “Urban Area” in the Hamilton Official Plan. Since the City of Hamilton has not yet completed the Urban Official Plan, planning permission for these lands is currently governed by the (former) Town of Flamborough Official Plan. The Waterdown Urban Area Land Use Plan designates these lands as Flamborough Business Park and the Secondary Plan related to this area designates lands along the Highway 6 corridor in this location as “Prestige Industrial” and “Prestige Industrial–Commercial”.

There are two “Rural Settlement Areas” located along the Highway 6 corridor in the City of Hamilton. The Freelon Rural Settlement Area is located at Highway 6 and Concession 11 in the City of Hamilton. The Freelon Rural Settlement Area Plan (**Figure 13**) designates lands along Highway 6 as “Settlement Residential”, “Settlement Commercial”, “Hazard Lands” and “General Open Space”. Permitted uses in the “Settlement Residential” and “Settlement Commercial” land use designations include single detached dwellings, small-scale institutional uses, home businesses, small-scale commercial and professional or personal service uses. Permitted uses in the “Hazard Lands” designation are limited to conservation, forestry, fish and wildlife management, and permitted uses in the “General Open Space” designation include parks and open space.

The Millgrove Rural Settlement Area is located at Millgrove Sideroad and Millgrove Road, on the west side of Highway 6. The Millgrove Rural Settlement Area Plan (**Figure 14**) designates lands along the Highway 6 corridor as “Settlement Residential”, “Settlement Commercial”, and “Hazard Lands”. As noted above, permitted uses in these designations include single detached dwellings, small-scale institutional uses, home businesses, small-scale commercial and professional or personal service uses, and uses the “Hazard Lands” designation are limited to conservation, forestry, fish and wildlife management.

City of Burlington:

As shown on **Figure 15**, Schedule A (Burlington City Structure) in the City of Burlington Official Plan, the lands along Highway 6 are designated “Land Use Designation to be Determined”. The City of Burlington Official Plan has specifically identified these lands as the “North Aldershot Study Area”, generally bounded by Highway 403 to the south, Highway 6 to the west, Town of Flamborough to the North and the Burlington-Guelph Hydro Line to the east. As noted in the City’s Official Plan, long term policies for this area include “to conduct a

secondary planning and/or major planning studies that establish long term development policies” for these areas. These lands are designated ”Agricultural Rural Area” in the Region of Halton Official Plan, which permits agricultural uses, single detached dwellings on existing lots, recreation uses, home industries, and home occupations.

Niagara Escarpment Commission:

As shown on **Figure 16**, Map 3 of the Niagara Escarpment Plan, lands on the east side of Highway 6 in Burlington are designated “Escarpment Natural Area” and “Escarpment Protection Area”. Permitted uses in the “Escarpment Protection Area” include agricultural operations, single dwellings, limited recreational uses, forest, wildlife and fisheries management, small-scale commercial uses accessory to agriculture, and home occupations. Uses permitted in the “Escarpment Natural Area” are limited to existing agricultural operations, single dwellings, forest, wildlife and fisheries management, and non-intensive recreational uses.

Existing Land Uses:

Existing Land Uses along the Highway 6 corridor are shown on **Air Photos 1 to 9**. Generally, Existing Land Uses along this corridor include Agricultural lands, Industrial uses, Commercial uses, Rural Residential uses, and Settlement Residential and Commercial uses. Specifically, Existing Land Uses, as shown on **Air Photos 1 to 9** (north to south) are described as follows:

Existing Land Uses shown on **Air Photo 1** include Agricultural Uses, Rural Residential dwellings, Settlement Residential dwellings (in Morriston), a car pool at the Highway 401 interchange, Industrial (Construction) business, and Settlement Commercial businesses, including gas station, Solid Oak Furniture, Picard’s Peanuts, Huether’s Garage, convenience store, psychic, restaurant, and Le Bel Furniture (in Morriston).

Existing Land Uses shown on **Air Photo 2** include Agricultural Uses, Rural Residential dwellings, Industrial uses (Bryan’s Farm and Industrial Supply, and an Industrial Building for sale), Institutional use (Seventh Day Church), and Rural Commercial Business uses (farm equipment shops, and Fine Point Painting).

Existing Land Uses shown on **Air Photo 3** include Agricultural Uses, Rural Residential dwellings, Settlement Residential dwellings (in Freelton), and Settlement Commercial uses (in Freelton), and a Rural Industrial use (Benson Chemicals) and Rural Commercial uses (Trucking Company and Pacific Cedar). As well the Hydro Corridor is located parallel to Highway 6, along the west side of the Highway.

Existing Land Uses shown on **Air Photo 4** include Agricultural Uses, Rural Residential dwellings, Settlement Residential dwellings (in Freelton), Institutional use (United Church of Canada) and Rural Commercial uses (kennel, Tractor Sales, Woodland Farm Market). As well the Hydro Corridor is located parallel to Highway 6, along the west side of the Highway, and crosses over the Highway in Freelton.

Existing Land Uses shown on **Air Photo 5** include Agricultural Uses, Rural Residential dwellings, Settlement Residential dwellings (in Harper’s Corner), Industrial use (Self Storage), and Commercial uses (Breezy Corners Family Restaurant, Pioneer Gas Station Texas Grill Restaurant, Shell Gas Station, Tim Horton’s, Li Chin Garden (Chinese food), Petro-Canada Gas Station, Coffee Time, and OLCA Gas Station. As well, the Hydro Corridor is located parallel to Highway 6, along the east side of the Highway.

Existing Land Uses shown on **Air Photo 6** include Agricultural Uses, Rural Residential dwellings, Settlement Residential dwellings (in Millgrove), Industrial use (JDJ Trailer Manufacturer), and Commercial uses (Grasshopper Imports, Market Garden, Pioneer Gas Station, Stafford Rentals, Brad’s Automotive, Flamborough Mix and Brew House, Auto Recyclers, Farm Market, and Oasis Family Restaurant (closed).

Existing Land Uses shown on **Air Photo 7** include Agricultural Uses, Rural Residential dwellings, Settlement Residential dwellings (in Millgrove), Industrial use (Business Pipeline Company), and Commercial uses (Flamborough Patio Centre, Doggie Daycare, Nursery, Terra Garden Centre, Golf Fairway).

Existing Land Uses shown on **Air Photo 8** include Agricultural Uses, Rural Residential dwellings, and Commercial uses (Beverly Tire and Auto, Petro Canada Gas Station, Wendy’s, Tim Horton’s, Gedas Motors, Appliances).

Existing Land Uses shown on **Air Photo 9** include Settlement Residential dwellings, Industrial uses and Commercial uses.

3.1.2 LINK 11: Campbellville Road (between Highway 6 and Centre Road)

Official Plan Designations:

Campbellville Road, in between Highway 6 and Centre Road, falls within the planning jurisdiction of the City of Hamilton. The lands along this corridor are designated “Rural Area” in the Region of Hamilton-Wentworth Official Plan, and “Rural” and “Rural Residential Estate Development” in the Town of Flamborough Official Plan.

As shown on **Figure 10**, Schedule D (Rural Land Use Designations) in the Rural Hamilton Official Plan, these lands are designated “Rural”. Permitted land uses within this designation include agriculturally-related uses, resource-based rural uses, and institutional uses. Further, a parcel of land located in between Centre Road and Highway 6 is identified as Site Specific Area No. R-6(a) in the Rural Hamilton Official Plan (**Figure 17**). These lands are identified as Chestnut Grove Estates and have special policy permission for an estate residential development to consist of 13 single detached estate homes (see Section 5.3.3.3 of this Report).

Existing Land Uses:

Existing Land Uses along this corridor are shown on **Air Photo 10**. Specifically, Existing Land Uses along this corridor include Agricultural lands, Rural Residential dwellings, Institutional use (Mountsberg Baptist Church at NW corner of Centre Road and Campbellville Road), and agriculturally-related Business (an equestrian training centre).

3.1.3 LINK 13: Campbellville Road (between Milborough Line and Twiss Road)

Official Plan Designations:

Campbellville Road, in between Milborough Line and Twiss Road, falls within the planning jurisdiction of the Region of Halton and Town of Milton. The Region of Halton Official Plan designates the lands along Campbellville Road as “Agricultural Rural Area”, “Greenlands A” and “Greenlands B” (**Figure 18**). Similarly, as shown on **Figure 19**, Schedule A (Land Use Plan) in the Town of Milton Official Plan, the lands along Campbellville Road are designated “Rural Area”, “Greenlands A” and “Greenlands B”. Permitted uses in the “Rural Area” include agricultural uses, single detached dwellings on existing lots, recreation uses, home industries, and home occupations. The “Greenlands A” and “Greenlands B” land use designations are intended to protect significant ecological, scenic and heritage resources. Permitted uses in the “Greenlands A” and “Greenlands B” designations are limited to existing agricultural operations, non-intensive recreation uses, forest, wildlife and fisheries management, and essential transportation and utility facilities.

Existing Land Uses:

Existing Land Uses along this corridor are shown on **Air Photo 15**. Specifically, Existing Land Uses along this corridor include Agricultural lands, and Rural Residential dwellings. Detailed reference to natural areas can be found in Savanta’s Natural Environment Report prepared in connection with the Haul Route.

3.1.4 LINK 17, 18: Concession 11 (between Highway 6 and Millborough Line)

Official Plan Designations:

Concession 11, between Highway 6 and Millborough Line, falls within the planning jurisdiction of the City of Hamilton. This corridor is designated “Rural Area” in the Hamilton-Wentworth Official Plan, and “Rural”, “Rural Residential Estate Development”, “Open Space and Recreation”, and “Agriculture” in the Town of Flamborough Official Plan.

As shown on **Figure 10**, Schedule D (Rural Land Use Designations) in the Rural Hamilton Official Plan, the lands along this road are designated “Rural”, “Open Space”, and “Rural Settlement Area”. Permitted uses within the “Rural” designation include agriculturally-related uses, resource-based rural uses, and institutional uses. As well, lands located on the south side of Concession 11, just east of Centre Road, are identified in the Hamilton Rural Official Plan as Site Specific Area R-6(d) (Stonebury Place) (**Figure 20**). These lands are designated for estate residential development.

Permitted uses within the “Open Space” land use designation include public or private areas where the predominant use or function of the land is for recreational activities, including resource-based recreational and tourism uses, recreation / community centres, pedestrian pathways, trails, bikeways and walkways, seasonal campgrounds, marinas, woodlots, forestry and wildlife, hazard lands and cemeteries.

Permitted uses within the “Rural Settlement Area” designation are set out in specific policies for each Rural Settlement Area. The Rural Settlement Area located along Concession 11 at Highway 6 is Freulton, and the Freulton Rural Settlement Area land use schedule is included as **Figure 13**. The lands along Concession 11 in Freulton are designated “Settlement Residential”, as shown on **Figure 13**.

Existing Land Uses:

Existing Land Uses along the Concession 11 corridor are included on **Air Photos 12 and 13**. Specifically, Existing Land Uses along this corridor include Agricultural lands, Rural Residential dwellings, Settlement Residential dwellings in Freulton (fronting onto Concession 11), one campground (Lawson Park Family Camping Resort), and agriculturally-related Business use (equestrian training centre). As well, Stonebury Place, located on the south side of Concession 11, just east of Centre Road, consists of estate residential dwellings. It is important to note that detailed reference to natural areas can be found in Savanta’s Natural Environment Report prepared in connection with the Haul Route.

3.1.5 LINK 1: Centre Road (between Concession 11 and Campbellville Road)

Official Plan Designations:

Centre Road, between Concession 11 and Campbellville Road, falls within the planning jurisdiction of the City of Hamilton. Lands along this corridor are designated “Rural Area” in the Hamilton-Wentworth Official Plan, and “Rural” and “Open Space and Recreation” in the Town of Flamborough Official Plan.

As shown on **Figure 10**, Schedule D (Rural Land Use Designations) in the Rural Hamilton Official Plan, the lands along this road are designated “Rural”. Permitted uses within the “Rural” designation include agriculturally-related uses, resource-based rural uses, and institutional uses.

Existing Land Uses:

Existing Land Uses along the Centre Road corridor are shown on **Air Photo 11** and include Agricultural uses, Rural Residential dwellings, Institutional use (Mountsberg Community Centre at SW corner of Centre Road and Campbellville Road), and agriculturally-related Business use.

3.1.6 LINK 5: Milborough Line (between Concession 11 and Campbellville Road)

Official Plan Designations:

Milborough Line, in between Concession 11 and Campbellville Road, represents the municipal boundary separating the City of Hamilton and the Regional Municipality of Halton. Accordingly, this corridor falls within the planning jurisdiction of the City of Hamilton (west side of the road) and Region of Halton and Town of Milton (east side of the road).

Within Hamilton, the lands along this corridor are designated “Rural Area” in the Hamilton-Wentworth Official Plan. Further, lands along this corridor are designated “Agriculture”, “Rural”, and “Rural Residential Estate Development” in the Town of Flamborough Official Plan.

As shown on **Figure 10**, Schedule D (Rural Land Use Designations) in the Rural Hamilton Official Plan, the lands along the west side of this road are designated “Rural”. Permitted uses within the “Rural” designation include agriculturally-related uses, resource-based rural uses, and institutional uses. As well, land located on the west side of Milborough Line, accessing from Mountsberg Road, are identified in the Hamilton Rural Official Plan as Site Specific Area R-6(b) (Timberrun Court) (**Figure 21**). These lands are designated for estate residential development.

The Region of Halton Official Plan designates the lands along the east side of Milborough Line as “Agricultural Rural Area” and “Greenlands A” (**Figure 18**). Similarly, as shown on **Figure 19**, Schedule A (Land Use Plan) in the Town of Milton Official Plan, the lands along the east side of Milborough Line are designated “Rural Area”, “Greenlands A” and “Greenlands B”. Permitted uses in the “Rural Area” include agricultural uses, single detached dwellings on existing lots, recreation uses, home industries, and home occupations. The “Greenlands A” and “Greenlands B” land use designations are intended to protect significant ecological, scenic and heritage resources. Permitted uses in the “Greenlands A” and “Greenlands B” designations are limited to existing agricultural operations, non-intensive recreation uses, forest, wildlife and fisheries management, and essential transportation and utility facilities. It is important to note

that detailed reference to natural areas can be found in Savanta’s Natural Environment Report prepared in connection with the Haul Route.

Existing Land Uses:

Existing Land Uses along the Milborough Line corridor are shown on **Air Photo 14** and include Agricultural uses, Rural Residential dwellings, and Business use (dog kennel located at NW corner of Concession 11 and Milborough Line). Further, Timberrun Court, located just west of Milborough Line, south of Mountsberg Road, consists of estate residential homes. It is important to note that detailed reference to natural areas can be found in Savanta’s Natural Environment Report prepared in connection with the Haul Route.

**3.1.7 LINK 26: Twiss Road
(between Campbellville Road and Reid Side Road)**

Official Plan Designations:

Twiss Road, in between Campbellville Road and Reid Side Road, falls within the planning jurisdiction of the Region of Halton and Town of Milton. The Region of Halton Official Plan designates the lands along this corridor as “Agricultural Rural Area” and “Greenlands A”. (**Figure 18**). Similarly, as shown on **Figure 19**, Schedule A (Land Use Plan) in the Town of Milton Official Plan designates the lands along this corridor as “Rural Area” and “Greenlands A”. Permitted uses in the “Rural Area” include agricultural uses, single detached dwellings on existing lots, recreation uses, home industries, and home occupations. The “Greenlands A” land use designation is intended to protect significant ecological, scenic and heritage resources. Permitted uses in the “Greenlands A” designation are limited to existing agricultural operations, non-intensive recreation uses, forest, wildlife and fisheries management, and essential transportation and utility facilities.

Existing Land Uses:

Existing Land Uses along the Twiss Road corridor are shown on **Air Photo 15** and include Industrial uses (Rockett Lumber, Self-Storage facility), Agricultural uses, and Rural Residential dwellings.

3.1.8 LINK 27: Reid Side Road (between Twiss Road and Guelph Line)

Official Plan Designations:

Reid Side Road west of Guelph Line is within the planning jurisdiction of the Region of Halton and Town of Milton. The Region of Halton Official Plan designates the lands along this corridor as “Hamlet”, “Agricultural Rural Area” and “Greenlands A” (**Figure 18**). Similarly, as shown on **Figure 19**, Schedule A (Land Use Plan) in the Town of Milton Official Plan, the lands along this corridor are designated “Hamlet Area”, “Rural Area” and “Greenlands A”.

The lands designated “Hamlet Area” are identified as the Hamlet of Campbellville, and the Hamlet of Campbellville Land Use Schedule is included as Figure 22. Section C.3.1 of the Official Plan notes that the Hamlet of Campbellville can accommodate 1080 persons in total, and lands along Reid Side Road are designated “Hamlet Industrial”, “Institutional”, and “Hamlet Residential” as shown on **Figure 22**. Permitted uses within these designations include residential, industrial and institutional uses.

Permitted uses in the “Rural Area” along this corridor include agricultural uses, single detached dwellings on existing lots, recreation uses, home industries, and home occupations. The “Greenlands A” land use designation is intended to protect significant ecological, scenic and heritage resources. Permitted uses in the “Greenlands A” designation are limited to existing agricultural operations, non-intensive recreation uses, forest, wildlife and fisheries management, and essential transportation and utility facilities.

Existing Land Uses:

Existing Land Uses along Reid Side Road are shown on **Air Photo 15** and include Hamlet Residential dwellings, Rural Residential dwellings, Agricultural uses, a cemetery, a Commercial use (Ridley Windows and Doors), and an Emergency Response Centre.

3.1.9 Guelph Line (between Reid Side Road and Highway 401)

Official Plan Designations:

A short distance along Guelph Line, in between Reid Side Road and Highway 401, is within the planning jurisdiction of Niagara Escarpment Commission, Region of Halton and Town of Milton. As shown on **Figure 16**, the Niagara Escarpment Plan designates lands along the east side of this section of Guelph Line as “Escarpment Rural Area”. Similarly, the Region of Halton and Town of Milton Official Plans designate the east side of Guelph Line as “Escarpment Rural Area”, consistent with the Niagara Escarpment Plan. Permitted uses within the “Escarpment Rural Area” include agricultural operations, single dwellings, limited recreational uses, forest,

wildlife and fisheries management, small scale commercial uses accessory to agriculture, home occupations and small-scale institutional uses.

Lands along the west side of this stretch of Guelph Line are outside of the Niagara Escarpment Plan, and are designated “Agricultural Rural Area” in the Region of Halton Official Plan, and “Rural Area” in the Town of Milton Official Plan. Permitted uses in the “Rural Area” along this corridor include agricultural uses, single detached dwellings on existing lots, recreation uses, home industries, and home occupations.

Existing Land Uses:

Existing Land Uses along Guelph Line are shown on **Air Photo 15** and include the Highway 401 interchange at Guelph Line.

4.0 Analysis Criteria and Indicators

As noted in the Haul Route Evaluation Terms of Reference (April 2006), the evaluation of the Alternative Haul Routes is to be based on a set of evaluation criteria and indicators. There are three evaluation criteria and associated indicator(s) that have been identified for the assessment of land uses along the Alternative Haul Routes. Below is a summary of the land use criteria and associated indicators, and a discussion related to the importance of each criterion to the haul route evaluation:

1. Criterion: “**Potential for removal of existing land uses for road improvements**” using the following indicator:
 - Area and sensitivity of existing land use eliminated by road improvements

Existing Land Uses are defined as the spatial arrangement of existing land uses resulting from previous development and land use planning. It is important to note that while natural areas represent a sizable portion of the rural landscape, details related to natural heritage features are discussed in the Natural Environment Report prepared by Savanta Inc. for the Haul Route Study. Existing land uses along the five Alternative Haul Routes have been inventoried and summarized. Each of the five Alternative Haul Routes contains a mix of land uses.

In order to ensure optimum pavement and road design for safe and efficient truck traffic and general road user traffic (including pedestrian and cyclists), iTRANS have proposed different cross-sections to alter the road design for each road LINK. In fact, iTRANS have examined the possibility of applying two different types of cross-sections: rural (requires property acquisition) and urban (within the existing right-of-way).

Because the Rural Cross Section requires potential property acquisition, it is the Rural Cross Section which was assessed for the purposes of the evaluation of Criteria No. 1 (potential for

removal of existing land uses for road improvements). iTRANS has developed three different representative road alteration Rural Cross Sections which have been applied to each road LINK, and for certain road LINKS, possible road allowance widening outside the existing right-of-way is anticipated. The above noted criterion and indicator will examine the proportional mix of existing land use types along each Alternative Haul Route, the relative importance of each land use type, and the anticipated road allowance widening along each Alternative Haul Route associated with the proposed road alterations.

2. Criterion: “**Potential for disruptive effects to sensitive planned land uses**” using the following indicators:

- Number, character of planned development areas
- Sensitivity of planned development to increased truck traffic

Planned Land Uses (Planned Development Areas) are defined as areas which are designated for development in long range comprehensive policy documents (i.e. Official Plan), but are not yet built. There are three Planned Development Areas identified along the five Alternative Haul Routes.

The above noted criterion and indicators will examine the three known Planned Development Areas, their character, and their sensitivity to increased truck traffic. This criterion is useful in determining whether the potential for increased truck traffic will significantly affect the character of the Planned Development Areas along the Alternative Haul Routes.

3. Criterion: “**Conformity with applicable plans and policies**” using the following indicators:

- Degree of conformity with Official Plans
- Degree of conformity with the Greenbelt Plan
- Degree of conformity with the Niagara Escarpment Plan

Traditional tools for land use planning and regulation include a combination of provincial, regional and local policy directives, legal instruments, administrative practices and means of promoting community participation in planning.

Applicable Provincial Plans do not identify the location of permitted haul routes / truck routes; however, Provincial policies related to infrastructure and aggregate resources have been examined. Further, information is available in Regional and local Official Plans related to functional classifications and right-of-way widths of major highways and roads. This information is discussed in the analysis of the above noted criterion and associated indicators to illustrate the five Alternative Haul Routes’ conformity with applicable plans and policies

5.0 Analysis

5.1 Data Sources

Data sources used in the analysis of the above noted criteria and indicators include the following:

- Provincial Policy Statement
- Greenbelt Plan
- Niagara Escarpment Plan
- Region of Hamilton-Wentworth Official Plan
- County of Wellington Official Plan
- Region of Halton Official Plan
- City of Hamilton's "Rural Hamilton Official Plan" (not yet approved)
- (former) Town of Flamborough Official Plan
- Town of Milton Official Plan
- City of Burlington Official Plan
- Baseline Conditions for Flamborough Quarry Haul Route Study (April 2008)
- Land Ownership Mapping (iTRANS and Gartner Lee)
- Representative Cross Section Alternatives prepared by iTRANS
- Haul Route Reconnaissance Survey (Karen Bennett, Jan. 4, 2008, Jan. 29, 2008, Feb. 5, 2008, Feb. 29, 2008, and March 6, 2008)

5.2 Analysis of Criteria #1:

Potential for Removal of Existing Land Uses Due to Road Improvements

5.2.1 Assumptions

5.2.1.1 Highway 6

Highway 6 (LINK 23, 24 and 25) is currently a viable transportation corridor which has been planned to accommodate significant truck traffic in a safe, rapid and efficient manner. Accordingly, it has been determined by iTRANS Consulting Limited that no road alterations are required along Highway 6, if Highway 6 is included in the Preferred Haul Route. Similarly, there are no anticipated road alterations required along Reid Side Road, which is a component road LINK in Alternative Route 3, 4 and 5.

5.2.1.2 Rural vs. Urban Cross Section Design and Analysis

For this study two types of cross-sections are proposed: Rural (requires road allowance widening) and Urban (within the existing right-of-way). For the purpose of the analysis, the Rural Cross-Section was applied as it has the most significant impacts due to road allowance widening and was therefore deemed more conservative. However, given the challenges that can be associated with road allowance widening, the urban design that fits the existing right-of-way was also given consideration. It was concluded that this design would not require road allowance widening however it would have a more significant impact on the existing character of the road and has a higher associated cost of construction.

Figure 23, Figure 24, Figure 25, and Figure 26 illustrate the proposed road bed design and shows Rural and Urban Alternative Cross-Sections for both Type 1 and Type 3 sections.

Type 1

With the Rural Cross-Section the proposed right-of-way is 2.0m greater than the existing 20m right of way. This cross-section allows for 3.75m travel lanes, 1.0m paved shoulder, 0.5m gravel shoulder, 0.5m rounding, and a drainage ditch.

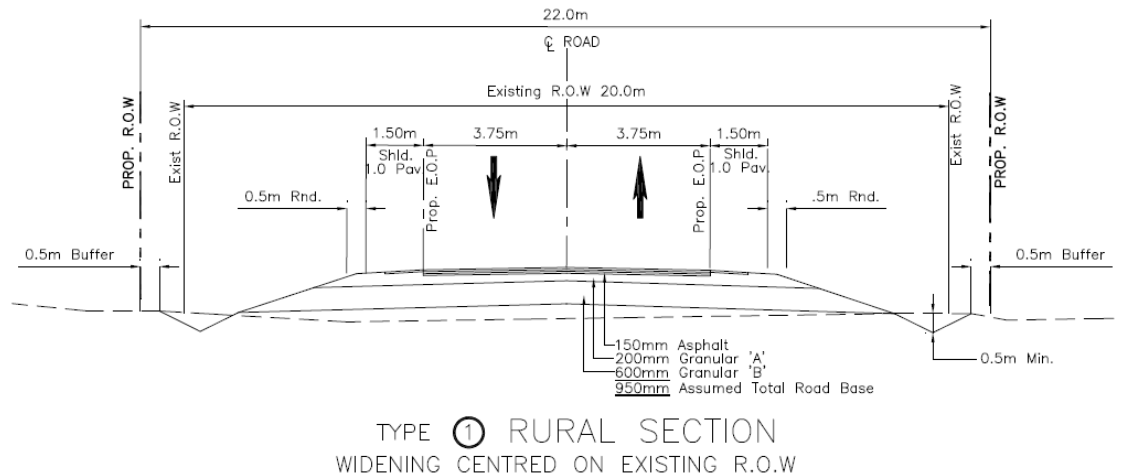


Figure 23: Type 1 Rural Cross-Section

With the Urban Cross-Section the proposed right-of-way fits into the existing 20m right-of-way. The cross-section allows for 3.75m travel lanes, and a 1.5m paved shoulder with curb and gutter.

