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PLANNING JUSTIFICATION REPORT

PLANS OF SUBDIVISION, PLANS OF CONDOMINIUM & ZONING BY-LAW AMENDMENT APPLICATIONS

Beaver Creek Road and Conservation Drive
City of Waterloo

Date:
July 2017

Prepared for:
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Our File 14148'A'

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1.0 INTRODUCTION

MacNaughton Hermsen Britton Clarkson Planning Limited ('MHBC') has been retained by 1017081 Ontario Limited and Gabriella Elizabeth Groff ('Northgate') and 1455136 Ontario Inc. ('Erbsville Kartway') to provide planning advice and to prepare consolidated planning reports in support of Plans of Subdivision, Plans of Condominium (Vacant Land Condominiums) and Zoning By-law Amendment applications for each property.

The subject lands are comprised of two parcels: lands owned by Northgate and lands owned by Erbsville Kartway. The Northgate lands are 30.959 hectares (76.5 acres) in area and the Erbsville Kartway lands are 6.456 hectares (15.95 acres), for a combined total of 37.415 hectares (92.45 acres). Each parcel is identified on **Figure 1**. The subject lands are legally described as Part of Lot 28, German Company Tract (the 'subject lands').

The subject lands are located within the Beaver Creek Meadows District, for which the City of Waterloo has approved a District Plan. The Northgate lands are currently used for interim agricultural purposes and the Erbsville Kartway lands are currently developed with a kartway and single-detached dwelling.

The subject lands are proposed to be developed for primarily residential purposes. The proposed plans include:

I. Single detached dwellings (mainly internal to the subject lands);

II. Townhouse and apartment dwelling units both internal to the subdivision, along Conservation Drive, Beaver Creek Road and within the node located at the intersection of Conservation Drive and Beaver Creek Road;

III. Public parks;

IV. Stormwater management facilities; and

V. A network of public and private streets, sidewalks and community trails with connections to Conservation Drive, Beaver Creek Road and the broader community trail network.

The proposed Plans of Subdivision, Plans of Condominium and Zoning By-law Amendment applications are submitted together and should be processed concurrently. This planning justification report and the Neighbourohod Design Summary assess the proposal in the context of the applicable planning framework, the *Planning Act*, urban design considerations and other relevant planning policies.

The purpose of this report is to provide:

- A general description of the subject lands, surrounding land uses, existing conditions and locational context;

- A description of the proposed Plans of Subdivision and Plans of Condominium and related design considerations;
- An overview and analysis of applicable Provincial, Regional and municipal planning policies; and
- A summary of recommendations which integrate supporting technical studies which have been submitted concurrently with the applications.

1.1 Complete Application

A pre-submission consultation meeting was held on November 23rd, 2016. Staff from the City of Waterloo and Region of Waterloo attended the pre-submission consultation meeting. **Appendix A** includes the Record of Pre-submission Consultation issued by the Region on February 1, 2017. The pre-submission record documents the requirements in order for the applications to be deemed complete. The requirements include:

I. Completed application forms and prescribed fees;

II. Planning Justification Report including the Parkland Brief and the Neighbourhood Design Summary;

III. Functional Servicing Report including the Water Servicing Strategy;

IV. Stormwater Management Report including preliminary grading and erosion and sedimentation control measures;

V. Road Noise Study (Conservation Drive and Beaver Creek Road)

VI. Stationary Noise Study (required if development occurs prior to the Kartway ceasing operation);

VII. Scoped and Full Environmental Impact Study (EIS);

VIII. Hydrogeological Assessment including groundwater monitoring (minimum 2 years);

IX. Archaeological Assessment;

X. Chloride Impact Study (to be submitted prior to draft approval); and

XI. Environmental Site Assessment/Record of Site Condition.

MHBC Planning has been responsible for the overall coordination of the applications. All identified reports (with the exception of the Environmental Site Assessment/Record of Site Condition) have been prepared and submitted concurrently with the planning applications. The Environmental Site Assessment/Record of Site Condition will be implemented through the development of the subdivisions and completion of this requirement will be assured through holding provisions. This approach has been discussed with staff.

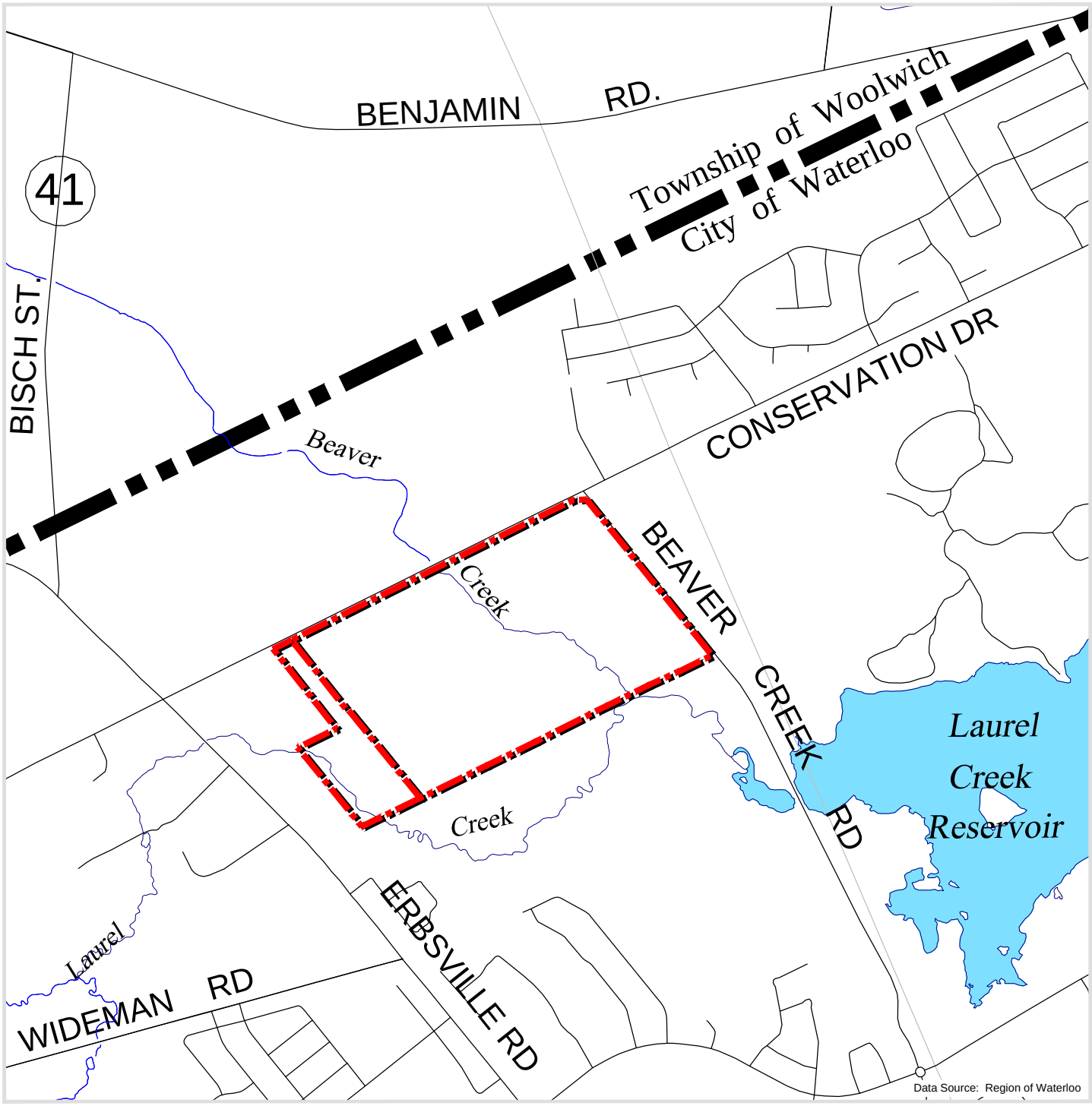

Figure 1
Location Plan

LEGEND

Subject Lands

DATE:	November 10,2016
SCALE	1 : 15,000
FILE:	14148A
DRN:	LHB

north

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Region of Waterloo

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2.0 SITE DESCRIPTION & SURROUNDING LAND USES

The subject lands are located within a developing residential community in the northwestern portion of the City of Waterloo known as the 'Beaver Creek Meadows District', illustrated on the Location Plan (**Figure 1**). The subject lands comprise an area of 37.415 hectares (92.45 acres) and are located south of Conservation Drive and west of Beaver Creek Road. The subject lands are legally described as Part of Lot 28, German Company Tract, Geographic township of Waterloo. The subject lands are currently used for interim agricultural and outdoor recreational purposes (Erbsville Kartway). Core Environmental Features include wetlands and woodlands along Beaver and Laurel Creeks which generally drain in a north to south direction and outlet to the Laurel Creek Reservoir located to the southeast. These features are within the central and western portions of the subject property. Privately owned lands and the Laurel Creek Conservation Area are located immediately to the south of the subject lands.

The Beaver Creek Meadows District (**Figure 2**) is located in northwest Waterloo along Beaver Creek and Laurel Creek. The District is characterized by large tracts of interim agricultural land, natural heritage features and limited areas of low density residential development however, it remains largely undeveloped.

The subject lands are situated between Conservation Drive to the north, Beaver Creek Road to the east, Laurel Creek Conservation Area to the south and Laurel Creek to the west.

An aerial photograph is included as **Figure 3** which identifies existing land uses in the area, which include:

NORTH: Conservation Drive forms the northern boundary of the subject lands. Various single detached dwellings and Creekside Church are located on the north side of Conservation Drive. Interim agricultural lands and environmental features are also located to the north. A Draft Plan of Subdivision has been submitted for lands on the north side of Conservation Drive and on the west and east sides of Roy Schmidt Road.

EAST: Beaver Creek Road forms the eastern boundary of the Northgate lands. Green Acre Park, which is a recreational vehicle park, is located east of Beaver Creek Road.

WEST: Laurel Creek and a tributary of Laurel Creek are located to the west of the Kartway lands. Erbsville Road and existing residential are located further to the west.

SOUTH: Laurel Creek Conservation Area and a remnant portion of the 'Trillium' subdivision are adjacent to the southern boundary of the subject lands.

There is an existing neighbourhood shopping centre located at Erbsville Road and Laurelwood Drive (less than a kilometre south of the subject lands) which includes a number of neighbourhood commercial uses.

A Mixed-Use Node is planned at the intersection of Conservation Drive and Beaver Creek Road. The Mixed-Use Node will include a planned commercial development at the southeast corner of the intersection.

The subject lands are well-connected to the arterial road network. Conservation Drive and Beaver Creek Road provide access to the northwest area of the City, as well as the Townships of Woolwich and Wilmot. Beaver Creek Road provides a direct connection to Laurelwood Drive to the south. Conservation Drive provides connections to Erbsville Road, Westmount Road North and Northfield Drive West which provides direct access to the Conestoga Parkway.

There are currently Grand River Transit routes to the east of the subject lands within existing developments. Future extension of transit services is contemplated by the approved District Plan.

The City's bikeway network will be accessible from the proposed subdivision. Multi-use trails are located within the Laurel Creek Conservation Area to the southeast. These trails provide opportunities for active transportation connections to various destinations within the City of Waterloo.

In summary, the subject lands are well-connected to the existing road network and active transportation routes.

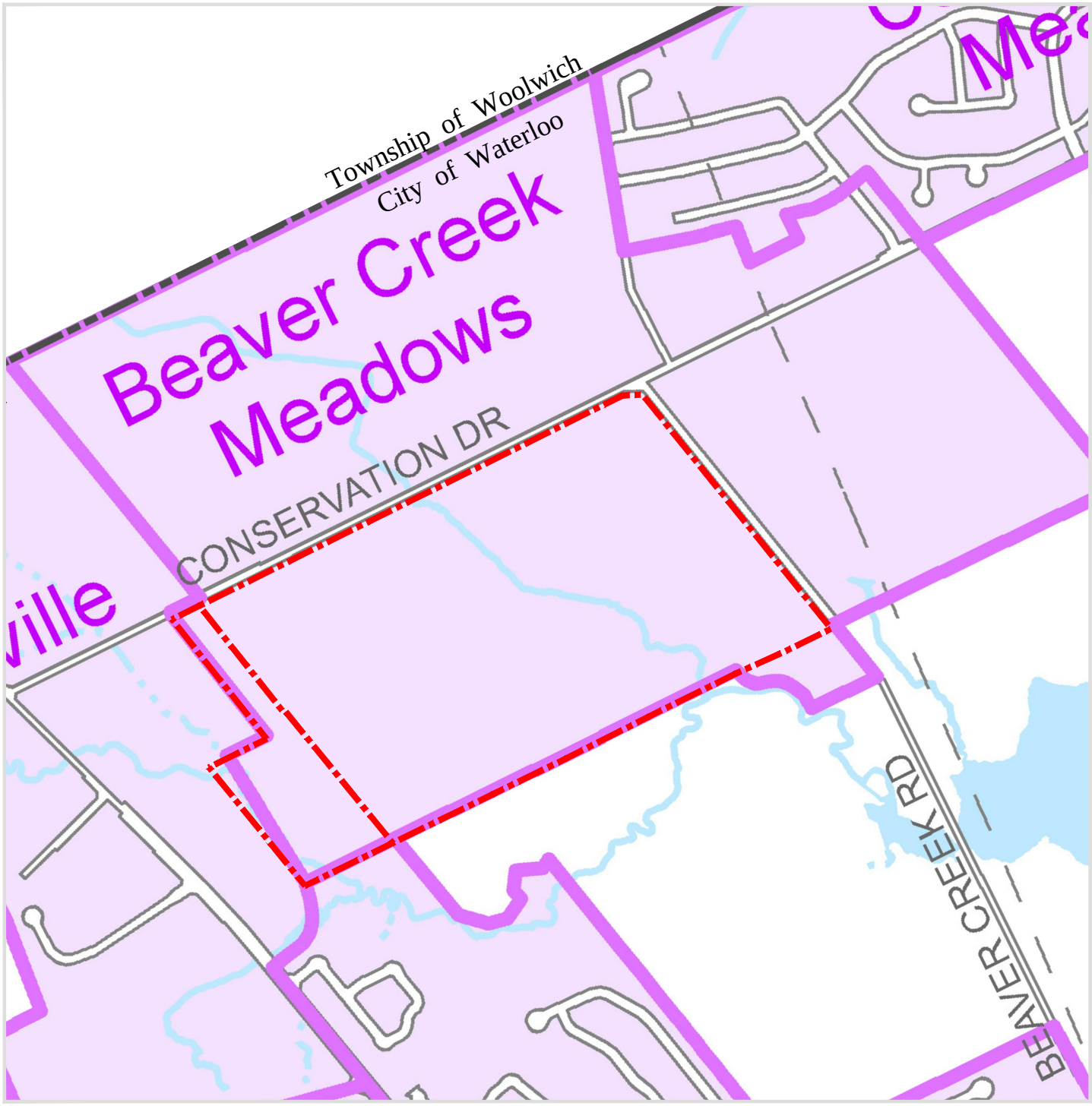

Figure 2

City of Waterloo, Official Plan, District Boundaries, Schedule "C"
(February 2013)

Northgate Land Corporation & Erbsville Kartway,
City of Waterloo,
Region of Waterloo

LEGEND

Subject Lands

District Boundaries

DATE:	November 10,2016
SCALE:	1 : 15,000
FILE:	14148A
DRN:	LHB

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Figure 3

Aerial Photograph

(Google Map 2016)

LEGEND

Subject Lands

DATE:	November 10,2106
SCALE	1 : 7,500
FILE:	14148A
DRN:	LHB

north

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3.0 DESCRIPTION OF PROPOSAL

The proposed development includes a mix and range of unit types, including single-detached dwellings (with a variety of lot widths), street-fronting townhouse units and multiple residential units. Although the form of the multiple residential units has not yet been determined it could include stacked townhouse and apartment units. The proposed development provides for a range of approximately 645-870 residential units.

The development contemplates blocks to accommodate vacant land condominiums. Stormwater management and pumping station blocks are also proposed. **Figure 4** consolidates the Plans of Subdivision and Plans of Vacant Land Condominium that are proposed for the overall development.

The development plans were designed in the context of a comprehensive and iterative process involving a multi-disciplinary project team. Input received at the pre-submission meeting was also considered as part of the design process.

3.1 Draft Plans of Subdivision, Plans of Condominium and Proposed Zoning By-law Amendments

There will be one Plan of Subdivision for the Northgate parcel and a separate Plan of Subdivision application for the Erbsville Kartway parcel. The Plans of Subdivision are proposed to be developed in stages. The Northgate parcel will be developed in five stages and the Erbsville Kartway parcel will be developed in two separate stages.

One Vacant Land Condominium application is proposed for the Northgate parcel. The Vacant Land Condominium relates to Stage 5 which is proposed to be draft plan approved as a block and subsequently subdivided as vacant land parcels, a condominium road and other common elements including a stormwater management facility.

Stage 1 of the Erbsville Kartway subdivision is comprised of consolidation blocks. These blocks are to be consolidated with adjacent blocks located in the Northgate subdivision with the consolidated blocks fronting proposed Street Three, Stage 3 of the Northgate plan. Stage 2 of the Erbsville Kartway subdivision will be draft plan approved as a block and subsequently subdivided as vacant land parcels, consolidation blocks and open space. Stage 2 of the Erbsville Kartway subdivision is to be developed together with Stage 5 of the Northgate subdivision

Table 1 includes a statistical analysis of the proposed subdivisions (**Figure 4**) and the following is highlighted:

I. Twenty-eight (28) residential blocks with a total area of 7.135 hectares (17.63 acres) to be developed with single-detached residential dwellings with a variety of lot widths as provided for by the proposed Zoning By-law Amendment;

II. Six (6) multiple residential blocks with a total area of 7.669 hectares (18.95 acres) proposed to be developed with townhouse and apartment dwelling units. Block 3, Stage 2 is located within the Mixed-Use Node of the Beaver Creek Meadows District Plan and is proposed to be developed with multiple residential buildings/units;

III. Two (2) Vacant Land Condominium blocks with a total area of 12.185 hectares (30.11 acres) to be developed with single-detached dwellings;

IV. Five (5) park blocks with a total area of 1.327 hectares (3.28 acres);

V. Four (4) open space blocks with a total area of 2.743 hectares (6.78 acres);

VI. One (1) stormwater management block with a total area of 0.805 hectares (1.99 acres);

VII. Two (2) pumping station blocks with a total area of 0.454 hectares (1.12 acres);

VIII. Two (2) walkway block with a total area of 0.037 hectares (0.09 acres) and

IX. A network of new local streets with three points of access to Conservation Drive and two points of access to Beaver Creek Road. Sidewalks will be provided within the proposed street network.

The proposed Zoning By-law Amendment site specific exceptions which will regulate the total number of units permitted. The multiple residential blocks will be subject to site plan control which will determine the final site and building design for the blocks.

TABLE 1 – OVERVIEW OF PROPOSED SUBDIVISION (refer to submitted Draft Plan of Subdivision)

Land Use	Block No.	Total Blocks	Area (ha)	Units Min.	Units Max.	% of Total Units Min.	% of Total Units Max.	% of Subdivision Area
Northgate								
Stage 1								
Single Detached Residential	1-4	4	2.056	45	67	7.33%	8.02%	6.64%
Multiple Residential	5	1	1.055	88	88	14.33%	10.54%	3.41%
Parks	6	1	0.106					0.34%
Walkway	7	1	0.017					0.05%
Open Space	8, 9	2	0.583					1.88%

Land Use	Block No.	Total Blocks	Area (ha)	Units Min.	Units Max.	% of Total Units Min.	% of Total Units Max.	% of Subdivision Area
Pumping Station	10	1	0.207					0.67%
Road Widening	11	1	0.150					0.48%
0.3m Reserve	12	1	0.001					0.00%
Roads			0.878					2.84%
Total		**12**	**5.053**	**133**	**155**	**21.66%**	**18.56%**	**16.32%**
Stage 2								
Multiple Residential	1,2	2	3.185	113	178	18.40%	21.32%	10.29%
Multiple Res./Mixed Use	3	1	1.951	117	195	19.06%	23.35%	6.30%
Parks	4	1	0.445					1.44%
Open Space	5	1	1.268					4.10%
Road Widening	6, 7	2	0.406					1.31%
Roads			0.461					1.49%
Total		**7**	**7.716**	**230**	**373**	**37.46%**	**44.67%**	**24.92%**
Stage 3								
Single Detached Residential	1-17	17	3.217	64	100	10.42%	11.98%	10.39%
Multiple Residential	18, 19	2	1.478	99	99	16.12%	11.86%	4.77%
Parks	20, 21	2	0.733					2.37%
Pumping Station	22	1	0.247					0.80%
Stormwater Management	23	1	0.805					2.60%
Future Residential/ Consolidation Block	24	1	0.251	7	11	1.14%	1.32%	0.81%
Road Widening	25	1	0.336					1.09%
0.3m Reserve	26-29	4	0.012					0.04%
Roads			1.992					6.43%
Total		**29**	**9.071**	**170**	**210**	**27.69%**	**25.15%**	**29.30%**
Stage 4								

Land Use	Block No.	Total Blocks	Area (ha)	Units Min.	Units Max.	% of Total Units Min.	% of Total Units Max.	% of Subdivision Area
Single Detached Residential	1-5	5	1.348	27	43	4.40%	5.15%	4.35%
Walkway	6	1	0.020					0.06%
Roads			0.532					1.72%
Total		**6**	**1.9**	**27**	**43**	**4.40%**	**5.15%**	**6.14%**
Stage 5								
Vacant Land Condominium	1	1	7.219	54	54	8.79%	6.47%	23.32%
Total		**1**	**7.219**	**54**	**54**	**8.79%**	**6.47%**	**23.32%**
Northgate Total		**55**	**30.959**	**614**	**835**	**100.00%**	**100.00%**	**100.00%**
Erbsville Kartway								
Stage 1								
Single Detached Residential	1, 2	2	0.514	7	11	22.58%	31.43%	7.96%
Parks	3	1	0.043					0.67%
Open Space	4	1	0.892					13.82%
Road Widening	5	1	0.040					0.62%
Roads			0.001					0.02%
Total		**5**	**1.490**	**7**	**11**	**22.58%**	**31.43%**	**23.08%**
Stage 2								
Vacant Land Condominium	1	1	4.966	24	24	77.42%	68.57%	76.92%
Total		**1**	**4.966**	**24**	**24**	**77.42%**	**68.57%**	**76.92%**
Erbsville Kartway Total		**6**	**6.456**	**31**	**35**	**100.00%**	**100.00%**	**100.00%**
GRAND TOTAL		**61**	**37.415**	**645**	**870**	**100.0%**	**100.0%**	**100.0%**

3.2 Density Summary

The approved Regional Official Plan (ROP) outlines a residential Greenfield density target of 55 people and jobs per hectare. This density target is to be measured across the entire Designated Greenfield Area rather than on a subdivision specific basis. Since the approval of the ROP, the City of Waterloo has adopted and the Region has approved Official Plan Amendment No. 15 which establishes a density target for Beaver Creek

Meadows District of 58 people and jobs per hectare. This density target is to be measured across the entire Beaver Creek Meadows District Plan area. As part of the density monitoring process, the Region and the City require the preparation of density calculations in support of planning applications.

Table 2 includes a density calculation. The calculation confirms the proposed subdivisions and related condominiums will have a density range of 57-76 people and jobs per hectare. The average density is calculated to be 67 people and jobs per hectare.

TABLE 2 – RESIDENTIAL DENSITY OF PROPOSED SUBDIVISIONS

Type	Density
Single Detached Lots	143-221
Multiple Residential Units	300-365
Multiple Residential/Mixed Use	117-195
Vacant Land Condominium	78
Future Development	7-11
Total Units	645-870
Net Land Area (ha)*	32.382*
Net Residential Density (uph)*	**20 – 27 uph**

*Excludes wetlands, dripline setback and ESPA on Northgate and Erbsville Kartway Lands.

TABLE 3 – DENSITY (PERSONS & JOBS) OF PROPOSED SUBDIVISION

Use	Units	Persons per Unit*	Total Persons	Total Jobs**
Single Detached	143-221	3.45	493-762	13.8 – 21.3
Multiple Residential	300-365	2.58	774-942	21.7 – 26.4
Multiple Residential/Mixed Use	117-195	1.9	222-371	6.2-10.4
Vacant Land Condominium	78	3.45	269	2.1 – 3.2
Future Development	7-11	3.45	24-38	7.5
GRAND TOTAL	**645-870**	**-**	**1,782 – 2,382**	**51.3 – 68.8**
TOTAL PERSONS AND JOBS	**1,833 – 2,451**			
Net Land Area (ha)	**32.382**			
NET PERSONS AND JOBS PER HECTARE	**57 - 76**			

*Persons per Unit values as per the Region's Land Budget.
**Population Related Employment was calculated at 2.8% of total persons, per the Region's Land Budget.

Table 3 confirms that the proposed subdivisions provides for a density range of between 57 and 76 people and jobs per hectare with an average density of 67 people and jobs per hectare. As noted, the Region's density target is to be measured across the entire Designated Greenfield Area (DGA) and the City's density target for the Beaver Creek Meadows District is to be measured against the entire district. The average density of the proposed development exceeds the Region's minimum density target of 55 people and jobs per hectare as well as the density target for the Beaver Creek Meadows District of 58 people and jobs per hectare. The density of the proposed subdivisions conform to the ROP as well as the City of Waterloo Official Plan.

3.3 Stormwater Management

The Northwest Waterloo Scoped Subwatershed Study (NWSSS) identifies significant water and environmental features, establishes stormwater criteria and conceptually locates stormwater management facilities.

Beaver Creek bisects the subject lands which results in the area located between the Plans of Subdivision being regulated by the Grand River Conservation Authority ('GRCA') (**Figure 5**). Laurel Creek runs through the westernmost section of the Erbsville Kartway parcel of the subject lands. A designated wetland and floodplain are located along Beaver Creek, Laurel Creek and within sections of the Core Environmental Feature.

The North Waterloo Scoped Subwatershed Study and the Beaver Creek Meadows District Plan provide for the construction of stormwater management ponds within the limits of the proposed Plans of Subdivision. Developers within the same sub-catchment drainage area are collaborating to confirm and implement a consolidated stormwater management facility. The subcatchment drainage area includes most of the Northgate lands located east of Beaver Creek.

A process has been established with the City of Waterloo to confirm the location and design of a consolidated stormwater management facility. The process involves:

1. A consent application to create the consolidated stormwater management facility. Provisional consent will be required by the City of Waterloo including a scoped development agreement with the City.
2. Approval of the detailed design of the consolidated stormwater management facility will be required prior to stamping the deed for the consent.
3. The stormwater management facility lands are to be conveyed to one of the benefitting developers.
4. The stormwater management facility is to be constructed prior to area grading and operational to the satisfaction of the City prior to registration of any subdivision within the subcatchment drainage area.

The approval process for the consolidated stormwater management facility will be coordinated with the approval of all lands which outlet to the consolidated stormwater management facility.

Block 2, Stage 2 is proposed to have its own private stormwater management facility. The general location and design parameters of this facility are outlined in the Preliminary Stormwater Management report prepared by MTE Consultants Inc. dated June 2017.

Lands located to the west of Beaver Creek will be attenuated by both a "public stormwater management facility" located on the Northgate lands (Block 25, Stage 3) and a "private stormwater management facility" located on the Northgate lands which will be a common element in the vacant land condominium to be developed within Stage 5.

A storm sewer is also proposed to extend southerly and within the limits of the Beaver Creek Road allowance, ultimately out-letting to Laurel Creek Reservoir. A Municipal Class Environmental Assessment has confirmed the location of the storm outlet/channel, which is located on lands owned by the GRCA. Stantec Consulting Ltd. ('Stantec') has been retained by the City of Waterloo to complete the final design and coordinate approvals and implementation of the storm outlet/channel. Construction of the storm outlet/channel will proceed concurrently with the re-construction of Beaver Creek Road, the construction of storm and sanitary sewers within the road allowance and the relocation of utilities. Major and minor storms for the Northgate lands located east of Beaver Creek will utilize a drainage system to be constructed within the subdivision and located generally within Street One and Street Two road allowances. Minor storm flows will be directed to the consolidated stormwater management facility and major storm flows will be directed to the storm outlets/channel and ultimately outlet to the Laurel Creek Reservoir.

3.4 Servicing

MTE has been retained by Northgate and Erbsville Kartway to prepare a Functional Servicing Report. The design of the subdivision has been prepared in consultation with Stantec to ensure the proposed road network and related services are coordinated with the preferred servicing strategy.

The proposed subdivision provides for a modified grid pattern of streets that will be the predominant street pattern in the Beaver Creek Meadows District. Local services (sanitary, storm sewers, watermains and utilities) will be located within the proposed road allowances. Local sanitary sewers will connect to the trunk sanitary sewer located and to be extended within the Conservation Drive road allowance. The Conservation Drive sanitary sewer will be extended to and down Beaver Creek Road to a sanitary pumping station located within the southerly portion of the proposed subdivision and adjacent to Beaver Creek Road.

3.5 Parks and Open Space

Parks and open space are a significant component of the proposed subdivision which will be well-connected to nearby existing and planned parks and open spaces. Five parks are planned within the subdivisions and include:

- Block 6, Stage 1 (Northgate subdivision);
- Block 4, Stage 2 (Northgate subdivision);

- Block 20, Stage 3 (Northgate subdivision);
- Block 21, Stage 3 (Northgate subdivision); and
- Block 3, Stage 1 (Erbsville Kartway subdivision).

The proposed parks are located in the general location identified for a "potential park" on Map 2 of the Beaver Creek Meadows District Plan. The park located on Block 6, Stage 1 (Northgate) has been located to provide for a terminating view of the Beaver Creek natural area and to provide access to the associated trail network. The location of the parks will ensure easy access from all parts of the proposed development. The park located on Block 4, Stage 2 will provide a buffer between the multiple residential development to the north located within the node and the low density residential located to the south. The park located on Block 20, Stage 3 will serve as a more traditional park which has been located in associated with higher densities and as a "through park" providing for enhanced accessibility and visibility. The park located on Block 21, Stage 3 will provide for a large contiguous open space and recreational opportunity in association with the adjacent stormwater management facility and potential bridge connection at this general location. As the bridge will traverse additional lands owned by the applicant, there will be an easement which will be conveyed as a condition of final registration. The park located on Block 3, Stage 1 of the Erbsville Kartway subdivision will provide additional recreational opportunities and a connection to the active transportation network contemplated to the west.

Some concern was raised at the Pre-Submission Consultation meeting with respect to the location of the park on Block 21, Stage 3 (Northgate subdivision). The concern related to public access to the park over a private condominium development. In consideration of this concern, the condominium proposal at this location has been abandoned in favour of proposed public streets and related sidewalk system. The public streets will ensure public access to the park. A similar concern was raised with respect to the park proposed on Block 6, Stage 1 (Northgate subdivision). A public street (Street Two, Stage 1) is now proposed rather than the private condominium road presented at the pre-submission meeting.

A large part of the lands owned by Northgate are designated as Open Space in the City of Waterloo Official Plan. The majority of these lands are considered to be Core Environmental Features which include wetlands and the ESPA. Although the Core Environmental Features are not within the limits of the Northgate Plan of Subdivision, the features and related buffers are proposed to be rezoned to Green One (G1) Zone as part of the zone change application submitted on behalf of Northgate. Environmental features and related buffers located within the limits of the Erbsville Kartway subdivision are also proposed to be rezoned to Green One (G1) Zone.

3.6 Community Connectivity

The Beaver Creek Meadows District Plan identifies possible trail locations within the subdivision including a crossing of Beaver Creek. A trail is proposed in this location which will connect the west and east sides of the subdivision. In addition to the proposed trail within the development, there will also be sidewalks located throughout the subdivision as well as a walkway between Blocks 5 and 6 in Stage 4. There will also be a multi-purpose trail on Conservation Drive which will allow pedestrians to access the Mixed Use Node in the

southeastern quadrant of Conservation Drive and Beaver Creek Road and the proposed school site in the subdivision on the north side of Conservation Drive.

An Active Transportation Plan has been prepared and has been included as part of the Neighbourhood Design Summary in **Appendix B** of this report. Emphasis has been placed on connecting proposed parks, open space features and the active transportation network both within and external to the subdivisions.

