

THE CITY OF VAUGHAN

# Carrville District Centre Urban Design Streetscape Master Plan Study

*Council Approved June 2010*



Giannone Petricone Associates



EDA

Collaborative Inc.

**Vaughan**  
The City Above Toronto



THE CITY OF VAUGHAN

# Carrville District Centre Urban Design Streetscape Master Plan Study

*Council Approved June 2010*

*Submitted by:*



**Giannone Petricone Associates**

*Prepared for:*



# ACKNOWLEDGEMENTS

The Urban Design Streetscape Master Plan for Carrville District Centre is the product of collaborative input from City of Vaughan staff, local land owners, and key stakeholders. These dedicated individuals addressed important concerns and issues surrounding the development of a streetscape master plan for this new urban centre within the City of Vaughan.

Those who made an effort to participate in the stakeholder meetings and workshops will have a greater sense of ownership and pride, as it is these individuals who have helped shape the Streetscape Master Plan design, guidelines and recommendations for Carrville District Centre. The future design of the Centre is the ideas of staff, land owners and stakeholders combined with the expertise of the consultants which has resulted in a practiced Streetscape Master Plan to be used to guide future development within Carrville District Centre.

## Consultants

EDA Collaborative Inc. commenced work on this study in Spring 2008. This document summarizes the design framework and vision, community structure components, streetscape and built form guidelines, and sustainability measures for implementation. EDA provided the overall project management, stakeholder consultation, streetscape and open space design components.

Giannone Petricone Associates Inc. Architects provided the architectural expertise for this study paying particular attention to the built form and urban design elements.

Read, Voorhees & Associates Limited provided the transportation and traffic engineering assessment.

## City of Vaughan Staff

John Zipay	Commissioner of Planning
Rob Bayley	Senior Urban Designer
Ted Radlak	Urban Designer
Moira Wilson	Landscape Architect / Urban Designer
Paul Gardner	Director of Parks Development
Diana Birchall	Director of Policy Planning
Anna Sicilia	Policy Planner
Selma Hubjer	Senior Transportation Engineer
Margie Singleton	President, Vaughan Public Libraries

## Key Stakeholders

Carmen Hui - Streetscape Program Manager, Region of York  
Anthony Sun – TRCA  
Kevin Huang – TRCA Senior Planner  
Lindsay Dale Harris - Bousfields Inc.  
Dinko Muzich – Eurorstar  
Randy Peddigrew – The Remington Group  
Luch Ognibene - The Remington Group  
Dan Leeming - The Planning Partnership  
Gary Silver – Norstar  
Lolita Parsalidis – H & R Developments  
Rosemary Humphries – Consultant to H & R Developments