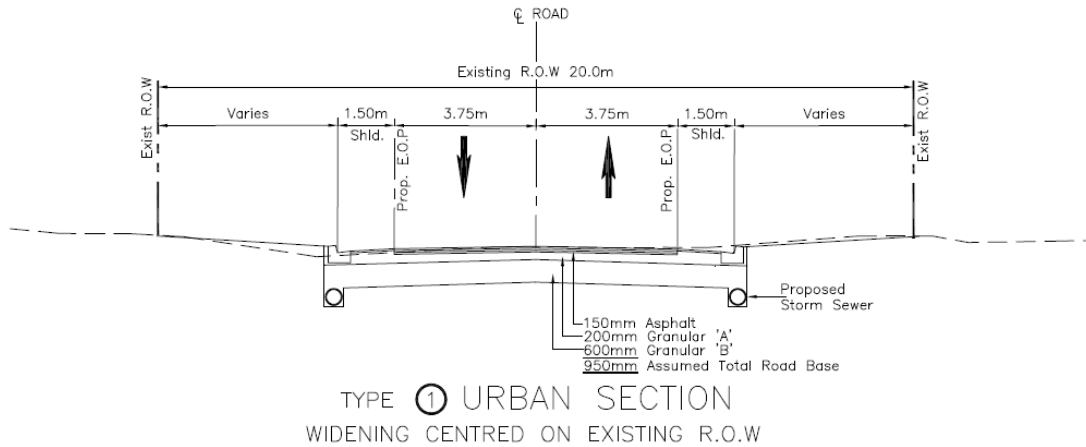


Figure 24: Type 1 Urban Cross-Section

Type 3

With the Rural Cross-Section the proposed right-of-way is 3m to 7.5m greater than the existing cross-section. This cross-section allows for 3.75m travel lanes, 1.0m paved buffer, 1.5m paved bike lane, 1.0m gravel shoulder, 0.5m rounding, a drainage ditch and a 0.5m buffer.

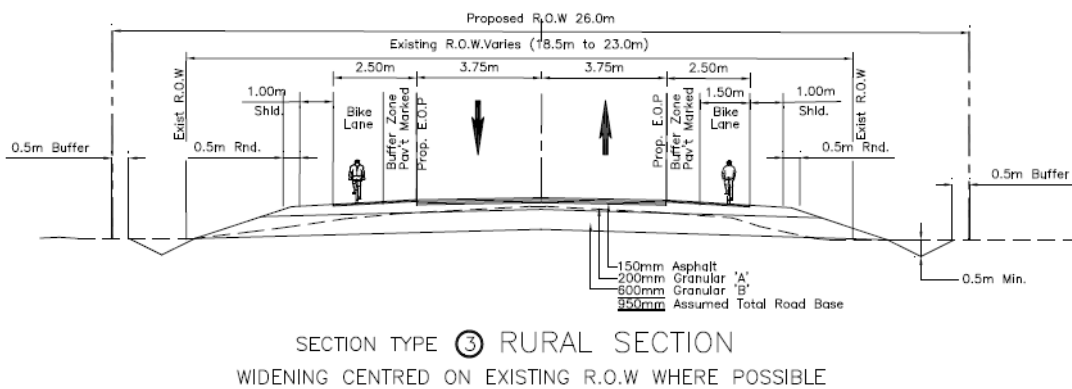


Figure 25: Type 3 Rural Cross-Section

With the Urban Cross-Section the proposed right-of-way can be fit into the existing right-of-way that varies from 18.5m to 23m. The cross-section allows for 3.75m travel lanes, a 1.0m paved buffer, a 1.5m paved bike lane, and curb and gutter with a minimum boulevard of 3m.

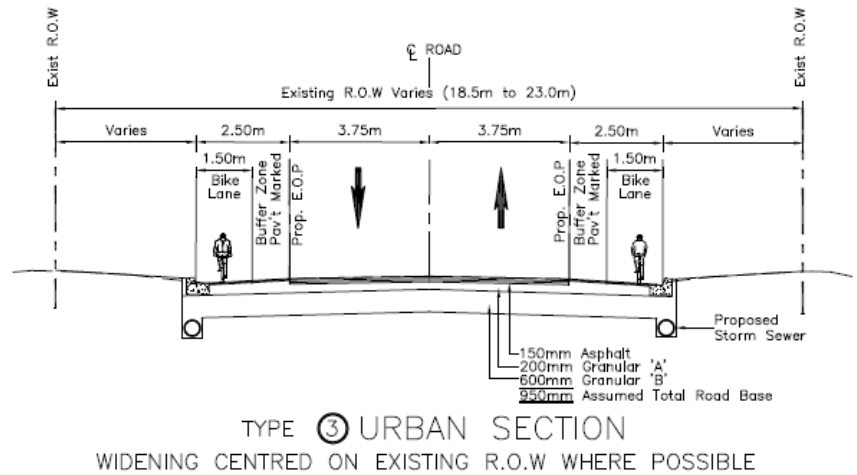


Figure 26: Type 3 Urban Cross-Section

It is important to note that both Type 1 and Type 3 section designs do not account for any changes in the existing profile and assume that widening is at existing profile grade.

While the Urban Cross-Section fits into the existing right-of-ways, the storm sewer infrastructure and appurtenances increase the construction costs approximately 50 percent over the rural design. It is a trade off between the cost (and challenge) of purchasing land and constructing a more expensive infrastructure.

Applying the Rural Cross-Section that would require road allowance widening is a conservative approach for haul route comparative evaluation purposes. The decision on which cross-section to move forward with would be decided at the detailed design stage of an Environmental Assessment when pavement recommendations are finalized. Typically, resolution of the design details would occur during the subsequent Municipal Class EA process.

5.2.1.3 Rural Cross Section Analysis

When the Rural Cross-Section is applied for this analysis, each of the road LINKS proposed in the five Alternative Haul Routes will require some degree of road alteration, with the exception of Highway 6 and Reid Side Road. Accordingly, iTRANS have developed three different representative Rural road improvement cross sections which have been applied to each road LINK for each Alternative Haul Route.

While the Type 1 Rural and Type 3 Rural Cross-Sections are illustrated above (**Figures 23 and 25**, respectively), all three representative Rural Cross Sections are illustrated on **Figure 27**, for ease of reference. These cross sections have been designed by iTRANS to bring each road LINK to design standards acceptable for safe and efficient truck traffic, and to safely accommodate on-street cycling. The proposed Rural Cross-Section type for each LINK relates to the anticipated volume of truck traffic and cyclists on each road LINK.

Existing Right-of Ways (ROW) for roads along the Alternative Haul Routes (excluding Highway 6) vary between 18.5 m and 23 m. As noted on **Figure 27**, the approximate ROW required for Representative Rural Cross-Section Type 1 is 22 m, for Representative Rural Cross-Section Type 2 is 22.5 m, and for Representative Rural Cross Section Type 3 is 26 m. Accordingly, it is anticipated that partial road allowance widening, outside of the existing ROW, may be necessary to accommodate the grading requirements of the proposed Representative Rural Cross-Section.

It is assumed that if partial road allowance widening is required to accommodate the grading requirements for the proposed road alterations, such widening will occur (and be divided across) both sides of the road, where feasible. Furthermore, it is anticipated that if widening is required, it will be balanced to minimize impact on land use types considered to be more sensitive to road alterations (i.e. residential and institutional land uses), where possible.

A summary of the required road alterations (excluding Highway 6 because no alterations are required), including LINK and Rural Cross-Section type proposed, is outlined below:

Alternative Route 1 consists of LINK 17 (Concession 11 west) and LINK 18 (Concession 11 east), and iTRANS is proposing Rural Type 3 Cross-Section (LINK 17) and Rural Type 1 Cross-Section (LINK 18) (**Figure 28**). As noted on **Figure 28**, LINK 17 and LINK 18 currently consist of approximately 20 m ROW. The following Table summarizes the approximate existing ROW, and the anticipated widening associated with the preferred Rural Cross-Section.

Table 1: Haul Route 1 Rural Cross-Section Summary

| LINK | Approximate Existing ROW | Proposed Rural Cross-Section | | Approximate Widening Outside Existing ROW |
|---------|--------------------------|------------------------------|-------------|-------------------------------------------|
| | | Type | Requirement | |
| LINK 17 | 20.0 m | 3 | 26.0 m | 6.0 m |
| LINK 18 | 20.0 m | 1 | 22.0 m | 2.0 m |

Alternative Route 2 consists of LINK 18 (Concession 11 east), LINK 1 (Centre Road), and LINK 11 (Campbellville Road), and iTRANS is proposing Rural Cross-Section Type 1 (for LINK 18 and LINK 11) and Rural Cross-Section Type 3 (for LINK 1) (**Figure 28**). As illustrated on **Figure 27**, Rural Cross-Section Type 3 includes bike lanes with a width of 1.5 m, to accommodate the anticipated large volume of cyclists on Centre Road. As noted on **Figure 28**, LINK 18, LINK 1 and LINK 11 all currently consist of approximately 20 m ROW. The

following Table summarizes the approximate existing ROW, and the anticipated widening associated with the preferred Rural Cross-Section.

Table 2: Haul Route 2 Rural Cross-Section Summary

| LINK | Approximate Existing ROW | Proposed Rural Cross-Section | | Approximate Widening Outside Existing ROW |
|---------|--------------------------|------------------------------|-------------|-------------------------------------------|
| | | Type | Requirement | |
| LINK 18 | 20.0 m | 1 | 22.0 m | 2.0 m |
| LINK 1 | 20.0 m | 3 | 26.0 m | 6.0 m |
| LINK 11 | 20.0 m | 1 | 22.0 m | 2.0 m |

Alternative Route 3 consists of LINK 5 (Milborough Line), LINK 13 (Campbellville Road), LINK 26 (Twiss Road), and LINK 27 (Reid Sideroad) and iTRANS is proposing Type 3 Rural Cross Section (for LINK 5 and LINK 13) and Type 1 Rural Cross Section (for LINK 26 and LINK 27) (**Figure 28**). As noted on **Figure 28**, LINK 5 currently consists of approximately 18.5 to 23.0 m ROW, LINK 13 and LINK 26 currently consist of approximately 20.0 m ROW, and LINK 27 currently consists of approximately 25.0 m ROW. The following Table summarizes the approximate existing ROW, and the anticipated widening associated with the preferred Rural Cross-Section.

Table 3: Haul Route 3 Rural Cross-Section Summary

| LINK | Approximate Existing ROW | Proposed Rural Cross-Section | | Approximate Widening Outside Existing ROW |
|---------|--------------------------|------------------------------|-------------|-------------------------------------------|
| | | Type | Requirement | |
| LINK 5 | 18.5 m to 23.0 m | 3 | 26.0 m | 3.0 m to 7.5 m |
| LINK 13 | 20.0 m | 3 | 26.0 m | 6.0 m |
| LINK 26 | 20.0 m | 1 | 22.0 m | 2.0 m |
| LINK 27 | 25.0 m | 1 | 22.0 m | 0 |

Alternative Route 4 is a combination of Alternative Routes 1 and 3, consisting of LINK 17, LINK 18, LINK 5, LINK 13, LINK 26 and LINK 27. The Rural Cross Section Types proposed are shown on **Figure 29**, and consist of Rural Cross Section Types 1, 2 and 3. As noted on Figure 13, LINK 17, LINK 18, LINK 13 and LINK 26 currently consist of approximately 20 m ROW. LINK 5 currently consists of existing ROW of approximately 18.5 m to 23.0 m, and LINK 27 currently consists of existing ROW of approximately 25.0 m. The following Table summarizes the approximate existing ROW, and the anticipated widening associated with the preferred Rural Cross-Section.

Table 4: Haul Route 4 Rural Cross-Section Summary

| LINK | Approximate Existing ROW | Proposed Cross-Section | | Approximate Widening Outside Existing ROW |
|---------|--------------------------|------------------------|-------------|-------------------------------------------|
| | | Type | Requirement | |
| LINK 17 | 20.0 m | 2 | 22.5 m | 2.5 m |
| LINK 18 | 20.0 m | 1 | 22.0 m | 2.0 m |
| LINK 5 | 18.5 m to 23.0 m | 3 | 26.0 m | 3.0 m to 7.5 m |
| LINK 13 | 20.0 m | 3 | 26.0 m | 6.0 m |
| LINK 26 | 20.0 m | 1 | 22.0 m | 2.0 m |
| LINK 27 | 25.0 m | 1 | 22.0 m | 0 |

Alternative Route 5 is a combination of Alternative Routes 2 and 3, consisting of LINK 18, LINK 1, LINK 11, LINK 5, LINK 13, LINK 26 and LINK 27. The Rural Cross Section Types proposed are shown on **Figure 30**, and consist of Rural Cross Section Types 1, 2 and 3. As noted on **Figure 30**, LINK 18, LINK 1, LINK 11, LINK 13, and LINK 26 currently consist of approximately 20 m ROW. LINK 5 currently consists of existing ROW of between 18.5 m and 23.0 m, and LINK 27 currently consists of existing ROW of approximately 25.0 m. The following Table summarizes the approximate existing ROW, and the anticipated widening associated with the preferred Rural Cross-Section.

Table 5: Haul Route 5 Rural Cross-Section Summary

| LINK | Approximate Existing ROW | Proposed Rural Cross-Section | | Approximate Widening Outside Existing ROW |
|---------|--------------------------|------------------------------|-------------|-------------------------------------------|
| | | Type | Requirement | |
| LINK 18 | 20.0 m | 1 | 22.0 m | 2.0 m |
| LINK 1 | 20.0 m | 2 | 22.5 m | 2.5 m |
| LINK 11 | 20.0 m | 1 | 22.0 m | 2.0 m |
| LINK 5 | 18.5 m to 23.0 m | 3 | 26.0 m | 3.0 m to 7.5 m |
| LINK 13 | 20.0 m | 3 | 26.0 m | 6.0 m |
| LINK 26 | 20.0 m | 1 | 22.0 m | 2.0 m |
| LINK 27 | 25.0 m | 1 | 22.0 m | 0 |

5.2.2 Methodology

The methodology involved in analyzing the potential for removal of existing land uses due to road alterations involves defining land use types, assigning a level of relative importance to each defined land use type, and measuring the area of each land use type anticipated to be removed outside of the existing ROW due to grading related to road alterations.

Defining Land Use Types:

Section 3.1 (above) provides a summary description of the land use environment along each of the road LINKS contained in the five Alternative Haul Routes. In preparing this analysis, the consulting team has categorized existing land uses into a series of Land Use Types, to include (1) Agricultural, (2) Woodlots and Conservation Lands, (3) Business, (4) Community / Recreational, and (5) Residential / Vacant. Each of the five Alternative Haul Routes contains a full mix of all of the land use types.

Below represents a summary of how each land use type was defined.

Agricultural:

Agricultural areas are lands primarily consisting of horticulture, field crops, pasture land, animals, and barns.

Woodlots and Conservation Lands:

Woodlots and Conservation areas are lands primarily consisting of woodlots and environmental features, including those lands owned by Conservation Halton. Specific examples include Laking Tract and Thomas William Harrison Tract which are both located along Campbellville Road, in between Milborough Line and Twiss Road. Detailed examination of all natural heritage features and landforms is contained within the Flamborough Quarry Haul Route Study: Natural Environment Report prepared by Savanta Inc.

Business:

Business areas include commercial and industrial uses. These areas include business uses within settlement and hamlet clusters, including gas stations, restaurants, furniture shops, convenience stores, coffee shops, and auto shops, as well as business uses located in a linear pattern along rural road frontages, including self-storage facility, pipeline company, lumber facility, farm equipment shops, equestrian training centres, landscaping and garden centres, trucking companies, farm markets, and kennels.

Community / Recreational:

Community / recreational areas include public facilities and open space, including churches, schools, community centres, parks, and a cemetery. A specific example of Community / Recreational also includes the Lawson Park Family Camping Resort on Concession Road 11, just east of Centre Road.

Residential / Vacant :

Residential / vacant areas include residential land uses within settlement cluster or hamlet areas, and those rural residential properties located in a linear pattern along a road. These areas also include lands identified as vacant along the haul routes. The following settlements or hamlets were measured: Morriston, Freelon, Millgrove, Harper's Corners and Campbellville. As well, residential properties within the estate residential developments referred to as Timberrun Estates and Stonebury Place were included in this land use type.

Assigning a Level of Importance to each Land Use Type

It is important to have a general understanding of the varying degrees of importance and sensitivity for each Land Use Type to road improvements. While it is recognized that Team Specialists are providing more precision related to the sensitivity of land uses to specific technical criteria, including natural environment, agriculture, social and business impacts, cultural heritage / archaeology, air quality, noise, health risk assessment, geotechnical analysis, structural and stormwater management, and transportation, it is important for the purpose of this Land Use analysis to acknowledge the varying degrees of general sensitivity for the Land Use Types identified above.

In general, it is expected that community / recreational land uses and residential land uses will be more sensitive to possible road allowance widening associated with road alterations, than agricultural, woodlots and conservation lands, and business uses.

Measuring the Area of Each Land Use Type

The inventory of Existing Land Uses was completed in March 2008 for the roads contained within the Alternative Haul Routes (including Highway 6). In order to evaluate the area of existing land uses eliminated by grading associated with road alterations to accommodate Rural Cross-Section designs, the Total Property Required for road alterations was measured using the five different Land Use Types identified above. Measuring each Land Use Type was undertaken by Team Specialist Gartner Lee Limited using a combination of the following methods:

- Measurement of approximate frontage and depth of anticipated land required for road alterations, by land use type, using land ownership mapping
- Field measurement by vehicle reconnaissance and site visits

The Total Property Required for grading associated with road alterations to accommodate Rural Cross-Section designs was measured by Land Use Type along the Alternative Haul Routes using a combination of the above noted measurement methods, and the resultant measured total for each existing land use type was recorded.

The result provides an opportunity to view and compare the approximate proportional land use mix, by land use type, of existing land uses along the road frontages within each Alternative

Haul Route (excluding Highway 6). The results are represented in pie charts illustrated below. One pie chart has been prepared for each Alternative Haul Route (all excluding Highway 6).

As noted above, road alterations are not required for Highway 6 or for Reid Side Road to accommodate Rural Cross-Section Designs for truck traffic associated with the proposed quarry. Accordingly, there will be no road allowance widening outside of the existing ROW along Highway 6 or Reid Side Road to accommodate road alterations related to the Rural Cross-Sections along the Alternative Haul Routes. Accordingly, Highway 6 is not included in the analysis of Criteria #1 (the potential for removal of existing land uses from road improvements).

5.2.3 Analysis

The potential for removal of existing land uses due to road alterations requires an analysis of the total property required (TPR) for road alterations to accommodate Rural Cross-Section Designs (outside of the existing road right-of-way), and an analysis of the land use types to be affected by such road alterations.

In order to measure the criteria indicator “*Area and importance of existing land use eliminated by road improvements*”, it is necessary to examine the proportional mix of land use types contained within each of the Alternative Haul Routes, and the Total Property Required (TPR) for grading associated with road alterations.

The analysis presented below illustrates in pie chart format the percentage of Total Property Required (TPR) for each land use type existing along the road frontages within each of the Alternative Haul Routes, excluding Highway 6. As noted in Section 5.2.1.1 above (Assumptions), Highway 6 is currently a viable transportation corridor which has been planned to accommodate significant truck traffic in a safe, rapid and efficient manner and, accordingly, no road alterations are required along Highway 6.

5.2.3.1 HAUL ROUTE No. 1

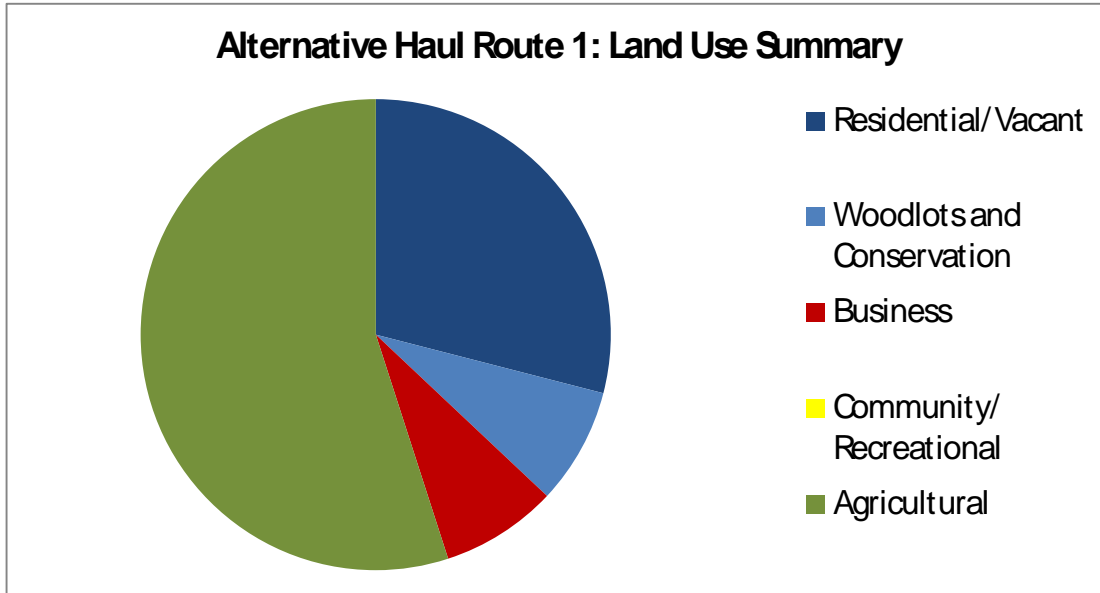
Haul Route 1 contains lands along Concession Road 11, from Highway 6 to Milborough Line. This route is predominantly comprised of agricultural areas and residential / vacant land uses. The residential land uses are comprised of rural residential properties, settlement residential properties, including several dwellings along Concession Road 11 in Freelon, and the estate residential development referred to as “Stonebury Place”. Stonebury Place is a secluded executive estate residential development, accessing Concession Road 11 from Stonebury Place Court. It is important to note that none of the estate residential dwellings in Stonebury Place directly access Concession Road 11. Accordingly, it is anticipated that road alterations along Concession Road 11 will not directly impact any of these estate residential dwellings. Similar to Stonebury Place, the Lawson Park Family Camping Resort is accessed from Concession Road 11, but there is no direct access to individual campsites from Concession Road 11. Potential land use impacts to the Camping Resort resulting from road alterations may be limited to the parking

area of the Camping Resort. As well, it is important to note that there are lands owned by the Roman Catholic Diocese of Hamilton on the south side of Concession 11, just east of Highway 6 in Freelton; however, discussions with the Diocese have confirmed that there are no immediate plans to develop these lands and, accordingly, this parcel has been classified as agricultural land use for the purposes of this analysis.

As noted on **Figure 28**, Alternative Haul Route 1 proposes the Rural Type 1 Cross Section and Rural Type 3 Cross Section. These Cross Sections proposed by iTRANS for this Alternative Haul Route will provide the benefit of bike lanes (Type 3) and better pavement and road design. As noted on Table 1, the road alterations associated with these Rural Cross Section Types are anticipated to require road allowance widening of approximately **6.0 m of land along LINK 17 (Concession 11 west of Centre Road)**, and **2.0 m of land along LINK 18 (Concession 11 east of Centre Road)**. In summary, the Total Property Required to accommodate grading associated with road alterations along Alternative Haul Route 1 is anticipated to be **21,462 m²**. Utilizing lands from adjacent properties along this Alternative Haul Route to accommodate the proposed road alterations will widen lands predominantly occupied by agricultural / natural areas, and some residential land uses. The Lawson Park Family Camping Resort is located along Concession Road 11; however, iTRANS has confirmed that road allowance widening will not be required along the frontage of the Lawson Park Family Camping Resort for road alterations associated with the Rural Cross-Section because the existing pavement is not centred on the existing right-of-way (ROW) and actually curves toward the northern side of the ROW at that particular location. Accordingly, road allowance widening to accommodate the Rural Cross Section in the vicinity of Lawson Park Family Camping Resort is only required on the north side of the road. No road allowance widening will be required from the frontage of Lawson Park.

As noted earlier in this report, it is expected that residential land uses will be more sensitive to road alterations than agricultural, woodlots and conservation lands, and business uses. Since potential road allowance widening along this Alternative Haul Route would appear to primarily impact agricultural and residential / vacant lands, with agricultural and woodlots/conservation representing approximately 63% of the lands fronting along this haul route, it is anticipated that road alterations would have **medium land use impact** on the existing land uses along Alternative Haul Route 1.