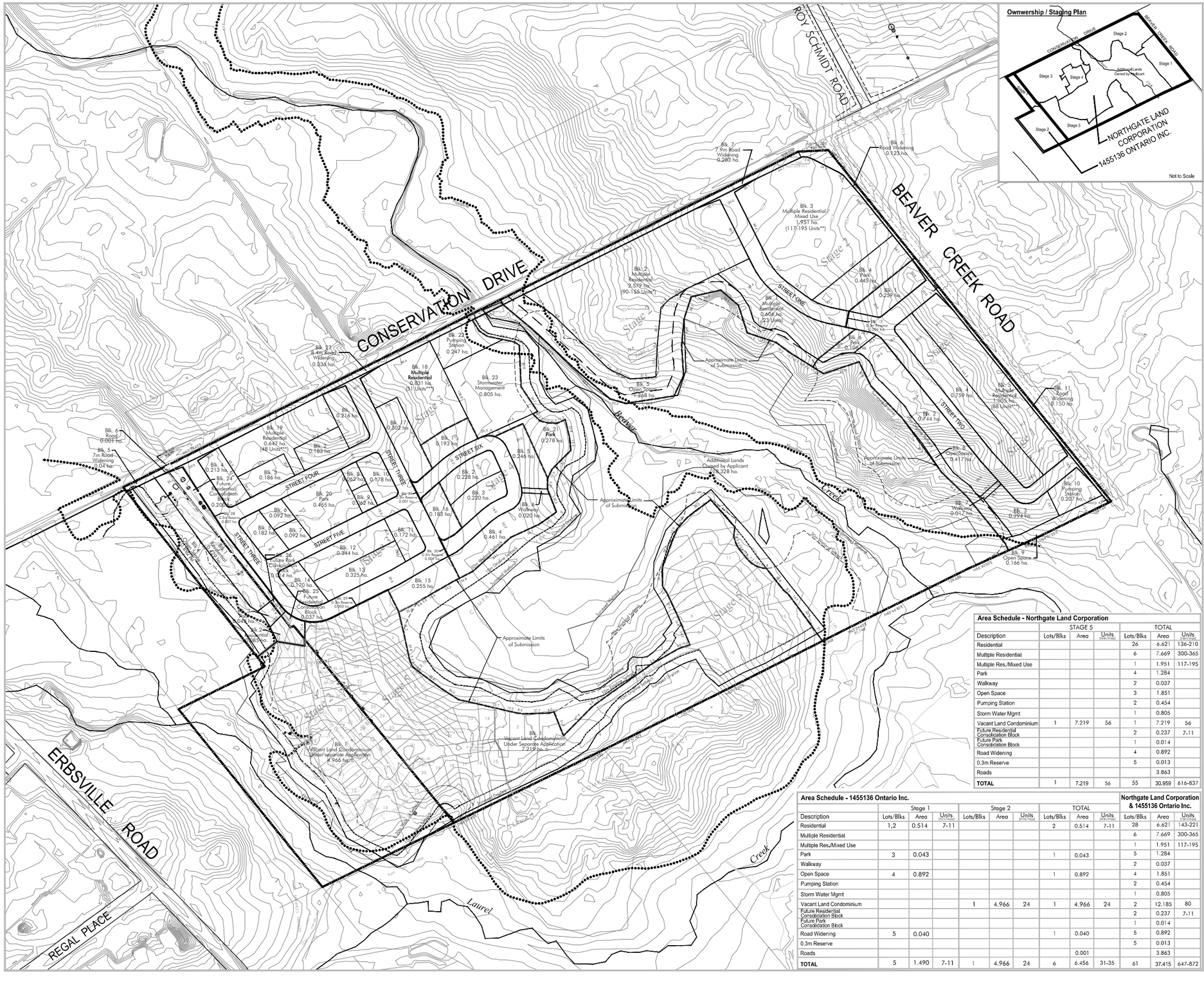
3.7 Design and Development – Stage 5, Northgate Lands

The study team considered several options for the development of Stage 5 of the Northgate Lands. Stage 5 is unique given the environmental considerations regarding development of this part of the subdivision. Block 5 is physically divided by the ESPA into western and eastern portions. Stage 5 is proposed to be developed as a Vacant Land Condominium with 54 units. The condominium approach allows unique standards to be applied to all lots that will restrict activities in order to protect and enhance the natural area. The natural areas will be governed by the condominium corporation.

A total of 15 lots are proposed on the easterly side of Stage 5, ranging in size from approximately 0.07ha to 0.1ha with about 20m in frontage. Large size lots will provide space for infiltration and vegetation cover in addition to the buffer lands. The access road to this portion of Stage 5 will circle a central island which has been proposed to perform several functions, both aesthetic and ecological. The island will be landscaped and planted with native trees, shrubs and herbaceous plants to provide some privacy screening between lots, but will also increase tree cover, vegetation and provide some wildlife habitat. The island will also perform a Low Impact Development (LID) stormwater management function in receiving and infiltrating precipitation particularly by the constructed bioswale feature. A bioswale is a stormwater filter and infiltration measure and will temporarily store, treat and infiltrate runoff. It will be constructed as a depression with filtering materials at the base, mulch and vegetation cover adapted to the hydrologic conditions as predicted by the SWM strategy. It will capture small rain events from a drainage area of 0.224 hectares and provide a storage volume of 202 cubic metres. An overflow path is provided to the north and into the open space area in the event of a major storm.

Buffers are proposed around the eastern portion of Stage 5 and will be naturalized to protect and enhance forest edge and will contribute to the overall size of the Core Environmental Feature. A portion of the eastern side of Stage 5 is proposed to be restored from its current use as an open field and is identified as Open Space on the Draft Plan of Subdivision. It will be planted to enhance forest cover and increase the size of the Core Environmental Feature while contributing to the overall area as forest interior habitat. The naturalized area will match the existing adjacent forest community using similar species that are suited to the soil and environmental conditions. This Open Space area is located in the northern portion of the field, corresponding to the narrowest point of the ESPA forest. This block is a natural low point on the property and will continue to receive surface runoff from the adjacent lots.

Figure 4



Ownership / Staging Plan

Legal Description

PART OF LOT 28, GERMAN COMPANY TRACT,
(GEOGRAPHIC TOWNSHIP OF WATERLOO),
CITY OF WATERLOO,
REGIONAL MUNICIPALITY OF WATERLOO

Key Plan



Additional Information Required Under Section 51(17) of the Planning Act R.S.O. 1990, c.P.13 as Amended

A. As Shown	B. As Shown	C. As Shown
D. Residential, Park, Open Space, Stormwater Management		
E. As Shown	F. As Shown	
G. As Shown	H. Municipal Water Supply	I. Sandy Loam
J. As Shown	K. All Services As Required	L. As Shown

Area Schedule - Northgate Land Corporation 30T - ____

	STAGE 1			STAGE 2		
Description	Lots/Blks	Area	Units (min/max)	Lots/Blks	Area	Units (min/max)
Residential	1-4	2.056	45-67			
Multiple Residential	5	1.055	88	1,2	3.185	113-178
Multiple Res./Mixec Use				3	1.951	117-195
Park	6	0.106		4	0.445	
Walkway	7	0.017				
Open Space	8, 9	0.583		5	1.268	
Pumping Station	10	0.207				
Storm Water Mgmt						
Road Widening	11	0.150		6, 7	0.406	
0.3m Reserve	12	0.001				
Roads		0.878			0.461	
TOTAL	12	5.053	133-155	7	7.716	230-373
	STAGE 3			STAGE 4		
Description	Lots/Blks	Area	Units (min/max)	Lots/Blks	Area	Units (min/max)
Residential	1-17	3.217	64-100	1-5	1.348	27-43
Multiple Residential	18,19	1.478	99			
Park	20,21	0.733				
Walkway				6	0.020	
Open Space						
Pumping Station	22	0.247				
Storm Water Mgmt	23	0.805				
Future Residential Consolidation Block	24,25	0.237	7-11			
Future Park Consolidation Block	26	0.014				
Road Widening	27	0.336				
0.3m Reserve	28-31	0.012				
Roads		1.992			0.532	
TOTAL	31	9.071	170-210	6	1.900	27-43

Area Schedule - Northgate Land Corporation

	STAGE 5			TOTAL		
Description	Lots/Blks	Area	Units (min/max)	Lots/Blks	Area	Units (min/max)
Residential				26	6.621	136-210
Multiple Residential				6	7.669	300-365
Multiple Res./Mixed Use				1	1.951	117-195
Park				4	1.284	
Walkway				2	0.037	
Open Space				3	1.851	
Pumping Station				2	0.454	
Storm Water Mgmt				1	0.805	
Vacant Land Condominium	1	7.219	56	1	7.219	56
Future Residential Consolidation Block				2	0.237	7-11
Future Park Consolidation Block				1	0.014	
Road Widening				4	0.892	
0.3m Reserve				5	0.013	
Roads					3.863	
TOTAL	1	7.219	56	55	30.959	616-837

Area Schedule - 1455136 Ontario Inc.

	Stage 1			Stage 2			TOTAL			Northgate Land Corporation & 1455136 Ontario Inc.		
Description	Lots/Blks	Area	Units (min/max)	Lots/Blks	Area	Units (min/max)	Lots/Blks	Area	Units (min/max)	Lots/Blks	Area	Units (min/max)
Residential	1,2	0.514	7-11				2	0.514	7-11	28	6.621	143-221
Multiple Residential										6	7.669	300-365
Multiple Res./Mixed Use										1	1.951	117-195
Park	3	0.043					1	0.043		5	1.284	
Walkway										2	0.037	
Open Space	4	0.892					1	0.892		4	1.851	
Pumping Station										2	0.454	
Storm Water Mgmt										1	0.805	
Vacant Land Condominium				1	4.966	24	1	4.966	24	2	12.185	80
Future Residential Consolidation Block										2	0.237	7-11
Future Park Consolidation Block										1	0.014	
Road Widening	5	0.040					1	0.040		5	0.892	
0.3m Reserve										5	0.013	
Roads								0.001			3.863	
TOTAL	5	1.490	7-11	1	4.966	24	6	6.456	31-35	61	37.415	647-872

Notes:

- Boundary information provided by MacDonald Tamblyn Surveying Ltd., February 5,2008, Plan 58R-16404.
- Topographic information provided by Stantec Consulting. Contour Interval - 0.5m.
- * BCM District Plan, Low Density Residential 2 calculated at 35-60 Units per Hectare
- ** BCM District Plan, Mixed Use Medium Density Residential calculated at 60-100 Units per Hectare
- *** Multiple Block Unit Yield based on Conceptual Site Plan prepared by MHBC Planning.

VLC - denotes Vacant Land Condominium.

- Floodline mapping obtained from North Waterloo Scoped Subwatershed Study, November 2012 and GRCA Developement Resource On-Line Mapping, January 23,2017.

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Approval Stamp

Date July 4,2017

File No. 14148A

Plan Scale 1:1,250

Drawn By L.H.B. / G.M.C.

Checked By P.B. / D.A.

Northgate Land Corporation & 1455136 Ontario Inc.
Conservation Drive
Waterloo, Ontario

north

File Name

DRAFT PLAN CONSOLIDATION

K:\14148A-NORTHGATE-WATERLOO\REPORT\FIGURE 4 CONSOLIDATED DRAFT PLANS.DWG

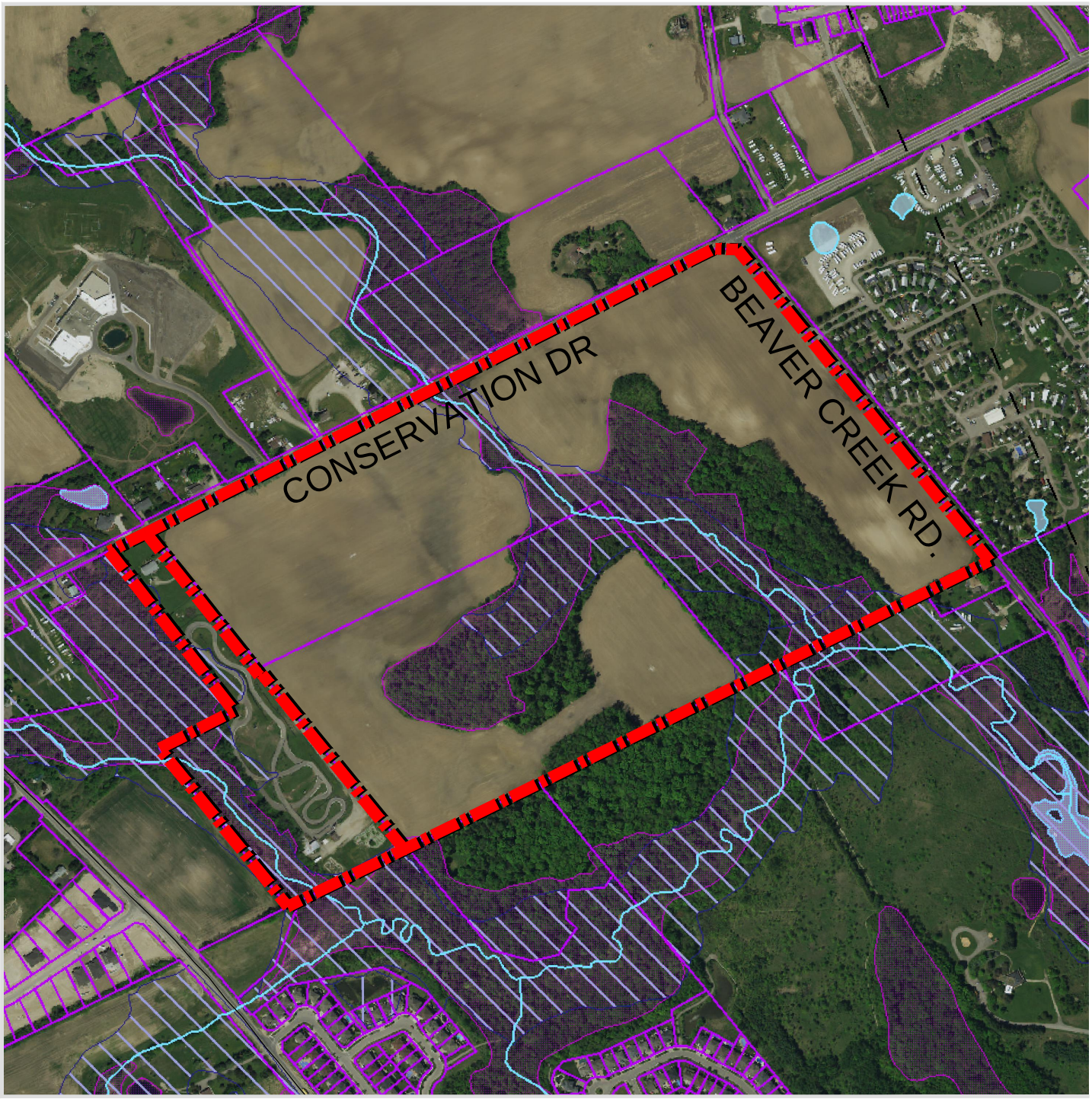

Figure 5

GRCA Development Resource Mapping

(November 2016)

LEGEND

Subject Lands.

- WATERSHED BOUNDARY (GRCA)
- UTILITY LINE (NRVIS)
- RAILWAY (NRVIS)
- DRAINAGE-NETWORK (GRCA)
- PARCELS-ASSESSMENT (MPAC)
- FLOODPLAIN (GRCA)
  - ENGINEERED
  - APPROXIMATE
  - ESTIMATED
- WETLAND (GRCA)
- SLOPE VALLEY (GRCA)
  - STEEP
  - OVERSTEEP
- SLOPE EROSION (GRCA)
  - STEEP
  - OVERSTEEP
  - TOE
- DRAINAGE-POLY (NRVIS)
- 2015 ORTHO (ONT)

DATE:	November 10,2016
SCALE:	1 : 7,500
FILE:	14148A
DRN:	LHB

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Northgate Land Corporation & Erbsville Kartway,
City of Waterloo,
Region of Waterloo

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4.0 PROPOSED ZONING BY-LAW AMENDMENT

The City of Waterloo Zoning By-law No. 1418 (the "Zoning By-law") was originally enacted in 1961 and has since been amended. The subject lands are zoned Agriculture ('A') according to the Zoning By-law (**Figure 6**). This zoning recognizes the existing agricultural uses of the subject lands and is considered an interim zoning pending approval of a concurrent Draft Plan of Subdivision and implementing Zoning By-law.

The City is currently undertaking a comprehensive Zoning By-law review to implement the new Official Plan (approved in December 2012 with two remaining appeals before the Ontario Municipal Board) and to update its zoning regulations to reflect current planning standards and best practices. The subject lands are proposed to be zoned Future Development ('FD') in the second draft of the new Zoning By-law. The Future Development Zone is an interim zoning category with the intent being the lands will be rezoned concurrently with the approval of the Plans of Subdivision.

A Zoning By-law Amendment application is submitted with the Draft Plans of Subdivision to implement the Official Plan and approved Beaver Creek Meadows District Plan. The proposed zoning is illustrated on the zoning schedule (**Figure 7**). The proposed zoning is intended to ensure compatibility and an appropriate transition between uses in the proposed subdivision. Other site specific provisions associated with the zoning on the lands are proposed to include recognition for private condominium roads and consideration of cluster townhouse and condominium blocks as a block for purposes of implementing the zoning bylaw regulations

The proposed Zoning By-law Amendment seeks to rezone the subject lands as follows:

Northgate Land Corporation

Flexible Residential (FR)	This zone allows for a single detached dwelling, duplex, semi-detached dwelling, Class A group home and a bed and breakfast establishment. The following blocks are proposed to be rezoned to the FR Zone: Blocks 1-4 (Stage 1), Blocks 1-17 (Stage 3) and Blocks 1-5 (Stage 4).
Medium Density – Three (MD3)	The MD3 Zone permits higher density dwellings including a townhouse-linear, townhouse, terrace dwelling and apartment dwelling. The following blocks are proposed to be rezoned MD3: Block 5 (Stage 1), Blocks 1-3 (Stage 2) and Blocks 18-19 (Stage 3).
Multiple Residential – Six (MR6)	This zone permits a variety of residential uses including a single detached dwelling, semi-detached dwelling, duplex, townhouse,

	townhouse-linear, Class A group home, home profession, personal recreation space, accessory unit, public/separate/private school and nursery school. The only block proposed to be zoned MR6 is Block 3 in Stage 2 which is part of the Mixed Use Node.
Mixed Use Residential (MXR)	The MXR Zone allows for a wide range of neighbourhood commercial uses such as a bake shop, financial institution, coffee shop, office and personal service shop in addition to higher density residential uses including apartment (including apartment in storeys above the first storey), townhouse, school and nursing home. Block 3 of Stage 2 is proposed to be rezoned to MXR Zone as it is located within the Mixed Use Node.
Green One (G1)	The uses in the G1 Zone are limited to conservation lands, natural resource areas, community trails, parks and buildings or structures associated with flood and erosion control or related to a conservation project. The blocks identified as open space in the Northgate Subdivision to be rezoned to the G1 Zone include: Blocks 8-10 (Stage 1) Block 5 (Stage 2), Blocks 22-23 (Stage 3) and Block 7 (Stage 4).
Green Two (G2)	This zone allows for active recreation, community trails, playgrounds and public parks. The four parks within the Northgate Subdivision are proposed to be rezoned to the G2 Zone and are specifically identified as follows: Block 6 (Stage 1), Block 4 (Stage 2) and Blocks 21-22 (Stage 3).

Erbsville Kartway

Flexible Residential (FR)	This zone allows for a single detached dwelling, duplex, semi-detached dwelling, Class A group home and a bed and breakfast establishment. The following blocks are proposed to be rezoned to the FR Zone: Blocks 1-2 (Stage 1).
Green One (G1)	The uses in the G1 Zone are limited to conservation lands, natural resource areas, community trails, parks and buildings or structures associated with flood and erosion control or related to a conservation project. The blocks identified as open space on the Draft Plans of Subdivision are proposed to be rezoned to the G1 Zone and include: Block 4 (Stage 1) and Block 2 (Stage 2).
Green Two (G2)	This zone allows for active recreation, community trails, playgrounds and public parks. The four parks within the subdivision are proposed to be rezoned to the G2 Zone and are specifically identified as follows: Block 3 (Stage 1).

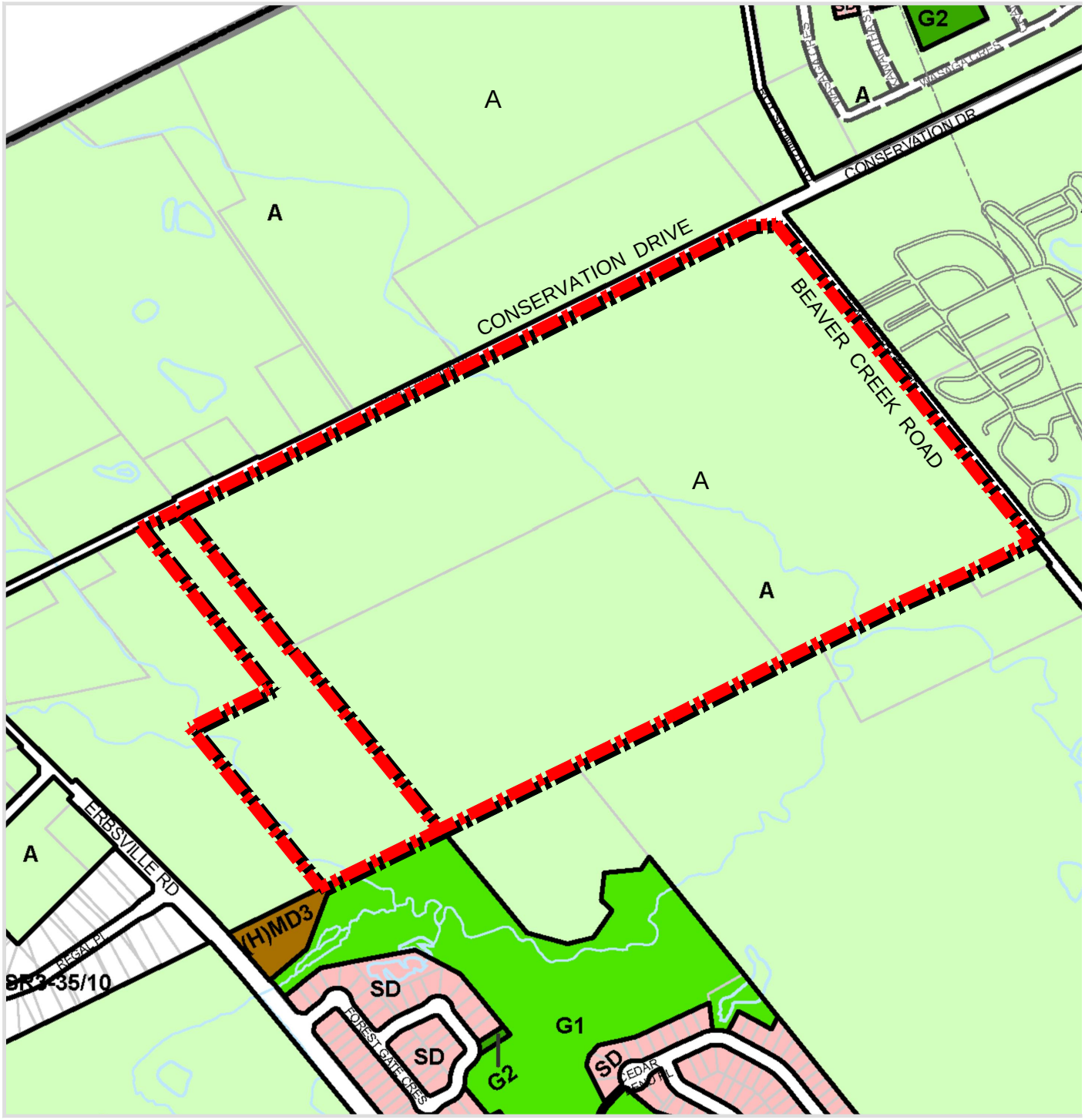

Figure 6

City of Waterloo, Existing Zoning

(February 26,2015)

Northgate Land Corporation & Erbsville Kartway
City of Waterloo,
Region of Waterloo

LEGEND

Subject Lands

BY-LAW 878A
A AGRICULTURE ZONE

BY-LAW 1418
R RESIDENTIAL ZONE
SD SEMI DETACHED ZONE
FR FLEXIBLE RESIDENTIAL FIFTY
G1 GREEN ONE ZONE
G2 GREEN TWO ZONE

DATE:	November 10,2016
SCALE	1 : 7,500
FILE:	14148A
DRN:	LHB

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Figure 7

City of Waterloo, Proposed Zoning

Northgate Land Corporation & Erbsville Kartway
City of Waterloo,
Region of Waterloo

LEGEND

Subject Lands

BY-LAW 878A
A AGRICULTURE ZONE

BYLAW 1418
R RESIDENTIAL ZONE
SD SEMI DETACHED ZONE
FR FLEXIBLE RESIDENTIAL
MD3 MEDIUM DENSITY THREE
MR-6 MULTIPLE RESIDENTIAL SIX ZONE
MXR MIXED USE RESIDENTIAL
G1 GREEN ONE ZONE
G2 GREEN TWO ZONE

DATE: November 10,2016
SCALE 1 : 7,500
FILE: 14148A
DRN: LHB

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5.0 PROVINCIAL POLICY ANALYSIS

5.1 Provincial Policy Statement, 2014

Effective April 30, 2014, the Province of Ontario issued, in accordance with Section 3 of the *Planning Act,* a new Provincial Policy Statement ('PPS'). The PPS provides policy direction on matters of provincial interest related to land use planning and development. It is to be considered in all planning decisions. One of the key considerations of the PPS is that planning decisions must "be consistent with" the PPS. The following is an analysis of the proposed subdivision in the context of the policies of the PPS.

The PPS provides a vision for land use planning in Ontario that encourages an efficient use of land, resources and public investment in infrastructure. A mix of land uses is encouraged to provide choice and diversity. A variety of modes of transportation are promoted to facilitate pedestrian movement, active transit and less reliance on the automobile. Public transit is encouraged as a means of creating more sustainable, livable and healthy communities. The PPS strongly encourages development that will provide long term prosperity, environmental health and social well-being.

The Beaver Creek Meadows District Plan was approved after the effective date of the 2014 PPS and is consistent with the provincial policy framework. The proposed plan of subdivision implements the District Plan and is also considered to be consistent with the 2014 PPS.

5.1.1 Settlement Areas

Policy 1.1.1 of the PPS states that healthy, liveable and safe communities are sustained by promoting efficient use of land and development patterns; accommodating an appropriate range and mix of land uses to meet long term needs; avoiding development and land use patterns which may cause environmental or public health and safety concerns; and promoting cost-effective development patterns and standards to minimize land consumption and servicing costs, among others.

The proposed subdivision will contribute to the density and mix of land uses within the Beaver Creek Meadows District as it will result in the development of single-detached dwelling units and multiple dwelling units in this emerging neighbourhood. It represents cost-effective and efficient development as it will be of a compact urban form that maximizes the use of developable land within the subject lands. The proposed subdivision will also utilize existing and planned infrastructure, amenities, services and roads.

The subject lands are located within the designated urban area of the City of Waterloo and more specifically within the City's Designated Greenfield Area ('DGA'). The proposed development is reflective of provincial policy direction as it relates to Policy 1.1.3.2 which provides that land use patterns within settlement areas shall be based on a density and mix of land uses which: efficiently use land and resources; are appropriate for and efficiently use planned and available infrastructure and public service facilities; minimize negative impacts to air quality and climate change and promote energy efficiency; support active transportation; and are transit supportive.

Policy 1.1.3 of the PPS includes policies with respect to Settlement Areas. Section 1.1.3.1 provides that settlement areas "shall be the focus of growth and development, and their vitality and regeneration shall be promoted." Furthermore, Section 1.1.3.2 identifies that land use patterns within settlement areas shall be based on densities and a mix of land uses that efficiently use land and resources including infrastructure and public service facilities and avoid the need for their unjustified and/or uneconomical expansion, support active transportation and are transit and freight supportive. Section 1.1.3.6 of the PPS requires that new development taking place in designated growth areas should occur adjacent to the existing Built-up Area and shall have a compact form, a mix of uses and densities that allow for the efficient use of land, infrastructure and public service facilities. The subject lands are located within the settlement area. The proposed development includes a variety of densities and a mix of land uses that efficiently use land, resources and infrastructure. The proposed subdivision represents the efficient use of land as the lands are designated and planned for residential development and are required to meet projected growth needs. Infrastructure to accommodate the proposed subdivision will be provided through connections to existing and planned municipal infrastructure. The proposed subdivision has been designed to support active transportation and planned at transit-supportive densities consistent with the approved Beaver Creek Meadows District Plan. Sidewalks and pedestrian connections are provided throughout the subdivision to encourage walkability and connectivity with surrounding future neighbourhoods. These pedestrian and transit-related considerations contribute to an energy-efficient design

5.1.2 Housing and Community Connectivity

Section 1.4.3 of the PPS pertains to housing and states that an appropriate range and mix of housing types and densities shall be provided by directing new housing to areas where appropriate levels of infrastructure and public service facilities are or will be available. In addition, the PPS promotes densities for new housing which efficiently use land, resources, infrastructure and support the use of alternative transportation modes and public transit where it exists or is to be developed.

The proposed subdivision is comprised of a mix of residential building types at densities designed to efficiently use land and optimize the use of infrastructure within the emerging Beaver Creek Meadows District. In addition, the range of housing types including single detached, multiple residential and dwellings as part of a condominium will appeal to a wide demographic group.

In accordance with Section 1.5.1 of the PPS, healthy, active communities are, in part, to be promoted by planning public streets, spaces and facilities to be safe, meet the needs of pedestrians, foster social interaction and facilitate active transportation and community connectivity; and planning for and providing for a full range and equitable distribution of publicly-accessible built and natural settings for recreation.

Sidewalks are to be provided to facilitate connectivity within the subdivision and between the proposed subdivision and future neighbourhoods to the north and east.

In summary, the proposed subdivision and zoning is consistent with the Provincial Policy Statement, 2014.

5.1.3 Infrastructure and Transportation

The PPS also includes policies with respect to sewage, water and stormwater as well as transportation systems. Policy 1.6.6.1(b) provides that planning for sewage and water services shall ensure that these systems are provided in a manner that can be sustained by the water resources upon which such services rely, is feasible, financially viable and complies with all regulatory requirements and protects human health and the natural environment. Moreover, Policy 1.6.6.2 states that municipal infrastructure is the preferred form of servicing for settlement areas

The Functional Servicing and Grading Report prepared by MTE Consultants Inc. determined that full municipal services will be planned and available for the development of the lands.

In addition to infrastructure, the PPS also contains policies with respect to transportation. Transportation systems should be provided which are safe, energy efficient, facilitate the movement of people and goods and are appropriate to address projected needs (Policy 1.6.7.1). Policy 1.6.7.2 advises that efficient use be made of existing and planned infrastructure. Furthermore, Policy 1.6.7.4 provides that in order to minimize the length and number of vehicle trips, a land use pattern, density and mix of uses should be promoted. In addition, this type of land use pattern will support the use of transit and provide opportunities for active transportation. The internal road is designed to service the proposed development with connections to the existing surrounding street network. Furthermore, sidewalks and trails are being proposed as part of the development with connections to the neighbouring residential community. The proposed subdivision also includes a variety of uses which will reduce the length and number of vehicle trips. Therefore, with the planned internal road, the existing road network, the provision of sidewalks and trails and the provision of a mix of uses and residential units, the proposed development capitalizes on the existing transportation infrastructure.

5.1.4 Natural Heritage

According to Policy 2.1.1 of the PPS, natural features and areas shall be protected for the long term. Furthermore, Policy 2.1.2 provides the following:

> "The diversity and connectivity of natural features in an area, and the long-term ecological function and biodiversity of natural heritage systems, should be maintained, restored or, where possible, improved, recognizing linkages between and among natural heritage features and areas, surface water features and ground water features."

A significant portion of the Open Space designated land that is regulated by the GRCA is not included in the Plans of Subdivision application and will remain in private ownership and designated as Open Space. All required buffers associated with the natural heritage features will be maintained and development is proposed outside of the buffers.

