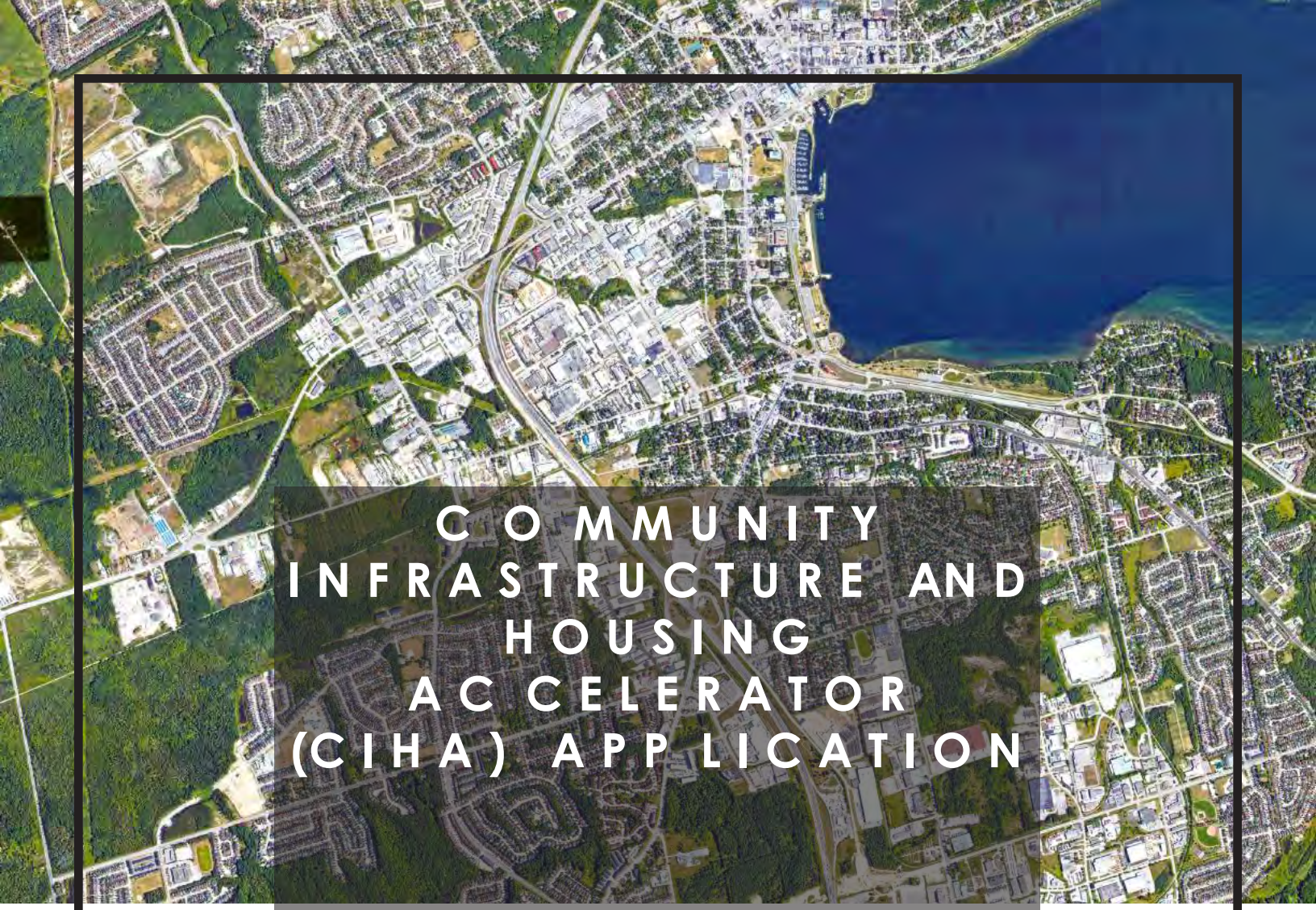

COMMUNITY INFRASTRUCTURE AND HOUSING ACCELERATOR (CIHA) APPLICATION

175 & 199 ESSA ROAD, 50 WOOD STREET

CITY OF BARRIE

PREPARED FOR:
GREENWORLD CONSTRUCTION INC.

OCTOBER 31, 2023

IPS INNOVATIVE PLANNING SOLUTIONS
PLANNERS • PROJECT MANAGERS • LAND DEVELOPMENT

175 & 199 ESSA ROAD,
50 WOOD STREET

CITY OF BARRIE,
COUNTY OF SIMCOE

COMMUNITY INFRASTRUCTURE AND HOUSING ACCELERATOR (CIHA) APPLICATION

PREPARED BY

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ON BEHALF OF

GREENWORLD CONSTRUCTION INC.

OCTOBER 31, 2023

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1.0 INTRODUCTION

On behalf of Greenworld Construction Inc. (Applicant/Owner), Innovative Planning Solutions (IPS) is pleased to submit this brief detailing the proposed development located at 175 & 199 Essa Road and 50 Wood Street, in support of a Community Infrastructure and Housing Accelerator (CIHA) Order.

The City of Barrie is designated by the Growth Plan for the Greater Golden Horseshoe as the principal '*Primary Settlement Area*' in the Simcoe Sub-Area, where the projected population and residential growth is to be accommodated through ambitious levels of development. Emphasis is placed on the development of lands to support new housing options along '*Intensification Corridors*' and within designated '*Strategic Growth Areas*'.

Supporting Provincial and City policies and initiatives to create new housing, the CIHA Application is being requested to support the expedited development of desired housing options on the subject site as part of a mixed-used development.

The order would support the development of 4,054 units, provided through high-rise residential, mixed-use high-rise and commercial, and townhouse built forms. To support the development and overall community, a school block has been incorporated into the development to support residents of a growing area.

An overview of the proposed development is provided under Section 4.0. A Master Plan for the site is included as *Appendix 1* with renderings as *Appendix 2*.

A CIHA Zoning Order has been attached to this report as *Appendix 3*, including a Draft Zoning By-law Amendment and Schedule.

2.0 SUBJECT LANDS

The subject lands are located at 175 & 199 Essa Road, and 50 Wood Street, uniquely positioned at the intersection of Highway 400 (provincial highway) and Essa Road ('*Intensification Corridor*'). This is a prominent location in the City of Barrie with rich history as the former Barrie Fairgrounds, which is presently vacant, underutilised, and represents a promising opportunity for new high-density development within the city's '*Built-up Area*'.

The site includes a total landholdings of 22.4 ha. (55.4 ac). Development is proposed on the Essa parcel, representing 14.7 hectares. The Wood lands include 7.7 hectares.

Since 1950, the portion of lands along Wood Street have historically been utilized for industrial uses. A watercourse is located on the lands, known as Hotchkiss Creek. The feature originates from the western limits of the property, running along

Highway 400 and towards the north-east corner of the Wood lands, with a portion of the creek piped underground. Hotchkiss Creek is part of a comprehensive realignment plan to improve the health of the system, with works coordinated by the City of Barrie, the Lake Simcoe Region Conservation Authority (LSRCA), Water's Edge (project consultant), and Aquafor Beach (city consultant).

3.0 SURROUNDING LAND USES

Surrounding land uses are diverse and include the following uses:

North: North of the Essa Road lands is an established residential neighbourhood, known as Allandale, consisting of low-density detached dwellings located along Campbell Avenue and Wood Street. The northern boundary of the Wood Street lands is bordered by the Barrie-Collingwood Railway, with a variety of general industrial land uses located to the north along Tiffin Street.

East: The eastern boundary of the Essa Road lands is delineated by Essa Road and Anne Street South, with a variety of general commercial land uses. East of the Wood Street lands are low-density detached dwellings (Allandale) located along Wood Street, Campbell Avenue, and Alfred Street. In addition, a variety of residential uses and densities are located south-east of the subject site, within the Allandale and Allandale Heights neighbourhoods.