Chart 1: Potential Road Allowance Widening Land Use Summary for Haul Route 1



5.2.3.2 HAUL ROUTE No. 2

Haul Route 2 contains lands along the east portion of Concession Road 11, along Centre Road, and along Campbellville Road to Highway 6. This route contains predominantly agricultural lands and residential / vacant lands, and traverses a portion of the Mountsberg community. The residential land use type is comprised of rural residential uses and settlement residential uses within the estate residential development of “Stonebury Place”. As noted above, Stonebury Place is a secluded executive estate residential development, accessing Concession Road 11 from Stonebury Place Court, and none of the estate residential dwellings in Stonebury Place directly access Concession Road 11. Accordingly, it is anticipated that road alterations along Concession Road 11 will not directly impact any of these estate residential dwellings. Further, as noted above, the Lawson Park Family Camping Resort is located along this route. The Lawson Park Family Camping Resort is accessed from Concession Road 11, but there is no direct access to individual campsites from Concession Road 11. Potential land use impacts to the Camping Resort resulting from road alterations may be limited to the parking area of the Camping Resort.

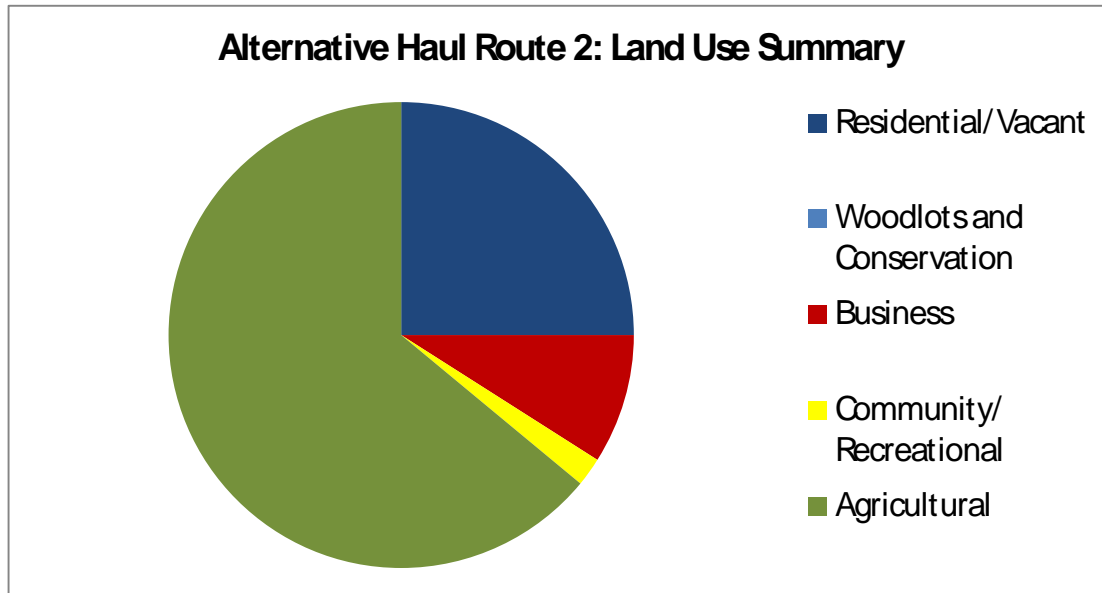
As noted on **Figure 28**, the Type 1 Rural Cross Section and Type 3 Rural Cross Sections are proposed by iTRANS for this Alternative Haul Route, and will provide the benefit of bike lanes (Type 3) and better pavement and road design. As noted on Table 2, the road alterations associated with these Rural Cross Section Types are anticipated to require road allowance widening of approximately **6.0 m of land along LINK 1 (Centre Road)**, and **2.0 m of land along LINK 18 (Concession 11 east of Centre Road) and LINK 11 (Campbellville Road)**. In summary, the Total Property Required to accommodate road alterations along Alternative Haul

Route 2 is anticipated to be **22,628 m²**. Utilizing lands from adjacent properties along this Alternative Haul Route to accommodate the proposed road alterations will widen lands predominantly occupied by agricultural uses and residential land uses.

The community / recreational land uses existing along this Haul Route include the Lawson Park Family Camping Resort, the Mountsberg Baptist Church on Campbellville Road (at Centre Road), and the Mountsberg Community Centre on Centre Road. However, iTRANS has confirmed that road allowance widening will not be required along the frontage of the Lawson Park Family Camping Resort or the Mountsberg Baptist Church for road alterations associated with the Rural Cross-Sections because the existing pavement is not centred on the existing right-of-way (ROW) and actually curves away from these land uses (i.e. curves on northern side of the ROW at Lawson Camping, and on southern side of ROW at Baptist Church). Accordingly, road allowance widening to accommodate the Rural Cross Section in the vicinity of Lawson Park Family Camping Resort and Mountsberg Baptist Church is only required on the opposite side of the road. No widening will be required from the frontage of Lawson Park or the Mountsberg Baptist Church.

As noted earlier in this report, it is expected that community / recreational land uses and residential land uses will be more sensitive to road alterations than agricultural, woodlots and conservation lands, and business uses. Potential road allowance widening along this Alternative Haul Route will primarily impact agricultural lands and residential/vacant lands, with agricultural representing approximately 64% of the lands fronting along this haul route. However, it is important to note that the Mountsberg Community Centre is anticipated to be directly affected by road allowance widening along this route. Accordingly, it is anticipated that road alterations would have **medium land use impact** on the existing land uses along Alternative Haul Route 2.

Chart 2: Potential Road Allowance Widening Land Use Summary for Haul Route 2



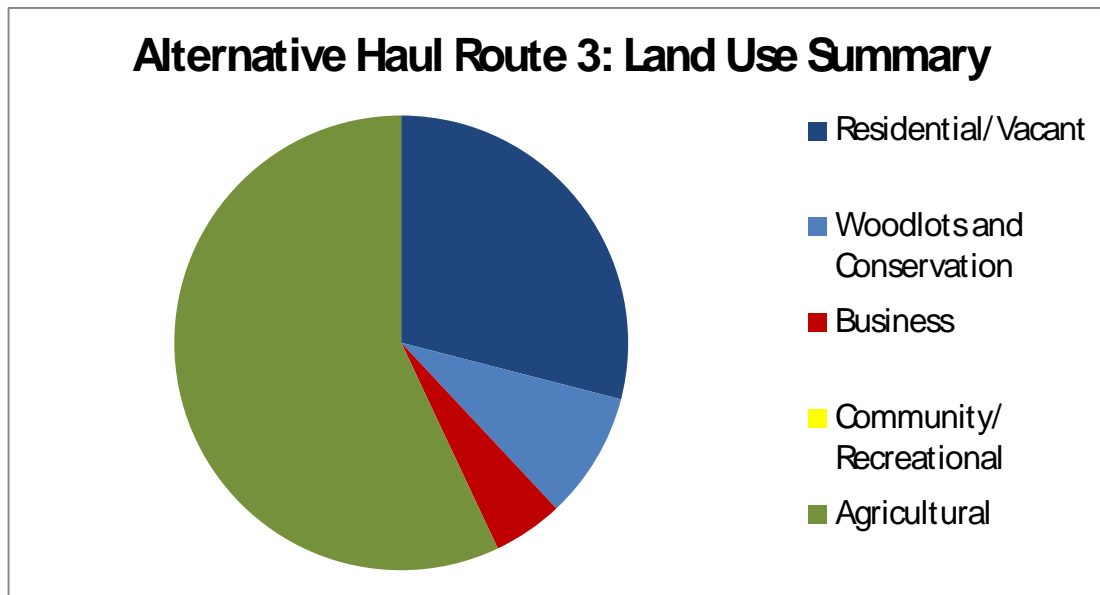
5.2.3.3 HAUL ROUTE No. 3

Haul Route 3 includes lands along Milborough Line, Campbellville Road, Twiss Road and Reid Side Road. This route contains predominantly residential / vacant land uses along Milborough, and agricultural areas and woodlots and conservation along Campbellville Road. This route traverses the north border of the Hamlet of Campbellville, and also borders a number of existing industrial uses along Twiss Road. Business uses, including those industrial uses along Twiss Road, are generally anticipated to have little or no sensitivity to road alterations. The residential land uses along this route consists of rural residential, settlement residential within the Hamlet of Campbellville (along Reid Sideroad), and the estate residential development referred to as “Timberrun”. Timberrun is a secluded executive estate residential development, accessing Mounstberg Road from Timberrun Court, which is adjacent to Milborough Line. It is important to note that all of the estate residences in Timberrun Court are accessed off Mounstberg Road, from Timberrun Court, and the only exposure this estate residential development has to the Alternative Haul Route includes some rear yards adjacent to Milborough Line. None of these estate residential dwellings directly access, or have frontage on, the proposed Haul Route. Accordingly, it is anticipated that road alterations along Milborough Line will not directly impact any of these estate residential dwellings. While there are community / recreational land uses located along Reid Side Road (Hamlet of Campbellville), which is a road LINK in this Haul Route, there are no anticipated road alterations along this road (as noted in Section 5.2.1.1 (Assumptions) above). Accordingly, there is no anticipated potential for removal of community / recreational land uses as a result of road alterations along Reid Side Road.

As noted on **Figure 28**, the Type 1 Rural Cross Section and Type 3 Rural Cross Sections are proposed by iTRANS for this Alternative Haul Route, and will provide the benefit of bike lanes (Type 3) and better pavement and road design. As noted on Table 3, the road alterations associated with these Rural Cross Section Types are anticipated to require road allowance widening of approximately **3.0 m to 7.5 m land along LINK 5 (Milborough Line), 6.0 m of land along LINK 13 (Campbellville Road), and 2.0 m of land along LINK 26 (Twiss Road)**. In summary, the Total Property Required to accommodate road alterations along Alternative Haul Route 3 is anticipated to be **34,110 m²**. Interestingly, Reid Side Road currently provides sufficient land within its existing ROW and, accordingly, no additional land is required outside of the Reid Side Road ROW to accommodate road alterations for this Alternative Haul Route.

Potential road allowance widening along this Alternative Haul Route to accommodate the proposed road alterations will displace lands predominantly occupied by residential / vacant lands along Milborough Line, and woodlots and conservation uses, and agricultural areas along Campbellville Road. Specifically, residential/vacant lands comprise approximately 29% of the lands to be impacted by road allowance widening along this route, and agricultural and woodlots comprise approximately 66%. Further, minor displacement of business uses along Twiss Road is anticipated. Accordingly, it is anticipated that road alterations would have **medium land use impact** on the existing land uses along Alternative Haul Route 3.

Chart 3: Potential Road Allowance Widening Land Use Summary for Haul Route 3



5.2.3.4 HAUL ROUTE No. 4

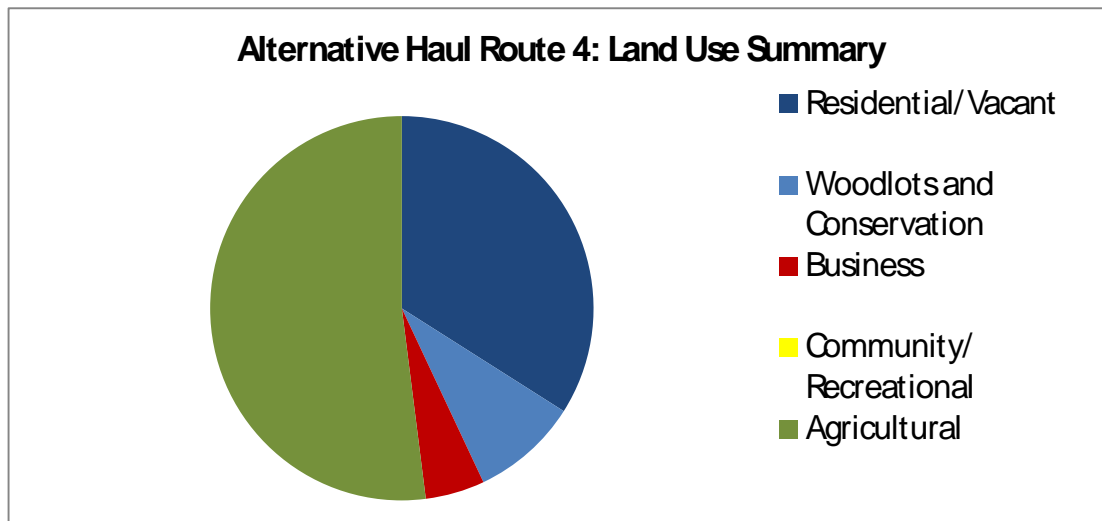
Haul Route 4 is comprised of a combination of Haul Route 1 and Haul Route 3. This route contains predominantly residential / vacant lands and agricultural areas. The eastern direction of this route traverses the north border of the Hamlet of Campbellville, and also borders a number of existing industrial uses along Twiss Road. As noted above, the residential land use type in this Alternative Haul Route is comprised of rural residential properties, residential dwellings in the Hamlet of Campbellville, and the estate residential development referred to as “Timberrun”, as well as some dwellings within Freelton (at Concession 11 and Highway 6) and Stonebury Place. As already noted, the dwellings within Stonebury Place and Timberrun Court do not directly access, or have frontage on, the proposed Haul Route. Accordingly, it is anticipated that road alterations will not directly impact any of these estate residential dwellings. The community / recreational land uses existing along this Haul Route include the Lawson Park Family Camping Report located along Concession Road 11. While it is recognized that individual camp sites do not directly access Concession Road 11, potential land use impacts to the Camping Resort resulting from road alterations may be limited to the parking area of the Camping Resort. As well, it is important to note that there are lands owned by the Roman Catholic Diocese of Hamilton on the south side of Concession 11, just east of Highway 6 in Freelton; however, discussions with the Diocese have confirmed that there are no immediate plans to develop these lands and, accordingly, this parcel has been classified as agricultural land use for the purposes of this analysis.

As noted on **Figure 29**, the Type 1 Rural Cross Section, Type 2 Rural Cross Section and Type 3 Rural Cross Sections are proposed by iTRANS for this Alternative Haul Route. All Cross Sections will provide better pavement and road design, and the Type 3 Rural Cross Section will provide the benefit of bike lanes. As noted on Table 4, the road alterations associated with these Rural Cross Section Types are anticipated to require road allowance widening of approximately **3.0 m to 7.5 m land along LINK 5 (Milborough Line), 6.0 m of land along LINK 13 (Campbellville Road), 2.0 m of land along LINK 18 (Concession 11 east of Centre Road) and LINK 26 (Twiss Road), and 2.5 m along LINK 17 (Concession 11 west of Centre Road)**. In summary, the Total Property Required to accommodate road alterations along Alternative Haul Route 4 is anticipated to be **48,370 m²**.

The Lawson Park Family Camping Resort is located along Concession Road 11; however, iTRANS has confirmed that road allowance widening will not be required along the frontage of the Lawson Park Family Camping Resort for road alterations associated with the Rural Cross-Section because the existing pavement is not centred on the existing right-of-way (ROW) and actually curves toward the northern side of the ROW at this particular location. Accordingly, road allowance widening to accommodate the Rural Cross Section in the vicinity of Lawson Park Family Camping Resort is only required on the north side of the road. No property will be required from the frontage of Lawson Park.

As well, as noted above, Reid Side Road currently provides sufficient land within its existing ROW and, accordingly, no additional land is required outside of the Reid Side Road ROW to accommodate road alterations for this Alternative Haul Route. Potential road allowance widening along this Alternative Haul Route to accommodate the proposed road alterations would primarily impact lands occupied by agricultural uses and woodlot / conservation (approximately 61%), and residential /vacant lands (approximately 34%). Furthermore, there is a larger amount of Total Property Required (TPR) to accommodate road alterations along this Alternative Haul Route because it utilizes more road length. Accordingly, it is anticipated that road alterations would have **medium-high land use impact** on the existing land uses along Alternative Haul Route 4.

Chart 4: Potential Road Allowance Widening Land Use Summary for Haul Route 4



5.2.3.5 HAUL ROUTE No. 5

Haul Route 5 is comprised of a combination of Haul Route 2 and Haul Route 3. This route contains predominantly residential / vacant areas and agricultural areas. Similar to Alternative Routes 3 and 4, the eastern direction of this route traverses the north border of the Hamlet of Campbellville, and also borders a number of existing industrial uses along Twiss Road. As well, the residential land use type in this Alternative Haul Route is comprised of rural residential properties, residential dwellings in the Hamlet of Campbellville, and the estate residential development referred to as “Timberrun”, as well as the estate development of Stonebury Place. As well, this route traverses the community of Mountsberg, along Centre Road. As already noted, the dwellings within Stonebury Place and Timberrun Court do not directly access, or have frontage on, the proposed Haul Route. Accordingly, it is anticipated that road alterations will not directly impact any of these estate residential dwellings. As well, the Lawson Park Family Camping Resort is located along this route. While it is recognized that individual camp sites do

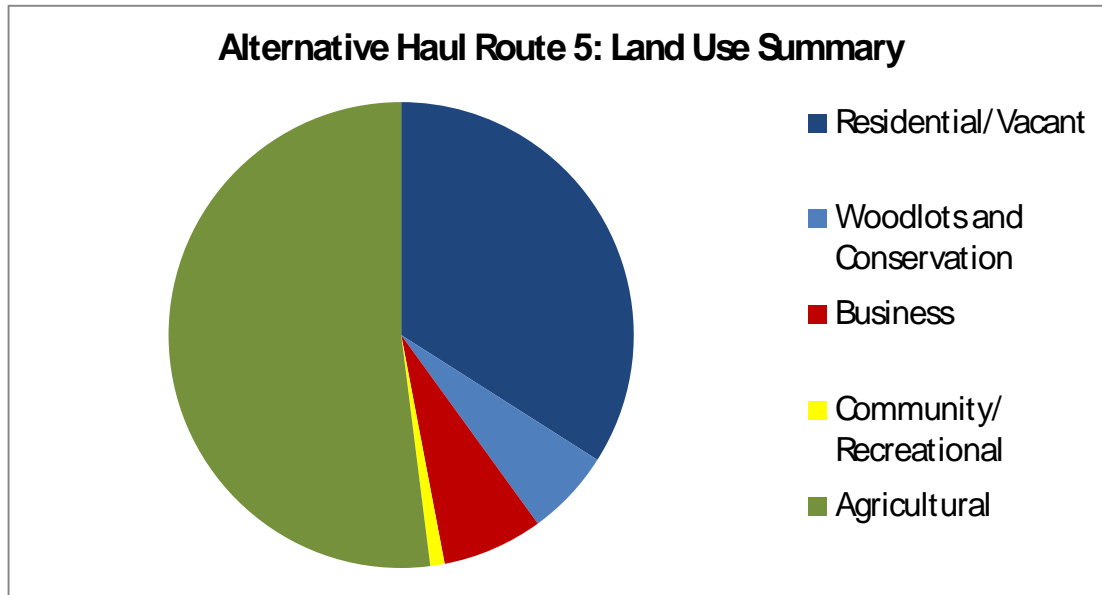
not directly access Concession Road 11, potential land use impacts to the Camping Resort resulting from road alterations may be limited to the parking area of the Camping Resort. The community / recreational land uses existing along this Haul Route include the Lawson Park Campground, Mountsberg Baptist Church on Campbellville Road (at Centre Road), and the Mountsberg Community Centre on Centre Road.

As noted on **Figure 30**, the Type 1 Rural Cross Section, Type 2 Rural Cross Section and Type 3 Rural Cross Sections are proposed by iTRANS for this Alternative Haul Route. All Rural Cross Sections will provide better pavement and road design, and the Type 3 Rural Cross Section will provide the benefit of bike lanes. As noted on Table 5, the road alterations associated with these Cross Section Types are anticipated to require road allowance widening of approximately **3.0 m to 7.5 m land along LINK 5 (Milborough Line), 6.0 m of land along LINK 13 (Campbellville Road), 2.0 m of land along LINK 18 (Concession 11 east of Centre Road), LINK 11 (Campbellville Road) and LINK 26 (Twiss Road), and 2.5 m along LINK 1 (Centre Road)**. In summary, the Total Property Required to accommodate road alterations along Alternative Haul Route 1 is anticipated to be **49,833 m²**.

The Lawson Park Family Camping Resort is located along Concession Road 11; however, iTRANS has confirmed that road allowance widening will not be required along the frontage of the Lawson Park Family Camping Resort or the Mountsberg Baptist Church for road alterations associated with the Rural Cross-Sections because the existing pavement is not centred on the existing right-of-way (ROW) in these locations, and actually curves away from these land uses. Accordingly, road allowance widening to accommodate the Rural Cross Sections in the vicinity of Lawson Park and the Baptist Church is only required on the opposite side of the road. No property will be required from the frontage of Lawson Park or the Baptist Church.

As well, as noted above, Reid Side Road currently provides sufficient land within its existing ROW and, accordingly, no additional land is required outside of the Reid Side Road ROW to accommodate road alterations for this Alternative Haul Route. Potential road allowance widening along this Alternative Haul Route will primarily impact lands occupied by agricultural and woodlot/conservation lands (approximately 58%), and residential/vacant lands (34%). Furthermore, there is a larger amount of Total Property Required (TPR) to accommodate road alterations along this Haul Route, because the Haul Route utilizes more road length. Accordingly, it is anticipated that road alterations would have **medium-high land use impact** on the existing land uses along Alternative Haul Route 5.

Chart 5: Potential Road Allowance Widening Land Use Summary for Haul Route 5



5.2.4 Results of Analysis of Criteria #1

The analysis presented above illustrates in pie chart format the percentage of Total Property Required (TPR) for grading associated with road alterations to accommodate the Rural Cross-Sections, organized by existing land use type, along the road frontages within each of the Alternative Haul Routes (excluding Highway 6) and provides a qualitative evaluation of each haul route on this basis. The evaluation is based on the percentage of each land use type subject to potential road allowance widening to accommodate the grading requirements of the proposed road alterations along each route, and the general importance or sensitivity of each of the land use types to road alterations.

The road alterations applicable to each Alternative Haul Route are presented as Representative Rural Cross Sections (**Figure 27**) which have been designed by iTRANS to bring each road LINK to design standards acceptable for safe and efficient truck traffic, and to safely accommodate on-street cycling. The proposed Rural Cross Section type for each LINK relates to the anticipated volume of truck traffic and cyclists on each road LINK (**Figures 28, 29 and 30**).

Existing Right-of Ways (ROW) for roads along the Alternative Haul Routes (excluding Highway 6) vary between 18.5 m and 23 m, and the approximate ROW required for Representative Rural Cross-Section 1 is 22 m, for Representative Rural Cross-Section 2 is 22.5 m, and for Representative Rural Cross Section 3 is 26 m. Accordingly, it is anticipated that road allowance widening may be required for some lands along the Alternative Haul Routes, outside of the existing ROW, to accommodate the proposed Representative Rural Cross-Section. The

anticipated widening for each road LINK within each Alternative Haul Route is summarized in Tables 1 - 5.

The analysis presents that the anticipated road allowance widening among the five Alternative Haul Routes ranges from 7.5 m (along portions of Milborough Line) to 0 m along Reid Side Road (summarized on Table 1 to Table 5). The analysis notes that it is assumed that the road allowance widening will occur (and be divided across) both sides of the road, where feasible, and it is anticipated that widening of lands will be balanced to minimize impact on land use types considered to be more sensitive to road alterations (i.e. residential and institutional land uses), where possible. Further, there are no road alterations required along Highway 6 and Reid Side Road, since they are currently viable transportation corridors which can accommodate significant truck traffic in a safe, rapid and efficient manner.

Examination of the types of land uses to be subject to potential road allowance widening and the approximate area of land to be widened suggests that there will generally be **MEDIUM-HIGH land use impacts** along Alternative Routes 2, 3, 4 and 5, and **MEDIUM land use impacts** along Alternative Route 1 resulting from road alterations.

5.3 Analysis of Criteria #2: Potential for Disruptive Effects on Planned Development Areas

5.3.1 Assumptions

Planned Development Areas (Planned Land Uses) are defined as areas which are designated for development in long range comprehensive policy documents (i.e. Official Plan), but are not yet built.

There are three Planned Development Areas identified along the five Alternative Haul Routes. The Planned Development Areas are described in terms of their character and sensitivity to increased truck traffic in the discussion below.

5.3.2 Methodology

The methodology involved in analyzing the potential for disruptive effects on Planned Development Areas involves defining, locating and characterizing Planned Development Areas, and qualitatively measuring the compatibility (and sensitivity) of the Planned Development Area to increased truck traffic. Specifically, the analysis uses the following indicators:

- Number, character of planned development areas
- Sensitivity of planned development to increased truck traffic

As noted above, there are three Planned Development Areas identified along the five Alternative Haul Routes, including the Flamborough Power Centre, Bridlewood Estates and Chestnut Grove Estates. These are discussed and characterized in the analysis, below.

5.3.3 Analysis

The potential for disruptive effects to Planned Development Areas requires an analysis of the three known Planned Development Areas, and a characterization of each in terms of their sensitivity to increased truck traffic.

The analysis presented below refers to each of the Planned Development Areas separately, identifies the location of each, and characterizes each in terms of proposed land use type and anticipated sensitivity to increased truck traffic.

5.3.3.1 Flamborough Power Centre

The Flamborough Power Centre is located on lands at the southeast corner of Highway 5 and Highway 6 in the City of Hamilton. These lands are designated “Urban Area” in the Rural Hamilton Official Plan and are designated to permit the Flamborough Power Centre, which is planned to consist of big box retail and grocery / food store development. Currently, these lands are vacant field and no development has occurred to date. This Planned Development Area is located on lands potentially impacted by all five Alternative Haul Routes, since each Haul Route will ultimately utilize Highway 6, albeit at different anticipated volumes.

Highway 6 is a Provincial Highway, and is identified as designated truck route. Accordingly, this Planned Development Area was planned in anticipation of continued active truck traffic along Highway 6.

This Planned Development Area is characterized as an Urban Area and given its location adjacent to Highway 6 which is a heavily-travelled road and a designated truck route, this Area is anticipated to be very compatible to potential increased truck traffic associated with the applicable Alternative Haul Routes. Accordingly, it is anticipated that this Planned Development Area will have low sensitivity to potential increased truck traffic along Highway 6.