The natural heritage system as identified through the North Waterloo Scoped Sub-Watershed Study has formed the basis for determining the limits of development for the proposed plans of subdivision and vacant land condominium. In addition, the buffer areas that were identified in the study have been maintained and all development is proposed outside the buffers. Minor site grading has been proposed in a small area of the buffer, as was considered in the North Waterloo Scoped Sub-Watershed Study. The protection of the natural features and buffer areas, along with the strategic location of additional vegetated area and stormwater management facilities has resulted in additional interior habitat in support of the ecological function of the natural system. Further details associated with the natural heritage system and consideration of the natural features and areas, surface water features and ground water features is found in the Environmental Impact Statement prepared by NRSI.

5.2 Growth Plan for the Greater Golden Horseshoe, 2006

The Province of Ontario approved the Growth Plan for the Greater Golden Horseshoe (the "Growth Plan"). The Growth Plan is effective as of June 16, 2006 and applies to all decisions on matters, proceedings or applications, made under the *Planning Act* and the *Condominium Act, 1*998, subject to any applicable regulations. The Growth Plan applies to the Greater Golden Horseshoe ("GGH"), which includes the Regional Municipality of Waterloo and the constituent lower tier municipalities, including the City of Waterloo. The Growth Plan establishes a vision for the Greater Golden Horseshoe based on the principles of compact and complete communities, economic competitiveness, optimizing the use of infrastructure, integrated transportation networks, intensifying existing Built-up Areas and protecting natural heritage and employment areas over the long term.

The Region of Waterloo Official Plan ('ROP'), City of Waterloo Official Plan and Beaver Creek Meadows District Plan include a more detailed policy framework and land use plans. The proposed Plan of Subdivision and implementing Zoning By-law conform with the ROP, City of Waterloo Official Plan and the Beaver Creek Meadows District Plan.

A new Growth Plan for the Greater Golden Horseshoe has been approved under the Places to Grow Act and will take effect on July 1, 2017 (the "2017 Growth Plan"). The 2017 Growth Plan builds on the initial Growth Plan and responds to the key challenges that the Greater Golden Horseshoe will face over the coming decades and provides enhanced policy directions.

With respect to the Designated Greenfield Area, the 2017 Growth Plan provides direction similar to the 2006 Growth Plan. The 2017 Growth Plan continues to require development in the designated greenfield area that supports the achievement of complete communities, supports active transportation and encourages the integration and sustained viability of transit services. The 2017 Growth Plan establishes a higher density target of 80 residents and jobs per hectare for the designated greenfield area. This increased density target is to be implemented through a municipally initiated comprehensive review of the Region of Waterloo Official Plan and the City of Waterloo Official Plan. A municipal comprehensive review has not been completed the new density target. The City of Waterloo Official Plan Amendment No. 15 applied a Specific Provision Area to the Beaver Creek Meadows area which included an overall density target of 58 residents

and jobs per hectare. Therefore, the density target contained in the Official Plan Amendment will continue to apply despite the changes in the 2017 Growth Plan.

The 2017 Growth Plan maintains and builds on the policy direction established in the 2006 Growth Plan. The proposed development conforms to the 2017 Growth Plan.

5.2.1 Where and How to Grow

The Growth Plan for the Greater Golden Horseshoe includes policies on where and how to grow specific to the Built-Up Area and DGA. Based on the Growth Plan, the Regional Municipality of Waterloo is required to establish intensification and greenfield density targets. The proposed subdivision is located within the DGA of the City of Waterloo (**Figure 8**).

Section 2.2.2.2 of the Growth Plan includes policies with respect to managing growth and provides that population and employment growth will be accommodated as follows:

a. building compact, transit-supportive communities in designated greenfield areas;
b. reducing dependence on the automobile through the development of mixed-use, transit-supportive, pedestrian-friendly urban environments;
h. encouraging cities and towns to develop as complete communities with a diverse mix of land uses, a range and mix of employment and housing types, high quality public open space and easy access to local stores and services; and
j. directing major growth to settlement areas that offer municipal water and wastewater systems and limiting growth in settlement areas that are serviced by other forms of water and wastewater services.

The proposed subdivision is compact and includes residential uses at densities to support future public transportation. The subject lands are in the City's designated greenfield area. The proposed development includes multiple residential uses within the planned Mixed Use Node identified in the Beaver Creek Meadows District Plan at Conservation Drive and Beaver Creek Road contributing to the variety of residential uses available within the subdivision. The Mixed Use Node which will serve the surrounding neighbourhoods as well as provide a variety of residential uses and a variety of open space areas within the proposed development will help to support a pedestrian-friendly urban environment and contribute to the creation of a complete community. Furthermore, the development will rely on municipal water and wastewater systems which meets the intent of the Growth Plan.

Section 2.2.7.2 of the Growth Plan requires that the DGA be planned to achieve a minimum density that is not less than 50 residents and jobs combined per hectare. The greenfield density target is to be measured over the entire DGA of the Region of Waterloo. The proposed subdivision provides for a density of between 20-27 units per hectare and 57-76 persons and jobs per hectare (see **Tables 2 and 3**). The proposed subdivision will contribute to the achievement of the greenfield density target as set out in the approved ROP and in the City of Waterloo Official Plan Amendment No. 15 which established a density target for Beaver Creek Meadows District of 58 people and jobs per hectare.

The proposed Plans of Subdivision and Zoning By-law Amendment applications conform to the Growth Plan for the Greater Golden Horseshoe and are consistent with the Provincial Policy Statement, 2014.

5.3 Planning Act, Section 51 (24)

Section 51 (24) of the *Planning Act* outlines criteria that shall be regarded by City Council when considering a Draft Plan of Subdivision. Table 5 below analyses the proposed subdivision's conformity with these criteria:

TABLE 4 – PLANNING ACT SECTION 51(24) COMPLIANCE

Criteria	Proposed Plan of Subdivision Response
The effect of development of the proposed subdivision on matters of provincial interest.	• The proposed subdivision will not adversely impact the Province's key interests including natural heritage resources, water resources, agricultural resources, mineral resources and cultural heritage and archaeological resources. The proposed subdivision is consistent with the direction of the Provincial Policy Statement, 2014, which provides direction on matters of provincial interest.
Whether the proposed subdivision is premature or in the public interest	• The subject lands are currently utilized for agriculture and are among the last Designated Greenfield Areas in the City of Waterloo. • Development of the subject lands is in conformity with the Beaver Creek Meadows District Plan which outlines the City's vision for the area. The City has completed a Class Environmental Assessment related to the provision of the necessary infrastructure. The key infrastructure is identified in the Capital Budget as development charge related items. • As such, the proposed subdivision is not premature and in the public interest.
Whether the plan conforms to the Official Plan and adjacent plans of subdivision, if any.	• The proposed subdivision conforms to the intent of the Region of Waterloo Official Plan and the City of Waterloo Official Plan.
The suitability of the land for the purposes which it is to be subdivided.	• The subject lands are of a suitable grade, soil composition and location to support both low density and medium density residential and mixed uses.

Criteria	Proposed Plan of Subdivision Response
The number, width, location and proposed grades and elevations of highways, and the adequacy of them, and the highways linking the highways in the proposed subdivision with the established highway system in the vicinity and the adequacy of them.	• There is no direct highway access from the proposed subdivision, nor are highways within proximity to the proposed subdivision.
The dimensions and shapes of the proposed lots.	• Lot shapes, depths and widths will conform to the applicable zones within the proposed subdivision and provide for the efficient use of land and ease of building.
The restrictions or proposed restrictions, if any, on the land to be subdivided or the buildings and structures proposed to be erected on it and the restrictions, if any, on adjoining land.	• No restrictions currently exist or are proposed for the subject lands on which the subdivision is proposed.
Conservation of natural resources and flood control.	• Designated core environmental features, specifically the woodland and wetland areas along Beaver Creek and Laurel Creek, will not be adversely impacted by the development of the subdivision. The floodplain as modelled in the subwatershed study is maintained and respected with the proposed development.
The adequacy of utilities and municipal services.	• Connections to the Regional water and wastewater system are available within proximity to the proposed subdivision. • Full municipal services will be extended to the proposed subdivision.
The adequacy of school sites.	• A proposed elementary school site is located within a future subdivision north of Conservation Drive. This elementary school site will be accessible from the proposed subdivision by Beaver Creek Road and the local road and sidewalk network.

Criteria	Proposed Plan of Subdivision Response
The area of land, if any, within the proposed subdivision that, exclusive of highways, is to be conveyed or dedicated for public purposes.	• Five public parks will be located throughout the proposed subdivision for the use and enjoyment of residents and visitors. Open spaces will also be provided for public use.
The extent to which the plan's design optimizes the available supply, means of supplying, and efficient use and conservation of energy.	• The design of the road and trail network will provide routes for active transportation within and external to the proposed subdivision. • Providing means for modes of transportation other than the private automobile helps conserve energy and efficiently utilizes land.
The interrelationship between the design of the proposed subdivision and site plan control matters relating to any development of the land, if the land is also located within a site plan control area designated under subsection 41 (2) of the Planning Act.	• All future development within the proposed subdivision shall be subject to the City of Waterloo's Site Plan Control By-law.

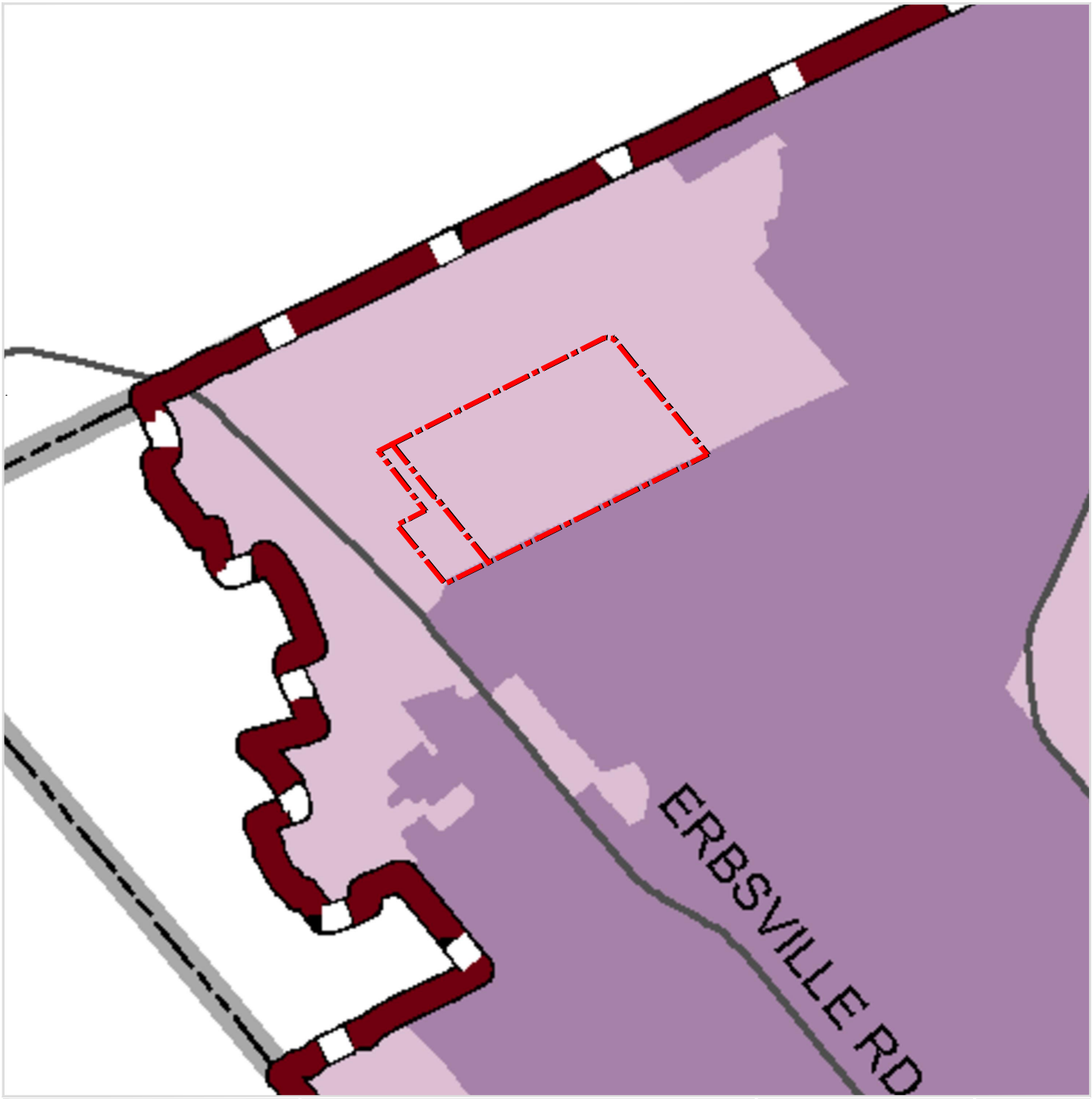

Figure 8

Region of Waterloo Regional Official Plan Map 3a, Urban Area

(June 18,2015)

Northgate Land Corporation & Erbsville Kartway,
City of Waterloo,
Region of Waterloo

LEGEND

- Subject Lands
- Built-Up Area*
- Urban Designated Greenfield Areas
- Prime Industrial/Strategic Reserve (Serviced)
- Urban Growth Centres
- Reurbanization Corridors **
- Major Transit Station Areas **
- Central Transit Corridor Environmental Assessment Study Area
- Planned Highway 7
- Region of Waterloo International Airport
- Urban Area Boundary

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6.0 REGION OF WATERLOO OFFICIAL PLAN

The Regional Official Plan was approved by the Ministry of Municipal Affairs and Housing ('MMAH') with modifications on December 22, 2010 and approved, with amendments, by Oral Decision of the Ontario Municipal Board on June 18, 2015. The ROP was processed as a municipal comprehensive review and represents the Region's conformity exercise with respect to the Growth Plan.

6.1 Designated Greenfield Area

The subject lands are located within the Urban Area of the City of Waterloo (see **Figure 8**) and are located within the Designated Greenfield Area according to Map B3 – Designated Greenfield Areas of the ROP (**Figure 9**). The Urban Area contains the primary urban areas of the cities of Kitchener, Waterloo and Cambridge and portions of the Township of Woolwich. The subject lands are intended to accommodate the forecasted growth needs to the year 2031.

Section 2.D.17 of the ROP requires that development occurring within the DGA be planned and developed to achieve a density target of 55 residents and jobs combined per hectare. Densities will be measured on average over the entire DGA. Section 2.D.18 of the ROP requires that municipalities, in collaboration with the Region determine how the density target for greenfield areas will be distributed. As identified in **Table 3** of this report, the proposed subdivision will have a density of 57-76 persons and jobs per hectare and will therefore, contribute to the Region's overall greenfield density target.

Section 2.D.17 provides policies specifically regarding development within the DGA. Section 2.D.17 requires that development be planned and developed to establish a network of continuous sidewalks, community trails and bicycle pathways that provide direct, safe, comfortable and convenient linkages within the neighbourhood, to other neighbourhoods and to transit stops, employment areas, schools, food destinations and community amenities. Any required easements, land dedications and pedestrian amenities to support walking, cycling and existing or planned transit services are to be provided by new development. Further, Section 2.D.17 requires that the design of the road network provides for direct and efficient transit routes within and between communities and that land uses be located such that the walking distance to a transit stop is generally 450 metres.

The proposed subdivision will feature a continuous network of sidewalks along new public streets with connections to the future neighbourhoods to the north and east. Residents will be able to walk to a range of destinations, including the future Mixed-Use Node at Conservation Drive and Beaver Creek Road, a

planned elementary school north of Conservation Drive and neighbouring subdivisions. Future roads have been planned to connect with future neighbourhoods to the north and east to accommodate efficient pedestrian and vehicular travel and the eventual development of lands in these new neighbourhoods. Transit services are not currently provided within proximity to the proposed subdivision however, the proposed public street network will allow for efficient transit routes to be located within the proposed subdivision, should transit services be extended in the future.

6.2 Transportation

With respect to transportation systems, Section 5.1 of the ROP provides that an integrated, accessible and safe multi-modal transportation system that provides transportation choice and promotes sustainability, a healthy population and the effective movement of goods should be planned and managed. The subject lands have direct access to regional roads and the provincial highway network, as well as regional cycling routes. Conservation Drive is designated as a planned Regional Cycling route on Map C (**Figure 10**).

The subject lands are well located with respect to existing transportation infrastructure and the subdivision has been designed to integrate with and connect to the existing transportation system.

6.3 Regional Greenlands Network

The ROP Greenlands Network, Map 4, identifies woodlands and wetlands along Laurel and Beaver Creeks (**Figure 11**) as 'Core Environmental Features' within the subject lands. Laurel Creek Conservation Area is adjacent to the southern boundary of the proposed subdivision and is also designated as a Core Environmental Feature by the ROP. An overall stormwater management strategy will be developed with the objective of maintaining the hydrological regime associated with these Core Environmental Features within and adjacent to the proposed subdivision.

The limits of the core environmental features were confirmed in association with completion of the North Waterloo Scoped Sub-Watershed Study, subject to the refinement of the area associated with the farm access. The EIS for the proposed development applications has further assessed the existing conditions and "confirmed" the limits of the core environmental features. The dripline of the core environmental feature excludes the farm lane, however the policy delineation of the core environmental feature remains consistent with the current designation.

A private road and infrastructure to service a portion of the Vacant Land Condominium is proposed through the farm lane access portion of the "core environmental feature". Policy 7.C.9 of the Regional Official Plan recognizes that "infrastructure" is permitted within a Core Environmental Feature subject to the completion of an EIS. The location of the proposed road and infrastructure has been designed in consideration of the core environmental feature and details associated with the design are discussed in the EIS.

6.4 Source Water Protection

Map 6a of the ROP (**Figure 12**) identifies the urban area source water protection areas. The subject lands are located within Wellhead Protection Sensitivity Area 8 ("WSPA7"). WSPA 8 delineates the area outside of the ten-year time of travel to the limit of the total land area contributing water to a municipal drinking water supply well. The proposed residential development is permitted within the Wellhead Protection Sensitivity Area 8.

6.5 Regional Official Plan Summary

In summary, the proposed Plans of Subdivision and Zoning By-law Amendment applications conform with relevant policies of the Regional Official Plan.

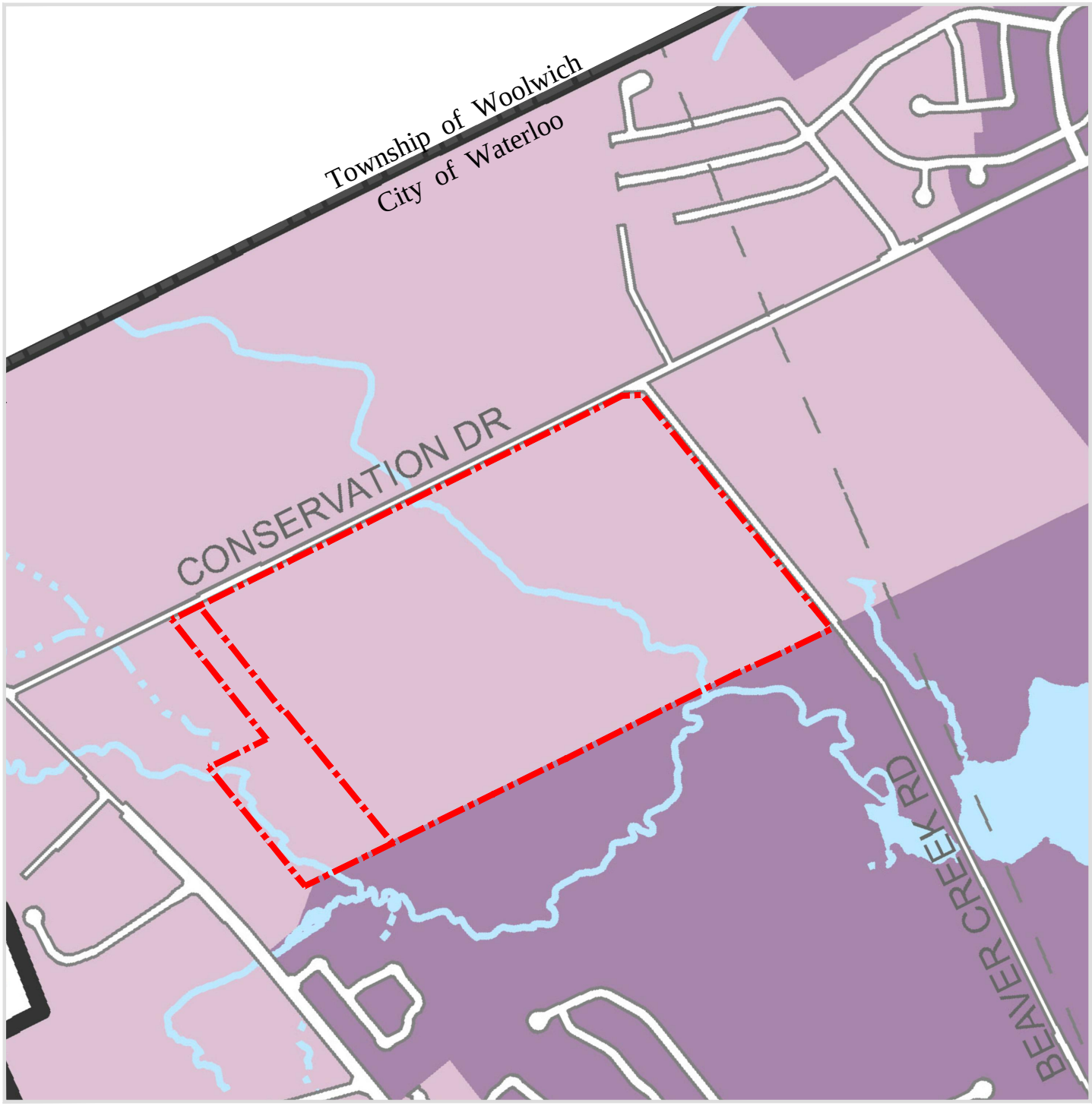

Figure 9

City of Waterloo, Official Plan, Designated Greenfield Areas, Schedule "B3"
(September 2013)

Northgate Land Corporation & Erbsville Kartway,
City of Waterloo,
Region of Waterloo

LEGEND

- Subject Lands
- Urban Area Boundary
- Designated Greenfield Areas
- Built Up Area

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Figure 10

Region of Waterloo Regional Official Plan Map 5c, Regional Cycling Routes
(June 18,2015)

Northgate Land Corporation & Erbsville Kartway,
City of Waterloo,
Region of Waterloo

LEGEND

- Subject Lands
- Existing Cycling Routes*
- Planned Cycling Routes*

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Figure 11

Region of Waterloo Regional Official Plan Map 4, Greenlands Network

(June 18,2015)

Northgate Land Corporation & Erbsville Kartway,
City of Waterloo,
Region of Waterloo

LEGEND

Subject Lands

Landscape Level Systems

- Significant Valleys
- Environmentally Sensitive Landscape
  1. Laurel Creek Headwaters
  2. Blair-Bechtel-Cruickston
  3. Dumfries Carolinian
  4. Beverly
- Provincial Greenbelt Natural Heritage System
- Regional Recharge Areas (also shown on Map 6g)
- Southwest Kitchener Policy Area

Core Environmental Features

- Core Environmental Features include: Provincially Significant Wetlands; Environmentally Sensitive Policy Areas; Regional Forests; Forests greater than 4 ha; and Significant Valley Features

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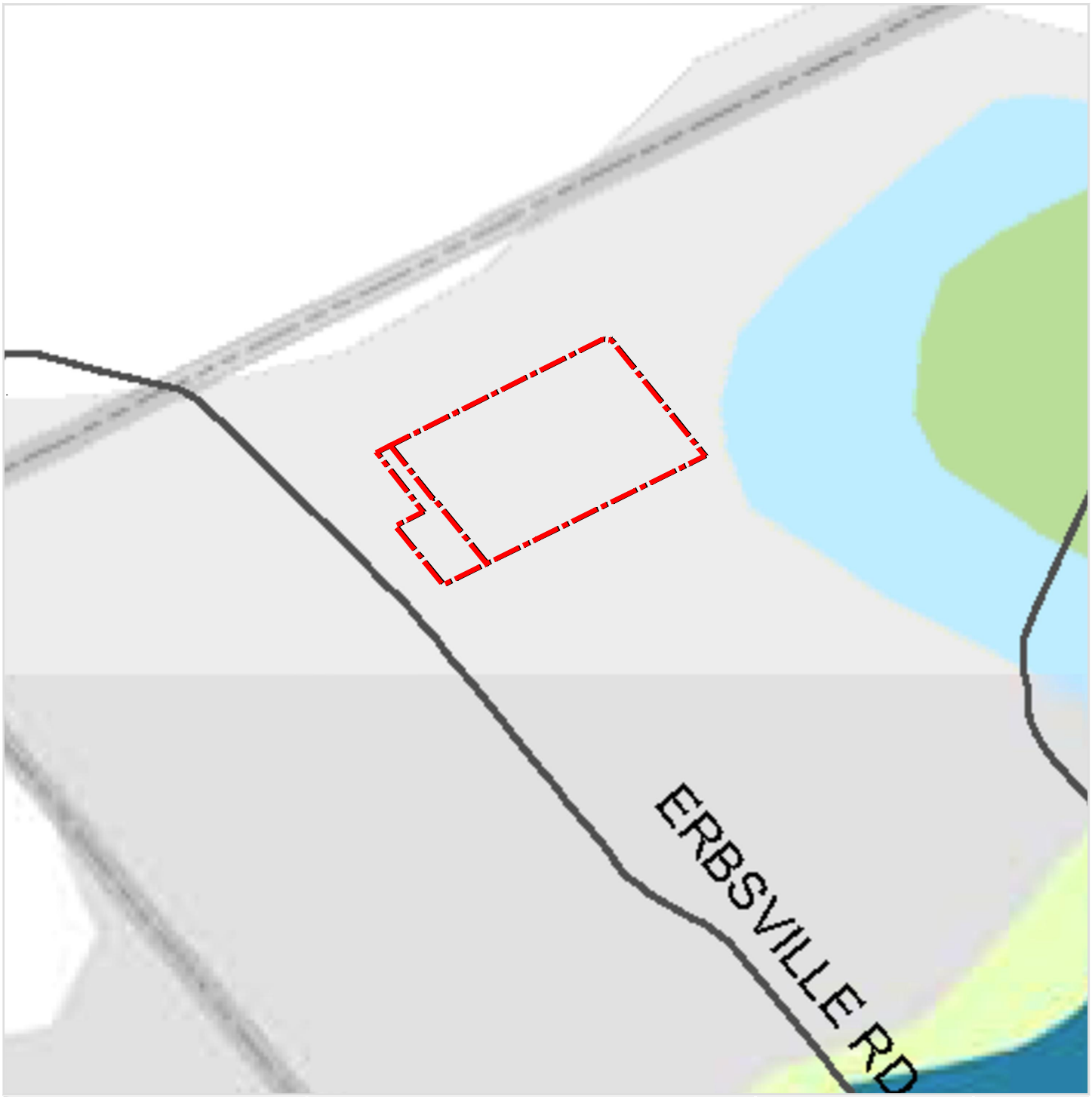

Figure 12

Region of Waterloo Regional Official Plan Map 6a, Urban Area Source Water Protection Areas

(June 18,2015)

Northgate Land Corporation & Erbsville Kartway,
City of Waterloo,
Region of Waterloo

LEGEND

Subject Lands

Wellhead Protection Areas

- WPSA-1
- WPSA-2
- WPSA-3
- WPSA-4
- WPSA-5
- WPSA-6
- WPSA-7
- WPSA-8

Municipal Wellhead

- Municipal Wellheads
- Groundwater Under Direct Influence (GUDI)

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7.0 CITY OF WATERLOO OFFICIAL PLAN

Council of the City of Waterloo adopted a new Official Plan in April 2012 (the "Official Plan"). The Official Plan was approved with modifications by the Region on November 21, 2012. The City of Waterloo Official Plan implemented the adopted ROP and was in conformity with the Growth Plan. The proposed applications have been assessed in the context of the new Official Plan, which is in effect save and except for certain policies which remain under appeal at the Ontario Municipal Board as it relates to the Northgate lands.

The subject lands are designated Low Density Residential and Open Space by the City of Waterloo Official Plan (**Figure 13**). Schedule A also symbolically identifies a Future Node (designated as 'Beaver Creek Node') at the intersection of Conservation Drive and Beaver Creek Road. Specific Provision Area 37 (SPA 37) which is applied to the Beaver Creek Node (**Figure 14**) requires that it will be developed as a Minor Node comprised of a mix of commercial and higher density residential uses.

7.1 Designated Greenfield Areas

The Official Plan anticipates that the City's DGA will accommodate a significant portion of population and employment growth. The subject lands are located within the DGA. Section 3.5(1) of the Official Plan states that the DGA will be planned in a manner that integrates with existing communities and supports the City as a complete community. The Plans of Subdivision propose a variety of land uses that help create a complete community as well as a street pattern that will be extended into future neighbourhoods to the north and east to provide seamless neighbourhood integration throughout the Beaver Creek Meadows District.

7.2 Low Density Residential

A significant portion of the subject lands is designated Low Density Residential on Schedule 'A' of the Official Plan. Section 10.1.3 provides that lands within the Low Density Residential designation shall accommodate primarily low-rise residential land uses at lower densities than the rest of the City. The maximum net residential density permitted in this designation is 150 bedrooms per hectare and a maximum building height of 10 metres.

The Draft Plan provides for a mix and range of residential unit types, including single-detached dwellings with a range of lot widths, townhouses and multiple dwellings.

Table 5 includes preliminary calculation of density for the proposed plan of subdivision:

TABLE 5 – RESIDENTIAL DENSITY OF PROPOSED SUBDIVISION (BEDROOMS PER HECTARE)

Type	Units	Bedrooms
Single Detached Dwelling Unit Bedrooms (3 per unit)	143 - 221	429-663
Multiple Residential Unit Bedrooms (2.5 per unit)	300-365	750-913
Multiple Residential/Mixed Use (1.5)	117-195	176-293
Vacant Land Condominium (3 per unit)	78	234
Future Development (3 per unit)	7-11	21-33
Total	645-870	1,610-2,136
Net Land Area (ha)*	32.382	
Official Plan Maximum Density	150 bedrooms per hectare	
Net Residential Density (bedrooms per hectare)	**50-66**	

The density range of the proposed subdivision conforms to the density requirements of the City of Waterloo Official Plan.

7.3 Urban Design

Section 3.11 of the Official Plan details urban design policies which generally encourage a high standard of urban design. The urban design policies apply to all development within the City. The proposed subdivision has been designed to be a safe, attractive, pedestrian friendly community integrated with the natural heritage system and linked to other areas of the City through the existing road, pedestrian and transit network. Section 9.0 of this report outlines the proposed subdivision's design features in detail.

7.4 Open Space

In addition to the 'Low Density Residential' designation, the subject lands are also designated as 'Open Space'. Section 10.5.1 includes general policies and states that in the 'Open Space' land use designation, the primary land is open space allowing a variety of uses including parks and other green spaces, active and passive recreation uses, municipal facilities, community gardens, elements of the natural system, cemeteries, golf courses and the regional landfill. Although a large part of the lands are designated 'Open Space', most

of the lands are not included in the Plan of Subdivision and the lands that are included and designated as 'Open Space', will remain as 'Open Space'.

An EIS has been submitted as part of the complete application to address requirements of the City of Waterloo Official Plan especially with regards to the extent of infrastructure in the 'Open Space' lands.

7.5 Mixed Use Node

Schedule 'A' of the City of Waterloo Official Plan identifies a Future Node at Conservation Drive and Beaver Creek Road which is further implemented through the Beaver Creek Meadows District Plan on Map 2 Community Structure as a Mixed Use Node. Map 3 Land Uses of the Beaver Creek Meadows District Plan identifies the portion of the subject lands that is within the Mixed Use Node as Mixed Use Medium Density Residential which is proposed to accommodate Mixed-Use Medium Density Residential designations.