South: The southern boundary of the site is bordered by Essa Road, connecting to Highway 400 and the Highway 400 / Essa Road interchange. A variety of general commercial land uses are located further south-east along Fairview Road.

West: The western boundary of the site is established by Highway 400, along with a Ministry of Transportation (MTO) stormwater management block (pond) cut into the subject site, to remain indefinitely. The area to the west side of the highway contains a diversity of highway industrial, general industrial, and light industrial uses.

4.0 PROPOSED DEVELOPMENT

The proposal represents an opportunity to develop a significant parcel (22.4 ha.) of underutilized and vacant lands within the City of Barrie, at the prominent location of Highway 400 and Essa Road. The landholdings provide an opportunity to substantially contribute to the City of Barrie's housing stock and provide for development to take place in a comprehensive and cohesive manner, where intensification is encouraged.

The following section provides an overview of the proposed development, which is illustrated by the Master Plan, attached as *Appendix 1* to this brief. A conceptual Site Render is also included as *Appendix 2*.

The development proposed includes two new municipal access points from Essa Road and Anne Street. The access points will allow for the development of the site that will transition from low density residential along the existing established neighbourhood, to high density residential along the Highway 400 frontage. The site will also incorporate mixed use development for those buildings fronting Essa Road. The site will possess a series of municipal and private roads to effectively develop the site and private vehicle and pedestrian access.

To support the application, a Transportation Review has been completed by BA Group and a Servicing Brief has been prepared by Counterpoint Engineering. These are included as *Appendices 4 and 5* to this brief.

Residential Uses

The residential component of the development proposes 4,054 units, including Townhomes and Condominium units.

A total of 3,956 units are proposed in the high-density blocks, provided through 13 towers ranging in height from 15-storeys to 40- storeys. These units will offer a variety of unit sizes, including garden, bachelor, one bedroom, two bedroom and three bedrooms. Along the base of the podium associated with the high rise buildings, a total of 113 townhouse units will be incorporated into Buildings J, A, B, C, D, F and G, fronting along the internal street (Street B). In addition, the 3 garden apartments are incorporated at Level 1 into Building H.

The placement of the high-rise blocks ensures the tallest budlings and uses with the most density are located furthest from the existing residential neighbourhood to the north and are appropriately situated along the '*Primary Intensification Corridor*' (Essa Road), where taller built forms and intensification is encouraged. The podium townhouse units are incorporated to activate the street level.

For the remainder of residential uses on site, a total of 98, 3-storey townhouse units are proposed internal to the site, with access provided from private condominium roads. Back-to-back and rear-lane unit types are proposed in a configuration that will activate municipal and private streets. The townhome blocks are located towards the north-west boundary of the Essa lands, in efforts to provide transition between the development and the existing residential neighbourhoods to the north along Campbell Street.

Commercial Space

The commercial focus for the development will be along the Essa Road frontage. This is the area in which the City of Barrie promotes mixed use development. A total of 5,000 m2 of commercial space is proposed to be integrated into the mixed-use towers at Level 1 in Buildings E, F, G & H. These commercial spaces will be designed to be flexible to accommodate for a range in tenants, and to accommodate demand for services as the site and neighborhood redevelops. The intent is to serve the needs of both site residents and the local area with commercial located in areas where it has the best opportunity for success.

School Block

A school block has been incorporated into the site to meet the needs of a growing population. This block is to be designed with the chosen school board once an agreement is reached for the lands. Roughly 6-acres (2.4 hectares) was the desired size of the local school boards, with frontage located along a proposed new collector road. The proposed block configuration has also been given consideration for a residential use should the school boards decide not to proceed with this parcel. The site is proposed to possess a dual zone to ensure development can happen has quickly as possible once a decision has been made.

Site Amenities & Open Space

Outdoor amenity space is provided throughout the high-rise built form, consisting of private balconies and outdoor rooftop amenity space with green roof terraces on the top of the podium. The podium is further intended to offer shared indoor amenity areas, including lounges, party rooms, recreational areas, and dedicated amenity spaces.

For the townhouse blocks, the units are to include options such as balconies and terraces to provide private amenity space, and a public/private park (approx. 0.2 ha.) is proposed adjacent to offer common amenity space. In addition, a pedestrian trail winds through the development proposal, connecting from the open space / stormwater management block at the north to the western side of the high-rise buildings, and along Essa Road to the south providing for active amenity space. The intent is to maintain active pedestrian connections throughout the site, connecting breezeways, trails, sidewalks, and public spaces.

Within the high-rise blocks, hardscaped public spaces are provided at-grade to provide common gathering spaces and connections between towers. These spaces are designed to facilitate social interaction. In addition, pedestrian connections are incorporated into the site and provide access through the hardscaped public spaces to facilitate pedestrian movements, connect blocks at grade, and provide active pathways between the site and Essa Road.

These hardscaped spaces are identified along Essa Road as well to encourage pedestrian access, with emphasis placed on convenient connections to the commercial spaces.

Parking Supply

The proposed townhouse uses result in a total of 196 parking spaces, equivalent to 2.0 spaces per unit. Spaces are accommodated in a garage and in the driveway, subject to the unit design.

The high-rise blocks offer a total of 3,260 parking spaces, accommodated by a 5-storey parking podium. The provided parking is designed to provide a minimum of 0.80 spaces per unit, being 0.70 spaces per unit plus 0.10 visitor spaces per unit.

Site Access and Road Configuration

Site access is proposed by the following:

1) Proposed signalized intersection on Essa Road with proposed Street 'A'. Street 'A' is proposed as a municipal street with a 23 m. right-of-way.
2) Proposed right in/right out intersection at Anne Street with proposed Street 'B'. Street 'B' is the principal municipal street for the site, with a 23 m. right-of-way.
3) A proposed connection to Campbell Avenue, providing secondary access to the site.
4) A condominium road is proposed for the townhouse blocks, with an 8.0 m. right-of-way.
5) A pedestrian connection is provided from the site to Campbell Avenue, with a 3.0 m. public walkway.
6) Public access is provided from Essa Road by means of three (3) pedestrian breezeway connections.

Barrie Curling Club

The Barrie Curling Club is proposed to be maintained within the proposed Zoning Order. Through the future development of the site, the Applicant will consider potential improvements to the clubs' lands, including but not limited to; site access from the internal street, a revised parking layout, and improvements to site landscaping.

Wood Street Lands

The Wood Street lands are not proposed for any development through this submission. The lands are to be maintained for stormwater management facilities

/ flood attenuation and open space, accommodating the needs of the development and the Hotchkiss Creek realignment. The layout of this block will be established in the future through detailed engineering design.

5.0 APPLICATION HISTORY

Official Plan Amendment (OPA), Zoning By-law Amendment (ZBA), and Draft Plan of Subdivision (DPS) applications were made to the City of Barrie by Osmington (Wood Street) Inc. and 2106580 Ontario Inc. in April 2020. The Essa Road applications were deemed complete on April 6th, 2020, and the Wood Street applications were deemed complete on April 22nd, 2020. The applications went through a formal review process, including a Neighbourhood Meeting on August 13th, 2019. Following, a Public Meeting was held by the Planning Committee of the Council of the Corporation of the City of Barrie on August 10th, 2020.

Greenworld Construction Inc. (Digram Developments) acquired the subject lands from 2106580 Ontario Inc. and Osmington Inc. on April 14th, 2022. On December 22nd, 2022, revised Official Plan Amendment (OPA), Zoning By-law Amendment (ZBA), and Draft Plan of Subdivision (DPS) applications were made to the City of Barrie. A Public Meeting was then held on April 5th, 2023.