# TABLE OF CONTENTS

<b>1.0</b>	<b>Introduction and Context</b> .....	<b>1</b>	<b>4.0</b>	<b>Parks and Open Space System</b> .....	<b>49</b>	<b>7.0</b>	<b>Implementation and Phasing Considerations</b> .....	<b>95</b>
1.1	Background and Purpose .....	2	4.1	Conceptual Framework .....	50	7.1	Implementation and Phasing.....	96
1.2	Policy Context .....	3	4.1.1	Overall System Structure .....	50	7.1.1	Region of York Initiatives.....	96
1.3	Site Analysis .....	4	4.1.2	Park Dedication in an Urban Setting .....	52	7.1.2	City of Vaughan Initiatives .....	96
1.3.1	Site Context .....	4	4.2	Natural System .....	53	7.1.3	Owners Schedule.....	97
1.3.2	Topography .....	5	4.2.1	Woodlots and Valleylands .....	53	7.1.4	Variables.....	97
1.3.3	Woodlots and Open Space .....	6	4.3	Storm Water Management Facilities .....	54			
1.3.4	Circulation .....	7	4.4	Parks and Open Space Hierarchy .....	55	<b>APPENDICES</b> .....		<b>A1</b>
1.3.5	Site Conditions—Photographs.....	8	4.4.1	Urban Square .....	55	Appendix 1—Street Tree Technical Details (City of Vaughan) ...		A2
<b>2.0</b>	<b>Vision and Community Structure</b> .....	<b>9</b>	4.4.2	Urban Neighbourhood Parks .....	56	Appendix 2—Street Tree Planting Details .....		A5
2.1	Vision .....	10	4.4.3	Neighbourhood and Pocket Parkettes .....	56	2.1 In-Ground Planting .....		A5
2.2	Community Structure Components .....	12	4.4.4	Greenway Corridor and Trail Links .....	57	2.2 Elongated Bed Planting .....		A8
2.2.1	Proposed Enhancements to OPA 651.....	12	<b>5.0</b>	<b>Streetscape Design</b> .....	<b>59</b>	Appendix 3—York Region Acceptable Street Tree Species List ..		A12
2.2.2	Road Network .....	14	5.1	Conceptual Framework .....	60	3.1 Full Sized Trees .....		A12
2.2.3	Transit Network .....	15	5.1.1	Road Hierarchy .....	60	3.2 Hydro Species .....		A13
2.2.4	Parks and Open Space Network .....	16	5.2	General Guidelines .....	62			
2.2.5	Block Structure .....	17	5.3	Regional Roads .....	64			
2.2.6	Development Density Calculations .....	18	5.3.1	Dufferin Street .....	64			
2.3	Demonstration Plan .....	19	5.3.2	Rutherford Road .....	66			
2.3.1	3-D View .....	19	5.4	Main Street .....	68			
2.3.2	Conceptual Landscape Plan .....	20	5.4.1	Main Street—District Centre .....	68			
<b>3.0</b>	<b>Urban Design Guidelines—District Centre</b> .....	<b>21</b>	5.4.2	Main Street—Urban Square .....	70			
3.1	Distinct Character Areas .....	22	5.4.3	Main Street Details .....	72			
3.1.1	Gateways .....	23	5.5	Primary Roads .....	74			
3.1.2	Cross Roads .....	24	5.6	Local Roads .....	77			
3.1.3	Main Street .....	25	5.6.1	All Local Roads .....	77			
3.1.4	Urban Square .....	26	5.6.2	Special Character Road .....	80			
3.1.5	Residential Neighbourhoods .....	27	5.7	Typical Intersections .....	84			
3.2	Built Form Guidelines .....	28	5.7.1	Intersection Treatments .....	84			
3.2.1	Built Form and Open Space .....	29	5.8	Streetscape Elements .....	86			
3.2.2	Block NW1 .....	30	5.8.1	Street Lighting .....	86			
3.2.3	Block NW2 .....	32	5.8.2	Utilities .....	86			
3.2.4	Block NE1.....	37	5.8.3	Street Furniture .....	87			
3.2.5	Block NE2 .....	39	5.9	Street Trees—List of Species .....	88			
3.2.6	Block NE3 .....	41	5.9.1	Street Trees .....	88			
3.2.7	Block NE4 .....	43	5.9.2	Shrubs and Perennials .....	89			
3.2.8	Block SW .....	45	<b>6.0</b>	<b>Sustainability Considerations</b> .....	<b>91</b>			
3.2.9	Block SE .....	47	6.1	Sustainability Criteria & Performance Measures...	92			

# LIST OF FIGURES AND TABLES

## FIGURE NO.

<i>Figure 1: Carrville Context Plan</i>	2
<i>Figure 2: Land Use Plan, Official Plan Amendment 651</i>	3
<i>Figure 3: City of Vaughan Map</i>	4
<i>Figure 4: Slope and Drainage Analysis</i>	5
<i>Figure 5: Woodlots, Valleylands and Open Space Context</i>	6
<i>Figure 6: Existing Circulation</i>	7
<i>Figure 7: Proposed Master Plan - Aerial View</i>	11
<i>Figure 8: Proposed Land Use Diagram</i>	13
<i>Figure 9: Road Network and Hierarchy</i>	14
<i>Figure 10: Transit Network</i>	15
<i>Figure 11: Parks and Open Space Network</i>	16
<i>Figure 12: Block Structure Diagram</i>	17
<i>Figure 13: 3-D View of Carrville District Centre</i>	19
<i>Figure 14: Conceptual Landscape Plan</i>	20
<i>Figure 15: Distinct Character Areas</i>	22
<i>Figure 16: FSI Comparison of OPA 651 and Demonstration Plan</i>	28
<i>Figure 17: Corner Conditions</i>	28
<i>Figure 18: Street Weather Protection</i>	28
<i>Figure 19: Figure Ground Comparison of OPA 651 and Demonstration Plan</i>	29
<i>Figure 20: Block NW1 3-D Model</i>	30
<i>Figure 21: Block NW1 Detailed Block Plan</i>	30
<i>Figure 22: Block NW2 3-D Model</i>	32
<i>Figure 23: Block NW2 Detailed Block Plan</i>	32
<i>Figure 24: Main Street Detailed Block Plan</i>	33
<i>Figure 25: Urban Square Detailed Block Plan</i>	33
<i>Figure 26: Block NE1 3-D Model</i>	37
<i>Figure 27: Block NE1 Detailed Block Plan</i>	37
<i>Figure 28: Block NE2 3-D Model</i>	39
<i>Figure 29: Block NE2 Detailed Block Plan</i>	39