The City of Waterloo Official Plan includes policies specific to the Beaver Creek Node in Section 11.1.37 and is identified as Specific Provision Area 37. It is the intent that the node develop as a Minor Node which is a mixed-use centre "with a concentration of neighbourhood oriented retail and service commercial uses, institutional, employment and residential uses." Section 11.1.3.7 also provides that a mix of housing types and a range of densities be permitted within the node while maximizing compatibility between housing types and adjacent non-residential uses.

The Plan of Subdivision includes a mixed use/multiple residential block. The design details of the block will be determined through the Site Plan Approval process. Design and development will be done according to the policies of the City of Waterloo Official Plan and the Beaver Creek Meadows District Plan.

7.6 Transportation

The Official Plan provides for an extensive multi-functional transportation network which includes a combination of Provincial Highways and regional and local municipal roads as illustrated on Schedule 'E' of the Official Plan (**Figure 15**). The subject lands are well located and connected to the City's multi-functional/multi-modal transportation network.

The subject lands are located immediately adjacent to two designated collector roads as shown on Schedule 'E': Conservation Drive is designated as a Major Collector and Beaver Creek Road is designated as a Minor Collector. Erbsville Road, a Regional Arterial, is located to the west of the subject lands. Conservation Drive provides the proposed subdivision east-west access to Erbsville Road and Northfield Drive West (via Westmount Road North)which are designated as Regional Arterial roads within the City.

City-Wide Cycling and Multi-Use Routes are illustrated on Schedule 'F' (**Figure 16**) of the Official Plan. Conservation Drive and Beaver Creek Road are designated as City-Wide Cycling and Multi-Use Routes and are accessible from the subject lands.

With respect to public transportation, Chapter 3, Section 3.9.2 (2)(k) provides that the City will plan for neighbourhoods that locate land uses generally within a 450 metre walking distance of a transit stop. The

District Plan was designed in anticipation of transit service extension. At this time, the nearest bus stop is located on Lake Louise Boulevard at Conservation Drive which is east of the subject lands. The proposed network of streets has been designed such that residents will have pedestrian access to the possible future extension of transit service.

The subject lands are well located with respect to existing and planned transportation infrastructure.

7.7 Official Plan Summary

The Draft Plan of Subdivision proposes a mix and range of residential unit types and conforms to the urban design policies of the Official Plan by promoting a high standard of urban design through building form and connectivity within the development and to the existing and planned residential neighbourhoods. Natural heritage features will be protected. The portion of the subject property within the Mixed Use Node has been identified as Multiple Residential on the Draft Plan of Subdivision with the form of development being determined at the site plan approval stage. The proposed development has been designed to utilize existing transportation infrastructure while proposing a new road network to ensure an efficient use of land. Therefore, the proposed plan of subdivision and zoning conform with the City of Waterloo Official Plan.

The City's Official Plan includes policies associated with the natural system. The policies pertaining to the natural system are currently under appeal. There are ongoing discussions with City of Waterloo staff relating to the resolution of the appeal on the policies. In general, the intent is to modify policies of the City of Waterloo Official Plan to be consistent with the policies of the Regional Official Plan as it relates to the provision of infrastructure within or contiguous to a core natural feature. In this regard, an EIS has been completed and is submitted with the applications.

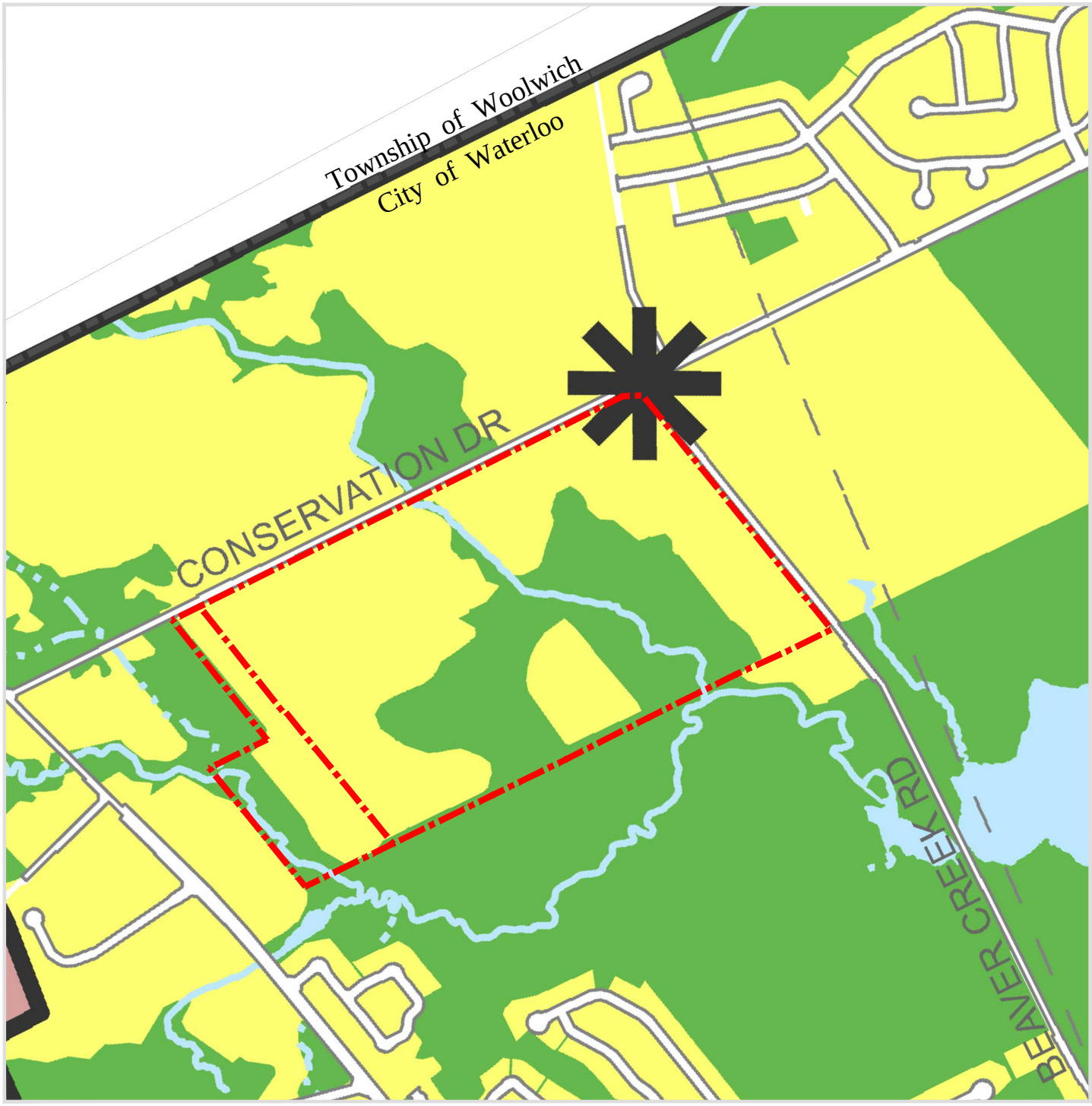

Figure 13

City of Waterloo, Official Plan, Land Use Plan, Schedule "A"

(November 2013)

Northgate Land Corporation & Erbsville Kartway,
City of Waterloo,
Region of Waterloo

LEGEND

Subject Lands

Land Use Designations

- Low Density Residential
- Mixed-Use Medium Density Residential
- Mixed-Use Medium High Density Residential
- Mixed-Use High Density Residential
- Commercial
- Employment
- Major Institutional
- Open Space
- Rural
- Urban Area Boundary
- Uptown Waterloo Urban Growth Centre
- Future Node

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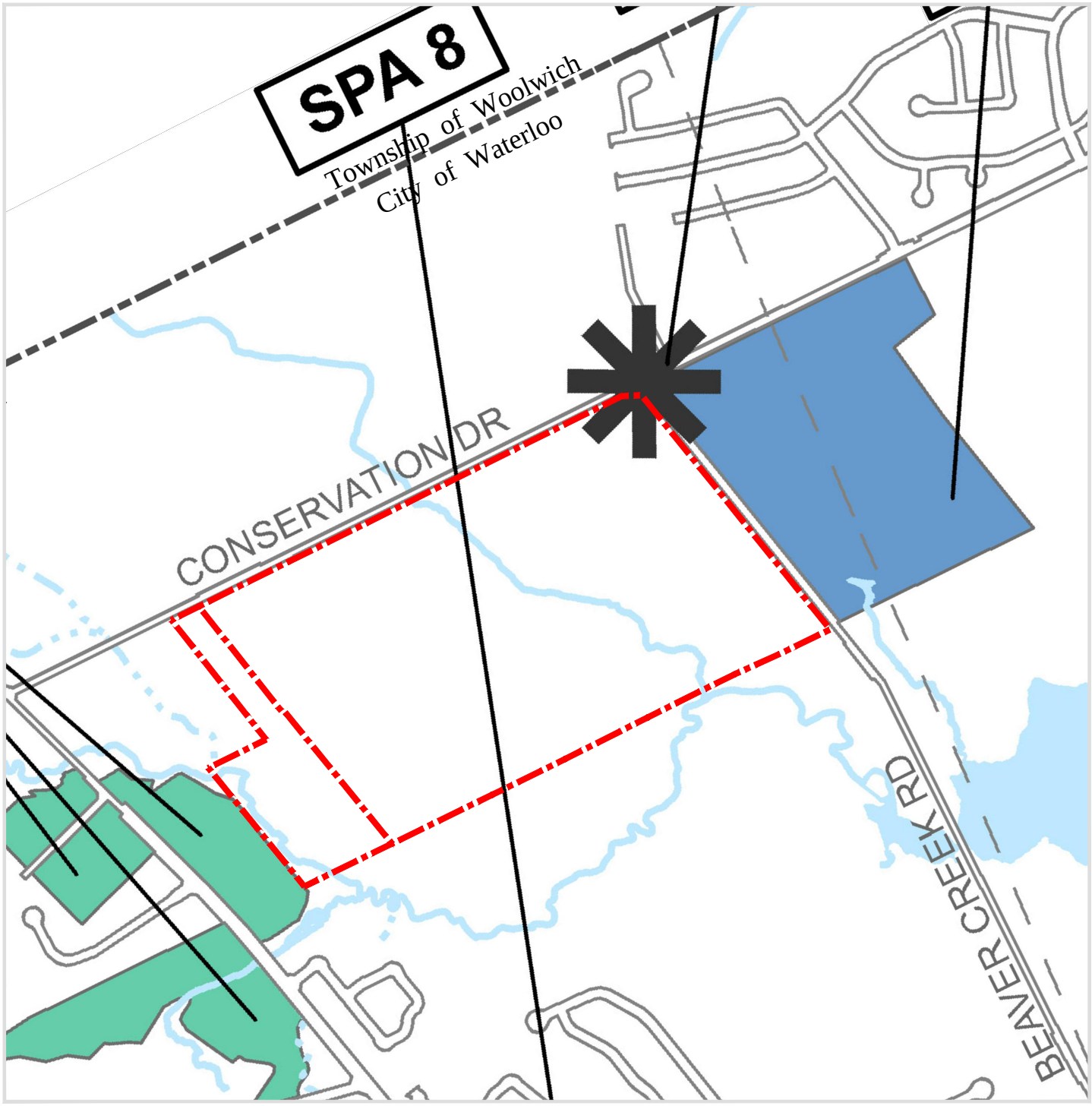

Figure 14

City of Waterloo, Official Plan, Specific Provision Areas, Schedule "A6"
(September 2014)

Northgate Land Corporation & Erbsville Kartway,
City of Waterloo,
Region of Waterloo

LEGEND

- Subject Lands
- SPA — Specific Provision Area
- Future Node

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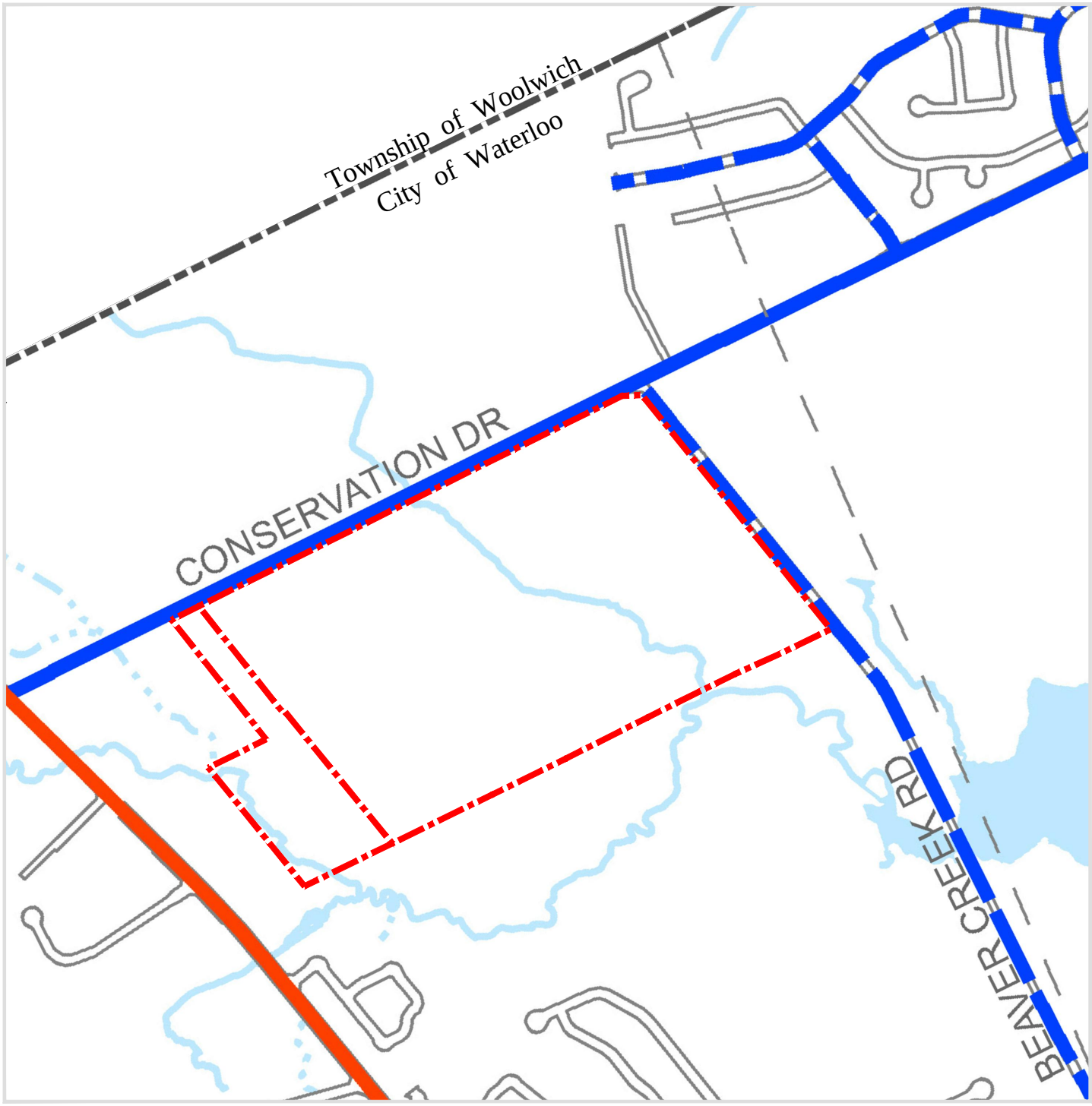

Figure 15

City of Waterloo, Official Plan, Road Classification System, Schedule "E"

(February 2013)

Northgate Land Corporation & Erbsville Kartway,
City of Waterloo,
Region of Waterloo

LEGEND

Subject Lands

Road Classification

Secondary Roads
- Local Roads
- Potential Future Local Roads
- Minor Collector
- Major Collector
- Deferred

Primary Roads
- City Arterial
- Regional Arterial

Provincial Highway
- Provincial Highway

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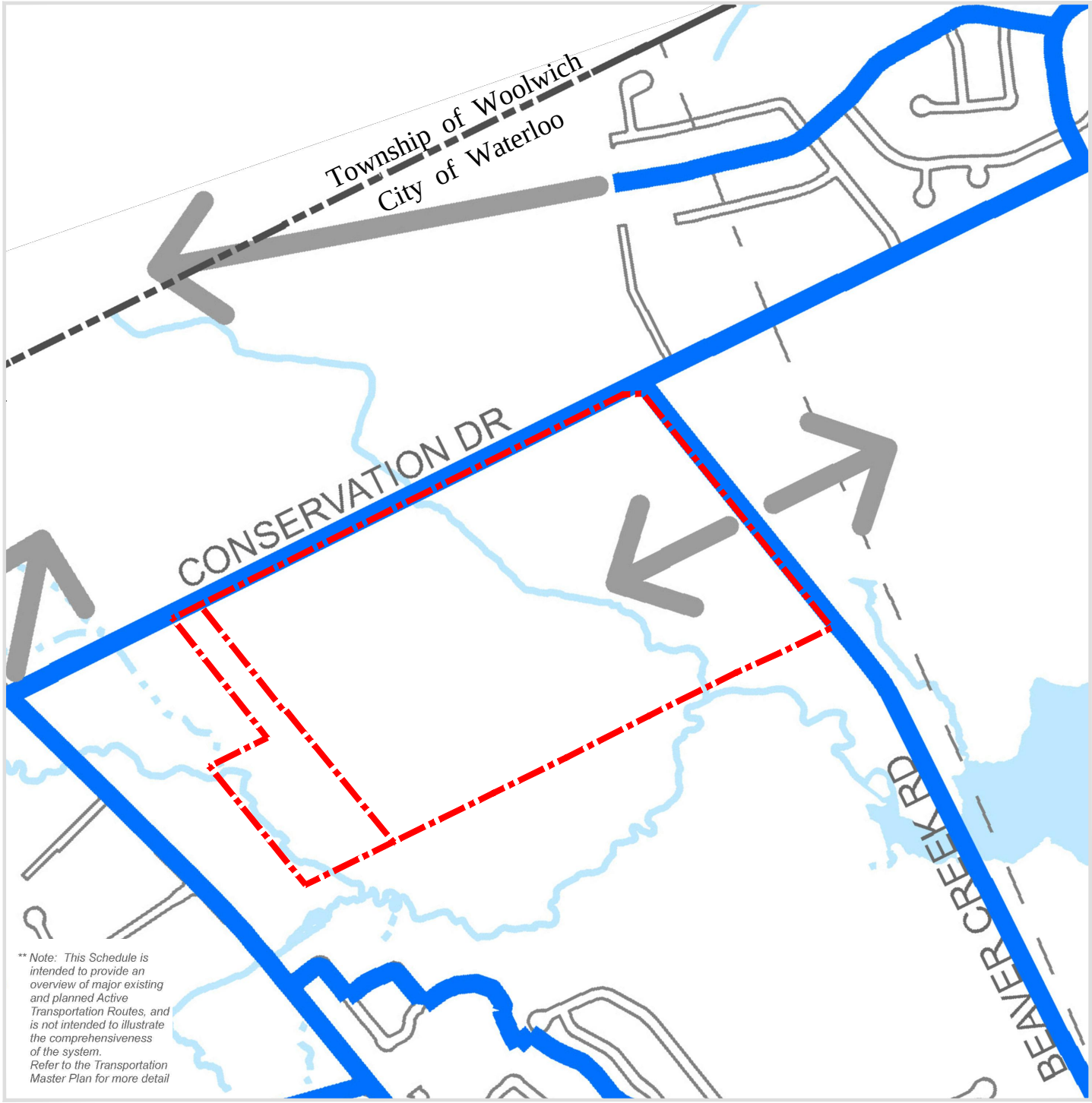


Figure 16

City of Waterloo, Official Plan, Active Transportation Framework, Schedule "F"

(February 2014)

Northgate Land Corporation & Erbsville Kartway,
City of Waterloo,
Region of Waterloo

LEGEND

Subject Lands

Existing and Planned Active Transportation Framework

- City-Wide Cycling and Multi-Use Routes
- Proposed City-Wide Cycling and Multi-Use Routes (Conceptual)
- King Street Corridor
- Potential Pedestrian Corridor (Conceptual)
- Connection to Adjacent Municipality / Lands

DATE:	November 10,2016
SCALE:	1 : 15,000
FILE:	14148A
DRN:	LHB

north

K:\14148A-NORTHGATE-WATERLOO\REPORT\OFFICIAL PLANS.DWG

MHBC PLANNING URBAN DESIGN & LANDSCAPE ARCHITECTURE
200-540 BINGEMANS CENTRE DR. KITCHENER, ON, N2B 3X9
P: 519.576.3650 F: 519.576.0121 | WWW.MHBCPLAN.COM

8.0 BEAVER CREEK MEADOWS DISTRICT PLAN

The Beaver Creek Meadows District Plan is a non-statutory planning document that is intended to complement the City's Official Plan by providing additional detail regarding the design and development of the proposed Beaver Creek Meadows Community. The proposed subdivision is located within the Beaver Creek Meadows District. The District Plan works in conjunction with the City's Official Plan. It is the intent of the City that all new development within the Beaver Creek Meadows District is consistent with the District Plan.

The Beaver Creek Meadows District Plan provides detail regarding the design and development of the future Beaver Creek Meadows community. The Beaver Creek Meadows District Plan defines the extent of the Beaver Creek Node, provides for more detailed land use designations, identifies the future collector road network, locates community facilities such as parks and delineates a conceptual community trail network. **Figure 17** superimposes Map 3 (Land Uses) over the proposed plan of subdivision and confirms general conformity with the approved District Plan.

8.1 Community Structure

Map 2 of the Beaver Creek Meadows District Plan identifies a community structure for the community which includes a total of seven neighbourhoods of which Neighbourhoods 5, 6 and 7 are located on the subject property (**Figure 18**). Central to the community structure is a Mixed Use Node which his designated 'Mixed Use Medium Density Residential' (**Figure 19**). As part of the proposed development, multiple residential blocks have been proposed within the designated Mixed Use Node to implement the policies as part of the District Plan.

The Community Structure also includes two stormwater management facilities in Neighbourhood 5 and one stormwater management facility in Neighbourhood 6. The stormwater management facility identified to the east of Beaver Creek is not identified on the proposed Plan of Subdivision and Vacant Land of Condominium for the Northgate lands as the facility is now proposed to be replaced by the stormwater management facility to the east of Beaver Creek Road and shared amongst other proposed developments. North Waterloo Community Northgate Subdivision & Erbsville Kartway Preliminary Stormwater Management Report prepared by MTE Consultants Inc. concluded that one on-site stormwater management facility was sufficient in addition to the additional stormwater management facility that will be located east of the development and shared amongst other proposed developments.

The Community Structure also includes two parks on the subject lands with one being located in Neighbourhood 5 and one in Neighbourhood 6. The Plan of Subdivision proposes a total of four parks with two being located in the general vicinity of the identified park in Neighbourhood 5 and the two additional parks in Neighbourhood 6. One of the parks in Neighbourhood 6 is in the location of the park as identified in the District Plan and the second park is located on the west side of the proposed development. A fifth park is located on the Erbsville Kartway lands on the west side of the overall development. The Community Structure also includes potential locations for Major and Minor Collector Roads with Conservation Drive identified as a Major Collector Road and Beaver Creek Road identified as a Minor Collector Road. Furthermore, the Community Structure also contemplates a Minor Collector Road on the west side of the subject property which has been identified on the Plan of Subdivision as Street Three.

Table A – Development Estimate of the District Plan includes estimated unit counts, population and job yields and density assumptions for Neighbourhoods 1 through 7 and categorizes the unit count by designation. In addition to the stormwater management facilities and open space designations, the proposed subdivision includes 'Low Density Residential 1', 'Low Density Residential 2' and 'Mixed-Use Medium Density Residential'. 'Low Density Residential 1' permits single detached, duplex, semi-detached and street townhouses with a density range of 25-35 units per hectare. 'Low Density Residential 2' allows for duplex, triplex, block townhouse, street townhouse, terrace dwelling and low-rise apartment at a density of 35-60 units per hectare. The 'Mixed-Use Medium Density Residential' designation permits townhouses, triplexes, terrace dwellings and low rise apartments. The blocks identified as 'Residential' on the Plan of Subdivision and the 'Multiple Residential' blocks accommodating freehold townhouse dwelling units would be considered 'Low Density Residential 1'. The 'Multiple Residential' blocks outside of the node that will accommodate condominium townhouse dwelling units would be considered 'Low Density Residential 2'. The 'Multiple Residential' blocks in the Mixed-Use Node would be considered as 'Mixed-Use Medium Density Residential'. The Beaver Creek Meadows District Plan includes a conceptual land use plan (**Figure 20**) identifying all of the land use designations within the Beaver Creek Meadows community.

Table 6 below identifies each of the neighbourhoods within the subject lands, the maximum number of units contemplated per designation in the District Plan and the proposed number of units include in the Plan of Subdivision

TABLE 6 – NEIGHBOURHOODS 5, 6 AND 7 – DEVELOPMENT ESTIMATES

Neighbourhood	Low Density Residential 1		Low Density Residential 2		Mixed-Use Medium Density Residential	
	Max. Units	Proposed	Max. Units	Proposed	Max. Units	Proposed
5	60	158-245	170	88	465	117-195
6	267	267-327	105	n/a	n/a	n/a
7	60	15	n/a	n/a	n/a	n/a
Total	387	440-587	275	88	465	117-195

Based on **Table 7** above, the proposed Plan of Subdivision is within the maximum unit counts for the subject property. Based on the proposed unit counts and the overall community structure proposed as part of the Plan of Subdivision, the development conforms to the community structure in the Beaver Creek Meadows District Plan.

8.2 Special Policy Area 2

Map 1 of the Beaver Creek Meadows District Plan includes a Special Policy Area (SPA) 2 on the subject lands which is a clearing surrounded by ESPA 80 and designated as 'Low Density Residential' in the City of Waterloo Official Plan. Section 5.2 of the Beaver Creek Meadows District Plan states that "an EIS is required for the subject lands to support consideration of development, the extension of supporting infrastructure and access to the lands for development."

An EIS has been completed for the proposed development of the lands. The EIS concludes that the lands identified as Special Policy Area 2 is supported for development, including the extension of supporting infrastructure and access to the lands. The EIS conclusions and design considerations for Special Policy Area 2 are discussed throughout other sections of this report.

8.3 Residential Uses and Mixed Use Nodes

The District Plan designates the subject lands as Low Density Residential 1, Low Density Residential 2 and Mixed Use Medium Density (**Figure 20**). **Table 8** summarizes dwelling types and density ranges contemplated for these designations.

TABLE 7 – BEAVER CREEK MEADOWS DISTRICT PLAN DENSITY TARGETS

Description	Dwelling Type	Distribution of Dwelling Type	Maximum Density Range		Proposed Density Range
Low Density Residential 1	Single-detached, Duplex, Semi-detached, Street Townhouse	60%	25-35 units per hectare	150 bedrooms per hectare (max)	22-29 units per hectare
Low Density Residential 2	Duplex, Triplex, Block Townhouse, Street Townhouse, Terrace Dwelling, Low-rise Apartment	20%	35-60 units per hectare	150 bedrooms per hectare (max)	83 units per hectare

Description	Dwelling Type	Distribution of Dwelling Type	Maximum Density Range		Proposed Density Range
Mixed Use Medium Density Residential (Node)	Triplex, Back-to-Back Townhouse, Terrace Dwelling, Low Rise Apartment	5%	60-100 units per hectare	300 bedrooms per hectare	60-100 units per hectare

The proposed development within the Low Density Residential 1 and Mixed Use Medium Density Residential designations are within the maximum permitted density ranges. The proposed density of the Low Density Residential 2 designation is 83 units per hectare based on initial unit counts however, this will be determined during detailed design. Therefore, the plans of subdivision implement the general intent of the Beaver Creek Meadows District Plan.

The location of the Mixed-Use Node is identified on **Figure 18**. The portion of the Mixed-Use Node located within the Northgate parcel is designated Mixed Use Medium Density. This land use designation permits both townhouse dwellings and multiple dwellings, including a range of building forms. Block 4 and part of Blocks 2 and 3 of Stage 1 of the proposed subdivision are located within the Mixed-Use Node and the configuration of the blocks and the zoning proposed for these blocks implement the policies associated with the Mixed Use Medium Density designation. Buildings within the Mixed-Use Node must exhibit high quality urban design, encourage pedestrian movement and visual interest, have a compact form and be oriented to and address the street. A special regulation is proposed to permit building mass to be oriented to Conservation Drive and Beaver Creek Road. The blocks will be subject to site plan approval and the design direction of the District Plan will be addressed in further detail through this future planning process.

8.4 Open Space and Parkland Brief

The Record of Pre-submission Consultation included comments from the City of Waterloo. The comments included the completion of a parkland brief as part of the planning justification report and consideration in context of the functional servicing and grading plans. The following addresses the comments and requirements for valuation as established by the City, based on the criteria from the pre-application meeting minutes:

a. The grading and general usability of the lands to be conveyed to the City for parkland purposes.

- The parkland areas are generally located in locations that provide for visibility and usability of the lands. The preliminary grading has taken into consideration the location of the parks and established appropriate grades for the intended use of the lands. The proposed park areas are not located within natural features, buffer areas or other areas that would not allow the active or passive use of the lands.

b. How the lands would meet the intent of a District Plan and Official Plan park land policies.

- The District Plan identifies two (2) "potential park" locations in association with the Northgate and Erbsville Kartway lands. The District Plan also identifies "other green spaces" that connect the proposed development to the "natural open space system". The proposed plans of subdivision provide for parks that are located in general conformity with the District Plan, as well as a third park that is central to the portion of the development lands on the west side of Beaver Creek. The intent of the parks is to provide a mix of active and passive use areas. General and conceptual design considerations for the three parks are included **Appendix C**.
- The locations of the parks have been determined considering the District Plan policies and the proposed approach of the plans of subdivision with three parks will provide for accessibility and a visual presence within the community. The new proposed park area that is central to the area west of Beaver Creek has been considered in addition to the park directly adjacent to the natural open space area as it provides additional park area with street frontage and visibility throughout that area of the community, rather than a focus to the edge of the community. A park is maintained adjacent to the natural area, as identified in the District Plan, to recognize the unique natural character of the area and provide for a more passive area that could connect to trails.

c. How the lands meet the general principles of the City's landscape design process and requirements manual for new subdivision development.

- The conceptual designs have given consideration to the City's requirements for park areas.

d. How the proposal will satisfy the requirements of the City's parkland dedication by-law.

- The proposed plans of subdivision provide for conveyance of parkland to the City of Waterloo. The proposed plans of subdivision provide for 1.298 hectares of parkland to be conveyed to the City of Waterloo. The additional parkland requirement is proposed to be provided by way of cash-in-lieu payment to the City of Waterloo. Based on the City of Waterloo parkland dedication by-law, the parkland is to be determined at a rate of 5% of the net land area. The net land area is identified as the gross land area minus the land area of any environmental features and associated buffers that are being conveyed to the City of Waterloo at no cost. For the purposes of this consideration, the net land area is 27.194 hectares with a total of 1.36 hectares of parkland required.

The District Plan includes three designations for open space: Open Space – Parks, Open Space – Other Green Spaces and Open Space – Natural System. Block 6 of Stage 1 is designated as Other Green Spaces and is proposed to be a park. Block 4 of Stage 2 is designated Open Space Land Uses-Park and is proposed to be a park. Block 21 of Stage 3 is designated Open Space–Parks under the District Plan and is proposed as a public park. Block 22 is designated as Low Density Residential 1 however, it is proposed to accommodate the fourth park in the subdivision. Block 3 of Stage 1 of the Erbsville Kartway lands is designated as Other Green Spaces

in the District Plan and is proposed to be a park. The Core Environmental Feature wetlands and woodlands adjacent to Laurel Creek and Beaver Creek are designated Open Space - Natural System by the District Plan.

8.5 Transportation

The District Plan contains policies with regards to both motorized and active transportation. Conservation Drive is designated as a Major Collector Road with a right-of-way width of 26 metres and will provide east-west access to the proposed subdivision. Street One and Street Two of the proposed subdivision are designated Minor Collector Roads by the District Plan (see **Figure 19**). All other streets within the plan of subdivision are designated Local Roads and have a right-of-way width of 18 metres. The proposed Draft Plan of Subdivision, including the width of the proposed road allowances, implements the road network shown on Map 2 of the District Plan.