Based on the comments received, the applicant has revised their plans and has decided to pursue the Community Infrastructure and Housing Accelerator (CIHA) process to help accelerate the time in which construction can commence on site.

6.0 SUMMARY OF CIHA INTENT & ZONING ORDER

The CIHA tool provides housing opportunities for Ontarians to ensure housing supply adequately meets demand. To effectively ensure these needs are met in the City of Barrie, Greenworld Construction Inc. is seeking to facilitate a high-density, mixed-use development on the subject underutilized lands. To support the development, a school is included to accommodate the growth projected and support a growing area of the city.

Among other matters, the intent of the order is to create the zoning of the lands, and establish a framework to regulate the future development of the site. A CIHA Zoning Order has been attached to this report with a Draft Zoning By-law Amendment.

It is our opinion the Community Infrastructure and Housing Accelerator (CIHA) Order would support a rare opportunity to accommodate significant growth

through new housing units within the Built Up Area, on lands designated as a Strategic Growth Area and along an Intensification Corridor.

Respectfully Submitted,
Innovative Planning Solutions

James Hunter, BURPl.
Associate

Darren Vella, MCIP, RPP
President & Director of Planning

Appendices

1) IPS: Master Plan Concept

CAMPBELL AVENUE
SITE ENTRANCE / EXIT
RESIDENTIAL
MTO SWM
PROPERTY BOUNDARY
SCHOOL BLOCK (2.4ha)
PARK BLOCK (0.2ha)
CITY OF BARRIE 23m R.O.W.
FUTURE DEVELOPMENT BLOCK (0.19ha)
COMMERCIAL
SITE ENTRANCE / EXIT
ESSA ROAD
CONDO ROAD - 8.0m ROW
STREET A
STREET B 23.0m ROW
SITE ENTRANCE
EXISTING CURLING CLUB (1.0ha)
HWY. 400
14.0m MIN. MTO / BUILDING SETBACK
RESIDENTIAL TOWER J 20 STOREYS 272 UNITS
RESIDENTIAL TOWER K 15 STOREYS 179 UNITS
RESIDENTIAL TOWER L 20 STOREYS 239 UNITS
RESIDENTIAL TOWER M 25 STOREYS 299 UNITS
RESIDENTIAL TOWER N 20 STOREYS 291 UNITS
RESIDENTIAL TOWER A 25 STOREYS 204 UNITS
RESIDENTIAL TOWER B 30 STOREYS 293 UNITS
RESIDENTIAL TOWER C 35 STOREYS 307 UNITS
RESIDENTIAL TOWER D 35 STOREYS 337 UNITS
RESIDENTIAL TOWER E 40 STOREYS 476 UNITS
RESIDENTIAL TOWER F 35 STOREYS 417 UNITS
RESIDENTIAL TOWER G 30 STOREYS 366 UNITS
RESIDENTIAL TOWER H 25 STOREYS 276 UNITS
OUTDOOR AMENITY @ LEVEL 4
PODIUM 3 STOREYS
SHARED PODIUM 4 STOREYS
GREEN ROOF TERRACE @ LVL 6
OUTDOOR AMENITY @ LEVEL 5
GREEN ROOF @ LEVEL 5
GREEN ROOF
OUTDOOR AMENITY @L3
BLOCK 1P
BLOCK 3P
BLOCK 4P
BLOCK 6P
BLOCK 6
BLOCK 8
BLOCK 9
BLOCK 10
BLOCK 11
BLOCK 12
BLOCK 13
BLOCK 14
BLOCK 15
BLOCK 16
BLOCK 17
BLOCK 18
BLOCK 19
BLOCK 20
BLOCK 21
BLOCK 22
BLOCK 23
BLOCK 24
BLOCK 25
BLOCK 26
BLOCK 27
BLOCK

TRANSITION CENTRE COMMERCIAL WITH SPECIAL PROVISIONS (C2-2 - XXX) ZONE	
PROVISIONS	**REQUIRED**
PERMITTED RESIDENTIAL USES	RESIDENTIAL USES PERMITTED AS PART OF A MIXED-USE DEVELOPMENT OR STAND-ALONE
	AUTOMOTIVE SERVICE STATION IS NOT PERMITTED
RESIDENTIAL AND MIXED-USE BUILDINGS ADJACENT TO THE RIGHT-OF-WAY OF HIGHWAY 400	PERMITTED
SETBACK TO THE HIGHWAY 400 RIGHT-OF-WAY	MIN. 14.00m
MIN. LOT AREA	NO MIN. LOT AREA
MIN. LOT FRONTAGE	NO MIN. LOT FRONTAGE
MIN. FRONT YARD SETBACK	3.00m
MIN. EXTERIOR SIDE YARD SETBACK	1.00m
MIN. SIDE YARD SETBACK	1.80m
	3.00m ADJOINING A RESIDENTIAL ZONE
MIN. REAR YARD SETBACK	NO MIN. REAR YARD
MIN. GROUND LEVEL FLOOR HEIGHT	3.00m
MAX. BUILDING HEIGHT	145.00m
MAX. LOT COVERAGE	NO MAX. LOT COVERAGE
SIDE YARD STEPPING PROVISIONS	SHALL NOT APPLY
STEP-BACK PROVISIONS	SHALL NOT APPLY
PODIUM STEP-BACK REQUIREMENTS	WHERE THE PODIUM MEETS THE TOWER, A MIN. 1.50m STEP-BACK IS REQUIRED WHERE A BUILDING FACE FRONTS A STREET
MIN. DWELLING UNIT FLOOR AREA	NO MIN. DWELLING UNIT FLOOR AREA
GROSS FLOOR AREA (GFA)	NO MIN. OR MAX. GFA
PARKING STRUCTURE UNDERGROUND	NO MIN. SETBACKS SHALL BE REQUIRED FROM THE STREET LINE (RIGHT-OF-WAY) OR PROPERTY LINE TO THE NEAREST PART OF A PARKING STRUCTURE UNDERGROUND
MIN. LANDSCAPED BUFFER AREA	MIN. LANDSCAPED BUFFERS SHALL NOT APPLY TO A SIDE OR REAR LOT LINE
MIN. LANDSCAPED OPEN SPACE OR AREA	NO MIN. LANDSCAPED OPEN SPACE OR AREA
COMMON AMENITY SPACE	MAY BE PERMITTED IN THE FORM OF INDOOR AND OUTDOOR AMENITY AREAS, IN AN UNCONSOLIDATED FORM
MIN. - MAX. RESIDENTIAL DENSITY	MIN. 225.00 UNITS PER HECTARE
	NO MAX. RESIDENTIAL DENSITY (UNITS PER HECTARE)
MIN. NUMBER OF USES FOR MIXED-USE BUILDINGS ALONG THE FRONTAGE OF ESSA ROAD	MIN. OF TWO USES
MIN. COMMERCIAL COVERAGE REQUIRED FOR AT-GRADE COMMERCIAL USE ALONG THE FRONTAGE OF ESSA ROAD, WHERE A MIXED-USE BUILDING IS PROVIDED	80% COVERAGE
MIN. - MAX. PODIUM HEIGHT	MIN. HEIGHT: 2-STOREYS
	MAX. HEIGHT: 6-STOREYS
MAX. BUILDING LENGTH	NO MAX. BUILDING LENGTH
MAX. PODIUM LENGTH	NO MAX. PODIUM LENGTH
MIN. - MAX. FLOOR PLATE SIZE	NO MIN. OR MAX. FLOOR PLATE SIZE
MIN. SEPARATION DISTANCE BETWEEN TOWERS	25.00m
FRONT YARD	THE FRONT YARD IS DEEMED TO BE ESSA ROAD. IN ALL OTHER INSTANCES WHERE LOTS/BLOCKS DO NOT HAVE FRONTAGE ON ESSA ROAD, THE FRONT YARD IS DEEMED TO BE THE MUNICIPAL STREET
LOTS / BLOCKS	LOTS / BLOCKS TO BE CONSIDERED ONE PROPERTY FOR ZONING PURPOSES
PARKING REQUIREMENT FOR LANDS ZONED AS (C2-2-XXX)	
MIN. PARKING SPACES PER DWELLING UNIT	0.7 PARKING SPACES PER DWELLING UNIT
MIN. VISITOR PARKING SPACES PER DWELLING UNIT	0.1 SPACES PER DWELLING UNIT
MIN. PARKING SPACES REQUIRED FOR COMMERCIAL USES	NO MIN. PARKING SPACE REQUIREMENTS
PARKING REQUIREMENTS FOR ANY OTHER NON-RESIDENTIAL USE	NO MIN. PARKING SPACE REQUIREMEMTS
MAX. PARKING REQUIREMENTS FOR ANY OTHER NON-RESIDENTIAL USE	40.00m^2 OF GFA
BARRIER FREE PARKING SPACES BE REQUIRED AS FOLLOWS	A. 1 - 25 SPACES: 1 TYPE 'A', NO REQUIRED TYPE 'B' B. 26 - 50 SPACES: 1 TYPE 'A' , 1 TYPE 'B' C. 51 - 75 SPACES: 1 TYPE 'A', 2 TYPE 'B' D. 76 - 100 SPACES: 2 TYPE 'A', 2 TYPE 'B' E. GREATER THAN 100 SPACES: 1 PLUS 3% OF THE REQUIRED SPACES, FOR BOTH TYPE 'A' AND 'B' SPACES
MIN. INDOOR BICYCLE PARKING SPACES	RESIDENTIAL USE: 0.25 SPACES PER DWELLING UNIT
	COMMERCIAL USE: 0.1 SPACES PER 100.00m^2 OF GFA
MIN. OUTDOOR BICYCLE PARKING SPACES	RESIDENTIAL: 0.05 SPACES PER DWELLING UNIT
	COMMERCIAL: 3 PLUS 0.3 BICYCLE PARKING SPACES PER 100.00m^2 OF G.F.A.