## page

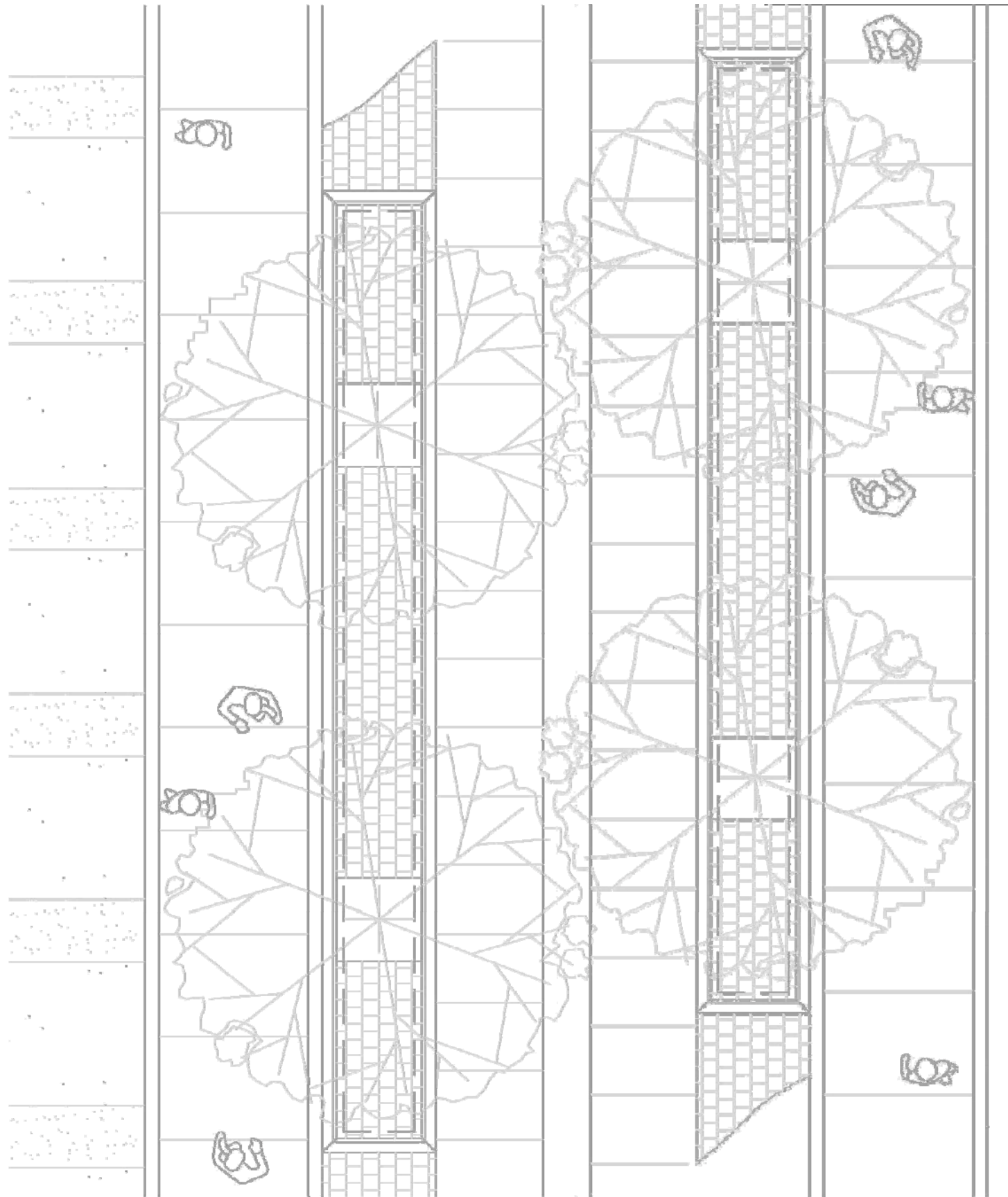
## page

<i>Figure 30: Block NE3 3-D Model</i>	41
<i>Figure 31: Block NE3 Detailed Block Plan</i>	41
<i>Figure 32: Block NE4 3-D Model</i>	43
<i>Figure 33: Block NE4 Detailed Block Plan</i>	43
<i>Figure 34: Block SW 3-D Model</i>	45
<i>Figure 35: Block SW Detailed Block Plan</i>	45
<i>Figure 36: Block SE 3-D Model</i>	47
<i>Figure 37: Block SE Detailed Block Plan</i>	47
<i>Figure 38: Park and Open Space System Structure</i>	50
<i>Figure 39: Urban Square Detail</i>	55
<i>Figure 40: Pedestrian Linkages</i>	57
<i>Figure 41: Road Hierarchy Diagram</i>	60
<i>Figure 42: Typical Streetscape Detail - Main Street East Side</i>	72
<i>Figure 43: Detailed Plan of Main Street at Midblock 'T' Intersection</i>	73
<i>Figure 44: Typical Streetscape Detail - East &amp; West Boundary, Marc Santi Blvd.</i>	76
<i>Figure 45: Typical Streetscape Detail - Local Road</i>	79
<i>Figure 46: Typical Streetscape Detail - Special Character Road</i>	83
<i>Figure 47: Typical Treatment for the Intersection of Dufferin Street and Marc Santi Blvd</i>	84
<i>Figure 48: Typical Treatment for the Intersection of Dufferin Street and Rutherford Road</i>	85

## TABLE NO.

<i>Table 1: Block Structure Statistics</i>	18
<i>Table 2: Parks and Open Space Hierarchy Chart</i>	51
<i>Table 3: Streetscape Hierarchy Chart</i>	61

# 1.0 INTRODUCTION AND CONTEXT



# 1.1 Background and Purpose

The Carrville District Centre is a new and exciting urban centre with a compact physical form that is human in scale and designed to be 'pedestrian-friendly' and transit supportive. The District Centre provides opportunities for community scale commercial facilities, coupled with more intense residential forms of development, and encourages mixed-use development. The Carrville District Centre is expected to contain 11,000 to 12,000 people and approximately 5,400 dwelling units. It is envisioned to have a main street and central urban square and supportive land uses surrounding the centre.

Carrville's important distinction is recognized by the creation of an urban centre complete with commercial and retail uses, live work uses, institutional uses, residential uses, mixed residential uses and urban spaces.

The purpose of the Carrville District Centre Urban Design Streetscape Master Plan Study was to prepare Urban Design Guidelines and Detailed Streetscape Master Plans to guide future development in accordance with the Urban Design policies of the Carrville District Plan OPA 651. The final design concept for the community was developed with the City through extensive workshops and meeting with various stakeholders that commenced in the spring of 2008. This study establishes the layout and detailed design of the public and private streetscape spaces, pedestrian and bicycle connections, public amenities and open spaces, as well as criteria for building locations, forms, heights and massing in relation to the public realm.

A number of objectives for the District Centre were established by the City of Vaughan and have been addressed through the development of this study.

After thorough analysis of the site, background information and relevant policies, EDA Collaborative Inc., in association with Giannone Petricone Associates Inc. Architects, developed the Carrville District Centre Urban Design Streetscape Master Plan Study. This study provides the guidelines and standards to ensure the future development of Carrville District Centre will be successful as a vibrant and inspiring place to live, work and play within the City of Vaughan.