5.3.3.2 Bridlewood Estates

Bridlewood Estates is located in the Hamlet of Campbellville in the Town of Milton. The Planned Development Area is on lands located on the south side of Reid Side Road, just west of Guelph Line in Campbellville. The lands for Bridlewood Estates are designated “Hamlet Residential” in the Town of Milton Official Plan. Bridlewood Estates is an estate residential development to include 29 single detached estate homes. Currently, Stokes Trail and Kingsbury Circle have been constructed; however none of the proposed 29 units have begun construction.

This Planned Development Area is located on lands potentially impacted by Alternative Haul Route 3, Alternative Haul Route 4, and Alternative Haul Route 5.

Reid Side Road was built as a haul route, in accordance with an agreement dated December 12, 1977 between Springbank Sand and Gravel Company, the Town of Milton and the Region of Halton. Specifically, the road was constructed as a haul route in order to significantly reduce the volume of truck traffic travelling through the Hamlet of Campbellville. Accordingly, this Planned Development Area was planned on a road that anticipates continued active truck traffic.

This Planned Development Area is an Estate Residential development within the limits of the Hamlet of Campbellville. These Estate Residences will be built as luxury custom homes on large estate lots. The development is advertised as follows: “*Situated on striking oversized homesites overlooking wooded areas, pasture and scenic views, your lifestyle is secure in this Carson Reid Community that implores pride and stature. Bridelwood Estates in Campbellville exemplifies stately living in one of Ontario’s finest preserved treasures*”. **Figure 31** illustrates a sample dwelling elevation for the estate development.

Review of the Site Plan (**Figure 32**) indicates that Unit 1 and Unit 29 are the two units located closest to Reid Side Road. Specifically, Unit 29 is located adjacent to Reid Side Road, separated by a generous side yard, and Unit 1 is separated from Reid Side Road by a pond and wooded area. It is apparent that this Planned Development Area anticipated continued truck traffic along Reid Side Road and has incorporated these natural buffers along the road frontage, as a result. Given the seclusion and wooded areas within and adjacent to this Estate Residential development, as well as the planned buffers along Reid Side Road, the anticipated sensitivity and impacts associated with increased truck traffic along Reid Side Road is low.

Accordingly, given the nature of this development, and the fact that this development is located directly adjacent to Reid Side Road which currently experiences truck traffic, it is anticipated that this Planned Development will have **medium-low sensitivity** to increased truck traffic along Reid Side Road.

5.3.3.3 Chestnut Grove Estates

Chestnut Grove Estates is located on the north side of Campbellville Road, in between Centre Road and Highway 6. These lands are designated “Rural Area” in the Rural Hamilton Official Plan, and are identified as Site Specific Area No. R-6(a) in the new Rural Hamilton Official Plan. Chestnut Grove Estates has special policy permission for an estate residential development to consist of 13 single detached estate homes. Currently, Chesswood Trail has been constructed and of the 13 proposed homes, two are currently under construction. This Planned Development Area is located on lands potentially impacted by Alternative Haul Route 2 and Alternative Haul Route 5.

Campbellville Road is a designated truck route with seasonal load restrictions. While it is anticipated that an increase in truck traffic along Campbellville Road would contribute to a potential increase in noise, dust, and air quality, these impacts are discussed and documented in technical analysis prepared by other Team Specialists. This Planned Development Area has been planned on a seasonal truck route, in anticipation of continued active truck traffic.

This Planned Development Area is an Estate Residential development within the Rural Area. As shown on the Site Plan (**Figure 33**), lots are generously sized, with a minimum lot area of 2.92 acres and a maximum lot area of 10.2 acres. Furthermore, there are no driveways planned to access Campbellville Road directly. **Figure 34** is a photo of one of the dwellings under construction, and it is apparent that these Estate Residences will be built as luxury custom homes on large estate lots.

This Planned Development Area was apparently planned to recognize there will be continued seasonal truck traffic along Campbellville Road, because there are large lots proposed and none of the lots provide direct access onto Campbellville Road. Accordingly, it is anticipated that this Planned Development Area will have medium-low sensitivity to increased truck traffic along Campbellville Road.

5.3.4 Results of Analysis of Criteria # 2

The analysis presented above characterizes each of the three Planned Development Areas.

The Flamborough Power Centre has anticipated low sensitivity to potential increased truck traffic, because this Planned Development Area is located along a road that currently contains high volume truck traffic. Further, it is apparent that this Planned Development Area was planned to recognize and anticipate continued truck traffic along this road.

The Chestnut Grove Estates Planned Development Area and the Bridlewood Estates Planned Development Area both have anticipated medium-low sensitivity to potential increased truck traffic along Campbellville Road. Campbellville Road is a designated (seasonal) truck route, and Reid Side Road was built to accommodate truck traffic, and this has apparently been recognized through the planning and design of Chestnut Grove Estates and Bridlewood Estates.

5.4 Analysis of Criteria #3: Conformity with Applicable Plans and Policies

5.4.1 Assumptions

Traditional tools for land use planning and regulation include a combination of provincial, regional and local policy directives, legal instruments, administrative practices and means of promoting community participation in planning.

The applicable Official Plans contain information related to functional classifications and right-of-way widths of major highways and roads. In some instances (i.e. Region of Halton Official Plan), this information is contained within the Appendix and therefore is not technically or legally part of the Official Plan. Notwithstanding whether this information is a technical part of the Official Plan, this information has been included in the analysis of this criteria.

The Provincial Policy Statement (PPS) provides policy direction on matters of provincial interest related to land use planning and development. The Greenbelt Plan builds upon the existing policy framework established in the Provincial Policy Statement (PPS), and provides permanent protection to the agricultural land base and the ecological features and functions occurring on the landscape. The Niagara Escarpment Plan is a senior planning policy document in the Province. While these Plans alone do not provide a level of precision that is required in the evaluation of the five Alternative Haul Routes, policies contained within these Plans contribute to the evaluation on a general basis.

It is noted that in addition to municipal Official Plan road classifications and policies, municipal by-laws are in place that implement heavy traffic permission / prohibitions in municipalities. These by-laws enable municipalities to enforce policies related to preferred truck routes, heavy traffic regulations, and seasonal restrictions. In fact, it is acknowledged that following the commencement of this Haul Route Analysis, the Town of Milton enacted By-Law No. 075-2008 (Heavy Traffic Prohibitions) which has the effect of prohibiting heavy traffic along the LINKS contained in Alternative Haul Route 3 in Milton (Reid Side Road, Twiss Road, and Campbellville Road). Evaluation of the Alternative Haul Routes requires an analysis of conformity to the Official Plans, which is provided below. If a preferred haul route is identified which requires amendments to municipal by-laws to permit heavy traffic, it is expected that the necessary amendment(s) will be applied for and processed accordingly, by the affected municipality.

5.4.2 Methodology

The following analysis examines the criterion “**Conformity with applicable plans and policies**” using the following indicators:

- Degree of conformity with Official Plans
- Degree of conformity with the Greenbelt Plan
- Degree of conformity with the Niagara Escarpment Plan

The analysis presented below is divided into three sections. First is an examination of municipal jurisdiction and related Official Plans and policies. The applicable Official Plan road functional classifications and right-of-way widths for each of the LINKS in the five Alternative Haul Routes are examined for the indicator “degree of conformity with Official Plans”.

Second, a review of the Provincial Policy Statement and Greenbelt Plan are provided, and third, a review of the Niagara Escarpment Plan is provided for those sections of the Alternative Haul Routes traversing lands within the Niagara Escarpment. In these documents, policies related to roads, infrastructure and mineral aggregate resources were assessed in the evaluation of the last two indicators: “degree of conformity with Greenbelt Plan” and “degree of conformity with Niagara Escarpment Plan”.

5.4.3 Analysis of Official Plan Conformity

A summary of the degree of conformity with applicable Official Plans for each of the five Alternative Haul routes is outlined below. The analysis refers to each of the Alternative Haul Routes and identifies the applicable municipal jurisdiction(s) the road LINKS are governed by. The analysis assess the municipal road classification referred to in the applicable Official Plan, and assigns a level of municipal Official Plan conformity based on road classification and associated function.

It is important to note that the new Rural Hamilton Official Plan (adopted September 2006) does not contain policies related to the Transportation Network; rather, these policies are anticipated to be addressed through the City’s new Urban Official Plan exercise (not yet available). Accordingly, road LINKS within the City of Hamilton have been evaluated using the Region of Hamilton-Wentworth Official Plan and Town of Flamborough Official Plan, which are in effect.

5.4.3.1 HAUL ROUTE No. 1

Haul Route No. 1 contains lands within the municipal jurisdictions of County of Wellington, City of Hamilton, and City of Burlington (Region of Halton).

Highway 6 is identified as a Provincial Highway in the County of Wellington Official Plan, the Region of Hamilton-Wentworth Official Plan, Town of Flamborough Official Plan, and the City of Burlington Official Plan. This road classification applies to roadways under the jurisdiction of the Ontario Ministry of Transportation. Provincial Highways function as major roadways which carry large volumes of traffic at relatively high speeds. This high speed, high functioning road provides for high volumes of truck traffic, and utilizing this Highway in Alternative Haul Route 1 conforms to the applicable municipal Official Plans.

Concession Road 11 is identified as a Local Road in the Town of Flamborough Official Plan. Local roads function to provide direct access to abutting properties and have maximum right-of-way widths of up to 20.0 m. As noted in **Figure 27** (Three Representative Rural Cross Sections) and **Figure 28** (Alternative Haul Routes 1, 2 and 3 Showing Preferred Rural Cross-Section Type), it is anticipated that Concession Road 11 may require road allowance widening to accommodate the preferred Rural Cross-Section. In that regard, amendment to the classification of road type in the Town of Flamborough Official Plan may be required.

Furthermore, Policy D.5.6 in the Flamborough Official Plan notes the following with regard to Local Roads:

“Where alternative routes can be found and where the volume of truck traffic is detrimental to the amenity of abutting residential areas, the use of Local Roads in residential areas by trucks not engaged in making local deliveries to the residences shall be prohibited.”

Recognizing that proposed road alterations to accommodate preferred Rural Cross Sections for Highway 6 would conform to municipal Official Plans, and that Concession Road 11 will require an amendment to the Town of Flamborough Official Plan to accommodate a ROW in excess of the permitted 20.0 maximum for Concession Road 11 if a Rural Cross Section is selected, this Alternative Haul Route has a **medium degree of conformity** with the municipal Official Plans.

5.4.3.2 HAUL ROUTE No. 2

Haul Route No. 2 contains lands within the municipal jurisdictions of County of Wellington, City of Hamilton, and City of Burlington (Region of Halton).

As noted above, Highway 6 is identified as a Provincial Highway in the County of Wellington Official Plan, the Region of Hamilton-Wentworth Official Plan, the Town of Flamborough Official Plan, and the City of Burlington Official Plan. This road classification applies to roadways under the jurisdiction of the Ontario Ministry of Transportation. Provincial Highways function as major roadways which carry large volumes of traffic at relatively high speeds. This high speed, high functioning road provides for high volumes of truck traffic, and utilizing this Highway in Alternative Haul Route 2 conforms to the applicable municipal Official Plans.

Centre Road is identified as an Arterial Road in the Region of Hamilton-Wentworth Official Plan, and a Regional Road in the Town of Flamborough Official Plan. Arterial Roads / Regional roads are strategic links in the road network whose primary function is to carry relatively high volume of long distance traffic within and through Flamborough and to provide access to Provincial Highways. Basic right-of-way widths are permitted to be 26 to 36 metres when there is only partial or no control of access to abutting land uses, and up to 60 m when there is full control over access to abutting land uses. As noted on **Figure 28**, (Alternative Haul Routes 1, 2 and 3 Showing Preferred Rural Cross Section Type), Centre Road is anticipated to require a ROW of 26.0 m to accommodate grading and road alterations associated with preferred Rural Cross Section Type No. 3. This is ultimately in accordance with the Region of Hamilton-Wentworth Official Plan and the Flamborough Official Plan Road Network.

Campbellville Road (east of Highway 6) is identified as an Arterial Road in the Regional Official Plan, and a Regional Road in the Town of Flamborough Official Plan. As noted above, Arterial Roads / Regional roads are strategic links in the road network whose primary function is to carry relatively high volume of long distance traffic within and through Flamborough and to provide

access to Provincial Highways. Basic right-of-way widths are permitted to be 26 to 36 metres when there is only partial or no control of access to abutting land uses, and up to 60 m when there is full control over access to abutting land uses. As noted on **Figure 28**, (Alternative Haul Routes 1, 2 and 3 Showing Preferred Rural Cross Section Type), Campbellville Road is anticipated to require a ROW of 22.0 m to accommodate grading and road alterations associated with preferred Rural Cross Section Type No. 1. This is ultimately in accordance with the Region of Hamilton-Wentworth Official Plan and the Flamborough Official Plan Road Network.

As noted above, Concession Road 11 is identified as a Local Road in the Town of Flamborough Official Plan. Local roads function to provide direct access to abutting properties and have maximum right-of-way widths of up to 20.0 m. As noted in **Figure 28** (Alternative Haul Routes 1, 2 and 3 Showing Preferred Rural Cross-Section Type), it is anticipated that Concession Road 11 may require road allowance widening to accommodate the preferred Rural Cross-Section. In that regard, amendment to the classification of road type in the Town of Flamborough Official Plan may be required.

Recognizing that proposed road alterations to accommodate preferred Rural Cross Sections for Centre Road, Campbellville Road and Highway 6 would conform with the municipal Official Plans, and that Concession Road 11 may require an amendment to the Town of Flamborough Official Plan to accommodate a ROW in excess of the permitted 20.0 maximum for Concession Road 11 if a Rural Cross Section is selected, this Alternative Haul Route has a **medium-high degree of conformity** with the municipal Official Plans.

5.4.3.3 HAUL ROUTE No. 3

Haul Route No. 3 contains lands within the municipal jurisdictions of City of Hamilton and Town of Milton (Region of Halton).

Reid Side Road is not identified in the Region of Halton Official Plan or the Town of Milton Official Plan as a Major Transportation Facility (i.e. Highway, Arterial, or Collector). Accordingly, it is assumed Reid Side Road is classified as a Local Road. Local Roads are intended to service residential neighbourhoods or employment area travel demands. Local Roads connect individual properties to Collectors and Arterials. ROW requirements for a Local Road are maximum 20.0 m ROW. However, Reid Side Road currently exceeds this ROW, and has existing 25.0 ROW. Since road alterations are not required for Reid Side Road to accommodate a possible Rural Cross Section, it is concluded that Reid Side Road conforms to the Official Plan.

Twiss Road is not identified in the Region of Halton Official Plan or the Town of Milton Official Plan as a Major Transportation Facility (i.e. Highway, Arterial, or Collector). Accordingly, it is assumed Twiss Road is classified as a Local Road. Local Roads are intended to service residential neighbourhoods or employment area travel demands. Local Roads connect individual properties to Collectors and Arterials. ROW requirements for a Local Road are maximum 20.0

m ROW. It is anticipated that if Twiss Road were to accommodate a preferred Rural Cross Section, it would require approximately 22.0 m ROW. Since this ROW is in excess of the maximum 20.0 allowable for a Local Road, it is anticipated that an amendment to the classification of road type and/or maximum ROW in the Town of Milton Official Plan may be required.

Campbellville Road (between Milborough Line and Twiss Road) is identified as a Minor Arterial Road in the Region of Halton Official Plan, in the Official Plan's Appendix VII. While this not technically a part of the Region's Official Plan, it is worthwhile to understand the Region's intent for this road. Minor Arterials are meant to serve mainly local traffic demands, accommodate local truck traffic, connect urban nodes within the same municipalities, and carry moderate to high volumes of traffic, and distribute traffic to and from Major and Multi-Purpose Arterials. The Region's Official Plan specifies that ROW requirements are up to 35 m for Minor Arterials. Campbellville Road is identified as an Arterial Road in the Town of Milton Official Plan. Similarly, ROW requirements allow for up to 35 m ROW, and Arterial Roads are intended to serve mainly regional and local traffic demands. **Figure 28** illustrates an anticipated ROW of 26.0 m to accommodate the preferred Rural Cross Section Type No. 3 for Campbellville Road. This proposal would be in accordance with the Region of Halton Official Plan and Town of Milton Official Plan.

Milborough Line represents the municipal boundary between the Region of Halton and the City of Hamilton. Milborough Line is not identified as a Major Transportation Facility in the Region of Halton Official Plan or the Region of Hamilton-Wentworth Official Plan, or as an Arterial or Regional Road in the Town of Flamborough Official Plan. It is identified as a Collector Road in the Town of Milton Official Plan. Collector Roads serve local traffic demands and connect Collector and Local Roads to Arterials, and Collector Roads may have ROW of up to 26.0 m. As noted on **Figure 28**, Milborough Line is proposed to accommodate the Type 3 Preferred Rural Cross Section with 26.0 m ROW, which would be in accordance with the ROW provisions for Collector Roads in Milton.

Recognizing that proposed road alterations to accommodate preferred Rural Cross Sections for Reid Side Road, Milborough Line, and Campbellville Road would not require amendments to the applicable Official Plans, and that Twiss Road may require an amendment to the Town of Milton Official Plan to accommodate a ROW in excess of the permitted 20.0 maximum if a Rural Cross Section is selected, this Alternative Haul Route has a **medium-high degree of conformity** with the municipal Official Plans.

5.4.3.4 HAUL ROUTE No. 4

Haul Route No. 4 (a combination of Routes 1 and 3) contains lands within the municipal jurisdictions of County of Wellington, City of Hamilton, City of Burlington (Region of Halton) and Town of Milton (Region of Halton).

Highway 6 is identified as a Provincial Highway in the County of Wellington Official Plan, the Region of Hamilton-Wentworth Official Plan, Town of Flamborough Official Plan, and the City of Burlington Official Plan. Provincial Highways function as major roadways which carry large volumes of traffic at relatively high speeds. This component of the Haul Route conforms to the applicable municipal Official Plans.

Concession Road 11 is identified as a Local Road in the Town of Flamborough Official Plan. Local roads function to provide direct access to abutting properties and have maximum right-of-way widths of up to 20.0 m. If a Rural Cross Section is preferred for this road, it is anticipated road allowance widening may be required to accommodate the preferred Rural Cross-Section. In that regard, amendment to the classification of road type in the Town of Flamborough Official Plan may be required.

Reid Side Road is not identified in the Region of Halton Official Plan or the Town of Milton Official Plan as a Major Transportation Facility (i.e. Highway, Arterial, or Collector). Accordingly, it is assumed Reid Side Road is classified as a Local Road. Local Roads are intended to service residential neighbourhoods or employment area travel demands. ROW requirements for a Local Road are maximum 20.0 m ROW; however, Reid Side Road currently exceeds this ROW, and has existing 25.0 m ROW. Since road alterations are not required for Reid Side Road to accommodate a possible Rural Cross Section, it is concluded that Reid Side Road conforms to the Official Plan.

Twiss Road is not identified in the Region of Halton Official Plan or the Town of Milton Official Plan as a Major Transportation Facility (i.e. Highway, Arterial, or Collector). Accordingly, it is assumed Twiss Road is classified as a Local Road. ROW requirements for a Local Road are maximum 20.0 m ROW. As shown on **Figure 29** (Alternative Haul Route 4 Showing Preferred Rural Cross Section), it is anticipated that if Twiss Road were to accommodate a preferred Rural Cross Section, it would require approximately 22.0 m ROW. Since this ROW is in excess of the maximum 20.0 m allowable for a Local Road, it is anticipated that an amendment to the classification of road type and/or maximum ROW in the Town of Milton Official Plan may be required.

Campbellville Road (between Milborough Line and Twiss Road) is identified as a Minor Arterial Road in the Region of Halton Official Plan and as an Arterial Road in the Town of Milton Official Plan. Minor Arterials in the Regional Official Plan and Arterials in the Town's Official Plan can have up to 35.0 m ROW and are meant to serve mainly local traffic demands, accommodate local truck traffic, connect urban nodes within the same municipalities, carry

moderate to high volumes of traffic, and distribute traffic to and from Major and Multi-Purpose Arterials. **Figure 29** illustrates an anticipated ROW of 26.0 m to accommodate the preferred Rural Cross Section Type No. 3 for Campbellville Road. This proposal would be in accordance with the Region of Halton Official Plan and Town of Milton Official Plan.

Milborough Line represents the municipal boundary between the Region of Halton and the City of Hamilton. Milborough Line is not identified as a Major Transportation Facility in the Region of Halton Official Plan or the Region of Hamilton-Wentworth Official Plan, or as an Arterial or Regional Road in the Town of Flamborough Official Plan. It is identified as a Collector Road in the Town of Milton Official Plan. Collector Roads serve local traffic demands and connect Collector and Local Roads to Arterials, and Collector Roads may have ROW of up to 26.0 m. As noted on **Figure 29**, Milborough Line is proposed to accommodate the Type 3 Preferred Rural Cross Section with 26.0 m ROW, which would be in accordance with the ROW provisions for Collector Roads in Milton.

Recognizing that proposed road alterations to accommodate preferred Rural Cross Sections for Highway 6, Reid Side Road, Campbellville Road and Milborough Line would conform to municipal Official Plans, and that Concession Road 11 and Twiss Road will probably require amendments to the Official Plans to accommodate the increased ROW for the preferred Rural Cross Sections, this Alternative Haul Route has a **medium degree of conformity** with the municipal Official Plans.

5.4.3.5 HAUL ROUTE No. 5

Haul Route No. 5 (a combination of Routes 2 and 3) contains lands within the municipal jurisdictions of County of Wellington, City of Hamilton, City of Burlington (Region of Halton) and Town of Milton (Region of Halton).

Highway 6 is identified as a Provincial Highway in the County of Wellington Official Plan, the Region of Hamilton-Wentworth Official Plan, Town of Flamborough Official Plan, and the City of Burlington Official Plan. Provincial Highways function as major roadways which carry large volumes of traffic at relatively high speeds. This component of the Haul Route conforms to the applicable municipal Official Plans.

Concession Road 11 is identified as a Local Road in the Town of Flamborough Official Plan. Local roads function to provide direct access to abutting properties and have maximum right-of-way widths of up to 20.0 m. If a Rural Cross Section is preferred for this road, it is anticipated road allowance widening may be required to accommodate the preferred Rural Cross-Section. In that regard, amendment to the classification of road type in the Town of Flamborough Official Plan may be required.

Centre Road is identified as an Arterial Road in the Region of Hamilton-Wentworth Official Plan, and a Regional Road in the Town of Flamborough Official Plan. Arterial Roads / Regional roads are strategic links in the road network whose primary function is to carry relatively high volume of long distance traffic within and through Flamborough and to provide access to Provincial Highways. Basic right-of-way widths are permitted to be 26 to 36 metres. As noted on **Figure 30**, (Alternative Haul Route 5 Showing Preferred Rural Cross Section Type), Centre Road is anticipated to require a ROW of 22.5 m to accommodate grading and road alterations associated with preferred Rural Cross Section Type No. 2. This is ultimately in accordance with the Region of Hamilton-Wentworth Official Plan and the Flamborough Official Plan Road Network.

Campbellville Road (east of Highway 6) is identified as an Arterial Road in the Regional Official Plan, and a Regional Road in the Town of Flamborough Official Plan. As noted above, Arterial Roads / Regional roads are strategic links in the road network whose primary function is to carry relatively high volume of long distance traffic within and through Flamborough and to provide access to Provincial Highways. Basic right-of-way widths are permitted to be 26 to 36 metres and, as noted on **Figure 30**, (Alternative Haul Route 5 Showing Preferred Rural Cross Section Type), Campbellville Road is anticipated to require a ROW of 22.0 m to accommodate grading and road alterations associated with preferred Rural Cross Section Type No. 1. This is ultimately in accordance with the Region of Hamilton-Wentworth Official Plan and the Flamborough Official Plan Road Network.

Reid Side Road is not identified in the Region of Halton Official Plan or the Town of Milton Official Plan as a Major Transportation Facility (i.e. Highway, Arterial, or Collector). Accordingly, it is assumed Reid Side Road is classified as a Local Road. Local Roads are intended to service residential neighbourhoods or employment area travel demands. ROW requirements for a Local Road are maximum 20.0 m ROW; however, Reid Side Road currently exceeds this ROW, and has existing 25.0 m ROW. Since road alterations are not required for Reid Side Road to accommodate a possible Rural Cross Section, it is concluded that Reid Side Road conforms to the Official Plan.

Twiss Road is not identified in the Region of Halton Official Plan or the Town of Milton Official Plan as a Major Transportation Facility (i.e. Highway, Arterial, or Collector). Accordingly, it is assumed Twiss Road is classified as a Local Road. ROW requirements for a Local Road are maximum 20.0 m ROW. As shown on **Figure 30** (Alternative Haul Route 5 Showing Preferred Rural Cross Section), it is anticipated that if Twiss Road were to accommodate a preferred Rural Cross Section, it would require approximately 22.0 m ROW. Since this ROW is in excess of the maximum 20.0 m allowable for a Local Road, it is anticipated that an amendment to the classification of road type and/or maximum ROW in the Town of Milton Official Plan may be required.

Campbellville Road (between Milborough Line and Twiss Road) is identified as a Minor Arterial Road in the Region of Halton Official Plan and as an Arterial Road in the Town of Milton Official Plan. Minor Arterials in the Regional Official Plan and Arterials in the Town's Official

Plan can have up to 35.0 m ROW and are meant to serve mainly local traffic demands, accommodate local truck traffic, connect urban nodes within the same municipalities, carry moderate to high volumes of traffic, and distribute traffic to and from Major and Multi-Purpose Arterials. **Figure 30** illustrates an anticipated ROW of 26.0 m to accommodate the preferred Rural Cross Section Type No. 3 for Campbellville Road. This proposal would be in accordance with the Region of Halton Official Plan and Town of Milton Official Plan.