RESIDENTIAL MULTIPLE DWELLING SECOND DENSITY WITH SPECIAL PROVISIONS (RM2 - XXX) ZONE	
PROVISIONS	**REQUIRED**
PERMITTED RESIDENTIAL USES	ALL TOWNHOUSE BUILT FORMS INCLUDING BLOCK/CLUSTER/STREET/STACKED/BACK-TO-BACK TOWNHOUSE USES
DENSITY	NO MIN. AND NO. MAX. DENSITY (PER NET HECTARE)
MIN. LOT AREA	NO MIN. LOT AREA
MIN. DWELLING UNIT WIDTH	4.50m
MIN. FRONT YARD SETBACK	3.00m
MIN. DRIVEWAY LENGTH	5.50m
MIN. INTERIOR SIDE YARD SETBACK	1.00m
MIN. EXTERIOR SIDE YARD SETBACK	1.00m WHERE ANY SIDE YARD ABUTS A STREET
MIN. REAR YARD SETBACK	3.00m
	0.00m BE PERMITTED FOR BACK-TO-BACK TOWNHOUSE USES, WHERE A COMMON WALL IS SHARED
MAX. LOT COVERAGE	NO MAX. LOT COVERAGE
MIN. DWELLING UNIT FLOOR AREA	NO. MIN. DWELLING UNIT FLOOR AREA
MAX. BUILDING HEIGHT	14.00m
REQUIRED STEP-BACKS	NO STEP-BACK REQUIREMENTS SHALL APPLY
MIN. FRONT YARD SETBACK TO A DECK	2.0m
MIN. SETBACK FROM AN EXTERIOR LOT LINE TO A DECK	1.00m
MAX. FRONT YARD PARKING COVERAGE	90%
MAX. PARKING COVERAGE FOR REVERSE FRONTAGE TOWNHOUSE UNITS	100%
MIN. AMENITY AREA	5.00m^2 PER DWELLING UNIT AND A MIN. COMMON AMENITY AREAS OF 10.00m^2 PER DWELLING UNIT
MIN. LANDSCAPED OPEN SPACE	10% PER LOT
TOWNHOUSES PERMITTED IN AN ROW	11 TOWNHOUSE UNITS
PARKING REQUIREMENT FOR LANDS ZONED 'RM2-XXX'	
MIN. PARKING SPACE PER UNIT	1 PARKING SPACE
	REQUIRED PARKING SPACES PER UNIT BE PERMITTED IN A GARAGE
BARRIER FREE PARKING SPACES	BARRIER FREE PARKING SPACES BE INCLUDED IN THE 1.0 SPACE PER UNIT REQUIREMENT
TANDEM PARKING	PERMITTED

RESIDENTIAL MULTIPLE DWELLING SECOND DENSITY WITH SPECIAL PROVISIONS (RM2 - XXX) ZONE - SCHOOL	
PROVISIONS	**REQUIRED**
MIN. LOT AREA	1,500.00m^2
MIN. LOT FRONTAGE	30.00m
MIN. FRONT YARD SETBACK	7.00m
MIN. SIDE YARD SETBACK	5.00m
MIN. SIDE YARD SETBACK TO A RESIDENTIAL ZONE	9.00m
MIN. SIDE YARD SETBACK TO A STREET	7.00m
MIN. REAR YARD SETBACK	7.00m
MIN. REAR YARD SETBACK TO A RESIDENTIAL ZONE	9.00m
MAX. LOT COVERAGE	35%
MIN. LANDSCAPED OPEN SPACE	35%
MAX. BUILDING HEIGHT	15.00m
MIN. PARKING SPACES	NO MIN. PARKING SPACE BE REQUIRED

OPEN SPACE (OS) ZONE	
PROVISIONS	**REQUIRED**
PERMITTED USES	A. PARK, PICNIC AREA, PLAYGROUND
	B. PLAYING FIELD OR COURT
	C. ECOLOGICAL MANAGEMENT MEASURES, ENVIRONMENTAL MONITORING
	D. ENVIRONMENTAL CONSERVATION
	E. NATURALIZED BUFFER
	F. NATURAL RESTORATION AND ENHANCEMENT ACTIVITIES
	G. NATURE TRAILS / PUBLIC TRAILS
	H. STORM WATER MANAGEMENT FACILITIES
	I. MUNICIPAL SERVICES AND UTILITIES, AND INFRASTRUCTURE CORRIDORS
SETBACK TO THE HIGHWAY 400 RIGHT-OF-WAY	14.00m
MIN. LOT AREA	NO MIN. LOT AREA
MIN. LOT FRONTAGE	NO MIN. LOT FRONTAGE
MIN. FRONT YARD SETBACK	10.00m
MIN. SIDE YARD SETBACK	10.00m
MIN. REAR YARD SETBACK	10.00m
MAX. LOT COVERAGE	40%
MAX. BUILDING HEIGHT	10.00m

MASTER PLAN ZONING STATISTICS

175 AND 199 ESSA ROAD,
CITY OF BARRIE

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Date:	October 31, 2023	Drawn By:	A.S.
File:	22 - 1234	Checked:	J.H. / D.V.

2) Kirkor Architects: Concept Site Renders

3) IPS: Draft CIHA Zoning Order

INNOVATIVE PLANNING SOLUTIONS

planners • project managers • land development

October 30, 2023

Re: **DRAFT COMMUNITY INFRASTRUCTURE AND HOUSING ACCELERATOR ORDER**
175 & 199 Essa Road, 50 Wood Street
Greenworld Construction Inc.