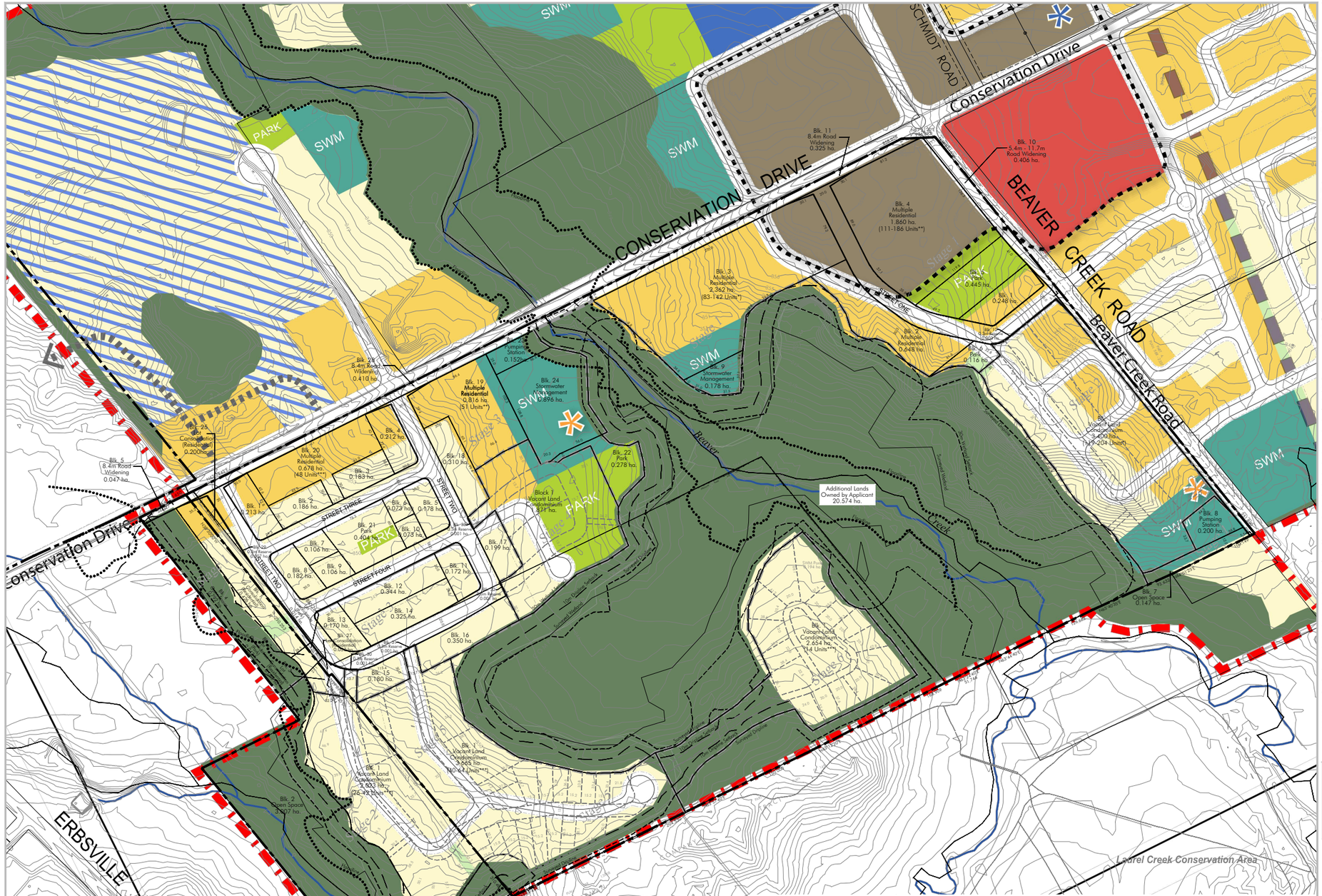
Conservation Drive and Street Two of the proposed subdivision are designated as Recommended Transit Routes on Map 5 Active Transportation (**Figure 20**) of the Beaver Creek Meadows District Plan, which will provide the proposed subdivision with convenient transit connections to the other areas serviced by Grand River Transit, subject to extension of transit services by the Region.

Potential trail connections are located within the Plan of Subdivision to link the Natural System (as illustrated on **Figure 20**) with the Northgate and Erbsville Kartway parcels of the proposed subdivision and provide further linkages with future neighbourhoods to the north and east. Perimeter trails within the Natural System Buffer Area are also proposed.

8.6 Servicing

The District Plan contemplates that the community will be connected to full municipal services. The proposed subdivision will be serviced by the regional sewage treatment system, the extension of water mains and sanitary sewers, stormwater management facilities and a road network that satisfies municipal engineering standards. A Functional Servicing Report has been prepared by Stantec and provides a more complete description of the servicing strategy for the proposed subdivision.

Figure 17



Legal Description
PART OF LOT 28, GERMAN COMPANY TRACT,
(GEOGRAPHIC TOWNSHIP OF WATERLOO),
CITY OF WATERLOO,
REGIONAL MUNICIPALITY OF WATERLOO

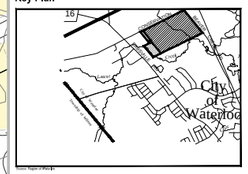
Owner's Certificate
I AUTHORIZE MACNAUGHTON HERMSEN BRITTON CLARKSON PLANNING LIMITED TO SUBMIT THIS PLAN FOR APPROVAL.

DATE: _____ _____

Surveyor's Certificate
I HEREBY CERTIFY THAT THE BOUNDARIES OF THE LAND TO BE SUBDIVIDED ON THIS PLAN AND THEIR RELATIONSHIP TO THE ADJACENT LANDS ARE ACCURATELY AND CORRECTLY SHOWN.

DATE: _____ _____

Key Plan



Northgate Land Corporation
Erbsville Kartway

north
Not to Scale

Additional Information Required Under Section 51(17) of the Planning Act R.S.O. 1990, c.P.13 as Amended

A. As Shown	B. As Shown	C. As Shown
D. Residential, Park, Open Space, Stormwater Management		
E. As Shown	F. As Shown	
G. As Shown	H. Municipal Water Supply	I. Sandy Loam
J. As Shown	K. All Services As Required	L. As Shown

Area Schedule NORTHGATE LAND CORPORATION **30T - ____**

Description	STAGE 1 Lots/Blks	Area	Units (Incl.in Mult.)	STAGE 2 Lots/Blks	Area	Units (Incl.in Mult.)
Residential	1	0.248	4-7			
Multiple Residential	2-4	4.870	220-354			
Park	5,6	0.561				
Open Space	7	0.147				
Pumping Station	8	0.200				
Storm Water Mgmt	9	0.178				
Vacant Land Condominium				1	3.400	119-204
Future Development						
Road Widening	10,11	0.731				
0.3m Reserve	12	0.003				
Roads		0.707				
TOTAL	12	7.645	224-361	1	3.400	119-204

Description	STAGE 3 Lots/Blks	Area	Units (Incl.in Mult.)	STAGE 4 Lots/Blks	Area	Units (Incl.in Mult.)
Residential	1-18	3.652	70-108			
Multiple Residential	19,20	1.494	99			
Park	21,22	0.682				
Open Space						
Pumping Station	23	0.152				
Storm Water Mgmt	24	0.896				
Vacant Land Condominium				1	1.871	28-45
Lot Consolidation	25-27	0.251				
Road Widening	28	0.410				
0.3m Reserve	29-33	0.011				
Roads		1.947				
TOTAL	33	9.405	169-207	1	1.871	28-45

Notes:
- Boundary information provided by MacDonald Tamblyn Surveying Ltd., February 5,2008, Plan 58R-16404.
- Topographic information provided by Stantec Consulting, Contour Interval - 0.5m.
*- BCM District Plan, Low Density Residential 2 calculated at 35-60 Units per Hectare
**- BCM District Plan, Mixed Use Medium Density Residential calculated at 60-100 Units per Hectare
***- Multiple Block Unit Yield based on Conceptual Site Plan prepared by MHBC Planning.

Description	NORTHGATE LAND CORPORATION STAGE 5 Lots/Blks	Area	Units (Incl.in Mult.)	STAGE 6 Lots/Blks	Area	Units (Incl.in Mult.)	SUB-TOTAL Lots/Blks	Area	Units	ERBSVILLE KARTWAY STAGE 1 Lots/Blks	Area	Units (Incl.in Mult.)	STAGE 2 Lots/Blks	Area	Units (Incl.in Mult.)	SUB-TOTAL Lots/Blks	Area	Units (Incl.in Mult.)	TOTAL Lots/Blks	Area	Units
Residential							19	3.810	74-115										19	3.810	74-115
Multiple Residential							5	6.364	319-453										5	6.364	319-453
Park							4	1.243											4	1.243	
Open Space							1	0.147		4	0.792		2	3.007		2	3.799		3	3.946	
Pumping Station							2	0.352											2	0.352	
Storm Water Mgmt							2	1.074											2	1.074	
Vacant Land Condominium	1	3.665	40-64	1	2.654	14	4	11.590	201-327				1	2.023	26-42	1	5.030	26-42	5	13.613	201-327
Lot Consolidation							1	0.251		1-3	0.554	8-11				3	0.554	8-11	4	0.805	8-11
Road Widening							3	1.141		5	0.047					1	0.047		4	1.188	
0.3m Reserve							6	0.014											6	0.014	
Roads								2.654			0.001						0.001			2.655	
TOTAL	1	3.665	40-64	1	2.654	14	47	28.640	594-895	1	1.394	8-11	1	5.030	26-42	7	6.424	34-53	54	34.064	628-948

MHBC PLANNING URBAN DESIGN & LANDSCAPE ARCHITECTURE
200-540 BINGEMANS CENTRE DR. KITCHENER, ON. N2B 3X9 | P. 519.576.3650 F. 519.576.0121 | WWW.MHBCPLAN.COM

Approval Stamp

Date October 25, 2016

File No. 14148A

Plan Scale 1:2,000

Drawn By L.H.B.

Checked By P.B. / D.A.

Project
Northgate Land Corporation & Erbsville Kartway
Conservation Drive
Waterloo, Ontario

north

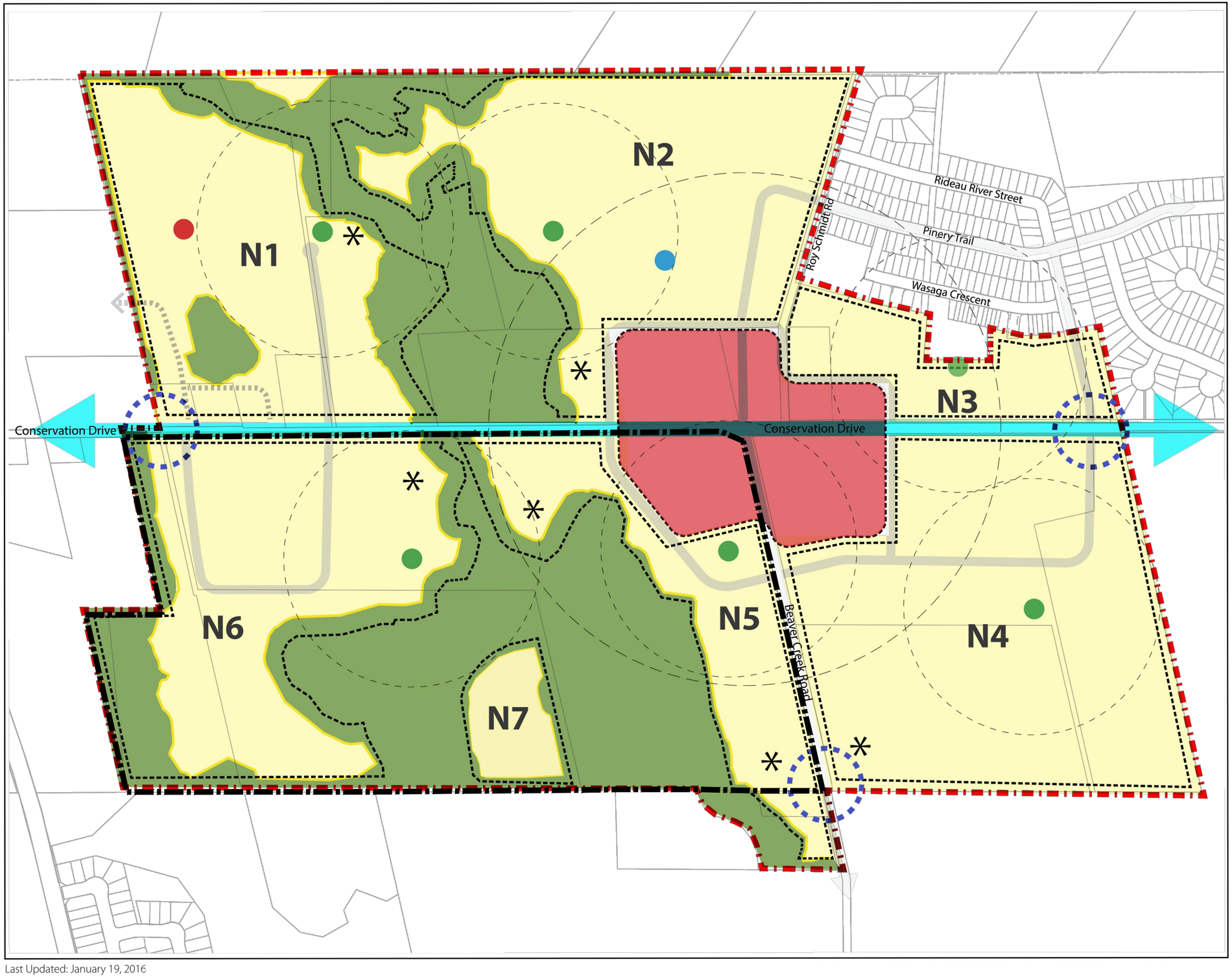
File Name **BLAIR CREEK MEADOWS OVERLAY**

K:\14148A-NORTHGATE-WATERLOO\REPORT\DRAFT PLAN OCTOBER 25 2016-BCM OVERLAY.DWG

Figure 18

BEAVER CREEK MEADOWS DISTRICT PLAN

MAP 2
COMMUNITY STRUCTURE



Subject Lands

LEGEND

- District Plan Boundary
- Neighbourhood
- Mixed Use Node
- Natural System (including buffers)
- Minor Collector Road
- Major Collector Road
- Potential Road Connection
- Potential Stormwater Management Facility
- Potential Park
- Potential Elementary School
- Spiritual Use
- 2-minute Walk (200-metre radius)
- 5-minute Walk (400-metre radius)
- Gateway
- Development Limit

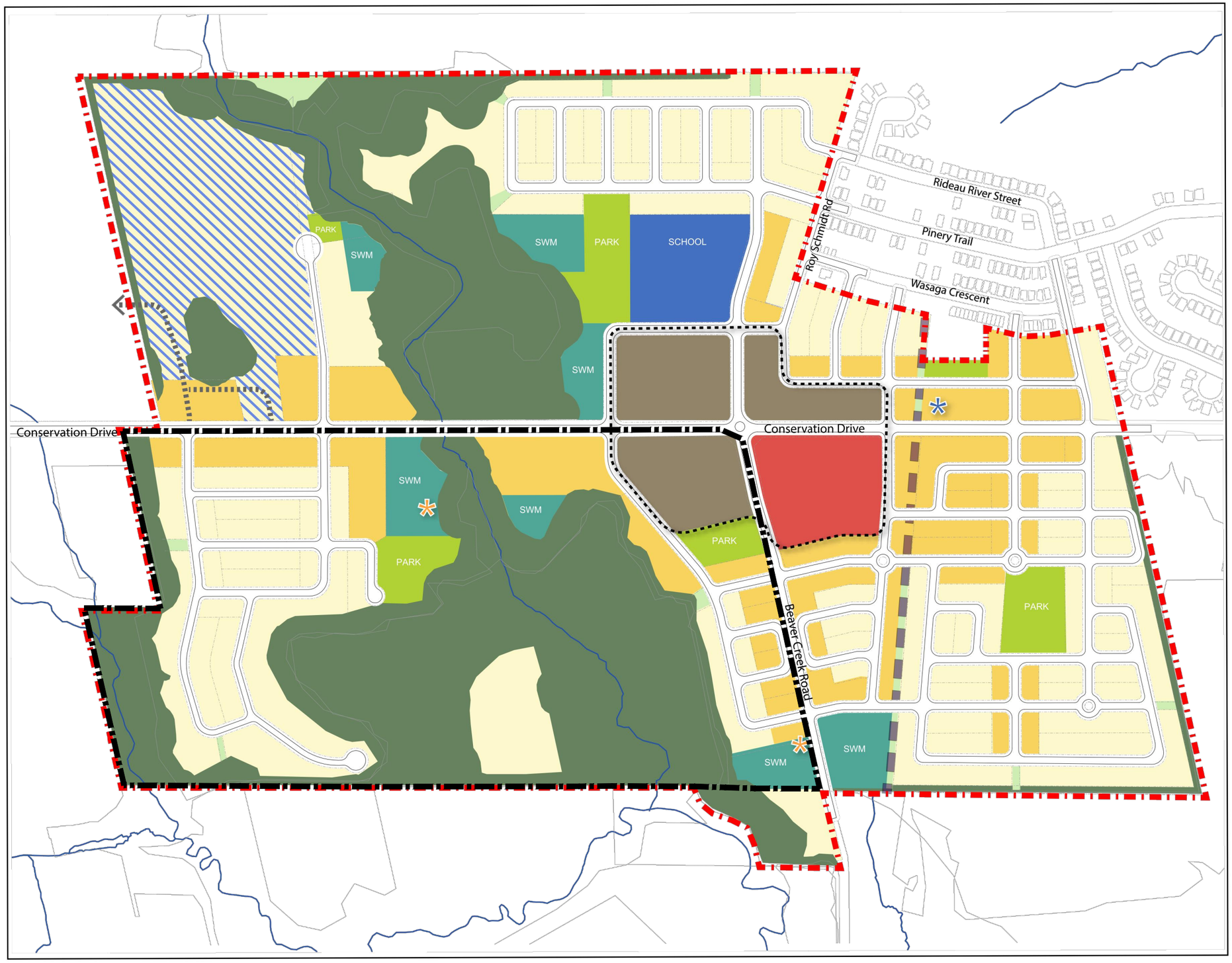
0 50 100 200 300 metres

Last Updated: January 19, 2016

Figure 19

BEAVER CREEK MEADOWS DISTRICT PLAN

MAP 3
LAND USES



Subject Lands

LEGEND

- District Plan Boundary
- Mixed Use Node

Residential Designations

- Low Density Residential 1
- Low Density Residential 2
- Mixed Use Medium Density Residential

Commercial Designations

- Mixed-Use Neighbourhood Commercial

Open Space Designations

- Open Space Land Uses - Park
- Other Green Spaces
- Natural System (includes buffers)

Other Lands and Features

- SWM Stormwater Management Facility
- Temporary Stormwater Management Facility
- Spiritual Use
- Elementary School
- Potential New Road Connection
- Hydro Corridor
- Pumping Station

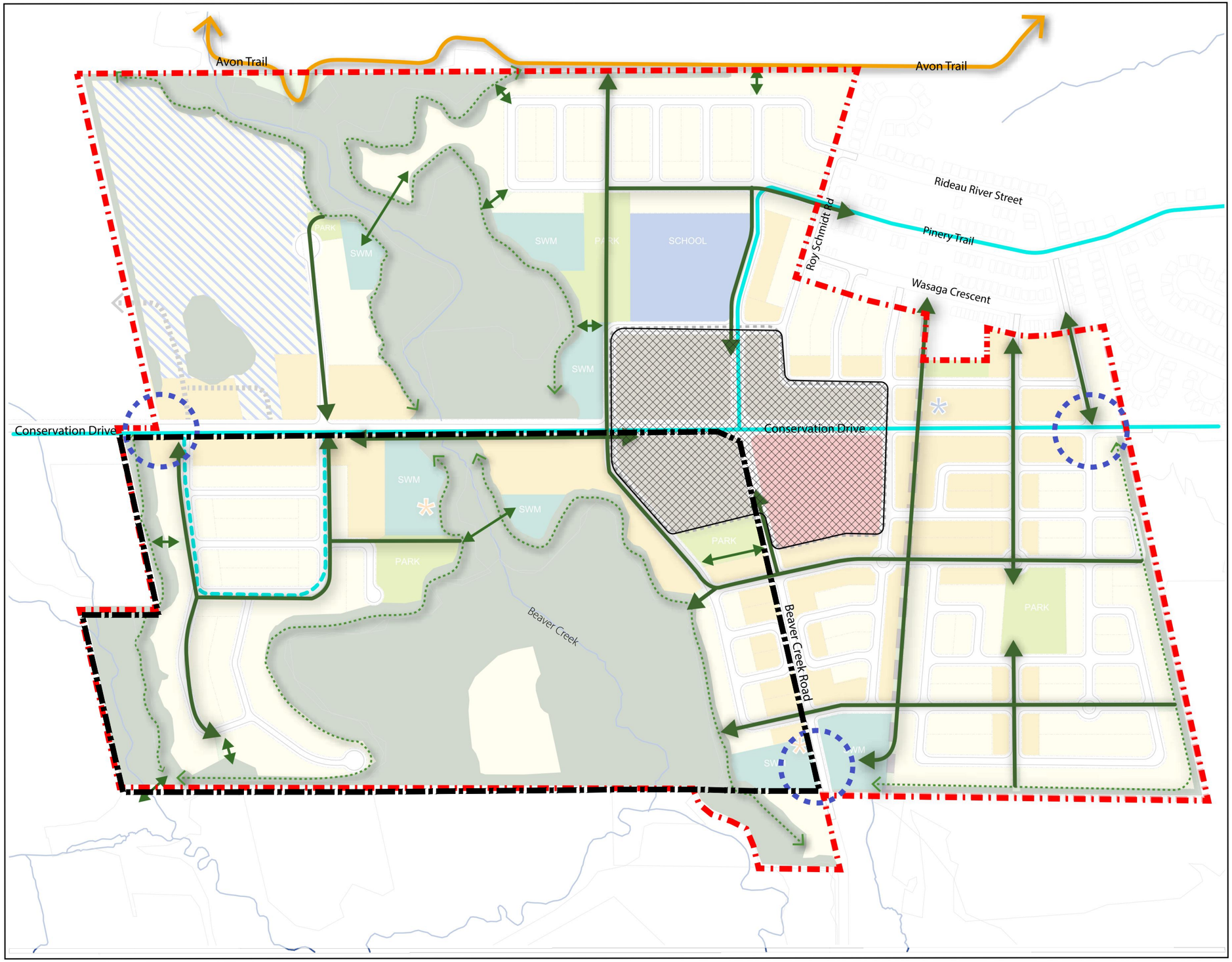
0 50 100 200 300 metres

Last Updated: January 19, 2016

Figure 20

BEAVER CREEK MEADOWS DISTRICT PLAN

MAP 5
ACTIVE TRANSPORTATION



Subject Lands

LEGEND

- District Plan Boundary
- Mixed Use Centre
- Gateways
- Recommended Transit Route (Potential Roads)
- Recommended Transit Route (Potential interim Use of Roads)
- Potential Trail System
- Potential Trail Connections
- Trails within Buffer Area
- Existing Trails
- Natural System (includes buffer)
- Watercourse

0 50 100 200 300 metres

Last Updated: January 19, 2016

9.0 NEIGBOURHOOD DESIGN

9.1 City of Waterloo Urban Design Manual

The proposed Plan of Subdivision is subject to the design objectives of the City of Waterloo's Urban Design Manual as well as the Urban Design Policies of the Beaver Creek Meadows District Plan. A Neighbourhood Design Summary has been prepared to address the objectives. The following summarizes the design objectives and how the design of the proposed subdivision meets these objectives:

- The proposed Plan of Subdivision will incorporate the Core Environmental Features along Beaver Creek and Laurel Creek, which will serve as focal points for the community while providing a setting for outdoor recreation and leisure activities. The Plan of Subdivision has been designed to include pedestrian access and views to the Core Environmental Feature.
- Buildings located within the Mixed Use Node will be designed to reflect the character of the Mixed-Use Node planned for the intersection of Conservation Drive and Beaver Creek Road.
- Streets within the proposed subdivision and along Beaver Creek Road and Conservation Drive will be designed to provide efficient access for pedestrians and cyclists to move through the neighbourhood and surrounding area.
- The layout of the proposed subdivisions will ensure that land is efficiently used.
- The local streets within the subdivision will provide connections to Conservation Drive and Beaver Creek Road. This interconnected road network will provide direct access to transit and active transportation opportunities both within and outside the subdivisions

9.2 Beaver Creek Meadows District Plan Urban Design Policies

The Urban Design Policies of the Beaver Creek Meadows District Plan are intended to promote an appropriate built form within the District Plan area that achieves a community with well-designed and high quality public and private spaces. Based on Section 4.1.2, new development within the District Plan area shall be designed based on achieving the following:

TABLE 8 – COMPLIANCE WITH CITY OF WATERLOO URBAN DESIGN MANUAL DESIGN OBJECTIVE

Design Objective	Proposed Plan of Subdivision Response
A Diversity in Use and Population	• There will be a variety of residential uses in the proposed subdivision. • Single-detached dwelling units, townhouse units and apartment units will provide a range of choice for various demographic groups including young families and those looking to downsize. • The multiple residential dwelling units planned for Block 2 of Stage 3 are located within the Mixed-Use Medium Density Residential designation of the future Mixed-Use Node. • To conform with the designation, these residences may include commercial uses in addition to the multiple residential uses, which will further increase the diversity of uses and users within the proposed subdivision.
Pedestrian-Scaled Built Form	• All future residential and mixed use development will be oriented towards the street, with pedestrian-scaled features. • Entrances and windows facing the streets will help activate the streetscape and contribute to a vibrant community environment. • Front driveway access will be limited to specific lots to create a welcoming pedestrian environment and minimize continuous streetscapes with front driveway access. • Building heights will be limited to 4 storeys in Neighbourhoods 5, 6 and 7 of the District Plan and between 3 and 6 storeys in the future Mixed-Use Node to create a comfortable and proportioned pedestrian environment.
A Complete Active Transportation Network	• Sidewalks will be located along all streets within the proposed subdivision, with connections made to the existing neighbourhood to the north, as well as the future subdivisions to the north of Conservation Drive and east of Beaver Creek Road. • Trail connections will provide direct pedestrian access to within the proposed subdivision, to future subdivisions adjacent to the proposed subdivision and related amenities

Design Objective	Proposed Plan of Subdivision Response
	(i.e. the proposed elementary school north of Conservation Drive). • The proposed subdivision's interconnected street network will provide access for cyclists to the City-wide Cycling and Multi-Use Routes on Conservation Drive and Beaver Creek Road (see **Figure 16**).
A Well-Defined, High-Quality Public Realm	• Decorative entrance features, including signature lampposts and signage, will be incorporated at the designated gateways at Beaver Creek Road and Conservation Drive to create a distinct sense of place. • Blank street-facing facades will be discouraged throughout the proposed subdivision, with high quality architectural articulation encouraged on all facades of future development to improve streetscape aesthetics. • Where possible, landscaping will be incorporated into boulevards, buffers and along walkways to increase the visual quality of the public realm.

Based on the above neighbourhood design analysis, the proposed subdivision meets the five objectives of the City's Urban Design Objectives outlined in Section 3.1(4) of the Official Plan and the Urban Design Policies of the Beaver Creek Meadows District Plan.

A Neighbourhood Design Summary is provided in **Appendix B** illustrating how the proposed subdivisions are consistent with the above design objectives.

10.0 PUBLIC CONSULTATION STRATEGY

As of July 1, 2016, changes to the Planning Act (O. Reg 544/06, amended by O. Reg 178/16) require that applicants submit a proposed strategy for consulting with the public with respect to an application as part of the 'complete' application requirements. This section summarizes the proposed Public Consultation Strategy.

We propose that the public consultation process for the proposed Plans of Subdivision, Plans of Condominium and Zoning By-law Amendment applications follow the Planning Act statutory requirements and the City's standard practices outlined in Section 12.4 of the Official Plan. The following points of public consultation are proposed:

- An informal neighbourhood open house. All technical studies and reports will be available at the open house. Sign-in and comment sheets will also be available for public input. This information will be provided to City Staff and assessed/reviewed by the consulting team.
- An informal public meeting advertised by the City and heard by the Committee of the Whole.
- An additional informal neighbourhood meeting (if required) depending upon comments received at the informal public meeting.
- Direct written responses to comments raised through the public consultation process will be provided to City Staff for their review and consideration in the preparation of a City Staff Report.
- Preparation of a City Staff Report, with the Report to be available to the public in advance of City Council's consideration of the applications. It is understood that City Staff will post information on the City's website for public review. This will include the City Staff Report, open house materials, and may also include technical studies and reports prepared in support of the applications.
- A Public Meeting will be held by Committee/Council at which time the City Staff Report, all available information, and public input will be considered.
- In addition to this formal process, there will be informal opportunities to dialogue with the public.

The consultation strategy proposed will provide members of the public with opportunities to review, understand and comment on the proposed Plan of Subdivision and Zoning By-law Amendment applications. The consultation strategy will be coordinated with City Staff and additional opportunities for consultation will be considered and may be warranted based on the input received.

11.0 SUMMARY OF ADDITIONAL REPORTS

11.1 Functional Servicing Report

MTE Consultants Inc. prepared a Functional Servicing report in support of the applications. The purpose of the report was to recommend a servicing strategy for the proposed subject lands and outlines how the subdivisions can be developed on full municipal services, including sanitary sewage collection, domestic water, storm drainage and utilities.

Key findings and conclusions from the functional servicing report are as follows:

1. The proposed development can be adequately serviced with the planned construction of the Conservation Drive and Beaver Creek Road sanitary pumping stations. Final design of these two facilities is currently underway by Stantec.
2. Water supply for the proposed development will be provided by four connection points to the planned extension of the existing municipal water distribution system. It is expected that the 300mm watermain extensions will be undertaken coincident with upgrading both Conservation Drive and Beaver Creek Road prior to servicing of the subject lands.
3. Stormwater management for the development can be accommodated in the proposed downstream SWM Facilities as outlined in the Preliminary Stormwater Management Report – MTE, June 2017.
4. Overall site grading will provide for 'major' overland flow conveyance to the downstream SWM Facilities, provide adequate cover over municipal services and generally match existing road and boundary grades with appropriate slopes. The following are the only exceptions: two narrow 3:1 slopes within setback buffers and 50m of 1.2m maximum height retaining wall, as shown on MTE Drawing 39502-104-AG1.1 enclosed.

11.2 Preliminary Stormwater Management Report

MTE Consultants Inc. prepared a Preliminary Stormwater Management Report in support of the applications. The purpose of the report was to develop a comprehensive stormwater management strategy for the current development proposal, taking the findings of previous studies into consideration, and that is

acceptable to the City of Waterloo, Region of Waterloo, the Grand River Conservation Authority (GRCA) and the Ministry of Environment and Climate Change (MOECC).

The objective of this stormwater management plan is to ensure that the proposed development includes the necessary controls to protect the hydrology and water quality of the receiving water systems. Further, this plan also ensures that the proposed draft plan provides the necessary blocks and corridors for stormwater management measures. The primary objectives of this study are as follows:

- Document criteria for the management of stormwater runoff from the study area;
- Recommend a comprehensive plan for controlling the quality of stormwater runoff from the study area (including temperature mitigation as required);
- Recommend a comprehensive plan for controlling the quantity of stormwater runoff from the study area;
- Recommend a comprehensive plan for balancing infiltration to groundwater and surface water inputs to existing features; and
- Prepare preliminary designs for the recommended stormwater management infrastructure.

Key findings and conclusions from the function servicing report are as follows:

Based on the foregoing analyses, it is concluded that:

1. The storm water management strategy outlined herein will provide the Northgate and Erbsville Kartway developments with appropriate levels of quality, quantity, erosion, water balance and temperature control.
2. "Enhanced" quality control of storm water runoff can be provided in the proposed stormwater management facility.
3. Quantity control targets for post-development peak flows as identified through the current conditions GAWSER modeling can be achieved in the proposed stormwater management facility for the 2 year through the 100 year storm events.
4. Adequate storage and release rate control has been provided to meet the extended detention storage and drawdown requirements for the 25 mm storm events.
5. Implementing erosion and sediment controls during construction will minimize any negative impacts of construction activities on the adjacent properties and the receiving watercourse.
6. Water Balance targets can be satisfactorily met through the use of the prescribed lot-level, conveyance, and end-of-pipe infiltration measures as described within this report.