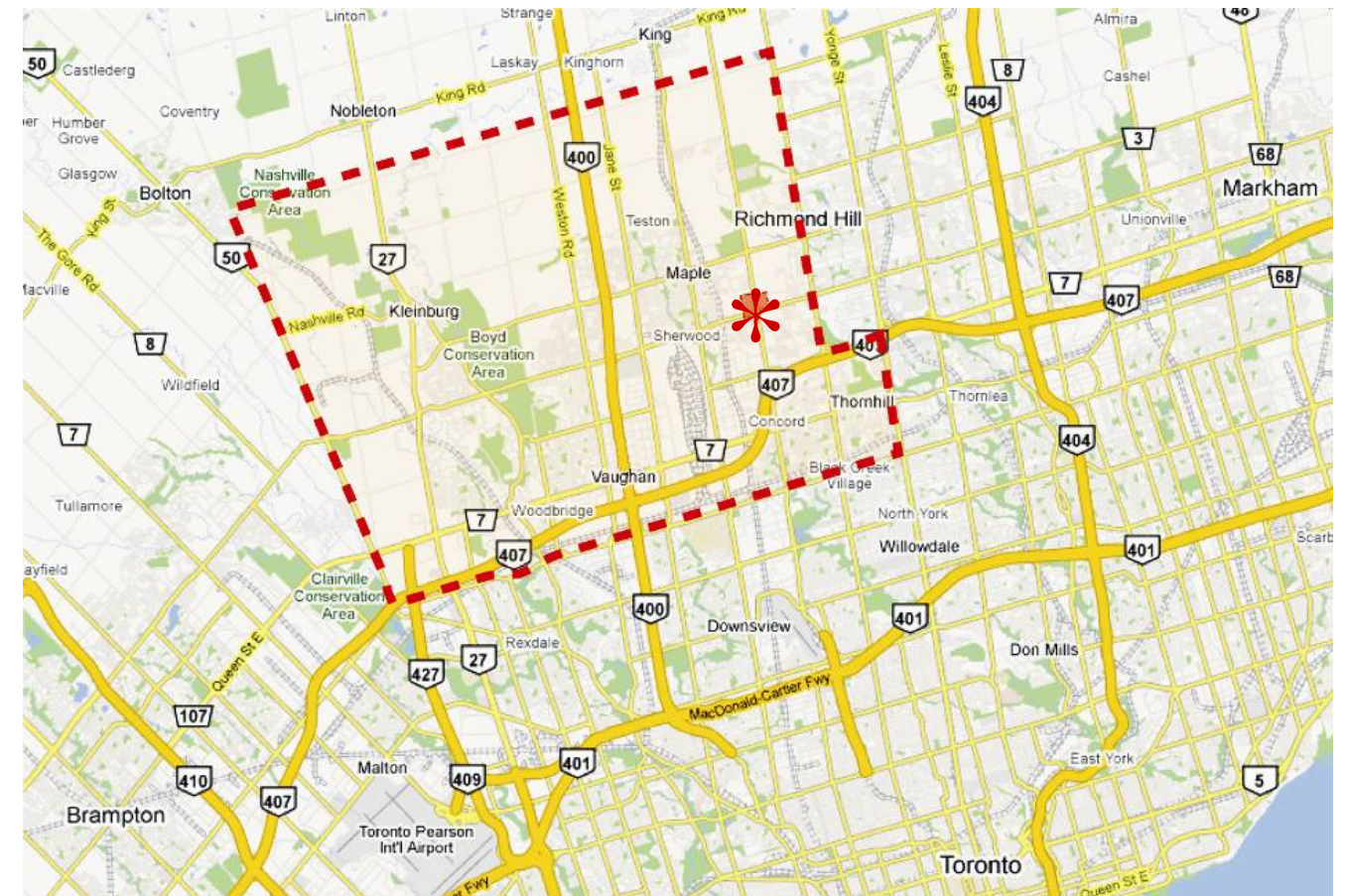
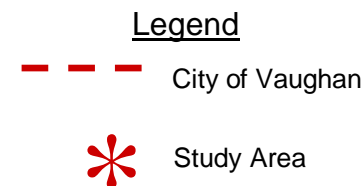


Figure 1: Carrville Context Plan



## 1.2 Policy Context

The City of Vaughan Council approved The Carrville District Centre Official Plan Amendment (OPA) #651 on May 23, 2006 with a general intent that the plan becomes the focus for higher order land uses within the Carrville community. OPA 651 sets out policies to ensure that the Carrville District Centre will evolve into an urban core, with a compact physical form that is human in scale and is designed to be a “pedestrian friendly” and transit supportive area. Within this Centre there will be the opportunity for community scale commercial uses coupled with more intense residential forms, encouraging mixed-use development.

The intent of the Urban Design Streetscape Master Plan Study is to expand upon the policies of OPA 651 by providing further urban design criteria and detail to assist in the preparation and evaluation of development plans within the District Centre.