APPENDIX "A"
Order
With Respect to the City of Barrie, CIHA Order XXX-2023
Subsection 34.1 (9) of the Planning Act

I hereby order pursuant to clause 34.1 (9) (a) of the Planning Act, further to a request from the Council of the City of Barrie set out in a resolution dated_____,____ 2023, that:

a) The zoning requirements attached as Appendix "A" apply to the lands, in the City of Barrie, set out in Appendix "B".

b) Appendices "A" (ZBA Text) and "B" (ZBA Schedule) attached to this Order, form part of this Order.

This Order comes into force on the day this Order is made.

Made by:

_____
Signature
Minister of Municipal Affairs and Housing

_____
Date made:

APPENDIX "A" TO CIHA ORDER NO. XXX-2023

With Respect to the City of Barrie Subsection 34.1 (9) of the Planning Act

1.0 Definitions

In this Order;

- "Zoning By-law" means Zoning By-law 2009-141 of the City of Barrie.

- "School" shall mean a public school, a separate school, a private school, or other educational institution and may include accessory uses such childcare but shall not include a commercial or industrial school.

- "Townhouse, Back to Back" shall mean a building containing four or more dwelling units divided vertically above and below grade by a common wall, including a rear common wall.

- "Townhouse Development, Block/Cluster" shall mean a minimum of 3 dwelling units which are attached at the main wall above and below grade.

- "Townhouse Development, Stacked" shall mean either block/cluster townhouse development or street townhouse development in which 1 unit is located above another unit, with no common enclosed corridor system.

- "Townhouse Development, Street" shall mean a minimum of 3 dwelling units which are attached above and below grade, by either the garage or by the main common wall that is at least 80% of the length of the adjoining buildings, and all of which front on a street.

- "Townhouse, Reverse Frontage" means a townhouse dwelling where vehicular access is provided via a driveway crossing the rear lot line that is accessed from either a street or a lane.

- "Mixed Use Building" shall mean a building with dwelling units and a non-residential use.

- "Lot" shall mean a parcel of land to which the title may be legally conveyed, and which has continuous frontage on a private or public street.

- "Residential Density" shall mean the number of dwelling units per gross hectare of land, excluding those lands zoned as '*Open Space (OS)*'.

- "Building Height" shall mean the vertical distance from the average finished grade level to:

- In the case of a flat roof, the highest point of the highest roof surface;
- In the case of a mansard roof, the roof deckline;
- In in the case of any other roof, the mean height between the eaves and the ridge; exclusive of any roof or penthouse structure accommodating an elevator, staircase, ventilating fan or other similar equipment, a chimney or other ornamental structure which rises above the roof level, but which does not provide habitable living space.

2.0 Application

1) This Order only applies to lands in the City of Barrie, in the Province of Ontario, being identified as the lands shown on the map attached to this Order as Appendix B.

2) Despite any future severance, partition or division of the lands described in subsection (1), this Order shall continue to apply to the lands as if no severance, partition, or division occurred.

3.0 Amendment

The Zoning By-law Map be amended to change the zoning of the lands from the '*General Commercial (C4)*' zone and '*Highway Industrial (HI)*' zone, to the following zones; as shown in Appendix "B" to reflect the land use permissions under this Order:

- ***'Residential Multiple Dwelling Second Density with Special Provisions (RM2** - XXX)' zone.*
- *'Transition Centre Commercial with Special Provisions (C2-2 - XXX)' zone.*
- *Open Space (OS)' zone.*

4.0 Permitted Uses: Exceptions

In addition to the uses permitted by the Zoning By-law, the following additional uses are permitted on lands zoned as '*RM2-XXX'*:

1) School.

In addition to the uses permitted by the Zoning By-law, the following additional uses are permitted on all lands within the site depicted by "Appendix B" (ZBA Schedule)':

2) A public park, common amenity space, or community use shall be permitted in all zones.

5.0 Zoning Requirements

Notwithstanding the zoning requirements set out by Zoning By-law 2009-141, the following exceptions shall apply to each zone, as identified by "Appendix B" (ZBA Schedule)'.

5.1 'RM2-XXX' Zoning Standards

The following provisions shall apply to lands zoned as '*Residential Multiple Dwelling Second Density with Special Provisions (RM2 - XXX)':*

1) Permitted Residential Uses: All townhouse built forms including Block/Cluster/Street/Stacked/Back-to-back townhouse uses.
2) No minimum and no maximum density (per net hectare).
3) No minimum lot area.
4) Minimum dwelling unit width of 4.50 m.
5) Minimum front yard setback of 3.0 m.
6) Minimum driveway length of 5.50 m.
7) Minimum interior side yard setback of 1.0 m.
8) Minimum exterior side yard setback of 1.0 m. where any side yard abuts a street.
9) Minimum rear yard setback of 3.0 m.
10) A rear yard setback of 0.0 m. for back-to-back townhouse uses, where a common wall is shared.
11) No maximum lot coverage.
12) No minimum dwelling unit floor area.
13) Maximum building height of 14.0 m.
14) No step-back requirements shall apply.
15) Minimum front yard setback to a deck of 2.0 m.
16) Minimum setback of 1.0 m. from an exterior lot line to a deck.
17) Maximum front yard parking coverage of 90%.
18) Maximum parking coverage of 100% for reverse frontage townhouse units.
19) Minimum private amenity area of 5.0 m2 per dwelling unit and minimum common amenity areas of 10.0 m2 per dwelling unit.
20) Minimum landscaped open space of 10 % per lot.
21) Maximum of 11 townhouse units in a row.

The following parking requirements shall apply to lands zoned as '*RM2-**XXX**'**:**

1) Minimum 1.0 parking spaces per unit.
2) Barrier free parking spaces be included in the 1.0 space per unit requirement.
3) Tandem parking spaces be permitted.
4) Required parking spaces per unit be permitted in a garage.

The following provisions shall apply to a school on lands zoned as '*RM2-**XXX**':*

1. Minimum lot area of 1,500 m2.
2. Minimum lot frontage of 30.0 m.
3. Minimum front yard setback of 7.0 m.
4. Minimum side yard setback of 5.0 m.
5. Minimum side yard setback of 9.0 m. to a residential zone.
6. Minimum side yard setback of 7.0 m. to a street.
7. Minimum rear yard setback of 7.0 m. and minimum 9.0 m. to a residential zone.
8. Maximum lot coverage of 35%
9. Minimum landscaped open space of 35%
10. Maximum building height of 15 m.
11. No minimum parking spaces be required.

5.2 'C2-2 -XXX' Zoning Standards

The following provisions shall apply to lands zoned as *'Transition Centre Commercial with Special Provisions (C2-2 - **XXX)':***

1) Permitted Uses:
    a. Residential uses permitted as part of a mixed-use development or stand-alone.
    b. Automotive Service Station is not permitted.
2) Residential and mixed-use buildings shall be permitted adjacent to the right-of-way of Highway 400.
3) A minimum 14.0 m. setback to the Highway 400 right-of-way.
4) No minimum lot area.
5) No minimum lot frontage.
6) Minimum front yard setback of 3.0 m.
7) Minimum exterior side yard setback of 1.0 m.
8) Minimum side yard setback of 1.8 m.
9) Minimum side yard adjoining a residential zone shall be 3.0 m.
10) No minimum rear yard setback.
11) Minimum ground level floor height of 3.0 m.
12) Maximum building height of 145.0 m.
13) No maximum lot coverage.
14) Side yard stepping provisions shall not apply.
15) Step-back provisions shall not apply.
16) Where the podium meets the tower, a minimum 1.5 m. step-back is required where a building face fronts a street.
17) No minimum dwelling unit floor area.
18) No minimum or maximum gross floor area (GFA).
19) No minimum setback shall be required from the street line (right-of-way) or property line to the nearest part of a parking structure underground.