Milborough Line represents the municipal boundary between the Region of Halton and the City of Hamilton. Milborough Line is not identified as a Major Transportation Facility in the Region of Halton Official Plan or the Region of Hamilton-Wentworth Official Plan, or as an Arterial or Regional Road in the Town of Flamborough Official Plan. It is identified as a Collector Road in the Town of Milton Official Plan. Collector Roads serve local traffic demands and connect Collector and Local Roads to Arterials, and Collector Roads may have ROW of up to 26.0 m. As noted on **Figure 30**, Milborough Line is proposed to accommodate the Type 3 Preferred Rural Cross Section with 26.0 m ROW, which would be in accordance with the ROW provisions for Collector Roads in Milton.

Recognizing that proposed road alterations to accommodate preferred Rural Cross Sections for Highway 6, Reid Side Road, Centre Road, Campbellville Road (between Milborough and Twiss, and between Highway 6 and Centre) and Milborough Line would conform to municipal Official Plans, and that Concession Road 11 and Twiss Road will probably require amendments to the Official Plans to accommodate the increased ROW for the preferred Rural Cross Sections, this Alternative Haul Route has a **medium degree of conformity** with the municipal Official Plans.

5.4.4 Degree of Conformity with the Provincial Policy Statement and Greenbelt Plan

The municipal planning applications submitted in connection with the proposed St. Marys Flamborough Quarry were submitted and deemed to be complete by the municipality in Fall 2004. Accordingly, the applicable policies are those that were in effect in 2004, including the 1997 Provincial Policy Statement. However, in addition to reviewing the applicable 1997 Provincial Policy Statement, this report examines the possible implications of the new policies, including the 2005 Provincial Policy Statement and the 2005 Greenbelt Plan.

The 1997 Provincial Policy Statement (PPS) provides policy direction on matters of provincial interest related to land use planning and development, and recognizes that there are complex inter-relationships among environmental, economic and social factors in land use planning. These policies protect mineral aggregate resources, while maintaining important agricultural areas and conserving archaeological, cultural and natural heritage resources.

“1.1.1 (b) Rural areas will generally be the focus of resource activity, resource-based recreational activity and other rural land uses;

- (e) *A coordinated approach should be achieved when dealing with issues which cross municipal boundaries, including:*
 - a. *infrastructure and public service facilities;*

The Combined Aggregate Resource Team (CART) provides a coordinated approach for this study. CART is actively involved in the review and comment of the Haul Route Study, and includes members from the Region of Halton, Town of Milton, City of Hamilton, Niagara Escarpment Commission and Conservation Halton.,

“1.1.3 Long term economic prosperity will be supported by:

- a) *making provisions such that infrastructure and public service facilities will be available to accommodate projected growth;*
- f) *optimizing the long-term availability and the use of agricultural and other resources; and*
- g) *planning so that major facilities (such as airports, transportation corridors, sewage treatment facilities, waste management systems, industries and aggregate activities) and sensitive land uses are appropriately designed, buffered and/or separated.*

2.1.1 Prime agricultural areas will be protected for agriculture. Permitted uses and activities in these areas are: agricultural uses; secondary uses; and agriculture-related uses. Proposed new secondary uses and agriculture-related uses will be compatible with, and will not hinder, surrounding agricultural operations.

An examination of agricultural areas and potential impacts along the Alternative Haul Routes is contained within the Flamborough Quarry Haul Route Study: Agricultural Report prepared by Conna Consulting Inc. The conclusions of that study note that while there is a significant level of agricultural activity along the proposed haul route alternatives, there is generally relatively lower level of agricultural productivity within the large portions of the Study Area. Recommendations are presented in the report related to the design and operation of the haul route, to minimize impacts on agriculture

2.2.1 Mineral resources (mineral aggregates, minerals and petroleum resources) will be protected for long term use.

2.2.3.1 As much of the mineral aggregate resources as is realistically possible will be made available to supply mineral resource needs, as close to markets as possible.

The St. Marys Flamborough Quarry is ideally located to serve market demands in the GTA. The more circuitous the Haul Route, the less compliant it is with the Provincial Policy Statement. Of the five alternative Haul Routes, Route 3 appears to be the shortest and most direct route to Provincial Highway 401.

- 2.3.1 *Natural heritage features and areas will be protected from incompatible development.*
- a) *Development and site alteration will not be permitted in:*
 - a. *significant wetlands south and east of the Canadian Shield; and*
 - b. *significant portions of the habitat of endangered and threatened species.*
 - b) *Development and site alteration may be permitted in:*
 - a. *fish habitat;*
 - b. *significant wetlands in the Canadian Shield²;*
 - c. *significant woodlands south and east of the Canadian Shield²;*
 - d. *significant valleylands south and east of the Canadian Shield²;*
 - e. *significant wildlife habitat; and*
 - f. *significant areas of natural and scientific interest if it has been demonstrated that there will be no negative impacts on the natural features or the ecological functions for which the area is identified.*
- 2.3.2 *Development and site alteration may be permitted on adjacent lands to a) and b) if it has been demonstrated that there will be no negative impacts on the natural features or on the ecological functions for which the area is identified.*
- 2.3.3 *The diversity of natural features in an area, and the natural connections between them should be maintained, and improved where possible.*

An examination of natural heritage features and environmental features and functions along the Alternative Haul Routes is contained within the Flamborough Quarry Haul Route Study: Natural Environment Report prepared by Savanta Inc. The study provides an overview of aquatic and terrestrial natural heritage features along the Alternative Haul Routes, and the study recommends mitigation measures including wedge restoration planting, minimizing the number of watercourse crossings (through selection of the preferred route), culvert replacement / extension for watercourse crossing(s), wildlife crossing planning, and traffic adjustments to accommodate key wildlife movement periods.

- 2.5.1 *Significant built heritage resources and cultural heritage landscapes will be conserved.*

An examination of built heritage resources and cultural heritage landscapes along the Alternative Haul Routes is contained within the St. Marys Flamborough Quarry Haul Route Study: Cultural Heritage and Archaeology Report prepared by Archaeologix Inc. The conclusions of that study note that the archaeological potential for historic sites and pre-contact Aboriginal sites were deemed to be moderate to high along stretches of road that have not been impacted by prior construction, sloping of the land or poor drainage. The areas of moderate to high archaeological

potential will be assessed by the standard shovel test pit method at an interval of five metres. As well, the report examines seventeen built heritage sites, including houses and barns, and seven cultural landscape units comprised of farmsteads, homesteads, two village complexes, one church complex, and one waterscape. When the final haul route has been determined, a more detailed architectural and historical study of relevant sites should be undertaken.

As noted above, while the applicable policies include the 1997 PPS, which were in effect at the time of the municipal application submission in 2004, it is helpful to examine the possible implications of new policies contained in the 2005 PPS and Greenbelt Plan. The 2005 Provincial Policy Statement (PPS) provide policy direction on matters of provincial interest related to land use planning and development. The Greenbelt Plan builds upon the existing policy framework established in the 2005 Provincial Policy Statement (PPS), and provides permanent protection to the agricultural land base and the ecological features and functions occurring on the landscape. While these Plans alone do not provide a level of precision that is required in the evaluation of the five Alternative Haul Routes, policies contained within these Plans contribute to the evaluation on a general basis.

The PPS and Greenbelt Plan provide for appropriate development while protecting resources of provincial interest, public health and safety, and the quality of the natural environment. These Plans contain policies that support improved land use planning and management, thereby contributing to a more effective and efficient land use planning system.

Section 2.5.2.1 of the PPS requires that *“as much of the mineral aggregate resources as is realistically possible shall be made available as close to markets as possible”*. Accordingly, the more circuitous the Haul Route, the less compliant it is with the Provincial Policy Statement.

Similarly, the Greenbelt Plan recognizes that infrastructure is important to economic well-being and quality of life in southern Ontario, and that new and/or expanding facilities will be required in the future to serve the substantial growth projected for southern Ontario.

The lands subject to the Alternative Haul Routes for the Flamborough Quarry are located within the “Protected Countryside” designation in the Greenbelt Plan, and portions of the study area are subject to policies for Natural Heritage System, as well. Policies in the Greenbelt Plan for lands designated “Protected Countryside” include the following:

- “3.1.4.1. Rural areas support, and provide the primary locations for a range of recreational, tourism, institutional and resource-based commercial / industrial uses. They also contain many historic highway commercial, non-farm residential and other uses which, in more recent times, would be generally directed to settlement areas but which are recognized as existing uses by this Plan and allowed to continue and expand subject to the existing use policies of section 4.5. Notwithstanding this policy or the policies of Section 5.3, municipal official plans may be more restrictive*

than this Plan with respect to the types of uses permitted within rural area.”

It is important to note that the Protected Countryside contains a Natural Heritage System that provides a continuous and permanent land base necessary to support human and ecological health in the Greenbelt and beyond. The Natural Heritage System includes areas of the Protected Countryside with the highest concentration of the most sensitive and/or significant natural features and functions. The Greenbelt Plan has policies to protect areas of natural heritage which indicate that any new development or site alteration on the portion of the subject lands identified as Natural Heritage System must maintain any connectivity between natural features, and cannot have negative effects on key natural heritage features or key hydrologic features or their functions. An examination of natural heritage features and environmental features and functions along the Alternative Haul Routes is contained within the Flamborough Quarry Haul Route Study: Natural Environment Report prepared by Savanta Inc.

In the Greenbelt Plan, it is noted that infrastructure is important to economic well-being, human health and quality of life in southern Ontario and the Greenbelt. It is acknowledged that “*existing infrastructure must be maintained and new infrastructure will be needed to continue serving existing and permitted land uses within the Greenbelt*”. Policies in the Greenbelt Plan related to General Infrastructure include the following:

- “4.2.1.1 All existing, expanded or new infrastructure subject to and approved under the Canadian Environmental Assessment Act, the Environmental Assessment Act, the Planning Act, the Aggregate Resources Act, the Telecommunications Act or by the National or Ontario Energy Boards, or which receives a similar environmental approval, is permitted within the Protected Countryside, subject to the policies of this section and provided it meets one of the following two objectives:*
- a. It supports agriculture, recreation and tourism, rural settlement areas, **resource use** or the rural economic activity that exists and is permitted within the Greenbelt; or*
 - b. It serves the significant growth and economic development expected in southern Ontario beyond the Greenbelt by providing for the appropriate infrastructure connections among urban growth centres and between these centres and Ontario’s borders.”*

The Greenbelt Plan provides permission for necessary infrastructure associated with meeting the needs of the Province, provided all planning, design and construction practices minimize the amount of the Greenbelt, and particularly the Natural Heritage System, traversed, disturbed, and/or occupied by such infrastructure. Further, the Greenbelt Plan notes the importance of optimizing capacity and coordination with different infrastructure services so that the existing rural landscape character of the Greenbelt Area is supported and reinforced.

The detailed road alteration design on the Alternative Haul Routes will ensure minimal negative impacts to the Protected Countryside and the Natural Heritage System. Further, mitigation measures are outlined in the Flamborough Quarry Haul Route Study: Natural Environment Report prepared by Savanta Inc. to ensure minimal impacts to the natural environment resulting from the haul route.

New and expanding infrastructure is permitted in the Greenbelt Plan, and policies in the Plan require that the location and construction of infrastructure and expansions in the Protected Countryside should be minimized, where possible, to minimize any disturbance of the existing landscape.

Alternative Haul Route No 1 and Alternative Haul Route No. 2 provide for moderately direct routes to the market. Accordingly, these routes have a **medium degree of conformity** with the PPS and Greenbelt Plan.

It is concluded that Haul Route No. 3 is the most direct Alternative Haul Route to the market, and accordingly, Alternative Haul Route No. 3 has **medium-high degree of conformity** with the PPS and Greenbelt Plan.

Alternative Haul Route No. 4 and Alternative Haul 5 are lengthier and occupy more lands within the Greenbelt Plan. In fact, these routes require the largest amount of land for road alterations, when compared to Alternative Haul Route 1, 2 and 3. Accordingly, Alternative Haul Route 4 and Alternative Haul Route 5 have **medium-low degree of conformity** with the PPS and Greenbelt Plan.

5.4.5 Degree of Conformity with the Niagara Escarpment Plan

The Niagara Escarpment Plan is a senior planning policy document in the Province. Similar to the Greenbelt Plan, the Niagara Escarpment Plan builds upon the existing policy framework established in the Provincial Policy Statement (PPS). While this Plan alone does not provide a level of precision that is required in the evaluation of the five Alternative Haul Routes, policies contained within this Plan contribute to the evaluation on a general basis.

Portions of Alternative Haul Routes 1, 2, 4 and 5 are located on lands within the Niagara Escarpment Plan, along Highway 6. Further, Alternative Haul Route No. 3 includes lands that are adjacent to (not within) the Niagara Escarpment Plan Area in Campbellville. Accordingly, it is worthwhile to review applicable Niagara Escarpment Plan land use designations for lands adjacent to each Alternative Haul Route.

Section 2.15 in the Niagara Escarpment Plan has the following policies related to transportation and utilities:

“2.15 The objective is to design and locate new and expanded transportation and utility facilities so the least possible change occurs in the environment and the natural and cultural landscape.

1. All new and reconstructed transportation and utility facilities shall be designed and located to minimize impact on the escarpment environment and be consistent with the objectives of this Plan.”

As noted earlier in this report, Highway 6 is currently a viable transportation corridor which has been planned to accommodate significant truck traffic in a safe, rapid and efficient manner. Accordingly, it has been determined by iTRANS Consulting Limited that no road alterations are required along Highway 6. Accordingly, it is concluded that Alternative Haul Route No. 1, 2, 4 and 5 have a **high level of conformity** with the Niagara Escarpment Plan.

Similarly, Alternative Haul Route No. 3 does not include lands within the jurisdiction of the Niagara Escarpment Plan; rather, this route includes lands adjacent to the limits of the Niagara Escarpment Plan. Accordingly, it is concluded that Alternative Haul Route No. 3 has a **high level of conformity** with the Niagara Escarpment Plan

6.0 Summary and Conclusions

This analysis of potential impacts to existing and planned land uses represents a component to the study that is being undertaken to understand the impacts of road alterations and the potential increased truck traffic movement along the five Alternative Haul Routes identified by iTRANS Consulting Inc.

This analysis presents a summary of the anticipated road alterations required to accommodate the truck traffic associated with the Alternative Haul Routes, and reviews the general mix of land use types existing along the road frontages within each of the Alternative Haul Routes. The analysis presents that road allowance widening along the Alternative Haul Routes to accommodate the proposed road alterations may be necessary if a Rural Cross Section is preferred. The anticipated widening of land outside the ROW among the five Alternative Haul Routes ranges from 7.5 m (along portions of Milborough Line) to 0 m along Reid Side Road, and it is anticipated that the ROW widening will be balanced to minimize impact on land use types considered to be more sensitive to road alterations (i.e. residential and institutional land uses), where possible.

Examination of the types of land uses to be affected by widening and the approximate area of land to be widened suggests that there will generally be **medium land use impacts** along Alternative Haul Routes 1, 2 and 3, and **medium-high land use impacts** along Alternative Haul Routes 4 and 5. Further, there are no road alterations required along Highway 6, since Highway 6 is currently a viable transportation corridor which can accommodate significant truck traffic in a safe, rapid and efficient manner.

Further, the analysis concludes that because each of the three Planned Development Areas located along the Alternative Haul Routes have been planned along a designated truck route or a route that was constructed to sustain truck traffic, these Planned Development Areas have low sensitivity and moderately low sensitivity to increased truck traffic. Specifically, Alternative Haul Route No. 1 is anticipated to have low sensitivity to increased truck traffic, and Alternative Haul Route No. 2, 3, 4 and 5 are anticipated to have medium-low sensitivity to increased truck traffic.

Finally, this analysis examines each Alternative Haul Route's conformity with applicable plans and policies and concludes that each of the Alternative Haul Routes have a high degree of conformity to the Niagara Escarpment Plan.

Further, Alternative Haul Route 1 has medium degree of conformity with the PPS, Greenbelt Plan and applicable Official Plans.

Alternative Haul Route 2 has medium-high degree of conformity with Official Plans, and medium degree of conformity with Greenbelt Plan and PPS.

Alternative Haul Route 3 has medium-high degree of conformity with municipal Official Plans and PPS and Greenbelt Plan.

Finally, both Alternative Haul Route 4 and Alternative Haul Route 5 have medium degree of conformity with municipal Official Plans and medium-low degree of conformity with the PPS and Greenbelt Plan.

Respectfully Submitted,

Karen Bennett, M.C.I.P., R.P.P.
Senior Planner

Appendix
Air Photos 1 - 15
Figures 6 - 34

Air Photo 1

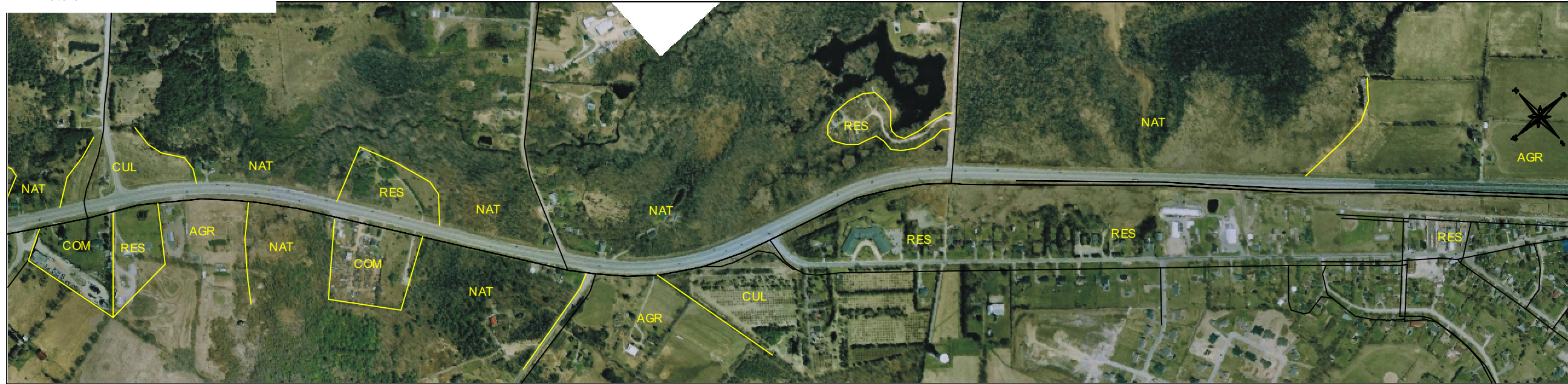


- AGR Agricultural
- COM Commercial
- CUL Cultural Vegetation Community
- NAT Natural Vegetation Community
- IND Industrial
- RES Residential

Air Photo 2



Air Photo 3



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 Revised on:

Source: GoogleEarthPro

February, 2008
160960345

Client/Project
 CBM
 St. Marys Sement Flamborough
 Figure No.
1.0
 Title
EXHIBIT 23

Air Photo 4



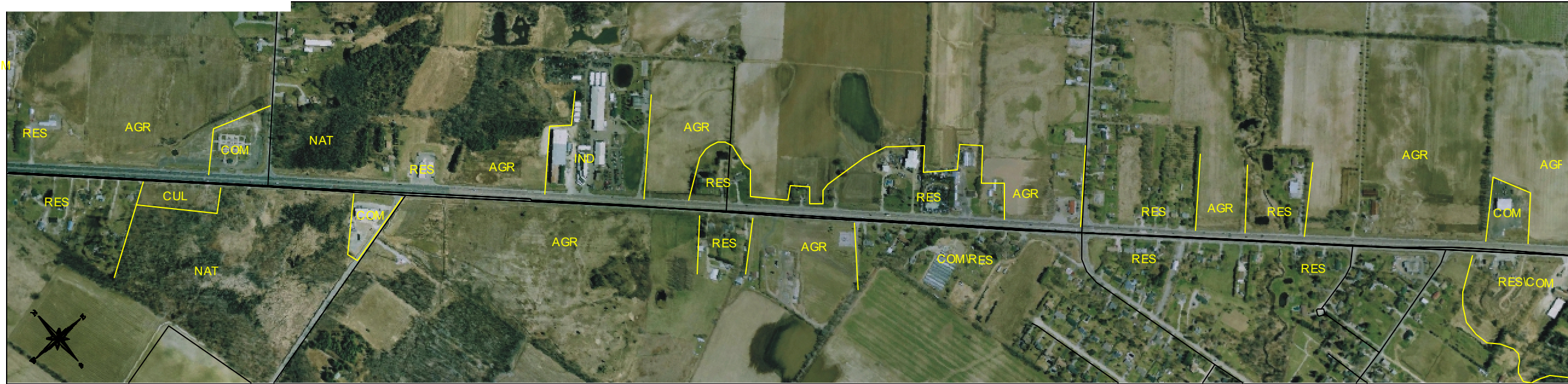
0 100 200 300 400
Meters
Scale 1:1000

- AGR** Agricultural
- COM** Commercial
- CUL** Cultural Vegetation Community
- NAT** Natural Vegetation Community
- IND** Industrial
- RES** Residential

Air Photo 5



Air Photo 6



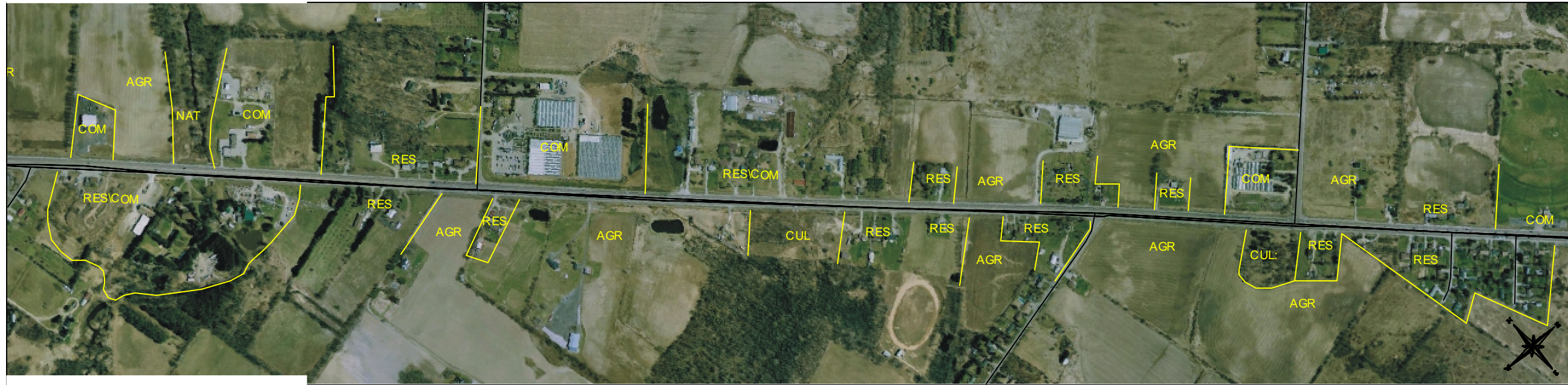
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 Revised on:

Source: GoogleEarthPro

February, 2008
160960345

Client/Project
 CBM
 St. Marys Cement Flamborough
 Figure No.
2.0
 Title
EXHIBIT 23

Air Photo 7



- AGR Agricultural
- COM Commercial
- CUL Cultural Vegetation Community
- NAT Natural Vegetation Community
- IND Industrial
- RES Residential

Air Photo 8



Air Photo 9



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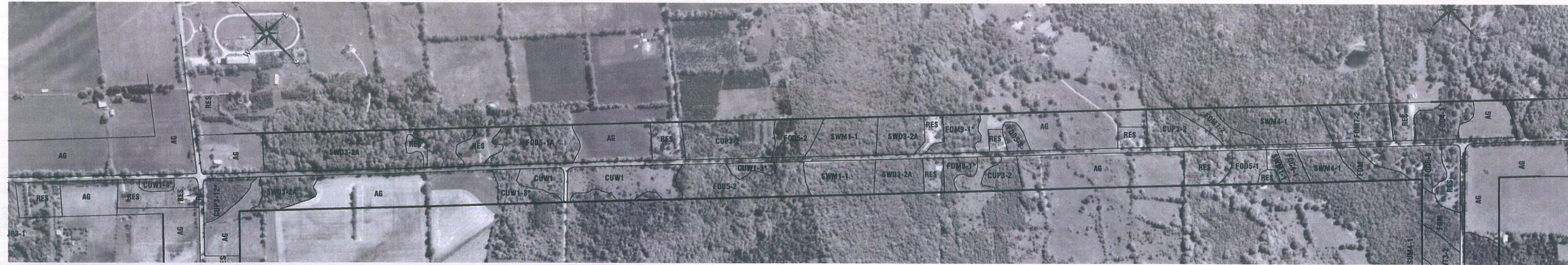
Source: GoogleEarthPro