The urban design objectives established by OPA 651 are to:

- Promote high quality urban design within the area including streetscapes, open spaces, and public and private buildings, to create a comfortable, usable and memorable neighbourhood;
- Create a strong community image by enhancing the character of the built environment including building design / massing, signage, planting and streetscapes;
- Provide a transition between the concentrated uses within the District Centre and the surrounding lower densities;
- Ensure neighbouring developments within the Centre and those adjoining it are compatible and complementary;
- Create a pedestrian-friendly environment through the street layout, lot configuration and siting of all buildings;
- Develop attractive streetscapes ensuring that development adjacent to the ‘Main Street’ is a comfortable, human-scale for pedestrians; and,
- Support transit by coordinating land use, transportation infrastructure and urban design in a complementary manner and encourage pedestrian-oriented, transit-supportive development.



Figure 2: Land Use Plan, Official Plan Amendment 651

## 1.3 Site Analysis

### 1.3.1 Site Context

The Carrville District Centre is located in the east portion of the City of Vaughan, one of Canada's fastest growing urban centres. The site is comprised of approximately 57.0 hectares and is generally located at the intersection of Rutherford Road and Dufferin Street. The four quadrants surrounding the intersection are not equal in size and have extremely different environmental and existing development contexts, therefore the northwest quadrant of the site will be the primary focus of the District Centre.

There are residential developments to the south of the Carrville District Centre, while development is in the initial stages on the east and west sides of the site. However, to the north of the Centre there is relatively little development occurring at this time.

The District Centre is in proximity to the Upper Don River Valley and many smaller tributaries, as well as several woodlots and vast open spaces; this will provide access for an extensive parks and open space network within the community.