The findings of this report, and the above conclusions, lead to the following recommendations:

1. That a quality/quantity control stormwater management facility be constructed to provide control of storm water as described in Sections 4 and 5 of the report.

2. That the Water Balance, as calculated in this report, be reviewed and re-confirmed during final design.
3. That during the site grading operations, soils be selectively excavated and placed, under the supervision of a geotechnical engineer, in order to maximize the post-development areas suitable for infiltration.
4. That erosion and sediment controls during construction as described in Section 6 of the report be implemented.
5. That the conceptual design and modeling of the future stormwater management facilities contained within the subwatershed model, but beyond the scope of the report, be reviewed and re-confirmed at the time of preliminary design for those lands.

11.3 Hydrogeology Study

MTE Consultants Inc. prepared a Hydrogeology Study in support of the applications. The purpose of the Hydrogeology Study was to develop a comprehensive Conceptual Site Model (CSM), which captures the local scale geologic and hydrogeologic understanding, in order to help identify and address potential areas of concern related to the proposed future development. The objectives of the Hydrogeology Study are:

- Describe the local scale geology and hydrogeology in relation to the regional scale context;
- Assess hydraulic conditions and functions of the local scale water features (i.e. Beaver Creek, groundwater seepage and/or wetlands);
- Assess suitability of soil conditions for stormwater management ponds and infiltration facilities; and
- Identify and address potential areas of concerns related to groundwater and environmental feature impacts (i.e. impacts on water quality and water quantity) as they relate to the proposed use changes for the site.

MTE recommends the following:

- Continued groundwater monitoring prior to Final Design, including the collection of groundwater levels, groundwater and surface water quality samples.
- The on-going groundwater monitoring program will continue to document preconstruction groundwater conditions. Any monitoring wells requiring decommissioning to allow for construction activities to take place shall be decommissioned in accordance with Ontario Regulation 903 (as amended).
- Since soil infiltration rates are an important consideration for SWM planning and design, MTE recommends that in-situ permeameter tests be conducted within the vicinity of the proposed infiltration facilities to confirm the estimates put forth in Section 5.1 and Section 5.2 of the report.
- MTE recommends that groundwater mounding calculations be re-visited during final design to ensure appropriate separation from infiltration facilities and high groundwater levels.

- MTE recommends performing a private well inventory of existing wells to establish background water level and water quality conditions prior to construction dewatering activities.
- A construction dewatering assessment will be required to determine if a Permit to Take Water (PTTW) is needed.

11.4 Preliminary Environmental Noise Assessment

MTE Consultants Inc. prepared an Environmental Noise Assessment in support of the applications. The purpose of the study is to determine the noise impact from Conservation Drive, Beaver Creek Road and Erbsville Road on the subject property, and recommend noise control measures to meet the Ministry of Environment's guidelines while satisfying the planning requirements of the City of Waterloo and the Regional Municipality of Waterloo.

The following conclusions and recommendations are made for this development:

1. Control measures in the form of a noise wall and/or berm may be required for blocks/lots with Outdoor Living Areas between Conservation Drive segment 1, Conservation Drive segment 2 and Setback line 2. Consideration should be given to orienting Outdoor Living Areas to the rear of buildings to minimize noise wall requirements.
2. Control measures in the form of a noise warning clause are required for Outdoor Amenity Areas (OAA) between Setback line 2 and Setback Line 3.
3. Forced air heating with provisions for central air conditioning is to be installed in all dwellings built between the Setback Line 1 and Setback Line 3, such that the unattenuated noise does not adversely affect the occupants.
4. The requirement for noise warning clauses shall be included in the registered subdivision agreement upon completion of a Final Environmental Noise Assessment. These noise warning clauses could be worded as follows:

   Lots between Conservation Drive (segments 1 and 2) and SBL 2

   NWC TYPE B & C: Purchasers/tenants are advised that despite the inclusion of noise control features in the development and within the building units, sound levels due to increasing road traffic may on occasions interfere with some activities of the dwelling occupants as the sound levels exceed the sound level limits of the Municipality and the Ministry of Environment. This dwelling unit has been designed with the provision for adding central air conditioning at the occupant's discretion. Installation of central air conditioning by the occupant in low and medium density developments will allow windows and exterior doors to remain closed, thereby ensuring that the indoor sound levels are within the sound level limits of the Municipality and the Ministry of Environment.

   Lots with OAA's between SBL 2 and SBL 3

NWC TYPE A: Purchasers/tenants are advised that the sound levels due to increasing road traffic may occasionally interfere with some activities of the dwelling occupants as the sound levels exceed the sound level limits of the Municipality and the Ministry of Environment.

Lots between SBL 1 and SBL 3

NWC TYPE A & C: Purchasers/tenants are advised that the sound levels due to increasing road traffic may occasionally interfere with some activities of the dwelling occupants as the sound levels exceed the sound level limits of the Municipality and the Ministry of Environment. This dwelling unit has been designed with the provision for adding central air conditioning at the occupant's discretion. Installation of central air conditioning by the occupant in low and medium density developments will allow windows and exterior doors to remain closed, thereby ensuring that the indoor sound levels are within the sound level limits of the Municipality and the Ministry of Environment.

It is recommended that:

1. A Final Noise Assessment Report be completed as part of Final Engineering for each of the Northgate and Erbsville Kartway Subdivisions once finished grades and house locations have been established.

11.5 Environmental Impact Study

Natural Resource Solutions Inc. prepared an environmental impact study (EIS) in support of the applications. This EIS builds on the characterization of natural features presented in the NWSSS (Ecoplans et al 2013), and incorporates the findings of the 3 years of pre-construction biological and water monitoring that has been completed specifically on the subject property. The analysis of natural feature significance and ecological functions in the NWSSS is further substantiated by this most recent work.

The NWSSS provides recommendations on management, development setbacks and buffers and these were relied on in order to design the layout of the proposed development in addition to other physical constraints as well as planning, transportation, grading and servicing considerations. The development layout adheres to the natural feature buffers recommended in the NWSSS (Ecoplans et al. 2013), with the exception of minor encroachment into the outer 15m of the wetland buffer, or the outer 5m of the woodland buffer for stormwater management, transition grading and trails. Total encroachment into buffers is 0.12ha. This encroachment is considered minor and is not anticipated to be a negative impact to the wetland/woodland and creeks, their functions or wildlife species. There are additional lands to be added to the buffers that more than off-set this encroachment. Buffers will be allowed to naturalize and will be supplemented with plantings in areas where there is soil erosion (adjacent to Beaver Creek), where buffer width has been reduced adjacent to residential lots, as well as along the access road in Stage 5. Rear lot fencing, a designated trail system and homeowner education are further methods of mitigating the potential for impacts due to residents.

A stormwater management report has been prepared by MTE that shows how the design meets the criteria of provincial and local policies (MOE, GRCA, City of Waterloo) and the NWSSS for quantity, quality, erosion control, infiltration and thermal mitigation. The forebay and wetland of the SWM facility are outside of the

protected general habitat for Blanding's Turtle. Infiltration is a key part of the stormwater management design which incorporates a mix of lot-level, conveyance and end of pipe techniques and facilities to maintain and enhance infiltration occurring on-site. LID measures including permeable pavement and a bioswale are proposed in the central field to enhance infiltration. Post-development infiltration is expected to exceed pre-development infiltration which will be a benefit and enhancement to the wetlands, Laurel Creek and Beaver Creek and their habitats.

Mitigation and compliance monitoring measures are provided by the team of MTE and NRSI to avoid, minimize and alleviate any potential impacts during construction and occupancy. An outline of a during and post-construction monitoring program has been provided which includes biological, surface water and groundwater monitoring as well as performance monitoring of the stormwater management facilities. This program will aim to track and compare the environmental conditions during and post-development and compare those to the pre-development monitoring results and the targets set in the NWSSS to identify any changes that may be related to the development and are not due to weather patterns or other natural cycles.

The Stewardship Plan as described in Section 6.0 and shown on Map 8 of the EIS demonstrates the commitment of the applicants to protecting natural areas, and enhancing and restoring ecological functions on the subject property to the benefit of the subwatershed study area. The plan shows how the development will provide a buffer between natural features and the development and places open space land uses such as stormwater management and parks adjacent to the natural areas. The riparian corridor of Beaver Creek will effectively be widened to over 125m and forest interior habitat in ESPA 80 will be more than doubled to 1.58ha on-site. Taking into account the layout of the development, the stormwater management plan, the monitoring program and the stewardship plan, and assuming the recommendations in this EIS and the reports of the study team are implemented no significant negative impacts to natural features are anticipated as a result of the proposed development.

11.6 Archaeological Assessment (Stages 1 & 2)

Mayer Archaeological Consultants prepared a Stage 1 and 2 Archaeological Assessment in support of the applications.

The Stage 1 archaeological assessment determined that portions of the property had archaeological potential and required a Stage 2 archaeological assessment. Forty-five percent of the study area is actively cultivated agricultural field. This portion of the study area required Stage 2 assessment using pedestrian survey. Approximately 10 percent of the study area was manicured lawn with a fenced cart racing track, a picnic area, a miniature golf course, a miniature race track and an existing house. This portion of the property could not be ploughed because of potential damage to existing landscaping and infrastructure and because a plough could not access the lot, therefore Stage 2 assessment was conducted using the test pit survey method. Six sites were identified as a result of the Stage 2 property assessment.

The following recommendations are made:

1. The Euro-Canadian site identified in the report as Location 1 does not meet the criteria for requiring Stage 3 assessment listed in Section 2.2. Standard 1 of the Ontario Ministry of Tourism, Culture and Sport's *2011 Standards and Guidelines for Consultant Archaeologists*. Location 1 is deemed to have little cultural heritage value or interest and it is considered sufficiently assessed at Stage 2. As such, no additional fieldwork or assessment is recommended for Location 1.
2. The Euro-Canadian site identified in the report as Location 2 does not meet the criteria for requiring Stage 3 assessment listed in Section 2.2. Standard 1 of the Ontario Ministry of Tourism, Culture and Sport's *2011 Standards and Guidelines for Consultant Archaeologists*. Location 2 is deemed to have little cultural heritage value or interest and it is considered sufficiently assessed at Stage 2. As such, no additional fieldwork or assessment is recommended for Location 2.
3. The Euro-Canadian site identified in the report as Location 3 does not meet the criteria for requiring Stage 3 assessment listed in Section 2.2. Standard 1 of the Ontario Ministry of Tourism, Culture and Sport's *2011 Standards and Guidelines for Consultant Archaeologists*. Location 3 is deemed to have little cultural heritage value or interest and it is considered sufficiently assessed at Stage 2. As such, no additional fieldwork or assessment is recommended for Location 3.
4. The Late Archaic Aboriginal site identified in the report as Location 4, AiHd-168, does not meet the criteria for requiring Stage 3 assessment listed in Section 2.2. Standard 1 of the Ontario Ministry of Tourism, Culture and Sport's *2011 Standards and Guidelines for Consultant Archaeologists*. Location 4 is deemed to have little cultural heritage value or interest and it is considered sufficiently assessed at Stage 2. As such, no additional fieldwork or assessment is recommended for Location 4.
5. The Euro-Canadian site identified in the report as Location 5 does not meet the criteria for requiring Stage 3 assessment listed in Section 2.2. Standard 1 of the Ontario Ministry of Tourism, Culture and Sport's *2011 Standards and Guidelines for Consultant Archaeologists*. Location 5 is deemed to have little cultural heritage value or interest and it is considered sufficiently assessed at Stage 2. As such, no additional fieldwork or assessment is recommended for Location 5.
6. The Euro-Canadian site identified in the report as Location 6 does not meet the criteria for requiring Stage 3 assessment listed in Section 2.2. Standard 1 of the Ontario Ministry of Tourism, Culture and Sport's *2011 Standards and Guidelines for Consultant Archaeologists*. Location 6 is deemed to have little cultural heritage value or interest and it is considered sufficiently assessed at Stage 2. As such, no additional fieldwork or assessment is recommended for Location 6.
7. Woodlot surrounding Beaver Creek and accounting for 25 percent of the study area, as shown on Maps 5 to 8 of the report, was not assessed because it is situated within a protected development setback area. This area was not assessed as per instructions by the proponent. As per Section 7.8.1 Standard 1e(i, ii, iii, iv, v) of the *Standards and Guidelines for Consultant Archaeologists* supplementary documents are required for areas formally prohibited from development and exempt from Stage 2 assessment, but which have been identified through Stage 1 assessment as having archaeological potential. As appropriate supporting documentation has not been received from the proponent

and the approval authority as of the writing of this report, a Stage 2 assessment is recommended for the woodlot because it has archaeological potential. The Stage 2 assessment should occur through test pit survey at a five metre interval.

12.0 SUMMARY

In conclusion, the proposed Plans of Subdivision, Plans of Condominium and Zoning By-law Amendment applications are reflective of sound land use planning practices and are appropriate for the subject lands. The proposed subdivisions are consistent with the Provincial Policy Statement, conform to the Growth Plan for the Greater Golden Horseshoe and the Region of Waterloo Official Plan, and conforms to the broader policy framework and intent of the City of Waterloo Official Plan for the following reasons:

- The proposed subdivisions will contribute to the greenfield density target of the Growth Plan, Region of Waterloo Official Plan and City of Waterloo Official Plan;
- The proposed subdivisions will contribute to the range and type of dwelling units available within the Beaver Creek Meadows District;
- The proposed subdivisions will contribute to the future build-out of the Beaver Creek Meadows District and the creation of a complete community;
- The proposed subdivisions can be adequately serviced with planned municipal infrastructure;
- The proposed subdivisions have been designed to provide opportunities for active transportation and will provide support for the future extension of transit services; and
- The proposed subdivisions will provide direct pedestrian connections to existing and proposed park and open space areas within the Beaver Creek Meadows District and adjacent areas.

Accordingly, it is concluded that the proposed Plans of Subdivision, Plans of Condominium and Zoning By-law Amendment applications are appropriate and represent good planning.

APPENDIX A

Records of Pre-Consultation
City of Waterloo and Region of Waterloo
November 23, 2016

Record of Pre-submission Consultation

Region of Waterloo

The purpose of the Pre-submission Consultation Meeting is to review a proposed development application and identify the need for, and scope of, the *other information and materials* necessary for a thorough review of the development application. This Record of pre-submission consultation documents the required *other information and materials* that must be submitted in conjunction with the application form and fees. It will be used by Planning Staff in determining whether the application is complete. This form does not preclude staff or other agencies from requiring additional reports/studies/plans throughout the development review process as required.

Owner: Northgate Land Corporation / Erbsville Kartway

Applicant:

Agent: MHBC Planning

File No (if applicable):

Project Name:

Type of Application: Plan of Subdivision

Site Location: Southwest Corner Conservation Dr. and Beaver Creek Rd, Waterloo

Meeting Date(s): November 23, 2016

Submission Date: October 28, 2016

Meeting Participants:

Name	Agency	Contact
Paul Britton	MHBC Planning	
Dave Aston	MHBC Planning	
Paul Grespan	Applicant	
Phil Quickfall	City of Waterloo	
Laura Dewar	City of Waterloo	
Trevor Hawkins	City of Waterloo	
Barb Magee Turner	City of Waterloo	
Tim Van Hinte	Region of Waterloo	
Shilling Yip	Region of Waterloo	

File Summary:
Northgate Land Corporation and Erbsville Kartway are proposing plans of subdivision and vacant land condominium to provide for a range of low rise residential units (628 to 948 units) consisting of a mix of singles, street-fronting townhouses and multiples, together with blocks for SWM, pumping station, park and open space on full municipal services. The total land area comprises 35.06 ha with the Northgate lands having land area of 28.64 ha, and Erbsville Kartway having area of 6.42 ha.

The site is situated on the south side of Conservation Drive immediately west of Beaver Creek Road in the new Beaver Creek Meadows District area of the City of Waterloo. A corresponding City of Waterloo zone change application will be required for the uses proposed.

Presubmission Consultation Meeting
A joint presubmission meeting for the plans of subdivision and vacant land condominium, and corresponding zone change applications was held at the City of Waterloo on November 23, 2016.

Each landowner is expecting to submit their own Planning Act applications, with the submission of joint technical studies where appropriate.

Where lands are identified as vacant land condominium, these same lands must also be included in the plan of subdivision. Both plans of subdivision and condominium may be processed concurrently.

A combination public and private street network is proposed.

Agency Comments
The proposal was circulated to the following agencies: City of Waterloo, Bell Canada, Union Gas, Rogers Cable Communications, Waterloo Region District School Board, Waterloo Catholic District School Board, Conseil scolaire de district catholique Centre-Sud, Conseil scolaire de District du Centre-Sud-Quest, Telecon Design (Telus), Hydro One Networks, Waterloo North Hydro, Township of Woolwich, Canada Post, and the Grand River Conservation Authority.

The following agencies have no concerns at this time: Woolwich Township, Waterloo Region District School Board, Hydro One Networks, and Telecon Design (Telus).

No responses were received from: Waterloo North Hydro, Bell Canada, Waterloo Catholic District School Board, Conseil scolaire de district catholique Centre-Sud, Conseil scolaire de District du Centre-Sud-Quest, Rogers Cable Communications, Union Gas, and Canada Post.

<u>Grand River Conservation Authority</u>
The Grand River Conservation Authority has indicated a portion of the site is within a GRCA regulated area. Comments will be provided by the Conservation Authority under separate cover.

<u>City of Waterloo</u>
Comments were received from City of Waterloo (December 15, 2016) – These are attached. A summary of City of Waterloo discussions at the November 23rd presubmission meeting has been included in the City's letter of December 15th. The City's complete application requirements have also been included in this letter. Please be advised the required copies of reports and so on noted by the City are in addition to those copies required by the Region in the attached table at the end of this document.

Attached are Concept Plans discussed at the meeting related to two of the residential blocks.

Region of Waterloo Comments

Water Services

A servicing report will be required.

The property is located in north section of pressure zone Waterloo 5 with a static hydraulic grade line of 404.9 mASL and adjacent to pressure zone Waterloo 4c with a static hydraulic grade line of 405 mASL.

A pending plan of subdivision 30T-16402 is located north of this subject property. It is currently being reviewed with supply proposed from Pressure Zone Waterloo 4c with knowledge of the changes in the future to the pressure zone boundaries.

The plan as submitted with the proposed creation of parcels through the vacant land condominium application may result in the creation of a Non-Municipal Year-Round Residential System (NMYRRS) under the Safe Drinking Water Act (SDWA), 2002. To this end, prior to draft approval, the City, as the provider of water services in this area, is asked to confirm whether the servicing and parcel configuration meet the definition of a NMYRRS.

If confirmed that a NMYRRS will be created, the Owner is advised to consult with the City to determine what, if any, requirements may be applicable under the Safe Drinking Water Act. Furthermore, as conditions of draft approval, the City of Waterloo will be required to provide the Region with a copy of the municipal consent submitted to the Ministry of the Environment and Climate Change as required by the Safe Drinking Water Act, *2002, S.O. 2002, c. 32*, and a copy of a registered agreement, where applicable, which secures the terms and conditions of the municipal consent. The Owner will be required to register the Drinking Water System within 30 days of receiving municipal consent, and include provisions in the final Condominium Declaration, to the satisfaction of the Region of Waterloo, and advising unit owners/tenants that of the Drinking Water and that the Corporation will be responsible to carry out all duties and obligations for the operation and maintenance of the System, in accordance with the *Safe Drinking Water Act, 2002, S.O. 2002, c. 32.*

The Region Water Services Division had a study completed on October 4 2016. "Consolidation of Waterloo North Pressure Zones – Staging and Implementation Plan" prepared by Stantec Consulting Ltd.

The purpose for the study: Pressure zones Waterloo 4B (WAT 4B), Waterloo 4C (WAT 4C), and Waterloo 5 (WAT 5) are located in the north-central area of Waterloo and operate at similar Hydraulic Grade Lines (HGL). An opportunity to reduce operations and maintenance costs has been identified by consolidating these pressure zones and decommissioning the pump stations that currently supply water to WAT 4B and WAT 4C (i.e. the Northfield Pumping Station (PS) and Lakeshore PS). The consolidation of WAT 4B, WAT 4C, and WAT 5 was evaluated as part of the Water Supply and Distribution Operations Master Plan (WSDOMP) to determine the infrastructure required to transfer WAT 4B and WAT 4C to WAT 5 and a preliminary staging and implementation plan was outlined. Subsequently, this study was initiated to develop a detailed timing and implementation plan to account for the staging of development and local infrastructure.

Two attachments have been included from the Report that provides locations and proposed timing for the watermains and infrastructure changes identified in the study. In summary, the site will require the 300 mm dia watermain loop on Erbsville Rd, Beaver Creek Rd and Conservation Dr to be constructed at minimum for an initial stage to proceed. Modelling will be required to support this assumption.

Any development with a finished road elevation below 348.7 mASL will require individual pressure reducing devices on each water service in accordance with Section B.2.4.7 of the Design Guidelines and Supplemental Specifications for Municipal Services for January 2016.

In summary, the Servicing Report should address timing of changes to the Pressure Zones and how this application will function under average day and maximum day scenarios and fire flow conditions. Pressure reducing devices should also be addressed.

Source Water Protection

The proposed development lies within WPSA 8 of the Waterloo North Well Field. As required under the Regional Official Plan, geothermal wells will not be permitted without additional study.

Hydrogeology & Source Water (HSW) staff will require a hydrogeological assessment, preliminary and SWM report and, depending on the nature of the stormwater controls proposed, a chloride impact assessment. The applicant is asked to contact Mr. Geoff Moroz, Project Hydrogeologist, in HSW to discuss this latter requirement further (gmoroz@regionofwaterloo.ca or 519-575-4757 x4671).

Salt Management Plans will be required for any multi-residential, commercial, institutional, industrial and community property uses, as well as any private roads proposed. These SMPs would be required at Site Plan.

Any private water supply wells will be required to be decommissioned in accordance with Ontario Regulation 903 (as amended).

Grand River Transit

At this point GRT does not have any firm timelines for service to be implemented in this area. However, as GRT has indicated in comments from previous applications in this area, the main transit route would use Conservation Drive within this plan. The distance along Conservation Dr. is just less than 1000 metres and would therefore warrant 4 local bus stops, three within the Northgate Land Corporation area and one within the Erbsville Kartway area. Transit will require the developer to fund the installation of concrete landing pads for these stops. The price for each pad is currently $2,700 each, for a total of $10,800 for all four pads.

Based on the current information, general stop locations would be as follows:

- South side of Conservation Drive nearside Beaver Creek Road adjacent to Block 4
- South side of Conservation Drive adjacent to Block 3
- South side of Conservation Drive, far side Street Two adjacent to Block 19
- Erbsville Kartway - South side of Conservation Drive adjacent to Block 4

Please see the attached illustration for more details.

More specific details regarding stop locations can be determined when further details of the development are available. Stop locations should be integrated as to minimize impacts to any front yards and to ensure that there are no conflicts with any driveway accesses and on-street parking

Road Traffic Noise Study

At this location the proposed development may encounter environmental noise sources (Road) as it is located adjacent to Conservation Dr. It is the responsibility of the applicant to ensure the development is not adversely affected by anticipated noise impacts. In this regard the applicant must prepare an Environmental Noise Study. The noise level criteria and guidelines for the preparation of the study should follow the Ministry of the Environment NPC-300 requirements.

The consultant who prepares the Environmental Noise Study must be pre-approved by the Region of Waterloo. The noise consultant is responsible for obtaining current information, applying professional expertise in performing calculations, making detailed and justified recommendations, submitting the Consultant Noise Study Declaration and Owner/Authorized Agent Statement along with 4 copies of the report directly to the Region of Waterloo.

The consultant preparing the Environmental Noise Study must contact Region of Waterloo staff for transportation data including traffic forecasts and truck percentages for the purpose of preparing the Environmental Noise Study. Region of Waterloo staff will provide this data within three weeks of receiving the request from the noise consultant.

Please note that there is a $250 fee for the preparation of traffic forecasts and review of Environmental Noise Studies. The noise consultant preparing the Environmental Noise Study must complete and submit a Transportation Planning Noise Assessment Fee Form and must request forecasted traffic data for the appropriate Regional roadways.

The form can be found at:

http://www.regionofwaterloo.ca/en/doingBusiness/resources/Noise_Assessment_Application__Fee_Form.pdf

As indicated on the form, traffic forecasts for noise assessments will be prepared within 15 business days of the data of the request, but will be withheld if payment has not been received.

Land Use Compatibility

The existing go-kart operation on the property is considered an incompatible use with the residential uses proposed. Staff understands the go-kart use will cease to operate once development proceeds. Should this not be the case, a stationary noise study will be required, including details how NPC 300 noise level objectives will be met due to staging.

Environmental Planning

Environmental planning staff has reviewed the pre-submission information and the following is provided at this time.

1. The subject lands contain and are contiguous to a Core Environmental Feature (ESPA 80 – Laurel Creek Forest) which is designated in the Regional Official Plan (ROP). In accordance with ROP Policy 7.C.10, development or site alteration may only be permitted on lands contiguous to Core Environmental Features where an Environmental Impact Statement (EIS) has demonstrated to the satisfaction of the Region that the proposed development would not result in adverse environmental impacts on the feature and its ecological functions. To this end, the applicant is required to submit a scoped EIS to the satisfaction of the Region prior to approval.

2. The Terms of Reference for the EIS was scoped by the Region's Ecological and Environmental Advisory Committee (EEAC) on February 29, 2016 and included the following:

    a. confirmation of an ecologically appropriate boundary of ESPA 80 within the subject lands;

b. delineation and design of suitable buffers between ESPA 80 and the proposed development on the subject lands;

c. a biophysical survey to identify natural habitats and/or populations of Regionally significant plant and animal species on the subject lands that might be adversely affected by the proposed development;

d. maintaining quantitative and qualitative aspects of the hydrological and hydrogeological regimes sustaining wetland features within ESPA 80 through design, construction, and operation of a stormwater management system required to support the proposed development;

e. identification of ecological enhancement, restoration and long-term stewardship opportunities for ESPA 80 on the subject lands;

f. identification of items covered in the North Waterloo Scoped Sub-watershed Study (NWSSS) and pre-development monitoring that may require special attention during site alteration and development;

g. content of a during-development and post-development monitoring program; and

h. consideration of the ecological implications of ecologically restoring the agricultural field inside the northern lobe of ESPA 80 as an alternative to residential development.

3. Staff attended the pre-submission meeting held on November 23, 2016, have reviewed the proposed Draft Plan of Subdivision (MHBC Planning, October 25, 2016) and provide the following comments:

- At the meeting, the future ownership/stewardship of ESPA 80 within the subject lands was discussed. Staff understands that the applicant is proposing that ESPA 80 be owned in the future by one or more of the proposed condominium corporations to be located contiguous to the feature and its required buffers. In accordance with ROP Policy 7.I.10, staff prefers that Core Environmental Features in urban areas such as this be owned by public bodies/agencies. Accordingly, we recommend that the City of Waterloo give consideration to securing ownership of the ESPA. If ESPA 80 is to remain in private ownership, Regional staff will require as a condition of approval that a comprehensive conservation easement be registered on title in favour of the Region, City of Waterloo, or Grand River Conservation Authority (which owns an adjoining Conservation Area) in order to ensure that the recommendations of the NWSSS, the forthcoming EIS in support of the development, and the requirements of relevant review agencies are implemented.

- At the meeting, access to the landlocked parcel to the south of the subject lands owned by Trillium Estates Limited was discussed. This parcel was known as "Block 41" when the adjoining Trillium Subdivision was approved in the early 1990s and ESPA 80 was designated in 1995. Although it was excluded from the original ESPA designation in 1995, it was subsequently included in the Core Environmental Feature designation in the 2015 approved ROP. The applicant raised the matter of an easement over the subject lands to provide access to this property, but it is not known at this time whether such an easement is in place. If access

is to be provided to this landlocked parcel through Block 1 (Stage 5) and the required buffer, staff requires that this be justified in the Planning Justification Report and examined in detail in the EIS.

- Staff notes that if a pedestrian connection through the ESPA and across Beaver Creek is proposed (as shown on Map 5 of the Beaver Creek Meadows District Plan), potential options for its alignment should be evaluated in the EIS.

- A 5-metre setback from the hedgerow in Block 7 (Stage 1) should be shown in accordance with the NWSSS.

- Block 1 (Stage 6) shows an access road into the internal cleared field aligned along the existing farm lane that was widened some years ago by clear-cutting trees along either side apparently to facilitate the entry of large agricultural equipment to the field. When the NWSSS was being conducted, Regional staff deferred further consideration of an appropriate ESPA boundary in this locality to the review of an EIS in support of a future development application. The road presupposes that such a boundary interpretation has been supported and, as such, may be premature at this time.

Following submission of the EIS, a site inspection will be required under appropriate seasonal conditions with the EEAC subcommittee reviewing this application. Please contact Tim Van Hinte, Environmental Planner at 519-575-4500 x3649 or tvanhinte@regionofwaterloo.ca to co-ordinate the review of the EIS and to schedule the inspection.

Record of Site Condition (RSC)
According to the Region's database, the Erbsville Kartway site and the adjacent Martin's Auto Garage at 499 Conservation Dr. are identified as a high potential for contamination. As per Region of Waterloo Implementation Guideline on review of development applications and potentially contaminated sites, a Record of Site condition will be required for both the Erbsville Kartway and Northgate properties. The RSC will be required prior to adoption of any zoning by-law for the lands. Given the large land area of the Northgate property, the applicant has requested Regional staff review the limit of the lands on which the RSC is to apply. Follow-up is required by Regional staff.

Planning Justification
A Planning Justification Report is required with the application. This should include whether the density meets ROP requirements, and how public consultation requirements will be met.

Minimum/Maximum Units
The range of minimum/maximum units shown in the land use schedule (628-948) is too wide. This needs to be narrowed.

Emergency Access
Emergency access requirements (if necessary) for Stages 5 and 6 on the Northgate lands will need to be addressed.

Archaeological Assessment
An archaeological assessment is required on both properties.

Other Criteria & Additional Notes (attach additional information as required)

The Region's Plans of Subdivision and Condominium application forms and additional application submission requirements are available on the Region's website.

In addition to the number of hardcopy plans and studies identified in the attached Checklist of Information and Materials Required for a Complete Application, digital copies of the same must be submitted on a CD or USB drive.

Region Planning Fees
The fee for submission of a complete subdivision application is $2,500.00 plus $250.00 per hectare (to maximum fee of $10,000.00).
The fee for submission of a complete condominium application is $2,000.00 plus $100.00 per residential unit (to maximum fee of $5,000.00).

To avoid delay in processing of the formal Planning Act applications, the applicant is encouraged to contact Regional staff to confirm the exact amount of fee payable prior to application submission.

The fee for subdivision draft approval is $3,500.00.
The fee for condominium draft approval is $1,000.00.

The fee for subdivision registration release is $2,000.00 per phase.
The fee for condominium registration release is $1,000.00 per phase.

The fee for review of zone change application is $1,000.00.

The fee for Transportation Noise Study review (including traffic counts) $250.00

Staff Person handling the file:	Shilling Yip	**Contact information:**	syip@regionofwaterloo.ca (519) 575-4496

To whom should all correspondence be sent?		**Contact information:**	Dave Aston MHBC Planning 540 Bingemans Centre Dr., Suite 200 Kitchener, ON N2B 3X9
	Owner		
	Applicant		
	Agent	X	
	Other		

Staff Signature: Shilling Yip **Date:** January 31, 2017

Commissioner (or delegate) Signature: **Date:** JAN 31/17.