February, 2008
160960345

Client/Project
 CBM
 St. Marys Cement Flamborough

Figure No.
3.0

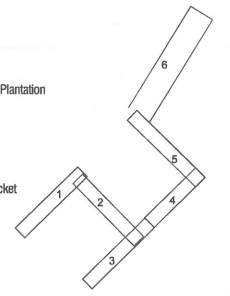
Title
EXHIBIT 23



- CONIFEROUS FOREST (FOC)**
- FOC2-2 Dry-Fresh White Cedar Coniferous Forest
- FOC4-1 Fresh-moist White Cedar Coniferous Forest
- FOM3-2 Dry-Fresh Sugar Maple Hemlock Mixed Forest
- MIXED FOREST (FOM)**
- FOM Mixed Forest
- FOM2-3* Dry-fresh White Pine - Aspen Mixed Forest
- FOM4-1 Dry-fresh White Cedar - White Birch Mixed Forest
- FOM7-2 Fresh-moist White Cedar - Hardwood Mixed Forest
- FOM7-3* Fresh-moist White Cedar - White Elm Mixed Forest
- FOM9-1* Dry-fresh Sugar Maple - White Ash - White Cedar Mixed Forest
- DECIDUOUS FOREST (FOD)**
- FOD4-2 Dry-Fresh White Ash Deciduous Forest
- FOD5-1a Dry-Fresh Sugar Maple Deciduous Forest
- FOD5-1b Dry-Fresh Sugar Maple Deciduous Forest
- FOD5-1c Dry-Fresh Sugar Maple Deciduous Forest
- FOD5-1d Dry-Fresh Sugar Maple Deciduous Forest
- FOD5-1e Dry-Fresh Sugar Maple Deciduous Forest
- FOD5-2 Dry-fresh Sugar Maple - Beech Deciduous Forest
- FOD5-3a Dry-fresh Sugar Maple - Oak Deciduous Forest
- FOD5-3b Dry-fresh Sugar Maple - Oak Deciduous Forest
- FOD5-8 Dry-fresh Sugar Maple - White Ash Deciduous Forest



- PLANTATION (CUP)**
- CUP3-1 Red Pine Coniferous Plantation
- CUP3-2 White Pine Coniferous Plantation
- CUP3-12* White Spruce Coniferous Plantation
- CUP3-13* Norway Spruce Cultural Plantation
- CUP3-14* Scotch Pine - Red Pine Coniferous Plantation
- CULTURAL MEADOW (CUM)**
- CUM1-1 Dry-Moist Old Field Meadow (open)
- CULTURAL THICKET (CUT)**
- CUT1-7* White Pine - White Ash Cultural Thicket
- CUT1-8* White Ash Cultural Thicket
- CUT1-9* Hawthorn Cultural Thicket
- CUT1-10* Mixed Maple Cultural Thicket
- CULTURAL SAVANNA (CUS)**
- CUS1-4* White Ash Cultural Savanna
- CULTURAL WOODLAND (CUW)**
- CUW1-3* White Ash - White Pine Cultural Woodland
- CUW1-4* White Ash Cultural Woodland
- CUW1-6* White Cedar Cultural Woodland
- CUW1-7* Maple - Ash - Hawthorn Cultural Woodland
- CUW1-8* Cottonwood - Norway Spruce Cultural Woodland
- CUW1-9* Mixed Cultural Woodland
- CONIFEROUS SWAMP (SWC)**
- SWC1-2 White Cedar Conifer Mineral Coniferous Swamp
- DECIDUOUS SWAMP (SWD)**
- SWD2-1 Black Ash Mineral Deciduous Swamp
- SWD2-2 Green Ash Mineral Deciduous Swamp
- SWD3-1a Red Maple Mineral Deciduous Swamp
- SWD3-1b Red Maple Mineral Deciduous Swamp
- SWD3-2a Silver Maple Mineral Deciduous Swamp
- SWD3-2b Silver Maple Mineral Deciduous Swamp
- SWD3-3a Swamp Maple Mineral Deciduous Swamp
- SWD3-3b Swamp Maple Mineral Deciduous Swamp
- SWD4-2 White Elm Mineral Deciduous Swamp
- SWD4-5* Poplar - Ash - Elm Mineral Deciduous Swamp
- SWD8-1* Silver Maple - Black Ash Mineral Deciduous Swamp
- THICKET SWAMP (SWT)**
- SWT2 Mineral Thicket Swamp
- SWT2-13* Black Ash - Red-Osier Dogwood Mineral Thicket Swamp
- SWT3-2 Willow Organic Thicket Swamp
- MIXED SWAMP (SWM)**
- SWM1-1 White Cedar-Hardwood Mineral Mixed Swamp
- SWM1-1a White Cedar Hardwood Mineral Mixed Swamp
- SWM1-1b White Cedar Hardwood Mineral Mixed Swamp
- SWM2-2 Silver Maple - Conifer Mineral Mixed Swamp
- SWM4-1 White Cedar-Hardwood Organic Mixed Swamp
- MEADOW MARSH (MAM)**
- MAM2-2 Reed Canary Grass Mineral Meadow Marsh
- MAM2-11* Mixed Mineral Forb - Graminoid Meadow Marsh
- AG** Agriculture
- RES** Residential



X:\Drawings\541-001\2008 02 February\Report Figures_Stanec\Map Aug 29, 2008, 11:28am

SOURCE: Northway-Photomap Inc., 1994 and 2000.



DATE: February, 2008
FILENAME: 160960345

PREPARED FOR:
SMC FLAMBOROUGH QUARRY
TRUCK ROUTE STUDY

FIGURE NO.
2.0 PAGE: 2 of 2

TITLE
**ELC VEGETATION
COMMUNITIES**

Figure 6: Alternative Haul Routes identified by iTrans Consulting Inc.

— - Alternative Haul Routes

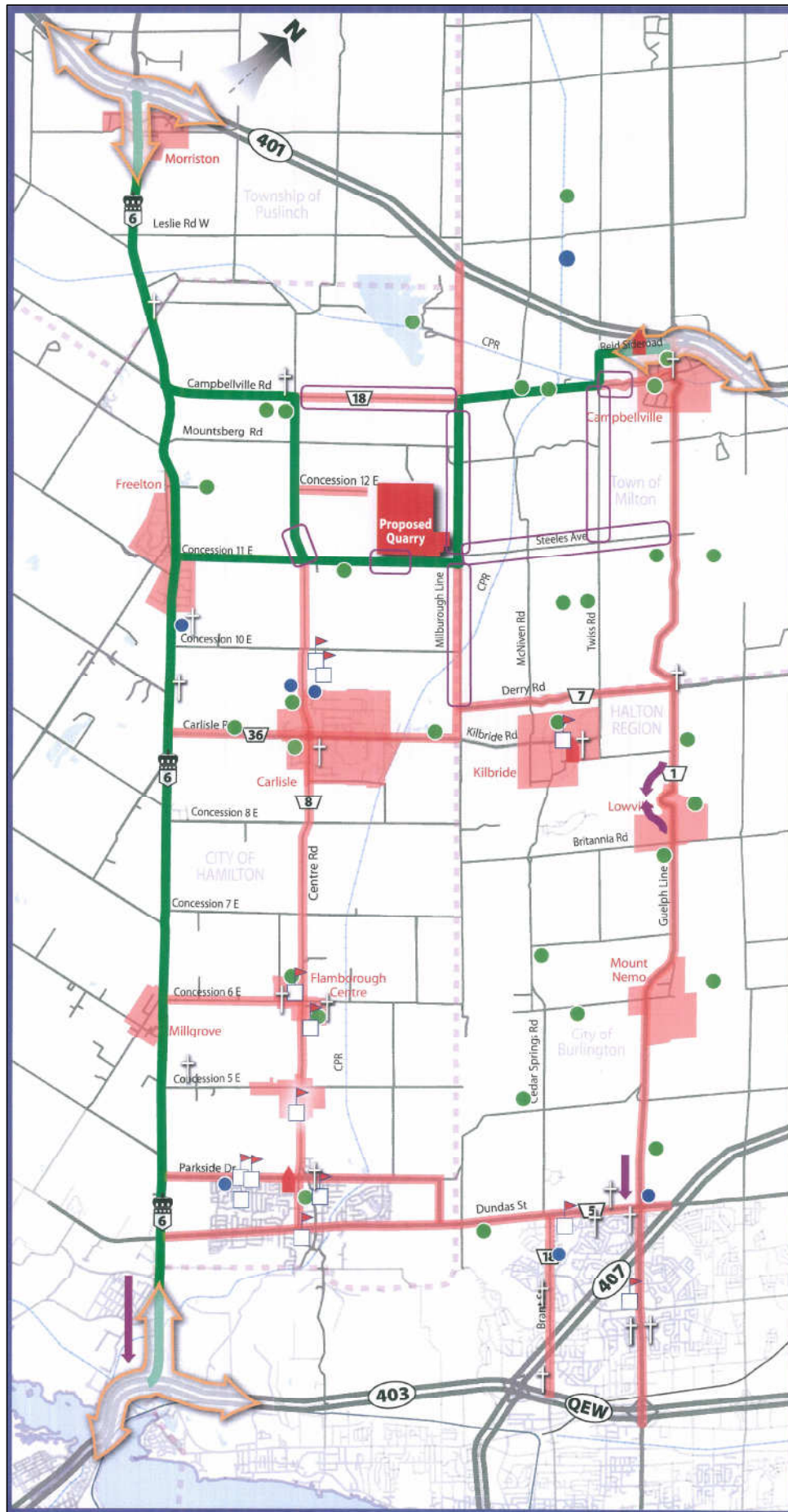


Figure 6B: Alternative Haul Routes by Identifying LINK Number

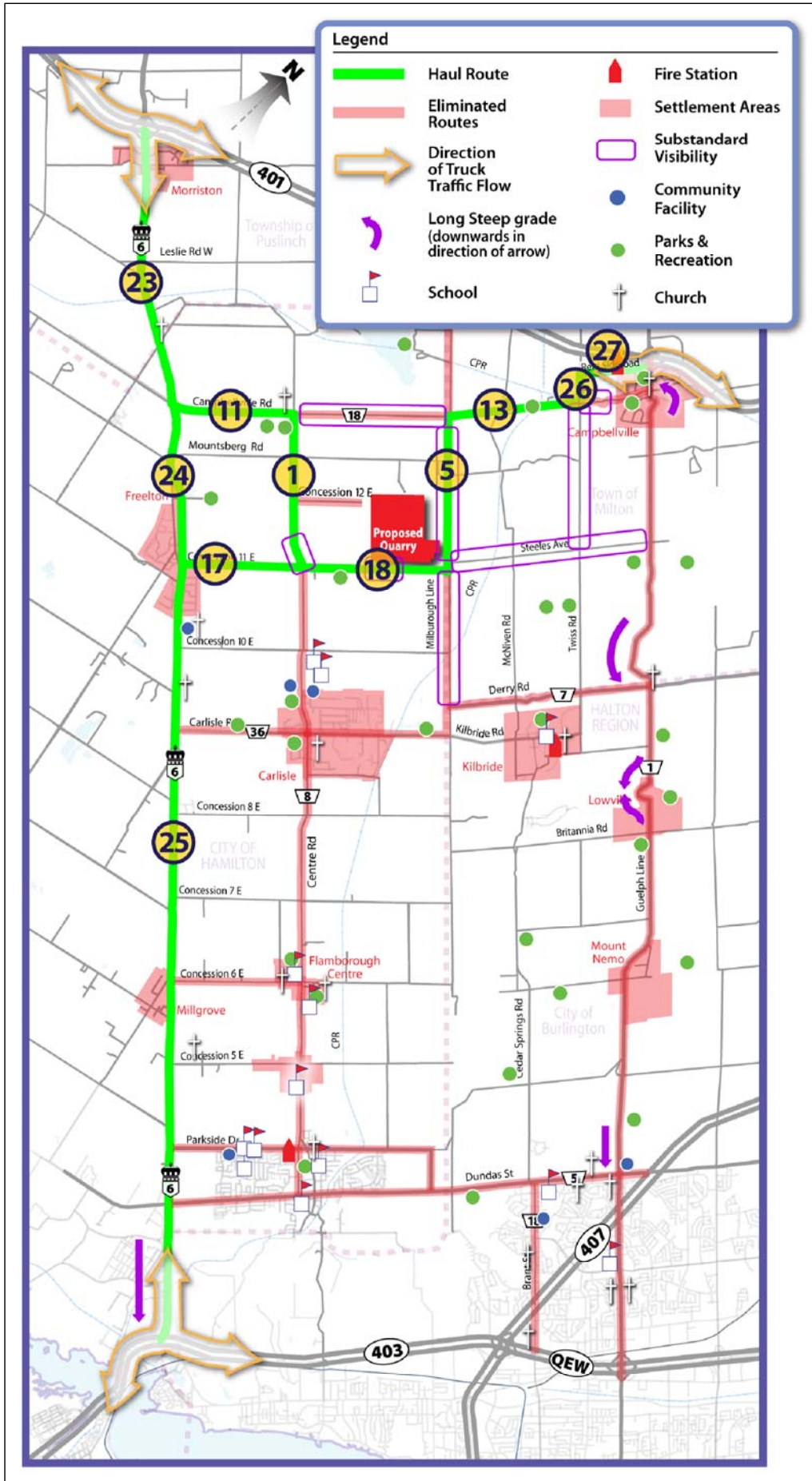
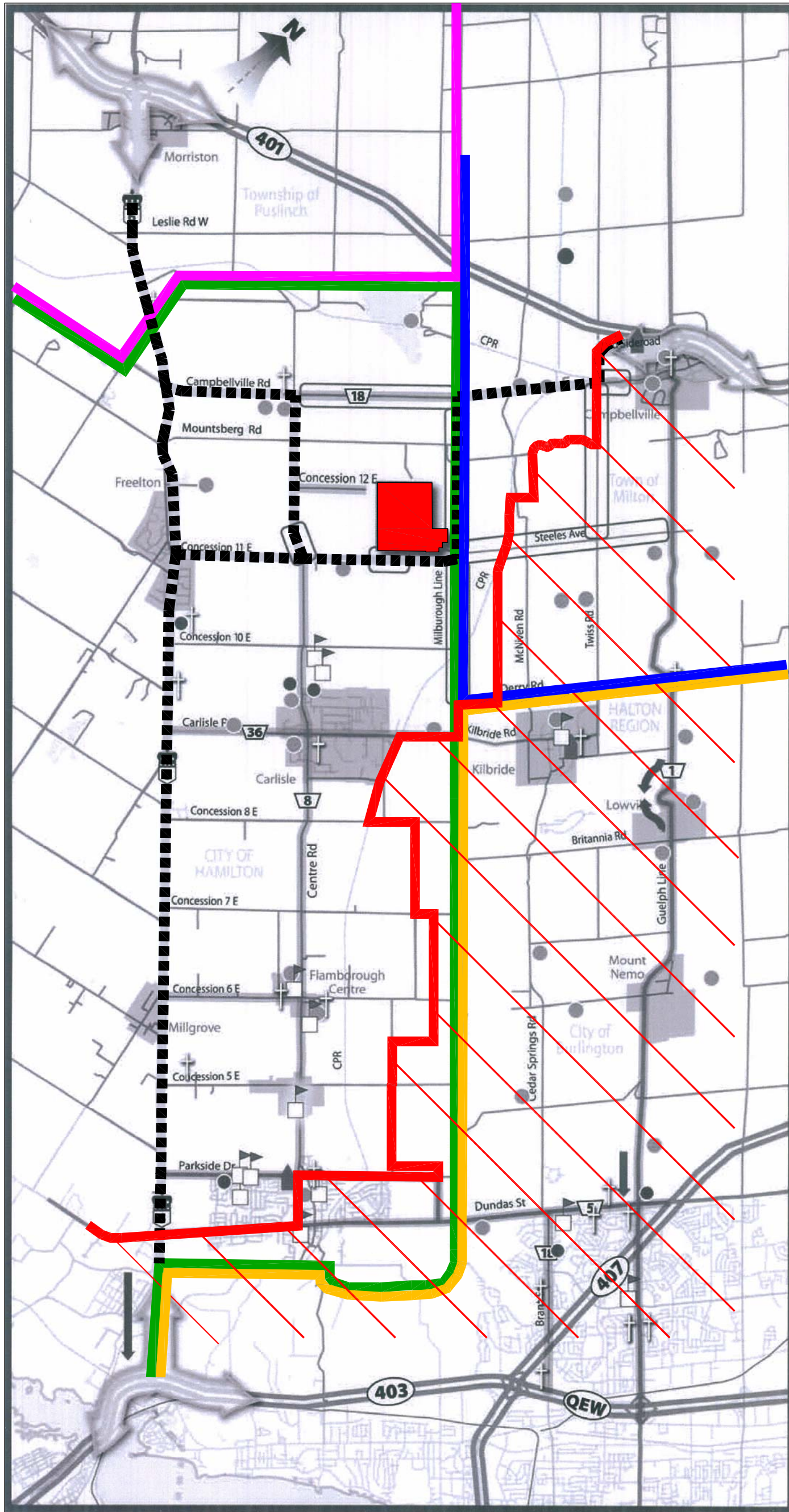


Figure 7: Municipal Official Plan Jurisdictions
 Overlay on Alternative Haul Routes



- Proposed Quarry
- Alternative Haul Routes
- Hamilton Official Plan
- Puslinch (Wellington County Official Plan)
- Niagara Escarpment Plan
- Milton Official Plan
- Burlington Official Plan

Figure 8: Alternative Haul Routes on County of Wellington Official Plan (Puslinch)

Schedule A7 PUSLINCH



Legend

The Urban System

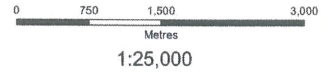
- H Hamlet Area
- UC Urban Centre

Other Designations

- Mineral Aggregate Area¹
- Policy Areas
- Proposed Major Roadways
- Provincial Earth Science ANSI
- Core Greenlands
- Greenlands
- Primary Agricultural
- Secondary Agricultural
- Country Residential
- Recreational
- Rural Industrial

Landfill Site

Proposed Interchange



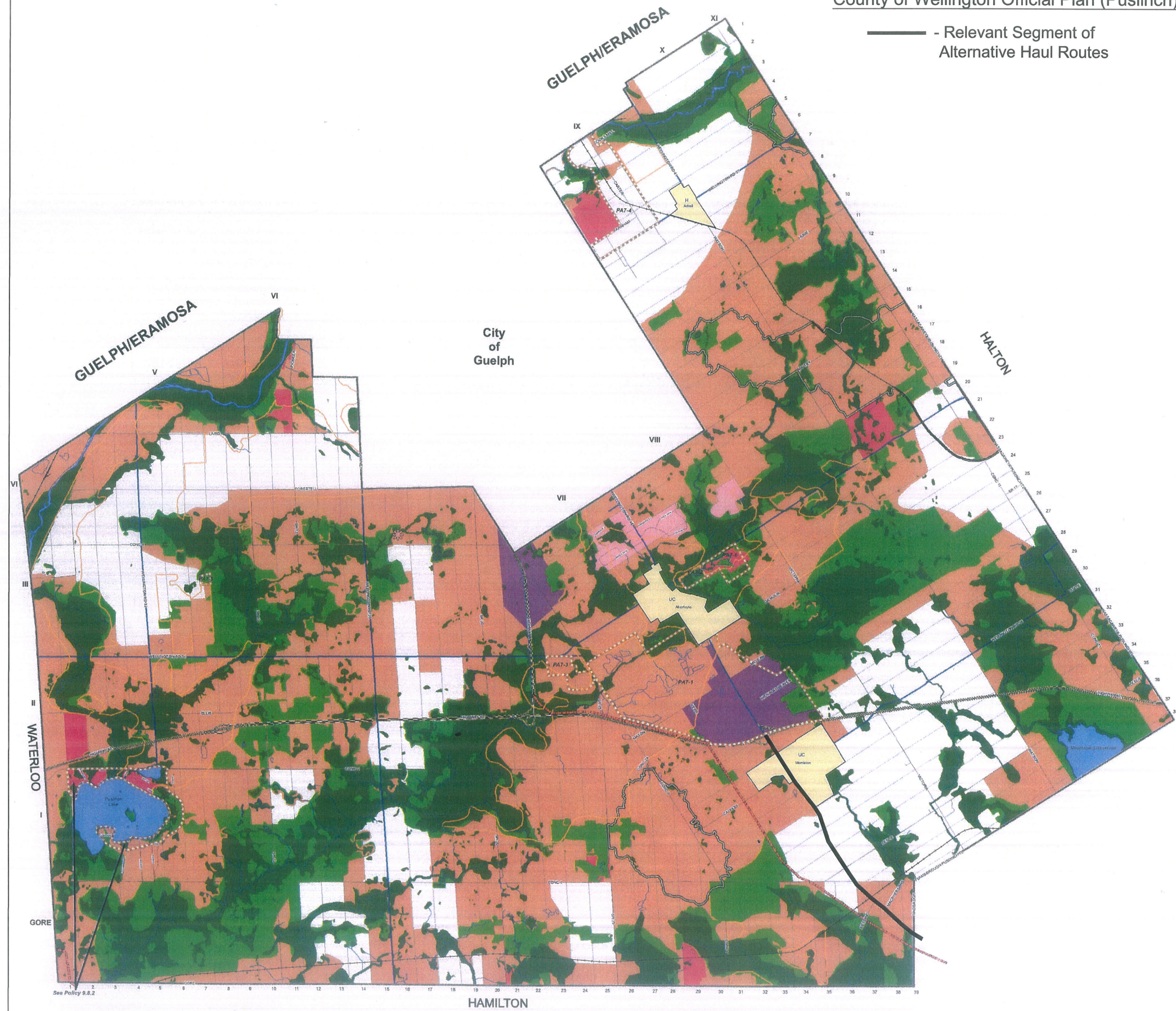
¹ - Existing licensed aggregate operations (sand, gravel, bedrock) are shown in Appendix 2 for information purposes.

This is not survey data. All rights reserved. May not be reproduced without permission.

Sources: County of Wellington, Planning and Development Department, Ministry of Natural Resources, Grand River Conservation Authority, Hamilton Region Conservation Authority, and Conservation Halton, Upper Grand District School Board.

Produced using natural resource information provided by local Conservation Authorities and the Ministry of Natural Resources (Copyright Queen's Printer, 1997).

Updated: February 4, 2008
Date Printed: February 7, 2008



See Policy 9.8.2

Figure 9: Morriston Urban Centre (Puslinch)

MORRISTON

TOWNSHIP OF PUSLINCH
Schedule A7-2



1:8,500

Sources:
County of Wellington Planning Department,
Grand River Conservation Authority,
Hamilton Region Conservation Authority,
and Conservation Halton,
Ministry of Natural Resources.

This is not survey data.