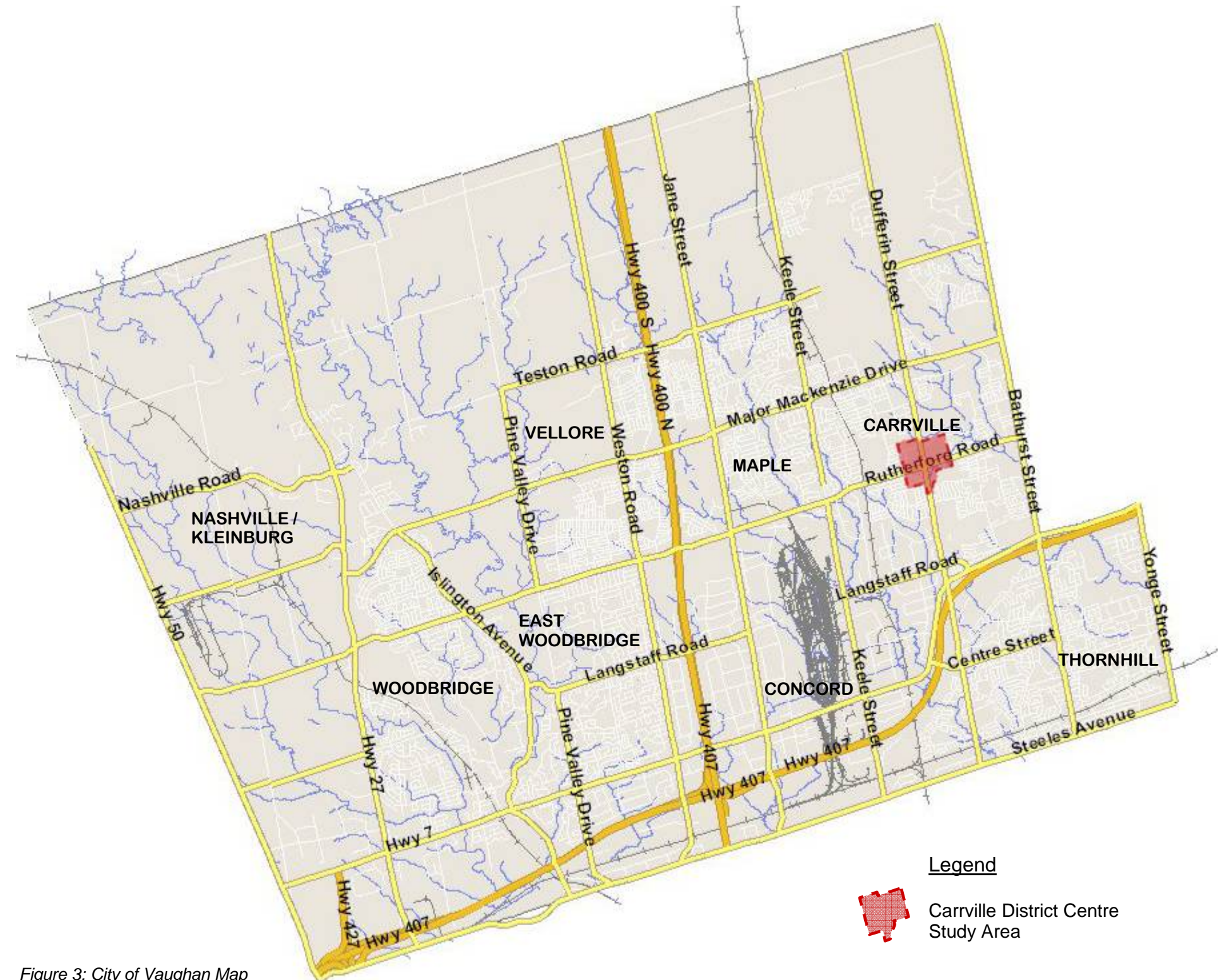


Figure 3: City of Vaughan Map

### 1.3.2 Topography

The natural character of the Carrville District Centre is that of an extensive, gently sloping plain with surface drainage via overland flow running generally from west to north and southeast. Low points exist in the north and northeast corner of the site, as well as in the south, where there is an extensive valleyland and woodlot natural heritage system. A third low point is located at the southwest end just outside of the site boundary, where a Storm Water Management Pond is proposed to be located. The highest point of the site is located in the northwest corner, with a secondary high point near the intersection of Dufferin Street and Marc Santi Boulevard. The northwest quadrant is generally the highest and flattest area within the Carrville District Centre, while the northeast quadrant is quite steep in some areas and possesses noticeable topographic variations.