Checklist of *Other Information and Materials* Required for a Complete Application:

Report/Study	Require	Reviewing	# of	*For Office Use Only* Provid	Date	Comple	Date
Affordable Housing Report/ Rental Conversion Assessment							
Aggregate/Mineral Resource Analysis							
Agricultural Impact Assessment							
Archaeological Assessment	2						
Chloride Impact Study	2						
Cut & Fill Analysis							
Development Phasing Plan							
Dust Impact Analysis							
Environmental Impact Study	13						
Environmental Site Assessment /Record of Site Condition (required prior to ZBL adoption)	3						
Groundwater Monitoring (Minimum 2 years)	8						
Heritage Impact Assessment							
Hydrogeological Assessment	4						
Land Use Compatibility Study							
Landfill Impact Study							
Local Air Quality Study							
Minimum Distance Separation							
Natural Heritage Inventory							
Noise Study (road traffic and stationary noise)	4						
Odour Impact Assessment							
Parking Analysis							
Pedestrian Route and Sidewalk Analysis							
Planning Report	25						
Preliminary Grading, and Erosion & Sedimentation Control Plan	5						
Preliminary Stormwater Management Report/Plan	5						
Retail/ Commercial Impact Analysis Study							
Roundabout Feasibility Analysis							
Servicing Report	6						
Slope Stability Study and Report							
Soils/Geotechnical Study							
Subdivision/Condominium Plan(s)	30						

Traffic Calming Options Report							
Transit Assessment							
Transportation Demand Management Options Report							
Transportation Impact Study							
Urban Design Report/Brief							
Vibration Study							
Water Servicing Strategy	2						

___ **Complete**

___ **Incomplete**

__ **Application cleared for acceptance and circulation**

__ **Letter identifying which additional studies are Dat** _____

THE CITY OF Waterloo

INTEGRATED PLANNING and PUBLICWORKS
Laura Dewar, MPL, MCIP, RPP
Development Planner
Waterloo City Centre, 100 Regina Street South
Waterloo, ON, N2J 4A8
phone: 519-747-6108 fax: 519-747-8523
laura.dewar@waterloo.ca

December 15, 2016

Dave Aston
MHBC Planning
540 Bingemans Centre Drive, Suite 200
Kitchener, Ontario
N2B 3X9

Re: Follow-up to Pre-consultation Meeting
Draft Plan of Subdivision and Zoning By-law Amendment
Northgate Land Corporation and Erbsville Kartway

Dear Dave,

Thank you for attending the pre-consultation meeting on November 23, 2016 to discuss a proposed Draft Plan of Subdivision and Zone Change Application for approximately 34 hectares of land owned by your clients, Northgate Land Corporation and Erbsville Kartway. The lands are located on the south side of Conservation Drive, east of Erbsville Road and west of Beaver Creek Road. As you are aware, the City is a commenting agency, rather than an approval authority, for the plan of subdivision application. The Subdivision concept presented to staff included:

- a new street network (combination of public and private)
- low to medium density housing mix with freehold and condominium tenure, and a unit yield between 628 and 948
- two stormwater management blocks
- 2 pumping station blocks
- 5 parkland blocks
- conservation and open space lands (some of which is to be retained by the owner)

Our understanding is the Zone Change Application is to:

a) Assign appropriate zoning categories to the respective lots and blocks; and
b) Determine any site specific zoning requirements to implement the plan.

The proposed zoning plan provided to staff at the meeting showed:

- Low density lands zoned Flexible Residential
- Medium density lands zoned Medium Density Three
- Mixed Use Node land zoned Medium Density Three, Multiple Residential – 6 Storeys, and Mixed Use Residential
- Conservation Area/Lands to be retained by Applicant zoned Agricultural (currently)

- Open Space, Stormwater Management and Pumping Station lands zoned Green One
- Parkland zoned Green Two

Staff offer the following comments related to the proposed development:

a) The lots and blocks adjacent to Conservation Drive and Beaver Creek Road should be zoned to exclude the possibility of singles. Buildings must be oriented to Conservation Drive and Beaver Creek Road and the zoning by-law should reflect this.

b) A portion of Block 3 in Stage 1 is within the Mixed Use Node and designated 'Mixed Use Medium Density' in the District Plan. These lands, and Block 4 and Stage 1, should be zoned to exclude singles, semis and duplexes. If you wish to include back to back towns, this would require a site-specific definition and performance regulations for this form of housing, as it is not currently recognized in our zoning by-law (or the draft zoning by-law).

c) Local Parks are generally in the range of 0.5 ha – 2.0 ha in size, with frontage on and access from a public street. Within the District Plan, two Local Parks are identified within the limits of this subdivision: one on the west side of the Natural Area, within Neighbourhood 6 and the second adjacent to Beaver Creek Road within Neighbourhood 5.

   Staff expressed concerns with the configuration and location of certain Park Blocks, particularly Block 22 within Stage 3. Public Parks require a certain amount of frontage, visibility and accessibility from adjacent streets to be safe and functional. For staff to accept the proposed park blocks, it must be demonstrated that the parks meet the minimum requirements for public parks in the Official Plan and Development Engineering Manual.

d) The Roundabout Design at Conservation Drive and Beaver Creek Road has not been finalized. The final design will dictate the lands to be conveyed to the City and the ultimate configuration of Block 4 in Stage 1.

e) Street One (a Minor Collector Road) is not shown in the same location as in the District Plan and does not align with the Minor Collector Road extending into the Cook Homes/Mattamy Homes Subdivision on the north side of Conservation Drive. Provide justification for the changes to the alignment of Street One.

f) Staff understand that a permanent stormwater solution is being evaluated based on a consolidated "community" approach. However, it would also appear that private stormwater management facilities are contemplated on these lands.

g) Consider the phasing and staging of the Kartway lands and the requirements of the District Plan (Section 4.4.3) regarding mitigation of noise, vibration and visual impacts, as necessary.

h) The Conservation Drive/Beaver Creek Road Environmental Assessment identified the preferred alternative (location) for a new pumping station further south of the proposed location shown on the preliminary draft plan (Block 23, Stage 3) with the trunk main extending west through the subdivision. The rationale for this deviation from the EA and a full assessment of the implications of this change (in terms of environment, costs, servicing and grading design, etc) need to be provided as part of the Subdivision Application.

In order for the City to consider your application complete, and in accordance with the City's Official Plan, the following must be submitted:

1. Joint Zoning By-law Amendment and Draft Plan of Subdivision Application Fee = $57,680 payable to the City of Waterloo
2. Zoning By-law Amendment Sign Fee Deposit for 3 Signs = $951 ($317 each) payable to the City of Waterloo
3. 3 copies - completed Zoning By-Law Amendment Application Form
4. A letter of authorization from the land owner authorizing you to act on their behalf
5. A signed copy of Permission to Enter, authorizing City staff to enter onto the subject lands for the purposes of evaluating the application
6. A covering letter, which outlines the nature of the application and details of the pre-application consultation meeting with Regional and City staff and the contents of the submission.
7. 10 copies - Draft Plan of Subdivision (24 x 36)
8. 10 copies – Draft Plan of Subdivision (11 x 17)
9. 8 copies - Planning Justification Report. The report should identify the proposed zoning for each of the blocks within the subdivision and how the proposal aligns with the Beaver Creek Meadows District Plan and City of Waterloo Official Plan. The report should also address how the plan is being implemented and provide solid planning rationale for any requested site specific zoning regulations.
10. 8 copies – Parkland Brief. This document could be provided as a subsection of the Planning Justification Report or the Functional Servicing and Grading Report. It should evaluate and describe:
    a. the grading and general usability of the lands to be conveyed to the City for parkland purposes.
    b. how the lands would meet the intent of the District Plan and Official Plan Parkland policies
    c. how the lands meet the general principles of the City's Landscape Design Process and Requirements Manual for New Subdivision Development.
    d. how the proposal will satisfy the requirements of the City's Parkland Dedication By-law.
11. 8 copies – Preliminary Servicing and Grading Report. The report will need to assess the servicing needs based on the proposed zoning of the lands and the highest possible unit/lot yield. The report should also assess the utility needs for the subdivision.
12. 8 copies – Preliminary Stormwater Management Report. This report should assess the permanent stormwater management plan for the lands.
13. 8 copies –Turn Lane Warrant Analysis to determine the need for any turning lanes along Conservation Drive or Beaver Creek Road (wherever a road internal to the subdivision intersects with these roads). Staff can provide the traffic counts that were generated for the District Plan.

14. 8 copies - Scoped Environmental Impact Study that was undertaken to support a connection through ESPA 80 of the Regional Official Plan to the lands identified as Special Policy Area 2 in the District Plan.
15. 8 copies - Full Environmental Impact Study to assess the impact of the proposed development on ESPA 80 of the Regional Official Plan. The study must determine appropriate setbacks and buffers. The terms of reference for this study should be developed in consultation with Regional and City staff.
16. Digital copies of the above noted plans and studies on a USB drive.

Once the above noted information has been received to the satisfaction of Integrated Planning and Public Works, a letter will be sent to your attention advising you that your application is considered complete and that it will be processed in accordance with the requirements of the Planning Act and the City of Waterloo Official Plan. We will advise if we require additional copies or other supporting materials.

Again, thank you for participating in the pre-application consultation process, should you have any questions regarding the City's requirements, please contact me.

Sincerely,

Laura Dewar

Laura Dewar, MPL, MCIP, RPP
Development Planner

cc: Paul Britton, MHBC Planning
Trevor Hawkins, City of Waterloo
Ric Martins, City of Waterloo
Shilling Yip, Region of Waterloo

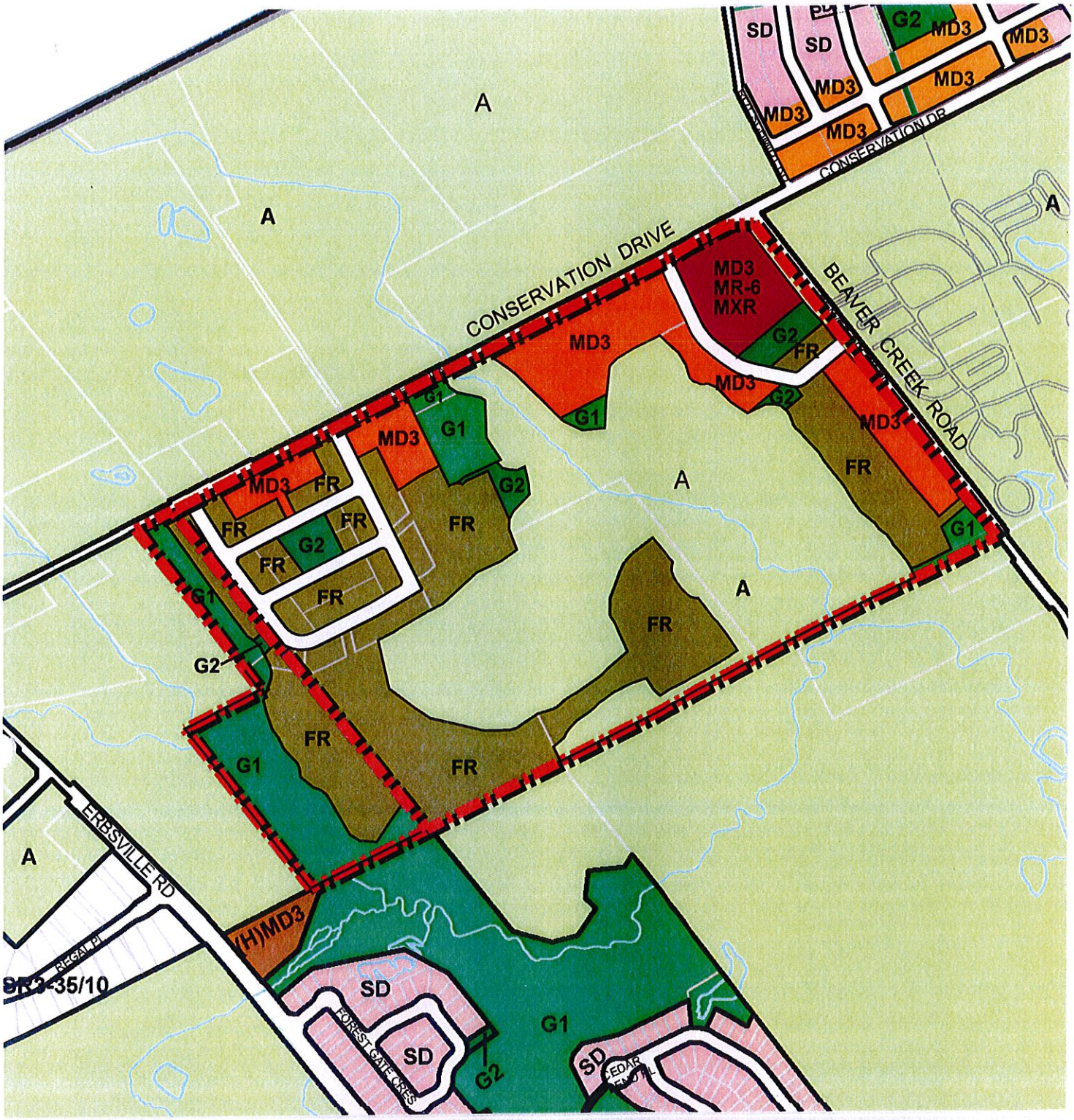


Figure 7

City of Waterloo, Proposed Zoning

Northgate Land Corporation & Erbsville Kartway
City of Waterloo,
Region of Waterloo

LEGEND

Subject Lands

BY-LAW 878A
A AGRICULTURE ZONE

BYLAW 1418
R RESIDENTIAL ZONE
SD SEMI DETACHED ZONE
FR FLEXIBLE RESIDENTIAL
MD3 MEDIUM DENSITY THREE
MR-6 MULTIPLE RESIDENTIAL SIX ZONE
MXR MIXED USE RESIDENTIAL
G1 GREEN ONE ZONE
G2 GREEN TWO ZONE

DATE: November 10,2016

SCALE 1 : 7,500

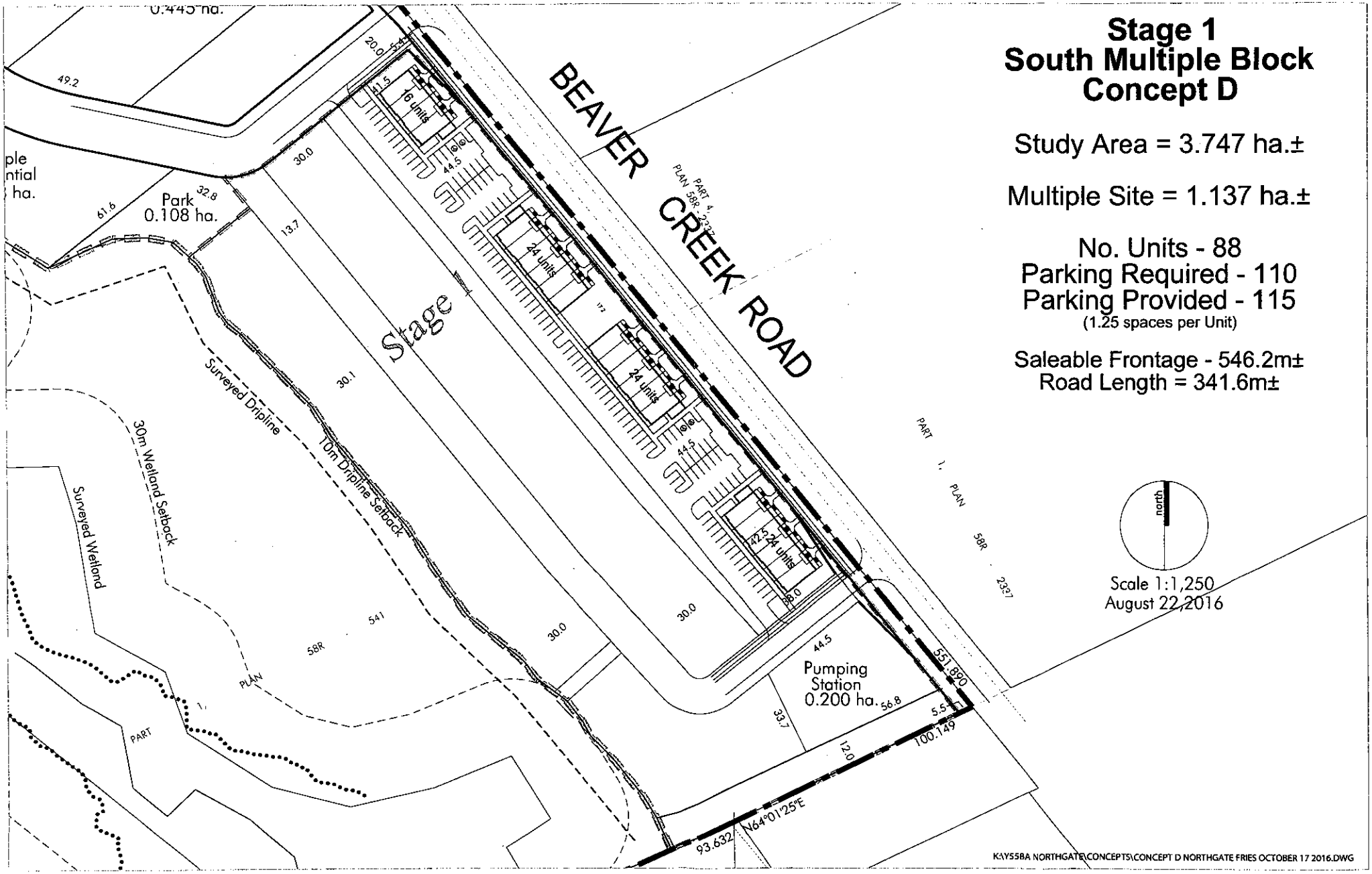
north

FILE: 14148A

DRN: LHB

K:\14148A-NORTHGATE-WATERLOO\REPORT\ZONING PROPOSED.DWG

MHBC PLANNING URBAN DESIGN & LANDSCAPE ARCHITECTURE
200 540 BINGEMANS CENTRE DR. KITCHENER ON N2B 3X9
P: 519.576.3650 F: 519.576.0121 | WWW.MHBCPLAN.COM



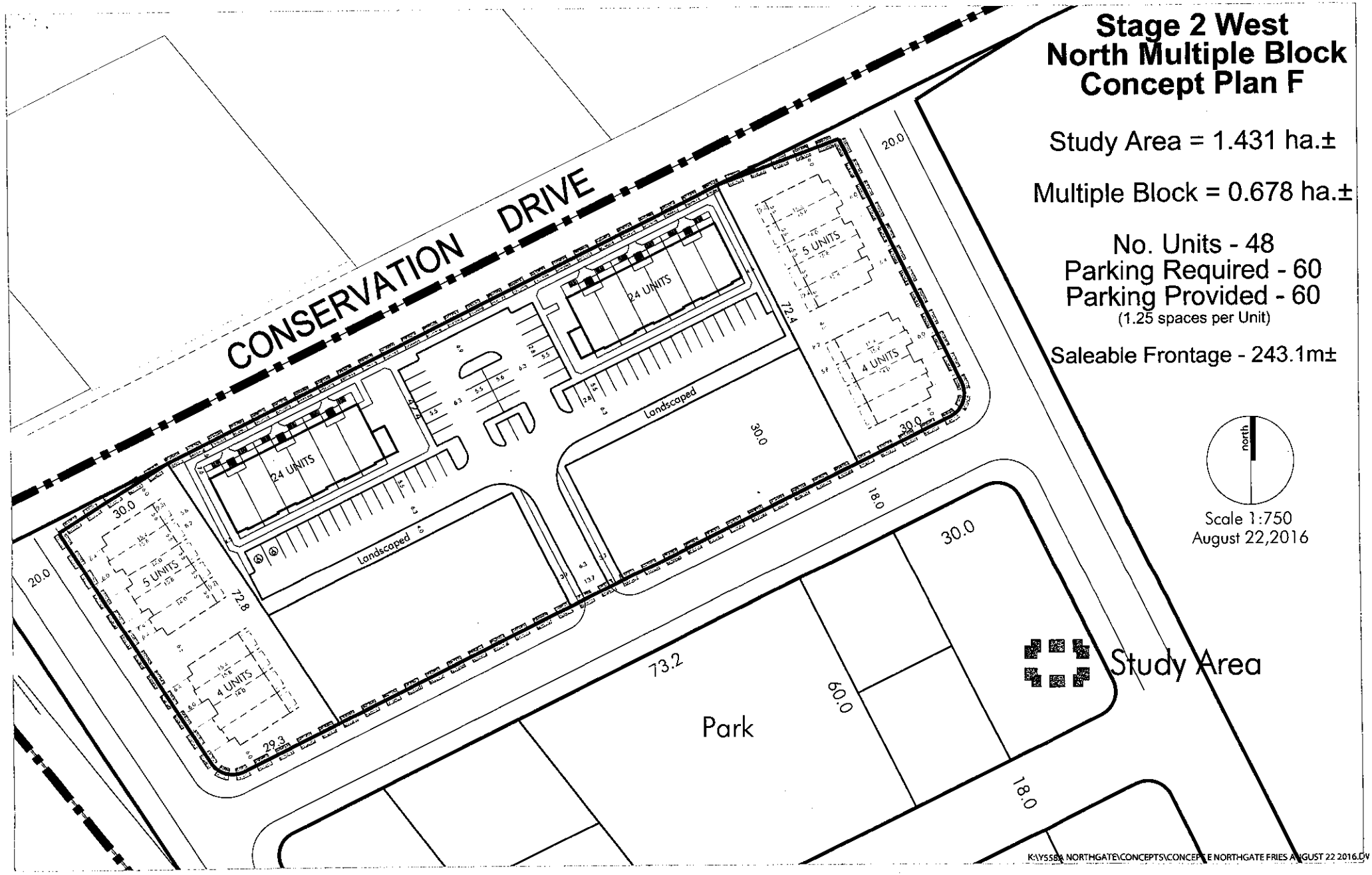
Stage 1
South Multiple Block
Concept D

Study Area = 3.747 ha.±

Multiple Site = 1.137 ha.±

No. Units - 88
Parking Required - 110
Parking Provided - 115
(1.25 spaces per Unit)

Saleable Frontage - 546.2m±
Road Length = 341.6m±



Stage 2 West
North Multiple Block
Concept Plan F

Study Area = 1.431 ha.±

Multiple Block = 0.678 ha.±

No. Units - 48
Parking Required - 60
Parking Provided - 60
(1.25 spaces per Unit)

Saleable Frontage - 243.1m±

Scale 1:750
August 22,2016

K:\Y5588 NORTHGATE\CONCEPTS\CONCEPT E NORTHGATE FRIES AUGUST 22 2016.DV

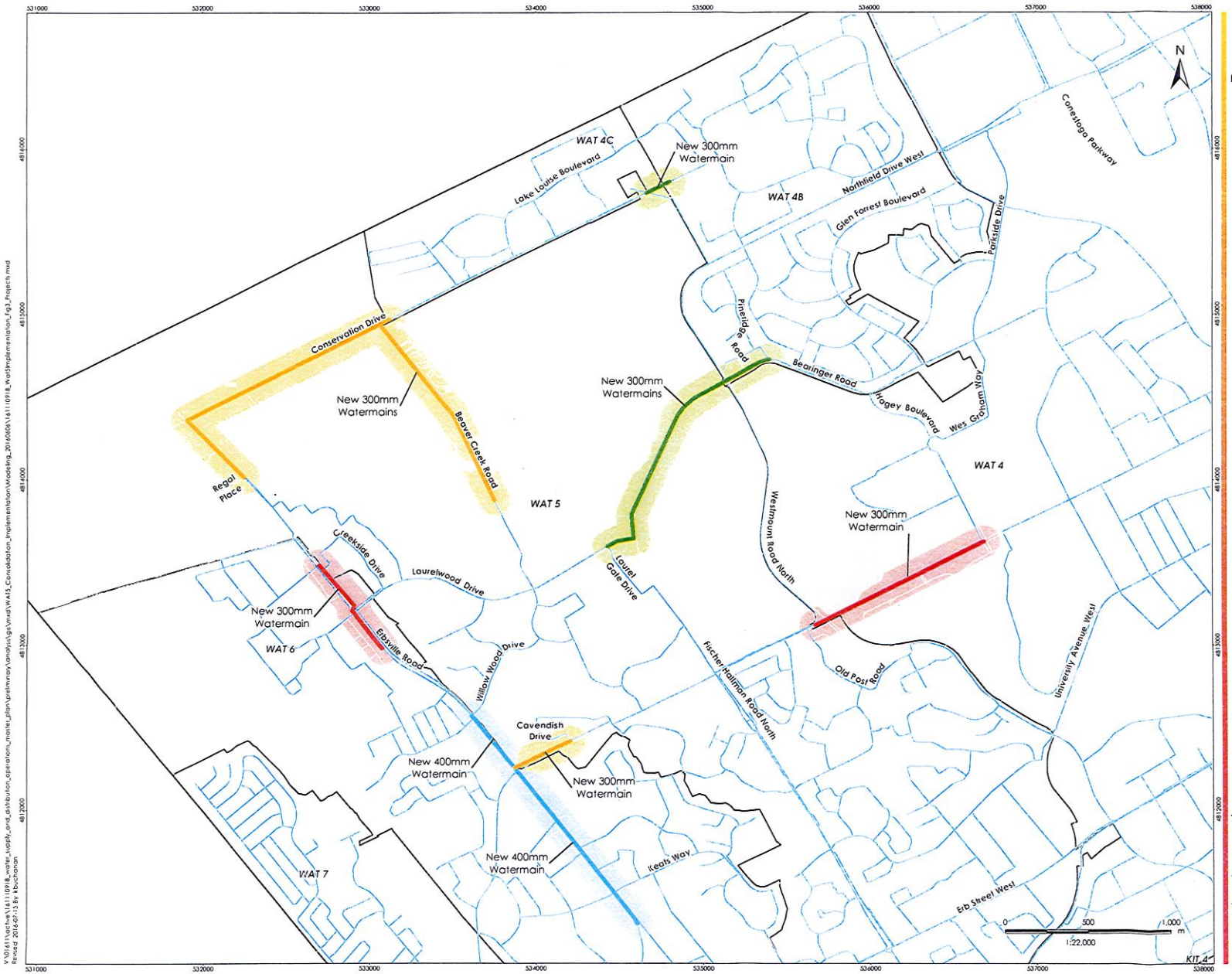
3.0 PROPOSED UPGRADES

Staging of capital plans was reviewed as part of the background review for this study. A summary of proposed watermain upgrades and the estimated timing is provided in Table 1 and Figure 3.

Table 1: Overview of Proposed Upgrades

Street	Watermain Diameter	From/To Street	Estimated Timing
Conservation Dr.	300 mm	East of Beaver Creek Rd./Erbsville Rd.	2017
Columbia St.	300 mm	Erbsville Rd./Cavendish Dr.	2017
Beaver Creek Rd.	300 mm	North of Laurelwood Dr./Conservation Dr.	2017
Erbsville Rd.	300 mm	Regal Pl./Conservation Dr.	2017
Bearinger Rd.	300 mm	Laurel Gate Dr./East of Pineridge Rd.	2020
Conservation Dr.	300 mm	Westmount Rd./East of Coldstream Dr.	2020
Erbsville Rd.	400 mm	South of Keats Way/Willow Wood Dr.	2024
Erbsville Rd.	300 mm	South of Forest Gate Cres./South of Laurelwood Dr.	Timing Unknown
Columbia St.	300 mm	Old Post Rd./Hagey Blvd.	Timing Unknown

Note: Colour coding is consistent with the implementation staging depicted in Figure 3.



Stantec

Legend

- Watermain
- Existing Pressure Zone Boundary
- Road
- Water Body
- Municipality

Implementation Staging

- 2017
- 2020
- 2024
- Timing Unknown

Notes

1. Coordinate System: NAD 1983 UTM Zone 17N
2. Base features produced under license with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario, 2015.

July 2016
161110918

Client/Project

Region of Waterloo
Staging and Implementation Plan for Consolidating Pressure Zones in North-Central Waterloo

Figure No.

3

Title

Overview of Proposed Upgrades

V:\0161\active\161110918_water_supply_and_distribution_operations_master_plan\preliminary\analysis\gis\mxd\WA15_Consolidation_Implementation\Modelling_20160606\161110918_WatSImplementation_Fig3_Projects.mxd
Revised 2016-07-15 By kbuchanan

Transit

4 stop locations



December 2016

Document Number: 2276571

APPENDIX B

NEIGHBOURHOOD **DESIGN SUMMARY**

PLANS OF SUBDIVISION, PLANS OF CONDOMINIUM &
ZONING BY-LAW AMENDMENT
APPLICATIONS

Northgate Land Corporation & Erbsville Kartway

City of Waterloo

NEIGHBOURHOOD
DESIGN SUMMARY

INTRODUCTION

THE PROPOSED NEIGHBOURHOOD DESIGN FOR THE NORTHGATE LAND CORPORATION & ERBSVILLE KARTWAY LANDS HAS BEEN DESIGNED IN KEEPING WITH THE DESIGN OBJECTIVES CONTAINED WITHIN THE BEAVER CREEK MEADOWS DISTRICT PLAN. THESE OBJECTIVES INCLUDE:

1. A DIVERSITY IN HOUSING TYPES AND POPULATION

The proposed single-detached dwelling units, townhouse units and apartment units will provide a range of choice for various demographic groups including young families and those looking to downsize.

2. PEDESTRIAN-SCALED BUILT FORM

All future residential development will be oriented towards the street, with pedestrian-scaled features. Building heights will be limited to four-storeys.

3. A COMPLETE ACTIVE TRANSPORTATION NETWORK

Sidewalks will be located along all streets within the proposed subdivision, with connections made to the existing neighbourhood to the north, as well as the future subdivisions to the north of Conservation Drive and east of Beaver Creek Road. Trail connections provide direct pedestrian access within the proposed subdivision, to parks, open space and other subdivisions within the neighbourhood and related amenities (i.e. the proposed elementary school north of Conservation Drive). All future residents will be within a five minute walk to parks and other community focal points.

4. A WELL-DEFINED, HIGH-QUALITY PUBLIC REALM

Decorative entrance features, including signature lampposts and signage, will be incorporated at the designated gateways at Beaver Creek Road and Conservation Drive to create a distinct sense of place. Priority lots will be established to ensure high quality architectural articulation on all facades of future development that interface with the public realm.

THE FOLLOWING PAGES ILLUSTRATE, IN PART, HOW THESE OBJECTIVES ARE MET AS WELL AS HOW THE ENTIRE NEIGHBOURHOOD HAS BEEN DESIGNED AS ONE CONNECTED COMMUNITY.

NEIGHBOURHOOD DESIGN SUMMARY

MASTER PLAN

THE PROPOSED NEIGHBOURHOOD DESIGN INCLUDES:



647-872 Total Units



Six (6) multiple residential blocks with a total area of 7.669 hectares (18.95 acres) proposed to be developed with townhouse and apartment dwelling units.



Multiple Residential Blocks proposed within the Beaver Meadows Mixed Use Node.



Multiple parks located to ensure all residents are within a 5 minute walk to parkland.



2.743 hectares (6.78 acres) of naturalized open space to be conserved which should include open space outside limits of subdivision and owned by Northgate.



A combination of trails, sidewalks and walkways to optimize pedestrian connectivity and walkability within the neighbourhood.



The neighbourhood will form part of a complete community which includes: a range of unit types; a mixed-use node; active transportation; open space areas which will be protected and enhanced where appropriate; and major public open space including the Laurel Creek Conservation Area and its associated trails.