20) Minimum landscaped buffers shall not apply to a side or rear lot line.
21) No minimum landscaped open space or area.
22) Common amenity space may be permitted in the form of indoor and outdoor amenity areas, in an unconsolidated form.
23) Minimum residential density of 225.0 units per hectare be required.
24) No maximum residential density (units per ha.).
25) Mixed-use buildings, with a minimum of two uses, shall be required along the frontage of Essa Road.
26) Minimum 80% coverage be required at-grade for a commercial use along the frontage of Essa Road, where a mixed-use building is provided.
27) Minimum podium height of 2-storeys and maximum podium height of 6-storeys.
28) No maximum building length.
29) No maximum podium length.
30) No minimum or maximum floor plate size.
31) Minimum separation distance of 25.0 m. between towers.
32) Notwithstanding By-law 2009-141, the front yard is deemed to be Essa Road. In all other instances where lots/blocks do not have frontage on Essa Road, the front yard is deemed to be the municipal street.
33) All lots/blocks to be considered one property for zoning purposes.

The following parking requirements shall apply to lands zoned as '*C2-2-**XXX***'**:**

1) Minimum 0.7 parking spaces per dwelling unit.
2) Minimum 0.1 visitor parking spaces per dwelling unit.
3) No minimum parking space requirements for a commercial use.
4) No minimum parking space requirements for any other non-residential use.
5) Maximum of 1 parking space per 40 square metres gross floor area for any other non-residential use.
6) Barrier free parking spaces be required as follows:
    a. 1-25 spaces: 1 type A, no required type B.
    b. 26-50 spaces: 1 type A, 1 type B.
    c. 51-75 spaces: 1 type A, 2 type B.
    d. 76-100 spaces: 2 type A, 2 type B.
    e. Greater than 100 spaces: 1 plus 3% of the required spaces, for both type A and B spaces.
7) Minimum indoor bicycle parking spaces (residential use): 0.25 spaces per dwelling unit.
8) Minimum indoor bicycle parking spaces (commercial use): 0.1 spaces per 100 square metres of gross floor area.
9) Minimum outdoor bicycle parking spaces (residential use): 0.05 spaces dwelling unit.
10) Minimum outdoor bicycle parking spaces (commercial use): 3 plus 0.3 bicycle parking spaces per 100 square metres of gross floor area.

5.3 'OS' Zoning Standards

The following provisions shall apply to lands zoned as ***'Open Space (OS)':***

1) Permitted Uses:
    a. Park, picnic area, playground.
    b. Playing field or court.
    c. Ecological management measures, environmental monitoring.
    d. Environmental conservation.
    e. Naturalized Buffer.
    f. Natural restoration and enhancement activities.
    g. Nature trails / public trails.
    h. Storm water management facilities.
    i. Municipal services and utilities, and infrastructure corridors.
2) A minimum 14.0 m. setback to the Highway 400 right-of-way.
3) No minimum lot area.
4) No minimum lot frontage.
5) Minimum front yard setback of 10.0 m.
6) Minimum side yard setback of 10.0 m.
7) Minimum rear yard setback of 10.0 m.
8) Maximum lot coverage of 40%
9) Maximum building height of 10.0 m.

6.0 Terms of Use

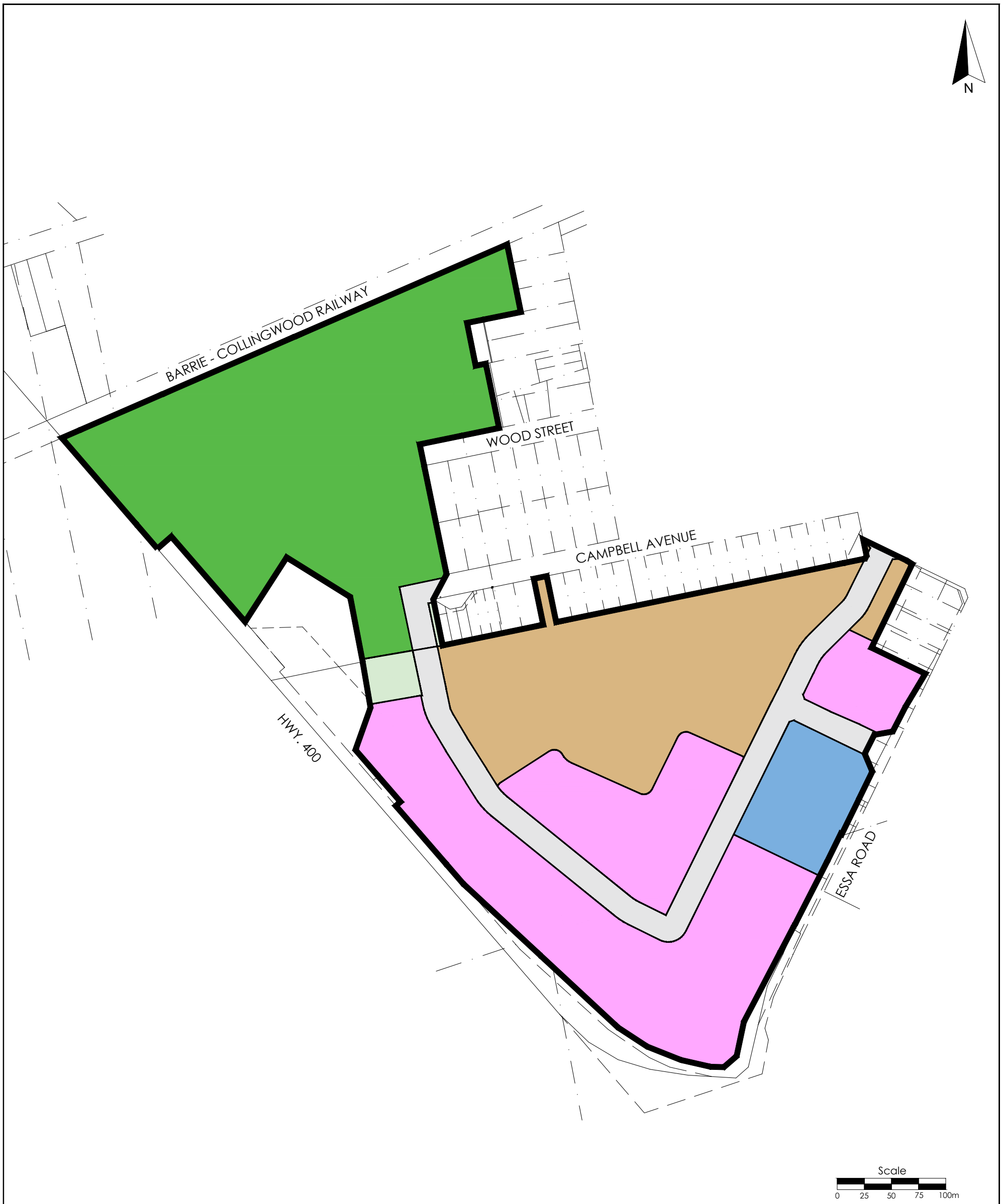
1) Every use of land and every erection, location and use of buildings or structures shall be in accordance with this Order.
2) Nothing in this Order prevents the use of any land, building or structure for any use prohibited by this Order if the land, building, or structure is lawfully so used on the day this Order comes into force.
3) Nothing in this Order prevents the reconstruction of any building or structure that is damaged or destroyed by causes beyond the control of the owner if the dimensions of the original building or structure are not increased or its original use altered.
4) Nothing in this Order prevents the strengthening or restoration to a safe condition of any building or structure.
5) Zoning By-law 2009-141 and all forthcoming City of Barrie Zoning By-laws shall not apply to the lands depicted by "Appendix B" (ZBA Schedule)'.