Parcels - Wellington County 2005, Teraset 2002.
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Legend

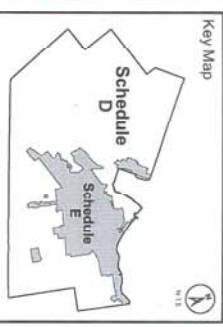
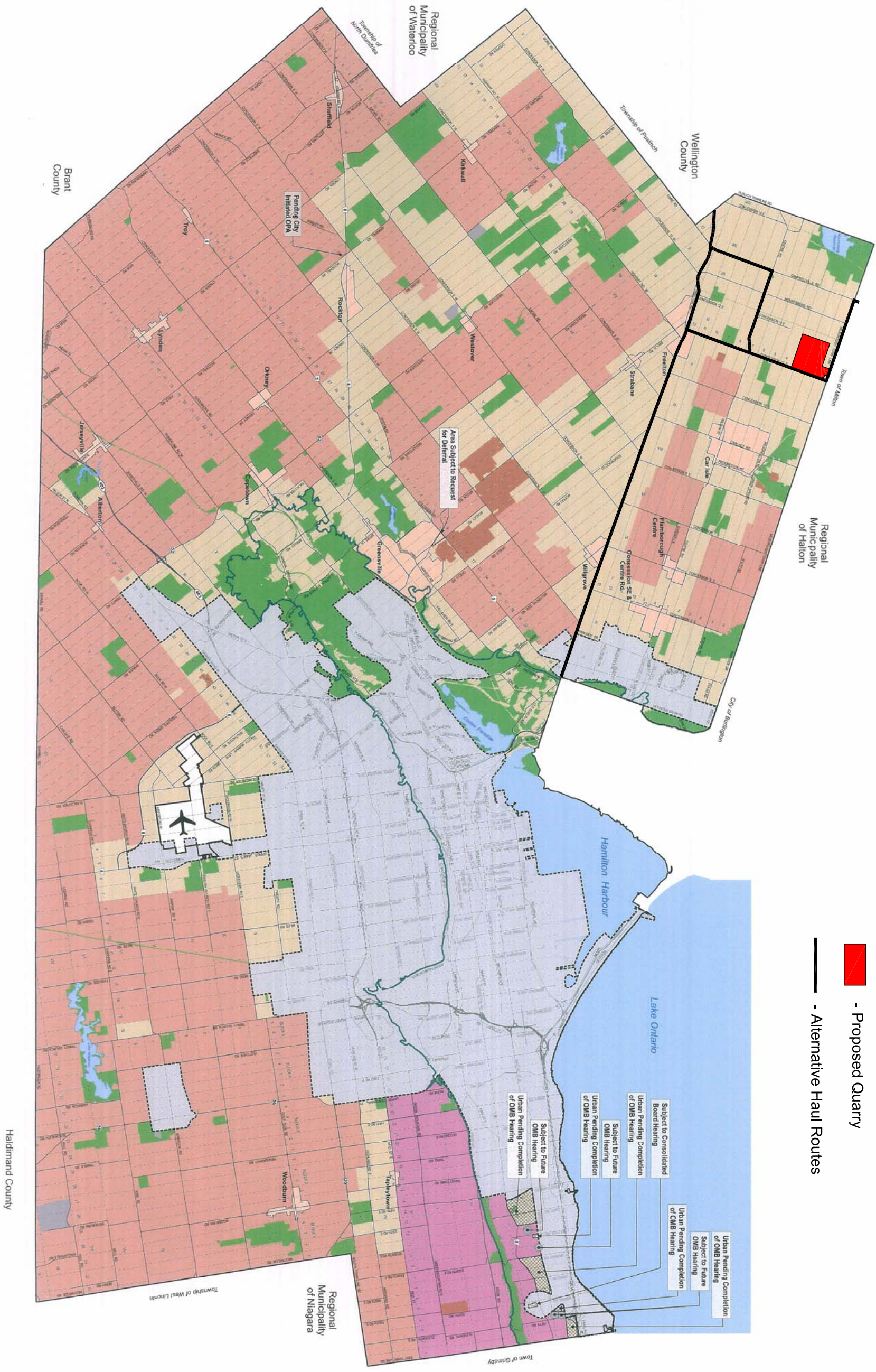
Designation

-  Residential
-  Central Business District
-  Core Greenlands
-  Greenlands
-  Community Improvement Area
-  Watercourses
-  Ponds

Update: March 22, 2005
Date Printed: February 7, 2008

Figure 10: Alternative Haul Routes Overlay on Hamilton Rural Official Plan

- Proposed Quarry
- Alternative Haul Routes



Note: For Urban Land Use Designations please refer to Schedule E (Future amendment)

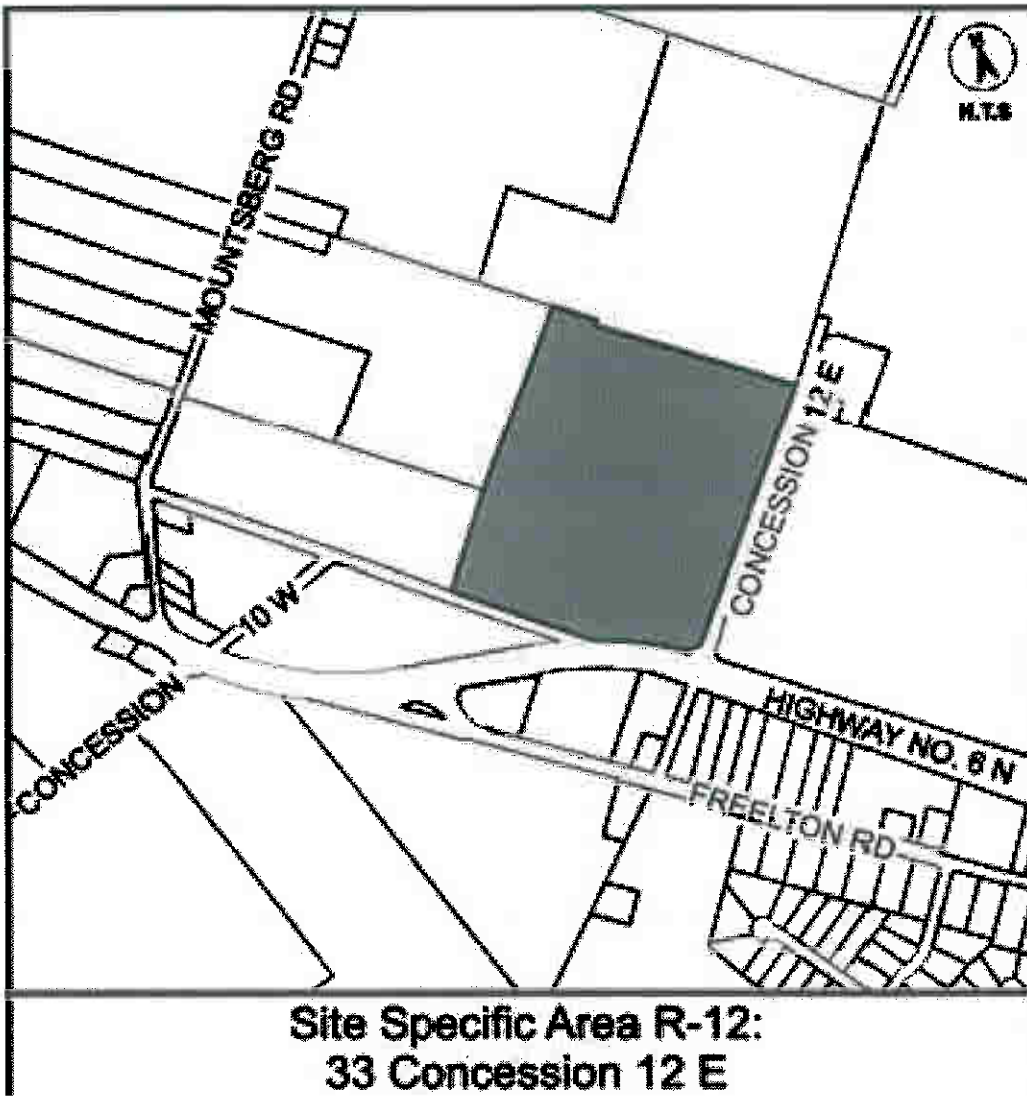
Legend

- Agriculture
- Specialty Crop
- Rural
- Mineral Aggregate Resource Areas
- Open Space
- Utilities
- Rural Settlement Areas
- Urban Pending Completion of OMB Hearing
- Subject to Consolidated Board Hearing
- Subject to Request Board Hearing
- Area Subject to Request for Deferral
- Subject to Future OMB Hearing
- John C. Munro Hamilton International Airport
- Municipal Boundary
- Urban Boundary
- Niagara Escarpment
- Urban Area (Subject to a Future Amendment)

Council Adoption: September 27, 2006
 Ministerial Approval: Pending

**Hamilton Official Plan
 Schedule D
 Rural Land Use Designations**

Figure 11: Waterdown Sportsman's Club Site Specific Area



Site Specific Area R-12:
33 Concession 12 E

Figure 12: Harper's Corner Site Specific Area

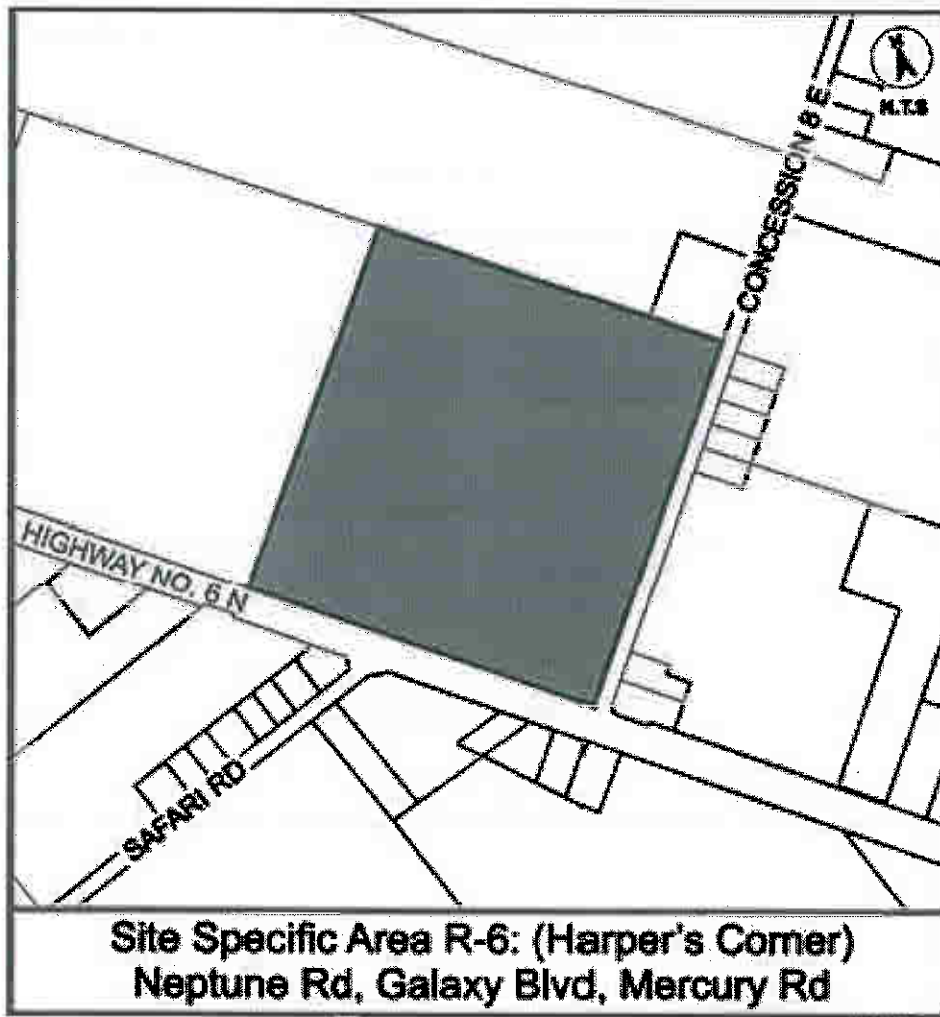




Figure 13: Freelon Rural Settlement Area





Legend:

 Settlement Area Boundary

Land Use Designations:

 Settlement Residential


 Settlement Commercial

 Hazard Lands

Open Space and Parks Designations:

 Community Park

 General Open Space

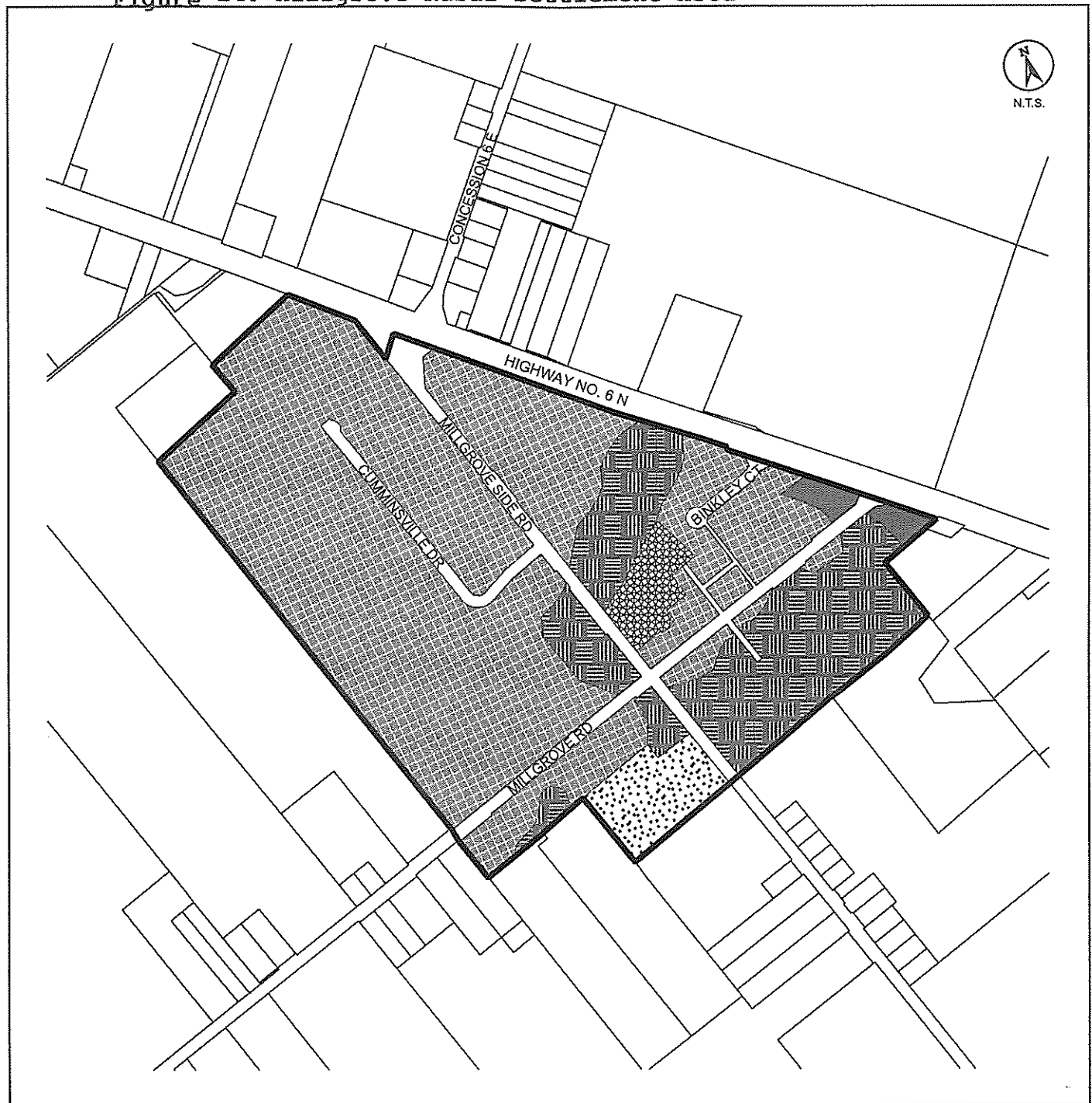
 Parkette

**Volume 2: Map 7
Freelon Rural Settlement Area Plan**


Hamilton Official Plan
Council Adoption: September 27, 2006
Ministerial Approval: Pending



Figure 14: Millgrove Rural Settlement Area




Legend:

 Settlement Area Boundary

Land Use Designations


 Settlement Residential

 Settlement Commercial

 Hazard Lands

Open Space and Parks Designations

 Community Park

 General Open Space

**Volume 2: Map 11
Millgrove Rural Settlement Area Plan**

Hamilton Official Plan
Council Adoption: September 27, 2006
Ministerial Approval: Pending



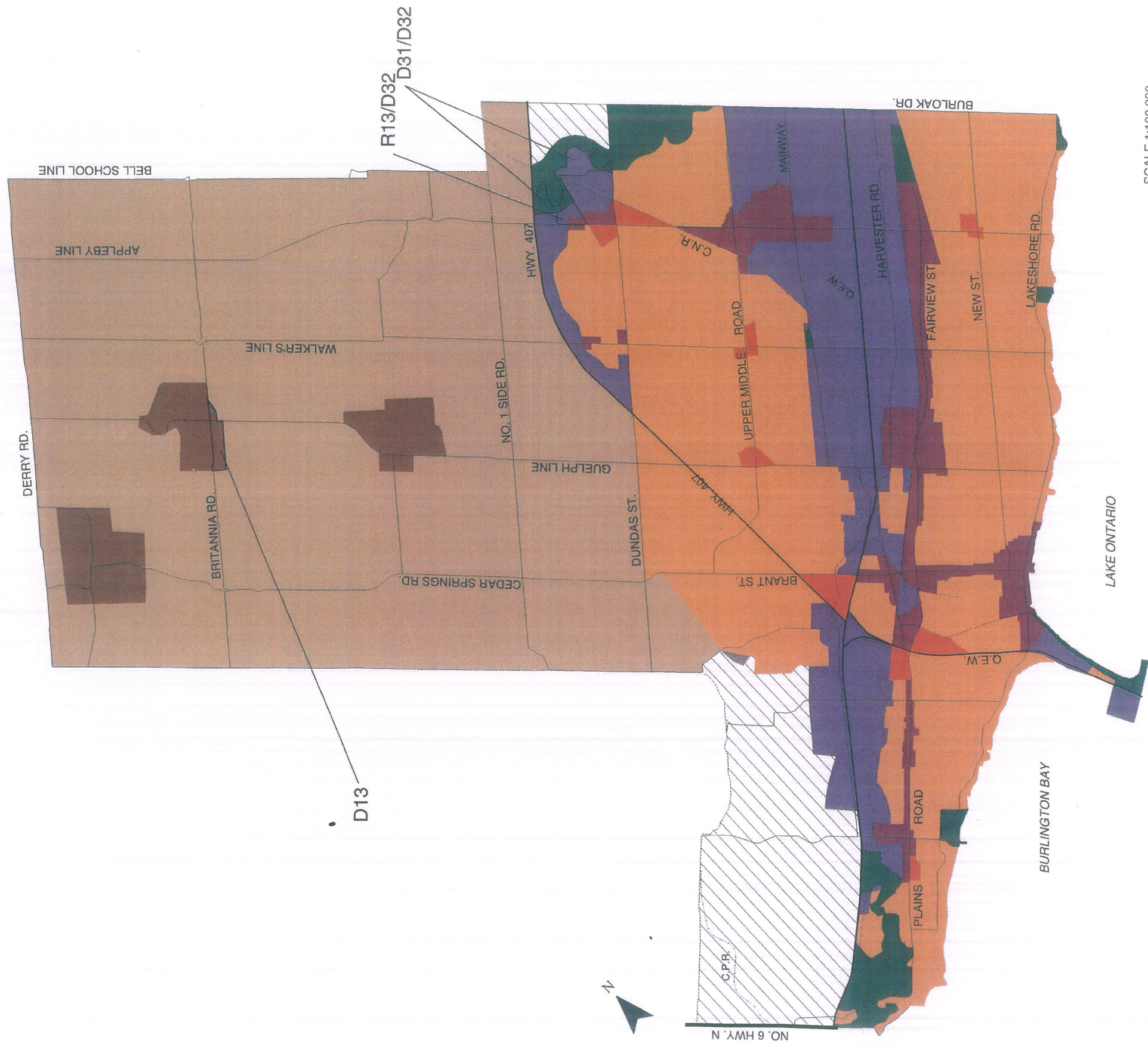
Figure 15: Alternative Haul Routes Overlay on City of Burlington Official Plan

— Relevant Segment of Alternative Haul Routes

SCHEDULE A

CITY STRUCTURE

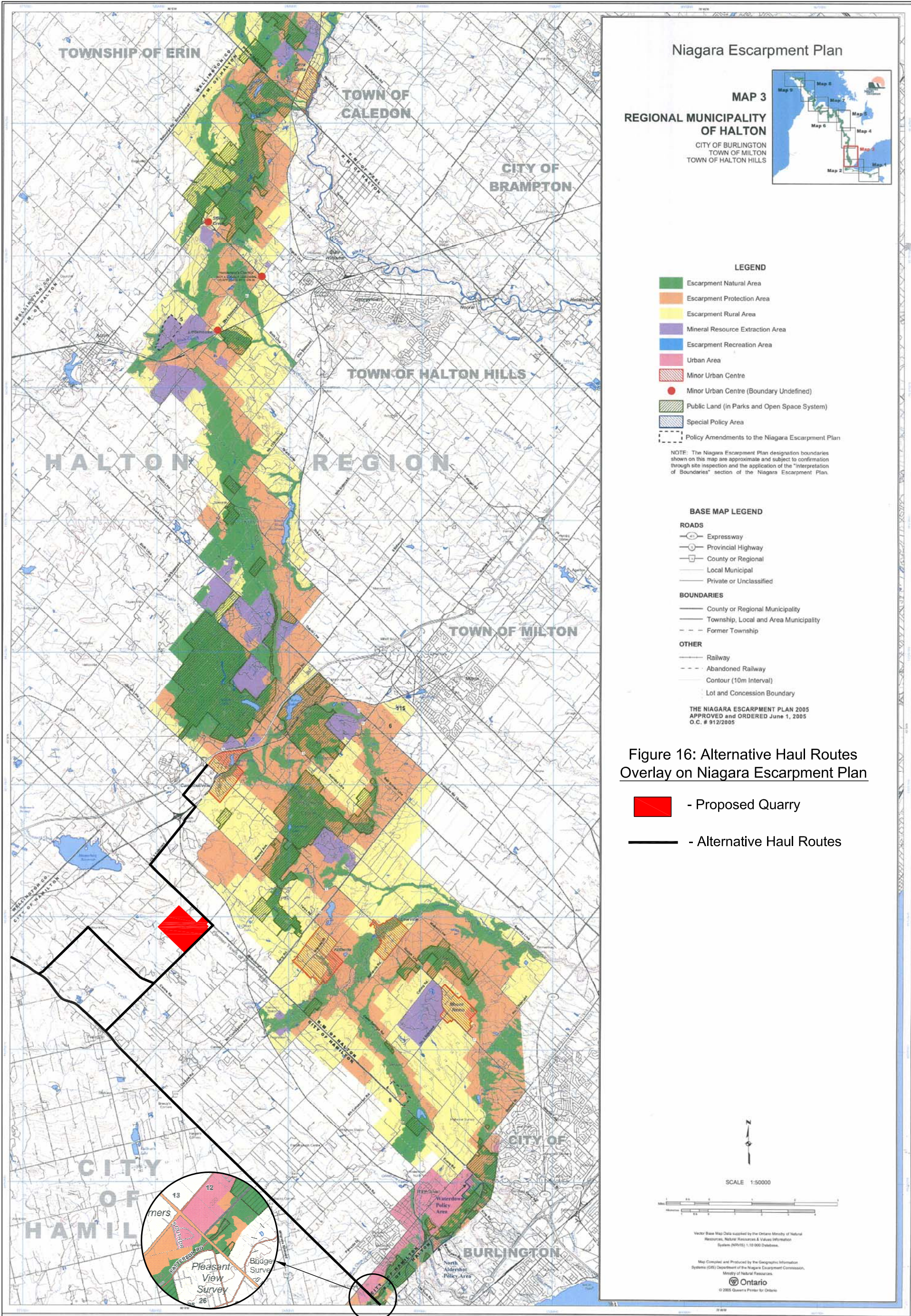
(Schedule A is included for general reference only. Official Plan designations are shown on Schedules B through J)



SCALE 1:100,000

LEGEND
MAJOR LAND USE POLICY AREAS

- Employment Lands
- Land Use Designation to be Determined
- Major Retail Areas
- Mixed Use Activity Areas
- Natural Features/Open Space
- Residential Areas
- Rural Lands
- Rural Settlement Area
- North Aldershot Policy Area



Part of Lot 10,
Campbellville Road,
rough;

Figure 17: Chestnut Grove Site Specific Area

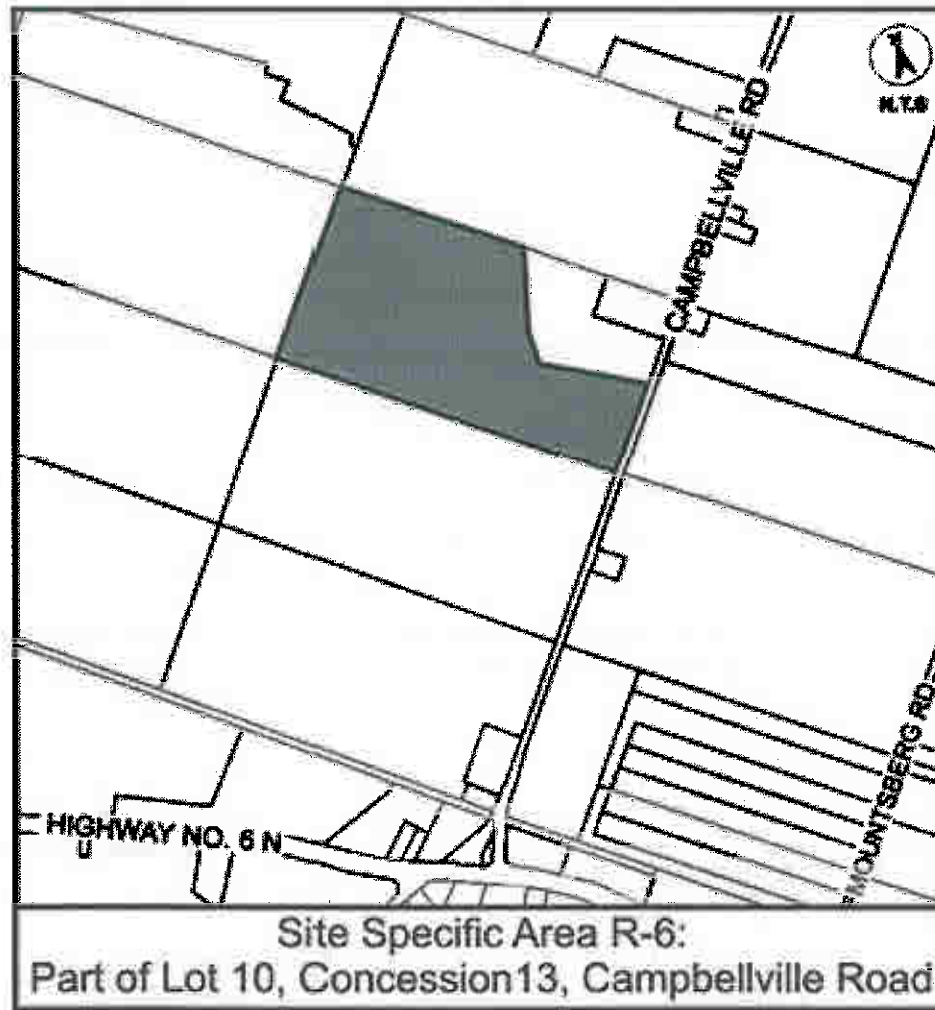
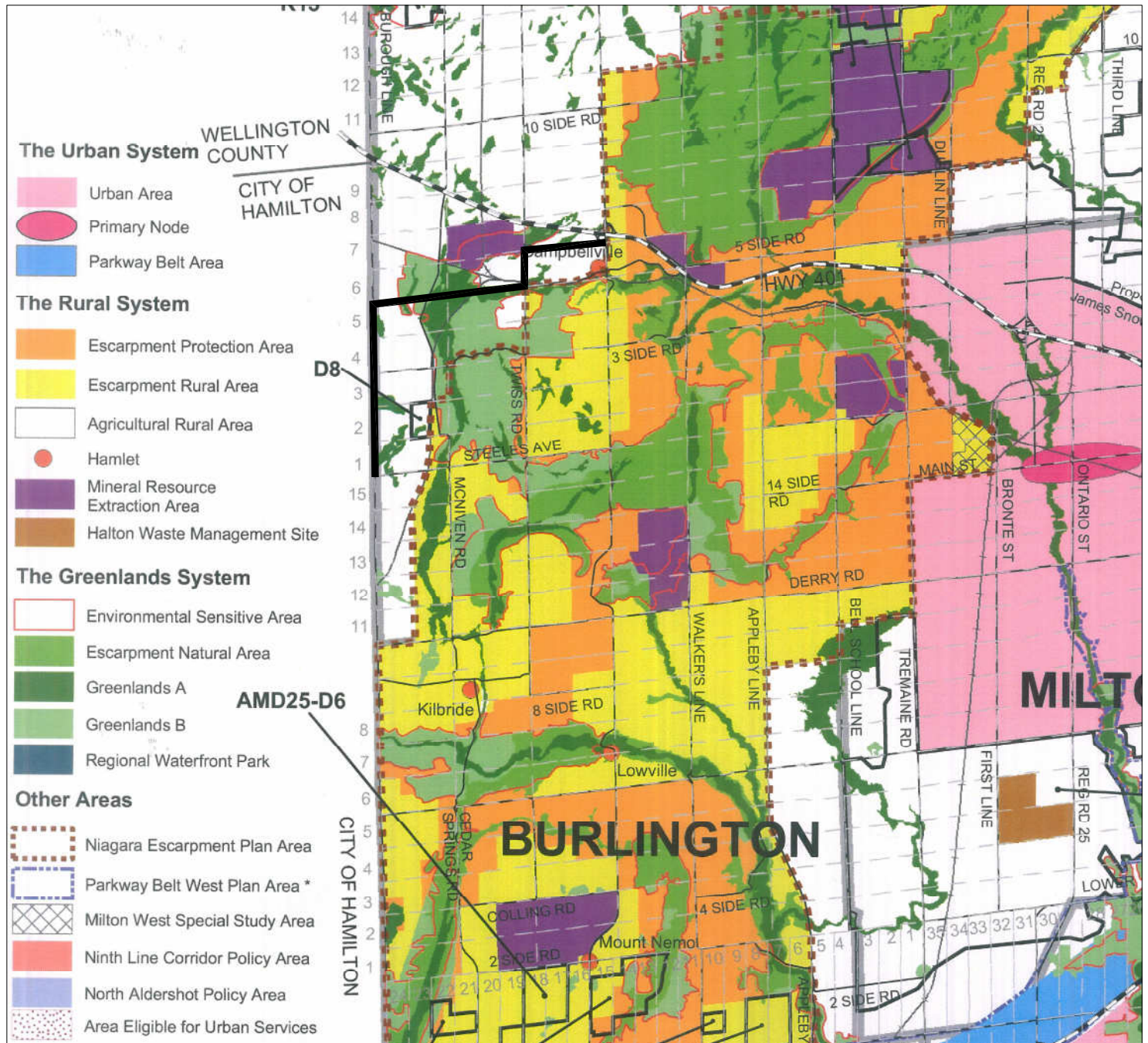