Conservation Drive
Street Three
Street Four
Park
Street Three
Street Five
Street Six
Laurel Creek


Beaver Creek Road
Park
Street Two
Street One
Beaver Creek
Park

NEIGHBOURHOOD **DESIGN SUMMARY**

CONNECTIVITY & ACTIVE TRANSPORTATION

THE FOLLOWING PLAN ILLUSTRATES ACTIVE TRANSPORTATION ROUTES AND RESULTING CONNECTIVITY BOTH WITHIN THE NEIGHBOURHOOD AND OUT TO AND THROUGH THE SURROUNDING COMMUNITY. THE FOLLOWING IS A SUMMARY OF DESIGN DECISIONS THAT INFORMED THE ACTIVE TRANSPORTATION NETWORK:

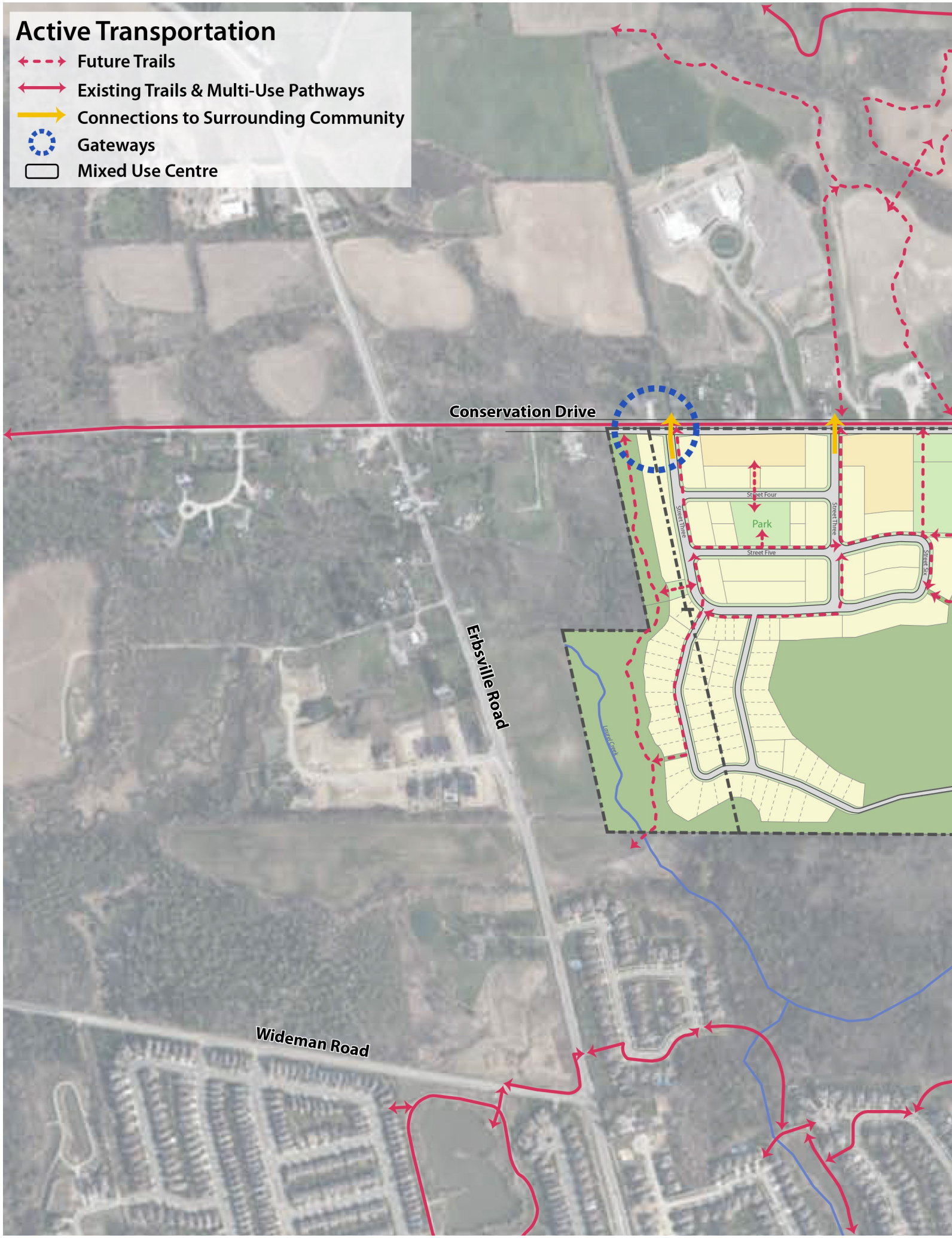
- Multiple entrances to the neighbourhood planned as extensions of the future street network planned for in the Beaver Creek Meadows District Plan.

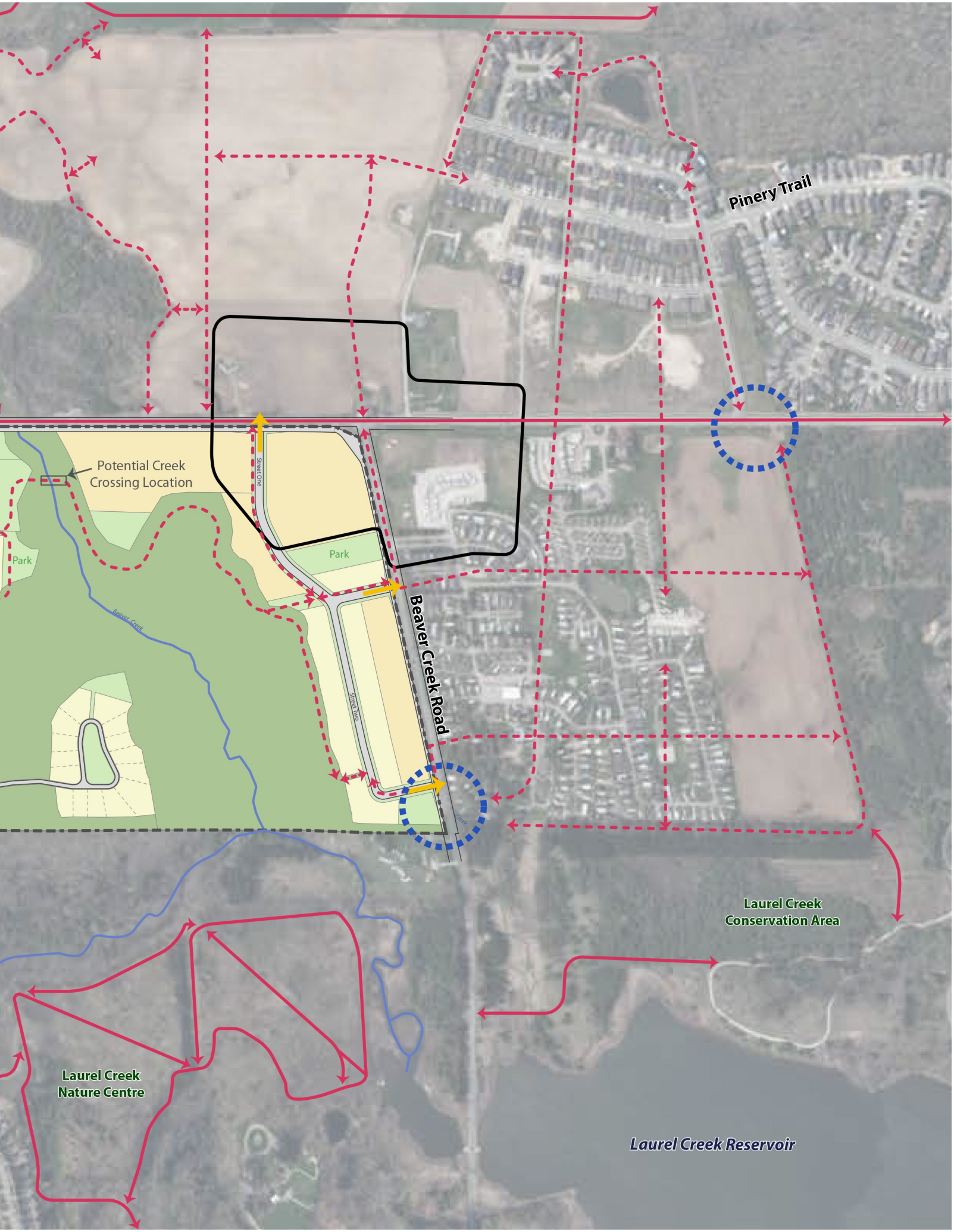
- Multiple connections to the multi-use trail along Conservation Drive are proposed. This multi-use trail provides a direct connection to the extensive trail system within the Laurel Creek Conservation Area as well as the extensive GRCA trail system south of the subject lands; the Laurel Creek reservoir; Laurel Creek Nature Centre; and the Laurel Creek Look out Tower.

- The neighbourhood is well connected via road and pedestrian connections to the planned mixed use node at Beaver Creek Road and Conservation Drive.

- The proposed parks and open space areas will be well connected through trails, sidewalks and walkways resulting in an overall open space network that encourages active transportation.

- The subject lands provide an opportunity for future transit along Beaver Creek Road and Conservation Drive. All lots/blocks are well within 500 m (five minute walk) of these potential future transit routes.


Active Transportation
Future Trails
Existing Trails & Multi-Use Pathways
Connections to Surrounding Community
Gateways
Mixed Use Centre
Conservation Drive
Erbsville Road
Wideman Road
Street Four
Street Three
Park
Street Five
Street Six
Laurel Creek


Pinery Trail
Potential Creek
Crossing Location
Park
Park
Street One
Street Two
Beaver Creek Road
Beaver Creek
Laurel Creek
Conservation Area
Laurel Creek
Nature Centre
Laurel Creek Reservoir

NEIGHBOURHOOD
DESIGN SUMMARY

GREEN NETWORK

THE FOLLOWING PLAN ILLUSTRATES THE GREEN NETWORK THAT HAS BEEN PLANNED FOR THE NEIGHBOURHOOD. THE OPEN SPACE NETWORK CONSISTS OF ENVIRONMENTAL AREAS, PARKS, WALKWAYS, STORMWATER MANAGEMENT FACILITIES AND OTHER OPEN SPACE ARES. THE OPEN SPACE SYSTEM CONSIDERS THE FOLLOWING:

- An Environmental Impact Study (EIS) was prepared and includes the surveyed limit of natural heritage features and recommended development setbacks.
- Natural heritage resources are conserved, protected and integrated within the overall plan.
- Buffers from core natural feature are respected.
- Opportunities for naturalization within stormwater management block will further enhance the open space network.
- Planned parks and walkway blocks contribute to the overall open space system.
- A planned pedestrian bridge will connect the eastern and western portions of the neighbourhood.
- LID and other measures that provide opportunities to enhance natural features.
- Achievement of infiltration objectives.
- Implementation of the Beaver Creek subwatershed plan.
- Implementation of water quantity, erosion control, enhanced groundwater monitoring and water temperature mitigation measures.

Green Network




Street One
Storm Water Management
Park
Beaver Creek Road
Beaver Creek
Other Open Space
Street Two
Other Open Space
Open Space
Pumping Station

NEIGHBOURHOOD **DESIGN SUMMARY**

WALKABILITY

THE FOLLOWING PLAN ILLUSTRATES WALKING DISTANCES TO PROPOSED PARKS WITHIN THE NEIGHBOURHOOD.

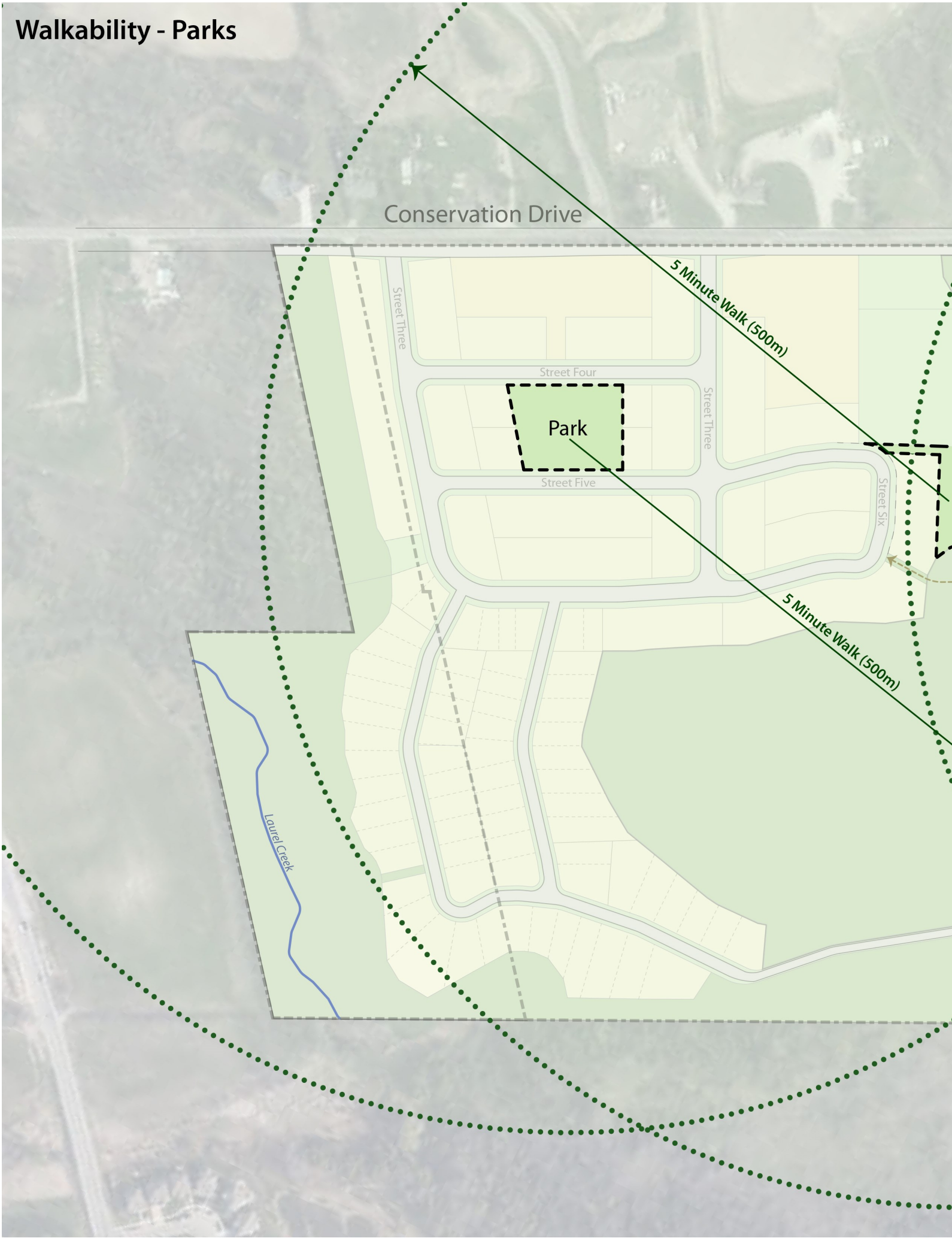
- Parks and open space are distributed throughout and connected to the overall community. Parks have been evenly distributed with the following considerations in mind:
    1. The eastern most park is in keeping with the location identified in the Beaver Creek Meadows District Plan. It is located just south of the proposed node and adjacent a proposed multiple residential block.
    2. The 'central' park is also located in keeping with the location identified in the District Plan. It has been located adjacent natural open space and the proposed stormwater management block. This provides an opportunity to connect park users with the proposed trail system.
    3. The western most park was not contemplated in the District Plan, but has been provided to ensure that the entire neighbourhood is in close proximity to a park. This park better serves the southern most part of the subdivision, and will have a direct pedestrian access to the multiple block that fronts onto Conservation Drive.

- By providing for three different parks within the neighbourhood it allows for a variety of different park design options which would be explored with City of Kitchener Community Services staff.

- All future residents will be within a 5 minute walk of proposed parks and open space (as illustrated on the following diagram).

- Open spaces, parks, trails and sidewalks will connect community amenities resulting in a very walkable community.

Walkability - Parks




5 Minute Walk (500m)
Park
Park
Street One
Street Two
Beaver Creek
Beaver Creek Road

NEIGHBOURHOOD **DESIGN SUMMARY**

PRIORITY LOTS

PRIORITY LOTS HAVE BEEN IDENTIFIED WITHIN THE COMMUNITY IN AREAS WHERE INCREASED ARCHITECTURAL ARTICULATION IS DESIRED. THE FOLLOWING WILL BE CONSIDERED WHEN DESIGNING FOR PRIORITY LOTS:

- Special built form design consideration is encouraged for priority lots and should be required through the subdivision agreement.

- Corner lots are encouraged to be designed in a manner which addresses both the front and flanking streets. The orientation of buildings should remain consistent at intersections. Where possible, the front facade should face the higher-order street. Special attention to the massing, articulation, fenestration, and material finish, is required for all exposed elevations.

- Highly articulated flanking elevations are required to avoid flat, uninteresting façades. Gables and dormers are desired to enhance the roof form. Porches, bay windows, generous fenestration, wall articulation, or other architectural features are encouraged on the flankage side to create a positive pedestrian experience along the street.

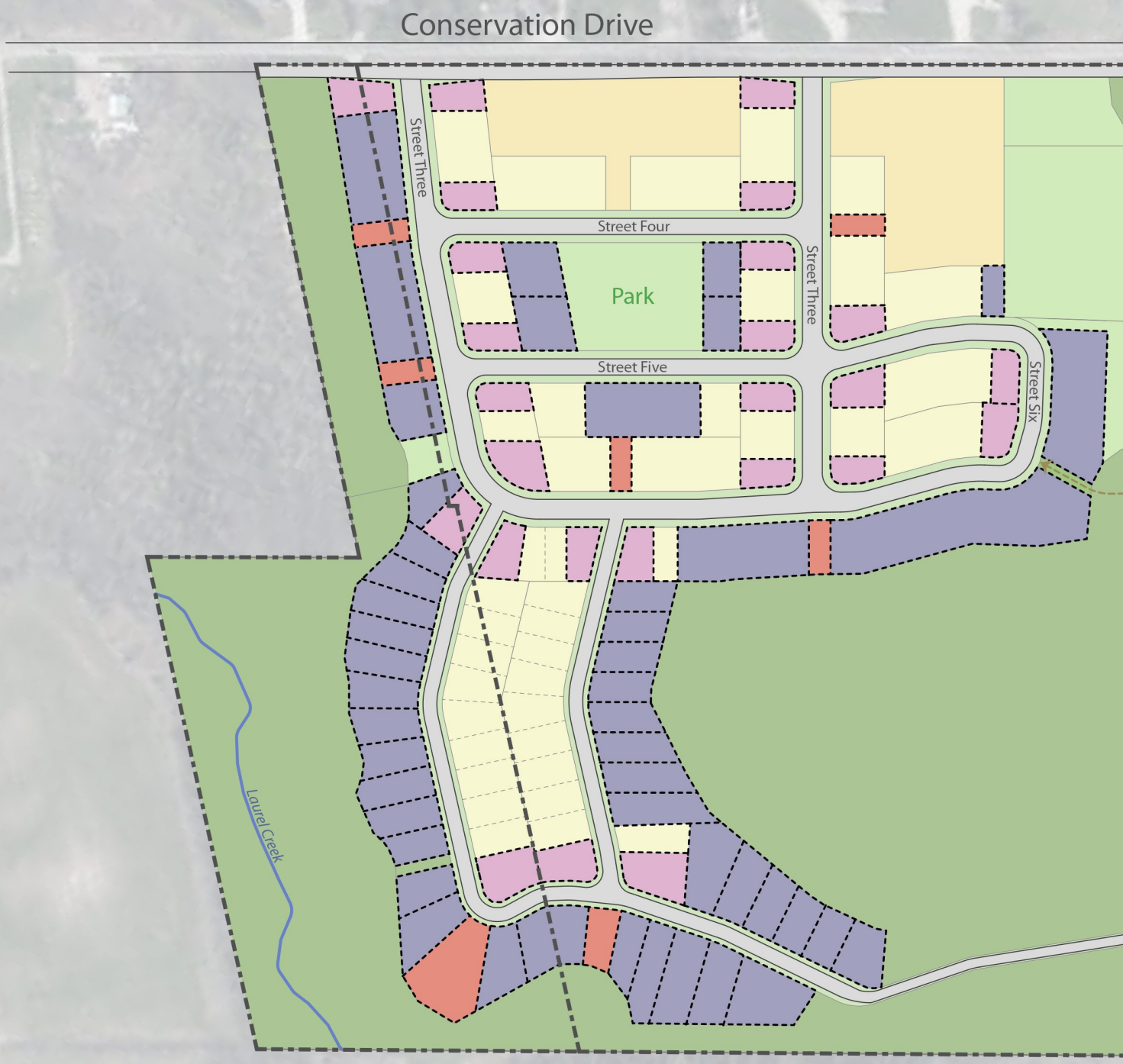
- Variety among rear wall articulation is required for lots that back onto public open spaces, where the rear elevations are publicly exposed.

- Terminating view lots occur at the top of an intersection, where one road terminates at a right angle (or close to a right angle) to the other, and at street elbows. These dwellings are prominent in the streetscape as they provide the focal point at the end of view corridors. These dwellings shall be designed to provide visual interest.\

The preparation of Architectural Control or Urban Design Guidelines should be considered, and registered on title to ensure implementation of priority lot design.

Priority Lots

- Corner Lots
- Lots Adjacent to/Fronting/Backing on Open Space
- Terminal View Lots




Beaver Creek Road
Park
Street Two
Street One
Beaver Creek
Park

APPENDIX C

Park Concept Designs

Blk. 23 Stormwater Management

0.805 ha.

TO CREEK CROSSING

TRAIL CONNECTION TO BROADER TRAIL SYSTEM

INFORMATION KIOSK

BENCH SEATING

PARK ENTRANCE

Blk. 21 Park 0.278 ha.

BERM

NATURALIZED PLANTINGS

BENCH SEATING

30m Wetland Setback

PROPOSED TRAIL

1 ha.

STREET SIX

Blk. 5 0.246 ha.

10m Dripline Setback

Surveyed Dripline

Surveyed Wetland

Blk. 2 0.228 ha.

Stage 4

Blk. 3 0.220 ha.

Blk. 6 Walkway 0.020 ha.

Approximate Limits of Submission

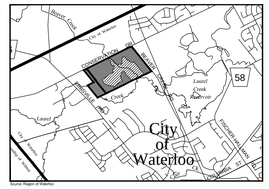
1 L3 PARK BLOCK 21 CONCEPTUAL PARK DESIGN

1:300

Legal Description

PART OF LOT 28, GERMAN COMPANY TRACT,
(GEOGRAPHIC TOWNSHIP OF WATERLOO),
CITY OF WATERLOO,
REGIONAL MUNICIPALITY OF WATERLOO

Key Plan



Subject Lands

Additional Lands Owned by Applicants

north

Not to Scale

Rev.	Date	Issued / Revision	By
1.	JULY 8, 2017	DRAFT PLAN AGREEMENT	GFJ
2.			

IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ARRANGE FOR LOCATES AND TO VERIFY THE EXACT LOCATION OF ALL UTILITIES, SERVICES AND STRUCTURES WHETHER ABOVE OR BELOW GRADE BEFORE COMMENCING WORK AND TO ENSURE ALL WORK IS TO COMPLY WITH TECHNICAL STANDARDS & SAFETY AUTHORITY (TSSA) STANDARDS.

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Stamp	Date: JULY 6, 2016
	Drawn By: GFJ
	Plan Scale: AS NOTED
	File No.: 14148A
Client	Checked By: DA
Project: Northgate Land Corporation & 1455136 Ontario Inc. Conservation Drive Waterloo, Ontario	north
Drawing Name: PARK BLOCK 21 CONCEPT PLAN	Dwg No.: L3

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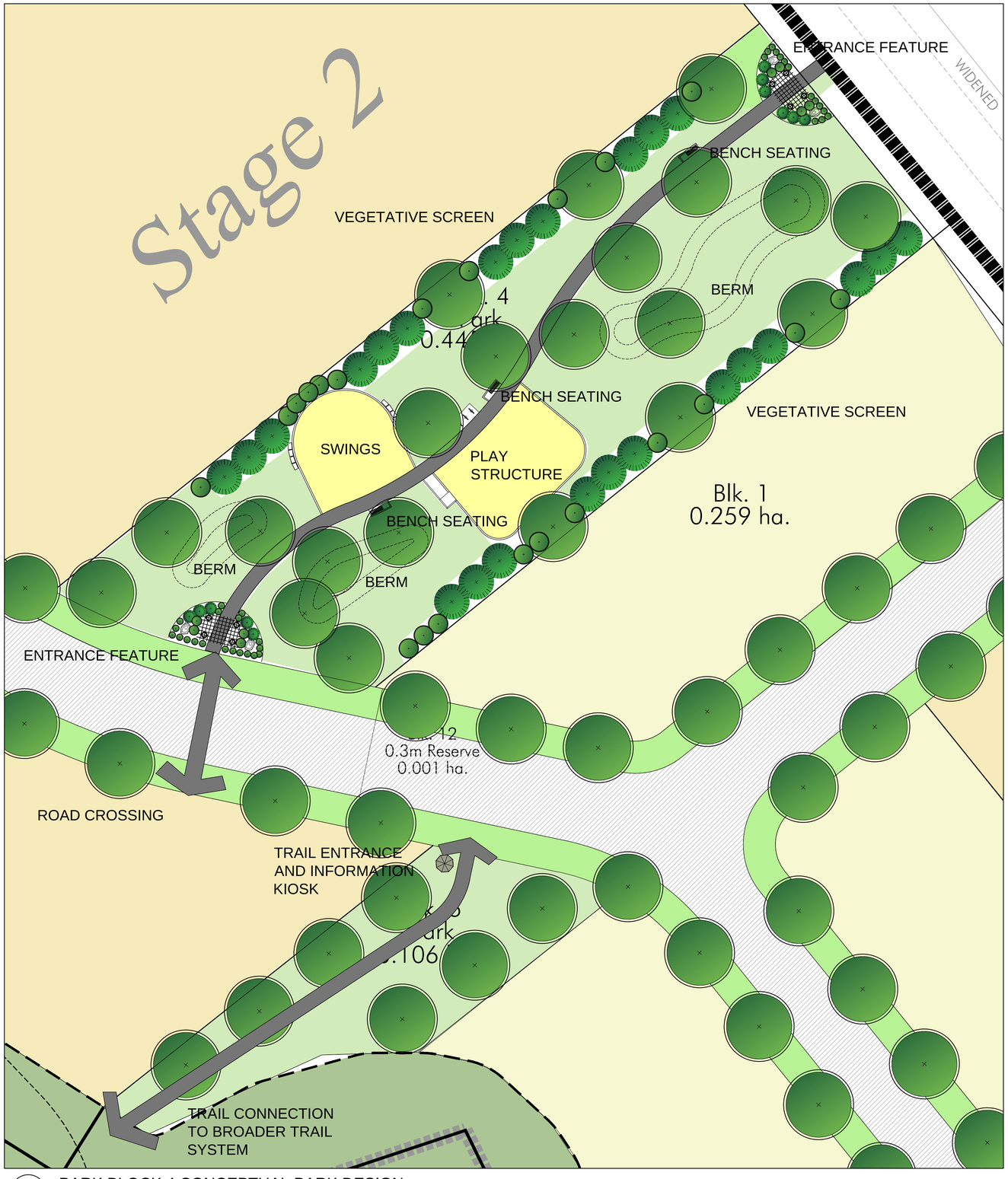


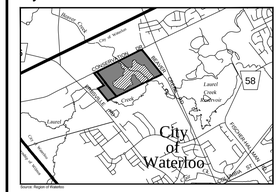
1 L2 PARK BLOCK 4 CONCEPTUAL PARK DESIGN

1:300

Legal Description

PART OF LOT 28, GERMAN COMPANY TRACT,
(GEOGRAPHIC TOWNSHIP OF WATERLOO),
CITY OF WATERLOO,
REGIONAL MUNICIPALITY OF WATERLOO

Key Plan



Subject Lands

Additional Lands Owned by Applicants

north

Not to Scale

Rev.	Date	Issued / Revision	By
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1.	JULY 8, 2017	DRAFT PLAN AGREEMENT	GFJ

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	Plan Scale: AS NOTED
	File No.: 14148A
Client	Checked By: DA

Project

Northgate Land Corporation
&
1455136 Ontario Inc.
Conservation Drive
Waterloo, Ontario

north

Drawing Name:

PARK BLOCK 4 CONCEPT PLAN

Dwg No. **L2**

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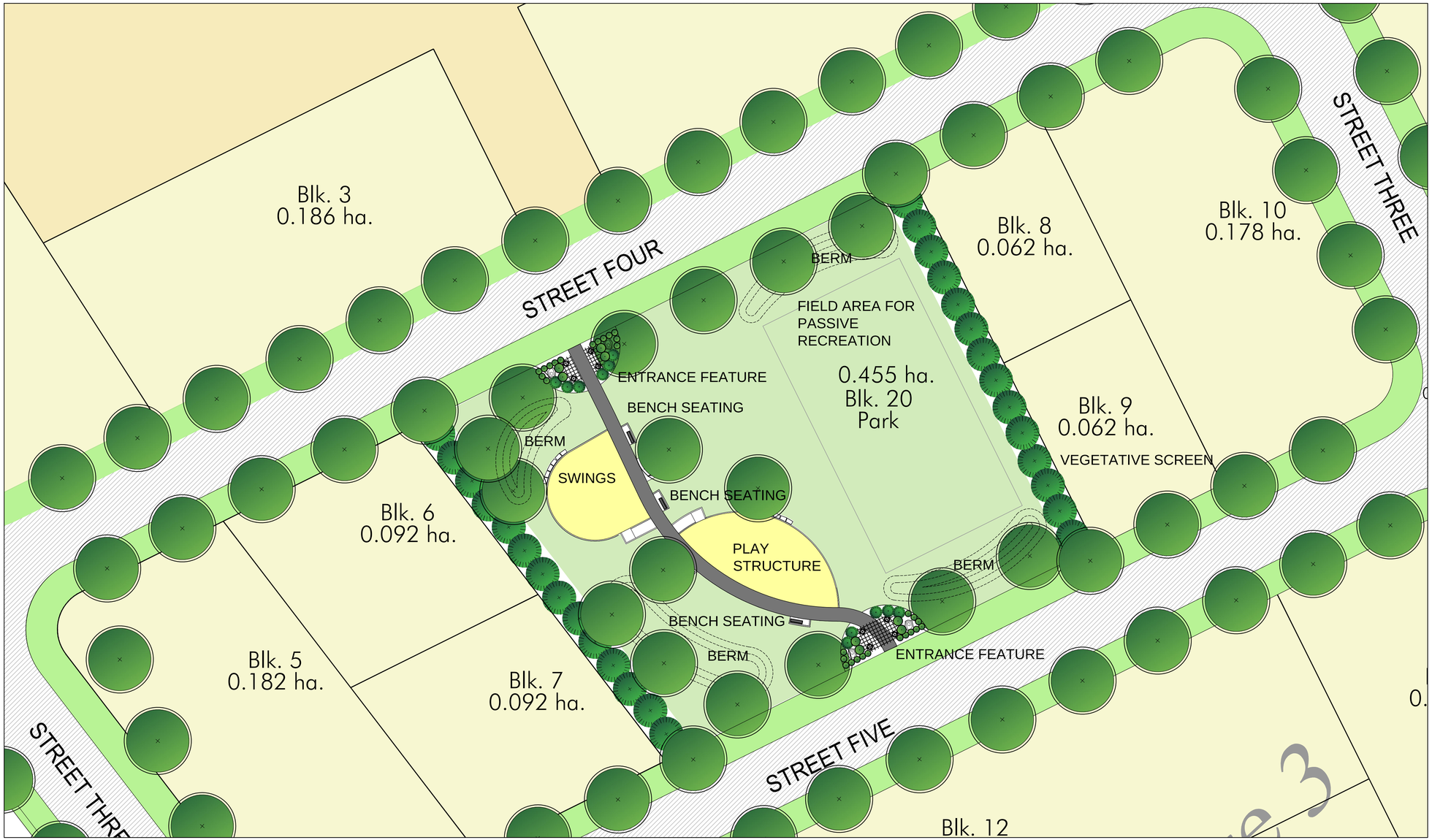
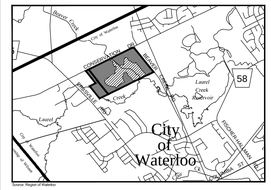


1
L1
PARK BLOCK 20 CONCEPTUAL PARK DESIGN
1:300

Legal Description
PART OF LOT 28, GERMAN COMPANY TRACT,
(GEOGRAPHIC TOWNSHIP OF WATERLOO),
CITY OF WATERLOO,
REGIONAL MUNICIPALITY OF WATERLOO

Key Plan



Subject Lands
Additional Lands Owned by Applicants
north
Not to Scale

Rev.	Date	Issued / Revision	By
2.			
1.	JULY 8, 2017	DRAFT PLAN AGREEMENT	GFJ

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Drawn By: GFJ
Plan Scale: AS NOTED
File No.: 14148A
Client
Checked By: DA

Project
Northgate Land Corporation
&
1455136 Ontario Inc.
Conservation Drive
Waterloo, Ontario

north

Drawing Name:
PARK BLOCK 20 CONCEPT PLAN

Dwg No.
L1

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