7.0 Deemed By-law

This Order is deemed for all purposes, except for the purposes of section 24 of the Act, to be a by-law passed by the council of the City of Barrie.

8.0 Commencement

This Regulation comes into force on the day it is filed.



LEGEND

- Subject Site (22.44ha)
- Lands to be rezoned from the 'General Commercial (C4)' zone to 'Transition Centre Commercial with Special Provisions (C2-2 - XXX)' zone
- Lands to be rezoned from the 'General Commercial (C4)' zone to 'Residential Multiple Dwelling Second Density with Special Provisions (RM2 - XXX)' zone
- Lands to be rezoned from the 'General Commercial (C4)' zone to 'Open Space (OS)' zone
- Lands to be rezoned from the 'Highway Industrial (HI)' zone to 'Open Space (OS)' zone
- Lands to remain in 'General Commercial (C4)' zone

SCHEDULE "A"
ZONING BY-LAW AMENDMENT

PART OF LOTS 6 AND 7, CONCESSION 14
GEOGRAPHIC TOWNSHIP OF INNISFIL AND PART OF PARK LOTS 3, 4 AND 5, REGISTERED PLAN 20
AND PART OF PARK LOTS 3, 4 AND 5
REGISTERED PLAN 20, AND PART OF LOT 71
NORTH SIDE OF WOOD STREET AND PART OF LOT B
SOUTH SIDE OF CAMPBELL AVE.
REGISTERED PLAN 235 AND PART OF LOTS 16 TO 24 (INCLUSIVE)
WEST SIDE OF ESSA ROAD AND PART OF LOTS 12 TO 16 (INCLUSIVE)
EAST SIDE OF CENTRE STREET AND ALL OF LOTS 17 TO 26 (INCLUSIVE)
EAST SIDE OF CENTRE STREET AND PART OF CENTRE STREET
(CLOSED BY BY-LAW 1715 AS IN BA35249 AND BY BY-LAW 74-144, INST. RO507294)
REGISTERED PLAN 30,
CITY OF BARRIE,
COUNTY OF SIMCOE

Source: City of Barrie Comprehensive Zoning By-Law 2009-141
Note: Information shown is approximate and subject to change.

IPS
INNOVATIVE PLANNING SOLUTIONS
PLANNERS • PROJECT MANAGERS • LAND DEVELOPERS
647 WELHAM ROAD, UNIT 9, BARRIE, ON, L4N 0B7
tel: 705 • 812 • 3281 fax: 705 • 812 • 3434 e: info@ipsconsultinginc.com www.ipsconsultinginc.com

Date:	October 23, 2023	Drawn By:	A.S.
File:	22 - 1234	Checked:	J.H. / D.V.

4) BA Group: Transportation Review

October 20th, 2023

Ryan Windle
Greenworld Construction Inc.
rwindle@digram.ca

**RE: 175 ESSA ROAD & 50 WOOD STREET REDEVELOPMENT
COMMUNITY HOUSING AND INFRASTRUCTURE ACCELERATOR
TRANSPORTATION REVIEW**

Dear Mr. Windle,

BA Group is retained by Greenworld Contruction Inc. ("Greenworld") to provide transportation advisory services with respect to Greenworld's proposed development project located at 175 Essa Road & 50 Wood Street in the City of Barrie. The site, which is the former location of the Barrie Fairgrounds, is located adjacent to Highway 400 and is within a 10 minute walk of the downtown Barrie GO Station. As such the site is well located from a mobility perspective as it has excellent access to transit (i.e. local transit and GO Transit) and private vehicles).

BA Group has prepared several transportation studies for the site dating back to 2019. BA Group's initial Transportation Study (dated September 2019) was prepared for the previous owner of the site. Later the site was sold to Greenworld and BA Group prepared an updateed transportation study for Greenworld that considered a revised development concept that with an increased density of approximately 2800 units on the site. That resubmission of the application was made in December 2022.

Since that time the project has undergone several additional revisions based on feedback provided by City Staff and the school boards. The revisions to the development concept also reflected the recent adoption of the City of Barries new Official Plan to 2051, which now designates the site for high density uses. Taking this into account, the development concept was revised to include a new school and park, as well as a proposed expansion of the high rise residential component. The proposed number of units now considered in the updated concept is approximately 4,000 units.

In addition, the transportation network within the site was also updated. To accommodate the provision of the school and park, the road network was modifed from three internal roads to two roads within the site: one primary street that provides access and address to the uses within the site (Street B), and a second shorter street that would serve as the main access to Essa Road (Street A). As part of the reconfiguration of the internal street network, all streets were widened to a 23m right-of-way width to accommodate for multi-modal infrastructure within the cross sections (i.e. cycling infrastructure).

In light of the current need for housing in all communities in Ontario, Greenworld is proposing that the City of Barrie request a provincial Community Infrastructure and Housing Accelerator (CIHA) approval for the Zoning and preliminary concept plan. The CIHA process is proposed in order to expedite the approvals process for the development so that the housing proposed can be brought forward to market in a faster timeframe. The purpose of this letter is therefore to provide a preliminary transportation review and opinion pertaining to the updated development concept relative to the proposed CIHA process.

Having reviewed the updated development concept plan, and considering BA Group's prior assessments completed for the site, it is my opinion that the transportation impacts of the updated development concept can be accommodated subject

to the implementation of a variety of transportation studies that will mitigate and/or reduce the autombile impacts of the proposed development. As set out in our prior studies, mitigating measures to accommodate site related traffic may include the following.

- Provision of functional road improvements in or around the site area such as auxiliary turn lanes, signal timing upgrades, new traffic signals, geometofric intersection improvements, etc.
- Delivery of infrastructure improvements currently planned by the City of Barrie and MTO such as:
    - completion of the Essa Road improvement project;
    - completion of the Essa Road / Highway 400 interchange improvements;
    - completion of the future Big Bay Point / Harvie interchange with Highway 400;
    - completion of other upgrades planned in the City of Barrie's TMP.

In addition, the development will be required to implement a Mobility Plan that outlines a variety of Transportation Demand Management (TDM) strategies. The purpose of TDM strategies is to reduce the number of vehicular trips generated by the project by encouraging and/or promoting alternative travel modes to the residents in the community. The specific TDM Strategies implemented for the develoment will be confirmed through subsequent phases of approval and will be tied to specific auto trip reduction targets to ensure traffic from the project can be accommodated. TDM strategies that will be considerd are set out in Table 1 below.

Table 1 TDM Strategies to be Considered / Implemented

Intent	TDM Strategy
Reduce vehicular demand generated externally	Reduce the number of parking spaces provded for residents to a level below prevailing by-law requirements
	Provision of car-share spaces within high density development sites
	Allocate space within site for a school
	Provision of mixed uses / supportive retail uses within the bases of higher density buildings to maximize internalization of trips
Encourage Transit	Provide pre-loaded transit fare cards to new residents
	Provide educational materials noting how to access other travel modes;
	Improve existing bus transit stops on Essa Road
Promotion of Cycling	Provide a high quality pedestrian and cycling facilities within site
	Provide on-site bicycle parking that meets or exceeds municipal requirements
	Provid infrastructure and programs that will support or implementation of a bike sharing network and facilities
	Improve to the external cycling and sidewalk network to accommodate improved connections to transit
Promotion of Walking	Construction of improved Sidewalks on Essa Road along site frontage
	Provide sidewalks on both sides of streets within the site
	Provide publicly accessible walking connections through and within the high density development to connect to transit and the existing pedestrian network

The TDM strategies that will be implemented for development will be confirmed through subsquent approvals. Infrastructure based strategies that apply generally to the entire site, or beyond the site, will be confirmed through a future Transportation Study update for the project and secured (as needed) through conditions in the Plan of Subdivision process.