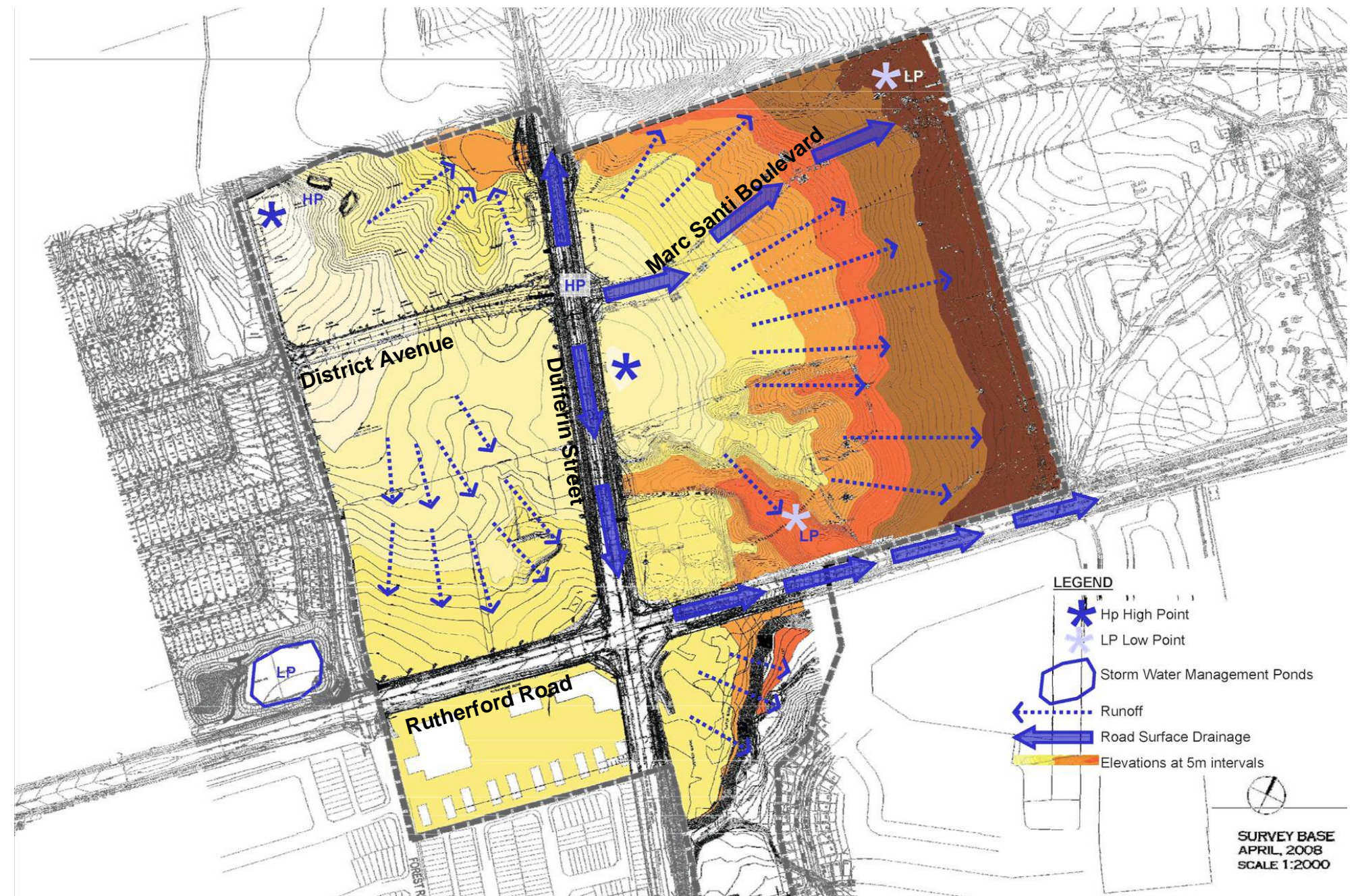


Figure 4: Slope and Drainage Analysis

### 1.3.3 Woodlots, Valleylands and Open Space

Within the Carrville District Centre there is one relatively large woodlot located in the northeast quadrant and a smaller area in the southeast quadrant of the site which are protected as Environmental Policy Areas. The northwest and southwest quadrants are generally clear of any woodlots, valleylands or natural open space features. There is a second woodlot located along the northern edge of the site which extends past the District Centre boundary. There are significant natural open spaces located directly to the north of the northern valley / woodlot as well as to the east of the site, creating a large interconnected system of woodlots and open space immediately surrounding the District Centre. Farther to the east are valleylands and the Upper Don River. These lands serve to protect and enhance the natural ecosystem and to maintain ecological diversity within Vaughan. Most of the lands within the Centre are identified as a "Settlement Area" within the Oak Ridges Moraine Conservation Plan, meaning that it will be developed in a manner consistent with all appropriate legislation.





- LEGEND**
-  Woodlot
  -  Valley lands
  -  Natural Open Space
  -  Stormwater Management Ponds / Watercourses
  -  Site Boundary



Figure 5: Woodlots, Valleylands and Open Space Context

### 1.3.4 Circulation

Two regional arterial roads create the major traffic node within the Carrville District Centre. Rutherford Road is the main east-west arterial road, and Dufferin Street is the main arterial road in a north-south direction. These roads play an important role in the successful development of the Carrville District Centre. They provide access and allow opportunities for vehicular and pedestrian infiltration into the Carrville District Centre by means of minor collector roads perpendicular to these arterial roads.

A smaller, community traffic node is located at the intersection of Dufferin Street and Marc Santi Boulevard. This intersection currently provides vehicular access through the northern portion of the site, connecting the two local roads running north-south along the site's east and west boundary.

The northwest quadrant is the most accessible area within the site. The regional and minor collector roads that border this quadrant provide numerous potential access points into the District Centre. District Avenue runs directly through this quadrant, connecting the Carrville District Centre with other areas in the City of Vaughan and the Region of York.






- LEGEND**
-  Regional Arterial Road
  -  Existing Minor Collector Road
  -  Regional Traffic Node
  -  Community Traffic Node
  -  Site Photo Location (colour-coded with photographs on page 7)



Figure 6: Existing Circulation

1.3.5 Site Conditions—Photographs



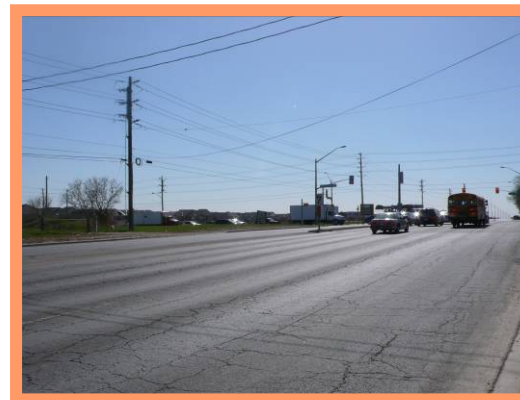
Existing Roads Photos —  
Marc Santi Boulevard  
(West of Dufferin Street)



Existing Roads Photos —  
Dufferin Street



Existing Roads Photos — Marc Santi Boulevard (East of Dufferin Street)



Existing Roads Photos —  
Rutherford Road



Existing Roads Photos —  
East Boundary of Site