Figure 18: Alternative Haul Routes Overlay on Region of Halton Official Plan



— Alternative Haul Routes

August 20, 2008



GLEN SCHNARR & ASSOCIATES INC.
 URBAN & REGIONAL PLANNERS, LAND DEVELOPMENT CONSULTANTS
 SUITE 700 10 KINGSBRIDGE GARDEN CIRCLE
 MISSISSAUGA, ONTARIO, L5R 3K6
 TEL (905) 568-8888 FAX (905) 568-8894

Figure 19: Alternative Haul Routes Overlay on Town of Milton Official Plan

— - Relevant Segment of Alternative Haul Routes

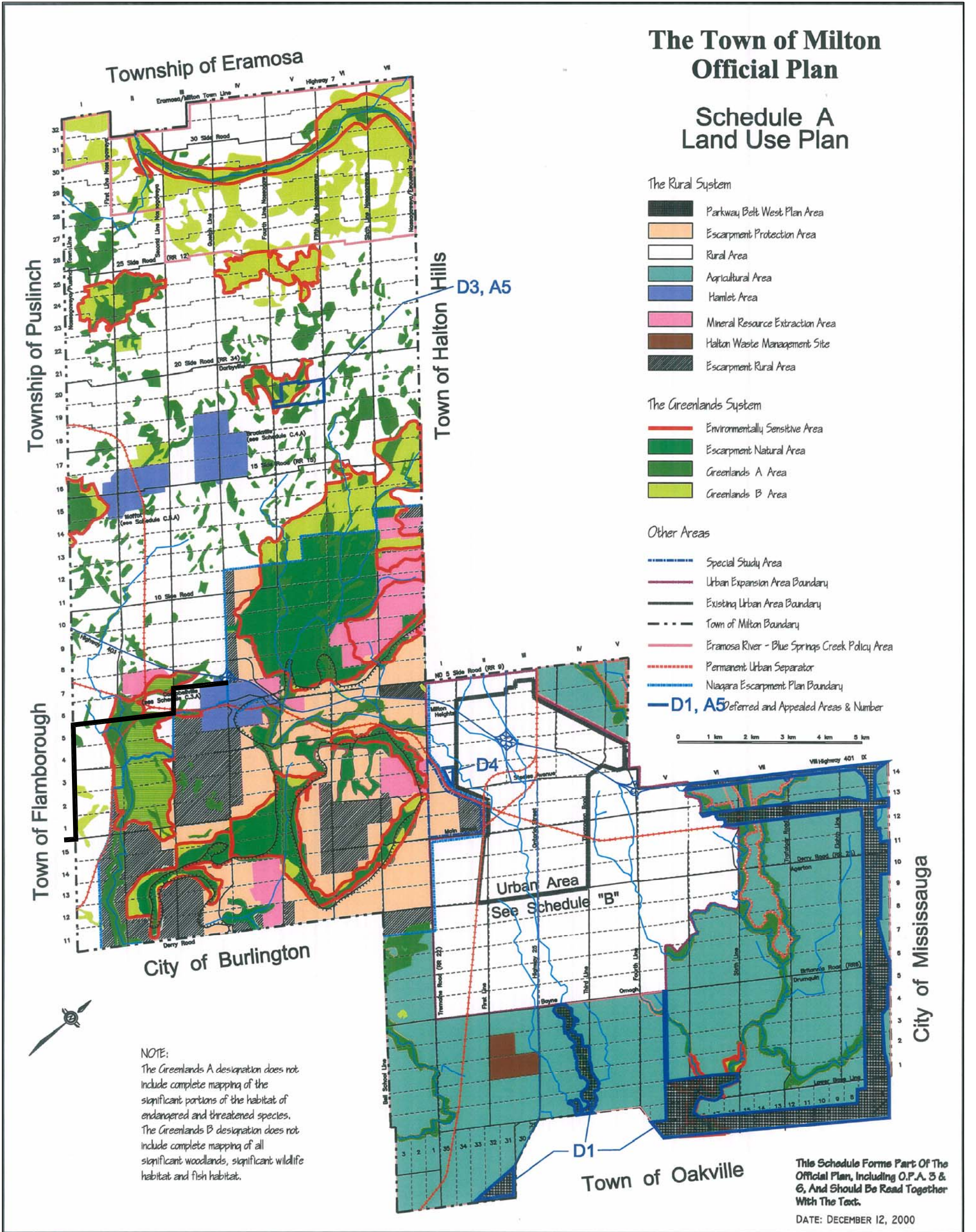


Figure 20: Stonebury Place Site Specific Area

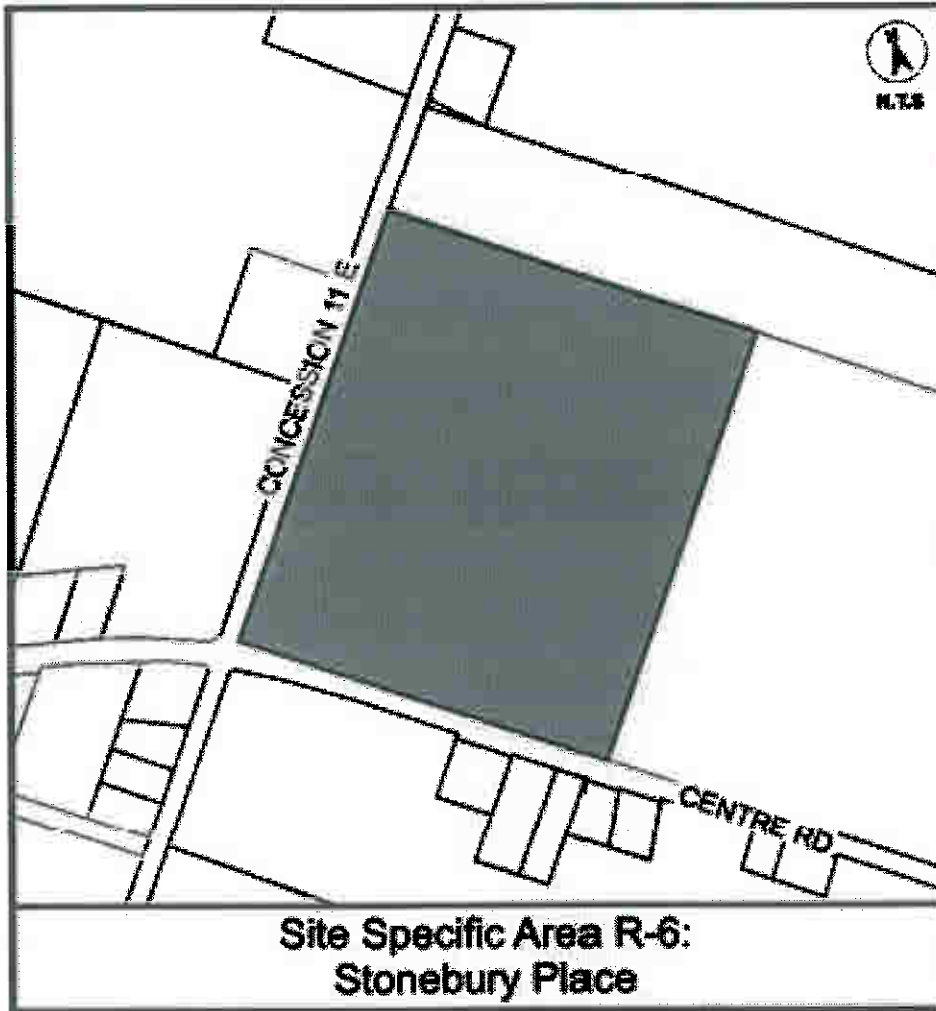


Figure 21: Timberrun Site Specific Area

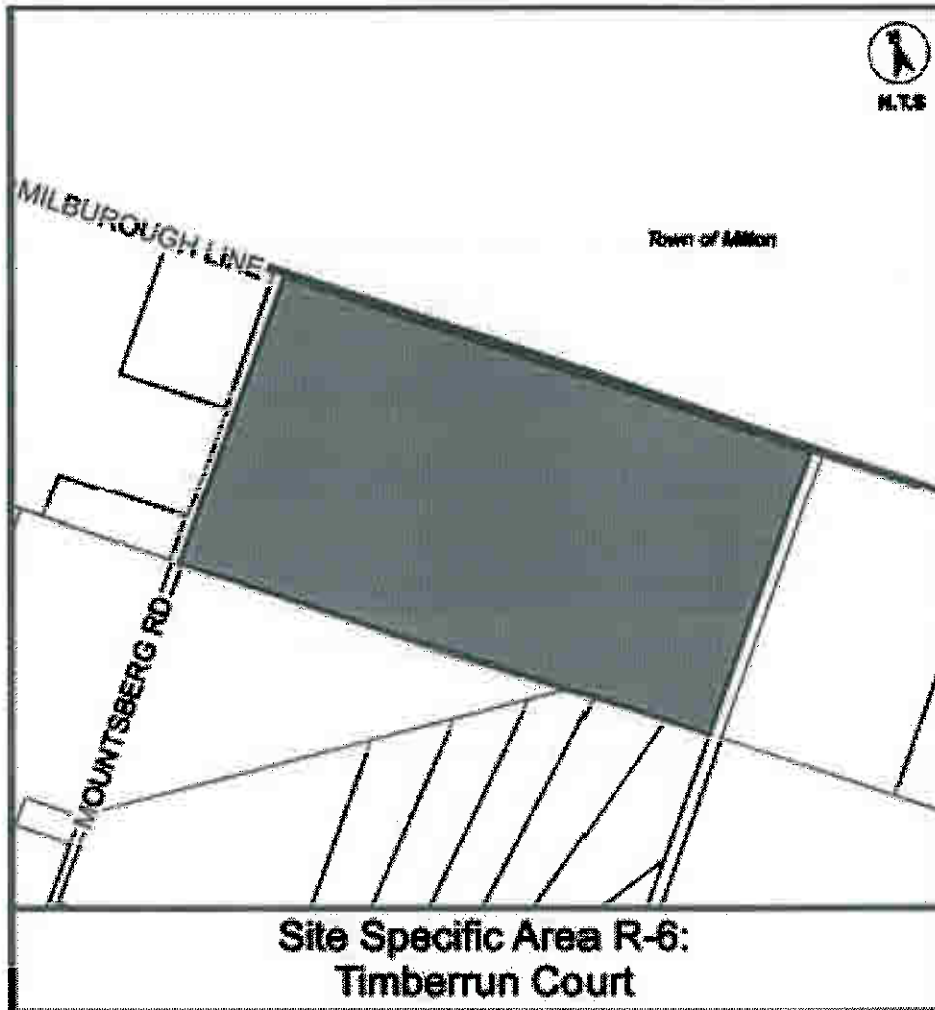
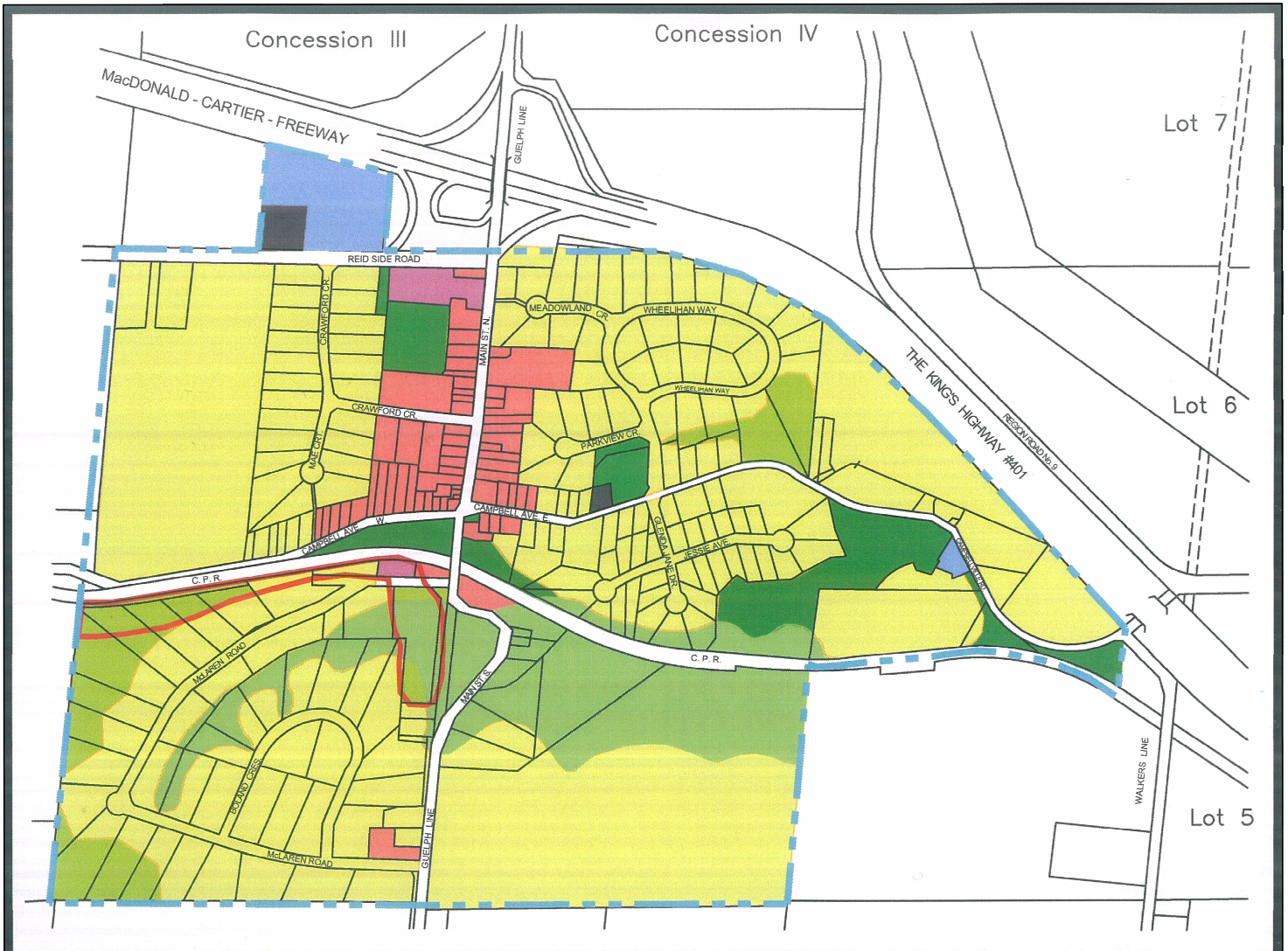


Figure 22: Campbellville Hamlet Land Use Plan



-  Neighbourhood Park
-  Church or Cemetery
-  Hamlet Residential
-  Institutional
-  Hamlet Commercial
-  Hamlet Industrial
-  Greenlands A Area
-  Greenlands B Area
-  Escarpment Natural Area
-  Boundary of Hamlet
-  Environmentally Sensitive Area

TOWN OF MILTON OFFICIAL PLAN

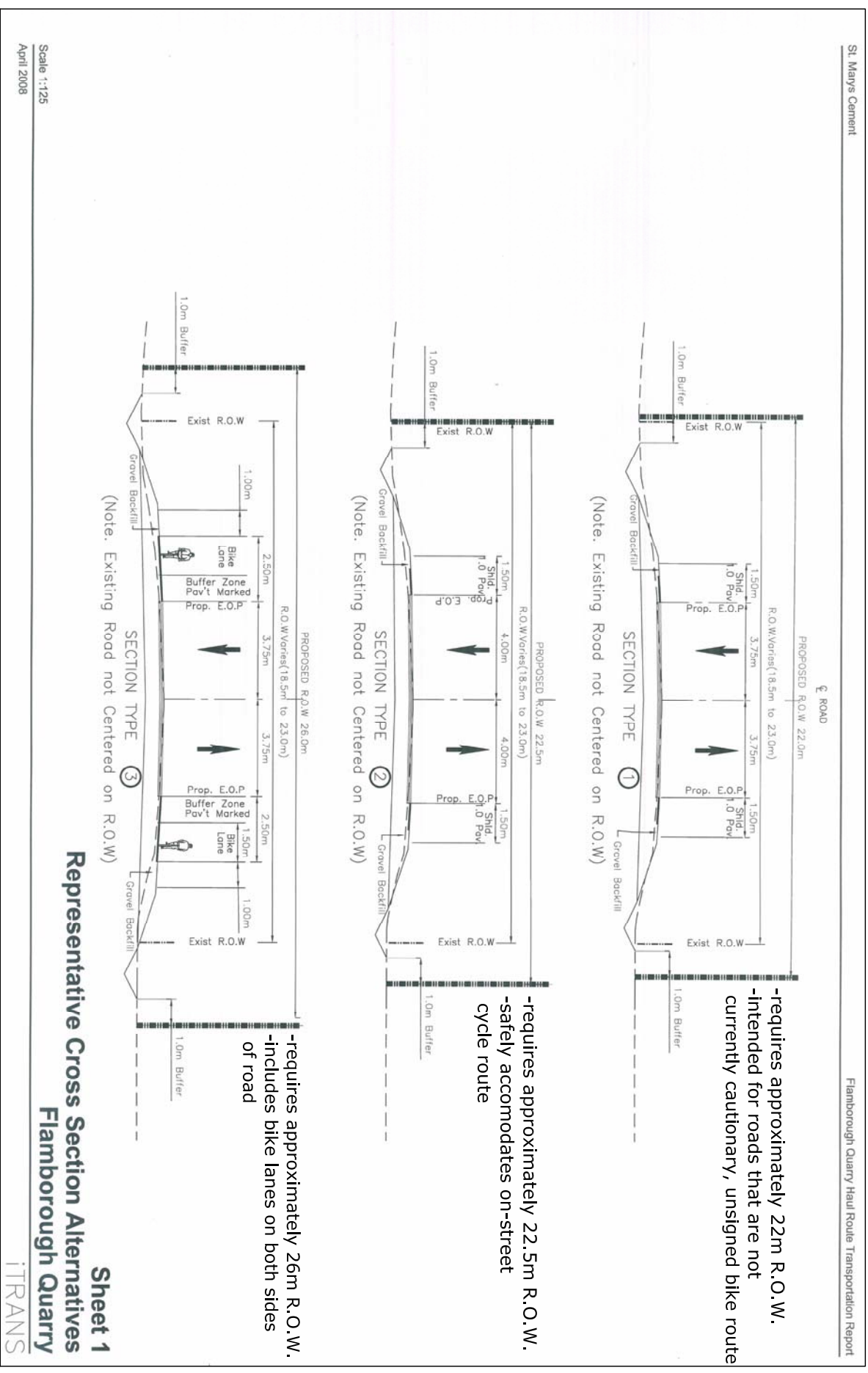
Schedule C.3.A CAMPBELLVILLE HAMLET LAND USE

NOTE:
The Greenlands A designation does not include complete mapping of the significant portions of the habitat of endangered and threatened species. The Greenlands B designation does not include complete mapping of all significant woodlands, significant wildlife habitat and fish habitat.



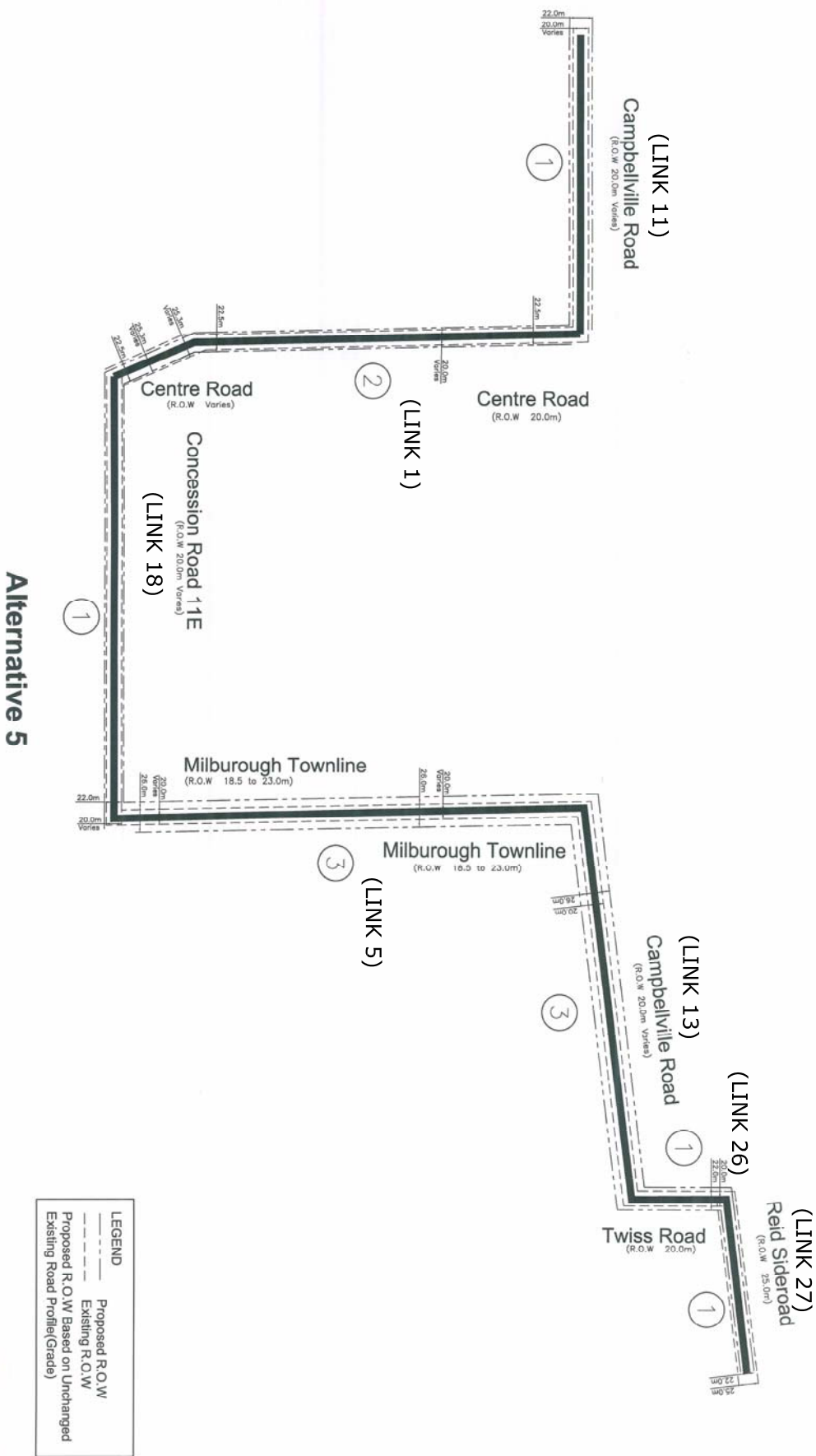
This Schedule Forms Part Of The Official Plan, Including O.P.A. 6 And Should Be Read Together With The Text.

Figure 27: Three Representative Rural Cross-Section Types



Scale 1:125
 April 2008

Figure 30: Alternative Haul Route #5 showing Preferred Rural Cross-Section Type



Not to Scale
April 2008

Alternative 5

Representative Cross Section Alternatives
Flamborough Quarry

Sheet 4

TRANS

Figure 31 : Typical Dwelling Elevation, Bridlewood Estates





Figure 32: Bridlewood Estates Site Plan

Figure 33: Chestnut Grove Estates Site Plan



Figure 34: Chestnut Grove Estate House