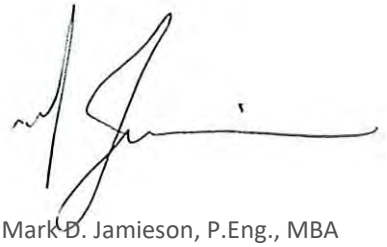
TDM Strategies that apply to individual buildings within the site will be outlined in a future Transportation Study update and secured (as required) through the future Site Plan application process for each phase of development building.

Taking into consideration the proposed changes within the site (e.g. an increased 23m right of way), the transportation impacts of the proposed Greenworld development concept can reasonably be accommodated subject to implementing the necessary infrastructure improvements and TDM Strategies. These requirements will be confirmed through a future revision to the Transportation Study for the site. The timing and need for the above noted TDM measures and infrastructure improvements can be appropriately implemented by the City of Barrie through the subsequent conditions of approval associated with the Plan of Subdivision and/or Site Plan processes.

I trust the foregoing is acceptable. Should anyone have any questions about this letter please feel free to contact me directly.

Sincerely,

BA Consulting Group Ltd.



Mark D. Jamieson, P.Eng., MBA
Principal and CEO

Copy: Marwa Khedr, Greenworld Construction
Cristina Campos-Herrera and Ethan Sun, BA Group
James Hunter, Innovative Planning Solutions

5) Counterpoint Engineering: Servicing Brief

counterpoint ENGINEERING

A SUBSIDIARY OF DILLON CONSULTING LIMITED

October 13, 2023
File No. 18043

Greenworld Construction Inc.
327 Renfrew Dr., #201
Markham, Ontario
L3R 9S8

Attn: Marwa Khedr, Senior Development Planner

Re: Opinion of Servicing of Proposed Development
Community Infrastructure and Housing Accelerator (CIHA)
OPA/ZBA/DPS (D09-OPA080, D14-1695, D12-451, D98-OPA081, D14-1697)
175 & 199 Essa Road and 50 Wood Street
Barrie, Ontario

Counterpoint Engineering Inc. ('CPE' or 'we') has been retained by Greenworld Construction Inc. ('Greenworld') to support the Official Plan Amendment, Rezoning and Draft Plan of Subdivision applications for the properties located at 175 & 199 Essa Road and 50 Wood Street, in Barrie, Ontario. In general terms, our role as the civil engineer on record from a rezoning perspective is to verify that the existing municipal infrastructure (storm, sanitary and water) can accommodate the proposed development concept put forth by Greenworld, while addressing environmental regulations associated with stormwater management and low impact development ('LID') measures.

We have been working with the City of Barrie, Ministry of Transportation Ontario ('MTO'), and Lake Simcoe Region and Conservation Authority ('LSRCA') staff for the past five years to ensure the proposed development meets all regulations enforced by the authorities having jurisdiction. CPE has made three (3) OPA/ZBA/DPS submissions to the municipality starting in 2019. Due to this, it is our opinion that the current concept presented by Greenworld can be accommodated by the existing municipal infrastructure with minor upgrades and extensions to sanitary sewers and watermains and the introduction of a public stormwater management pond and flood mitigation facility, with associated LIDs. Please see below for a summary of key servicing aspects that have been identified to date.

Sanitary Sewers:

The proposed development will require one new municipal sanitary connection at the Anne Street and Essa Road intersection to accommodate the proposed density on the 175 & 199 Essa Road properties (no dwellings are proposed on the 50 Wood Street property, green space only). This connection will require a new sanitary sewer in Anne Street. To meet municipal criteria associated with minimum sewer cover, cleansing velocities, and minimum slopes, one pipe length of existing sanitary sewer in Essa Road, east of Anne Street, will need to be removed and replaced at a flatter slope to gain depth for conveyance purposes.

With respect to conveyance capacity in the existing sanitary sewer in Essa Road, CPE has updated the City's PCSWMM sanitary model with the anticipated peak wastewater flows from the subject site. Our findings indicate that there is adequate capacity to accommodate the proposed 4,054 units.

Therefore, the existing municipal sanitary sewer can accommodate the proposed development with minor modifications to the existing sewer in Essa and a short extension down Anne Street.

Watermain:

To provide a well connected, looped system for the proposed development, three water connections are proposed for the 300mm dia. water system designed to accommodate the development. The connections will be to the 300mm diameter watermain in Anne Street, 200 mm diameter watermain in Essa Road and 150 mm diameter watermain in Campbell Ave.

To verify municipal pressures and flows can accommodate the proposed development, CPE completed domestic demand calculations based on municipal criteria and Fire Underwriter Survey (FUS 1999) calculations for fire suppression. The City's InfoWater model, under existing and future forecast scenarios, was updated using EPANET and no constraints were identified.

Therefore, the existing municipal watermains can accommodate the proposed development.

Storm Conveyance, Stormwater Management and Low Impact Development:

Per the City of Barrie Drainage Master Plan prepared by Tatham Engineering dated March 2019, a portion of the 50 Wood Street Property is to be expropriated for a flood mitigation facility necessary to lower the regional floodplain elevation down stream on Hotchkiss Creek and to alleviate current flooding issues for existing residents. The proposed development will respect existing drainage patterns to Hotchkiss Creek and convey storm flows to an end-of-pipe stormwater management ('SWM') pond prior to discharging to the creek (on the 50 Wood Steet property). Due to site grading constraints, minor drainage areas at the street connections to Anne St. and Essa Rd will be directed to new municipal connections to the respective roads. The proposed SWM pond will treat the development for quantity (post to pre for all storm events), quality (80% TSS removal), erosion (extended detention for 25 mm storm event) and the LSRCA requirements surrounding volumetric controls for filtration and phosphorous removal (close to net zero as possible with offsetting payment for the difference) as per Lake Simcoe Protection Plan and Policies (Phosphorus Offsetting Policy and Lake Simcoe Protection Plan Water Budget Offsetting Policy for LSPP 4.8-DP and 6.40-DP) . Minor stormwater detention is required at the storm connection to Anne St. to ensure pre-development release rates are being met at municipal road minor systems.

Per LSRCA guidelines, at source LID's will be implemented wherever feasible for stormwater retention and infiltration/evapotranspiration to promote stormwater back into the hydrologic cycle at the source of rainfall. These LID's will be in the form of disconnected downspouts for low-rise units, rainwater harvesting cisterns for mid and high-rise towers and soak-a-way pits, infiltration galleries and permeable

pavers to promote further infiltration and water balance. For lots that require further controls for quantity, quality and phosphorous removal, private manufactured treatment devices (designed for phosphorus removal) and holding tanks in series with orifice tubes will be implemented to treat and detain stormwater, reducing release rates.

Given the sites location above a vulnerable aquifer and the City and LSRCA criteria surrounding Issues Contributing Areas ('ICA') storm water infiltration will only be permitted from clean roof top and landscape areas (roads and parking lots are not permitted).

The stormwater management techniques and LID's described above will ensure the regulations around stormwater release to the Hotchkiss Creek and eventually Lake Simcoe are respected.

We trust that the information presented herein has demonstrated that the sanitary, watermain and stormwater management plan for the proposed development meets the intent of the zoning requirements through the CIHA process and that the existing municipal infrastructure can accommodate the proposed development. Should you require additional information or require a copy of our latest, detailed Functional Servicing Report please do not hesitate to contact the undersigned.

Sincerely,
Counterpoint Engineering Inc.

Jake Howkins, P. Eng.
416-389-9135
jhowkins@counterpointeng.com

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SOLUTIONS

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