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DRAFT PLAN RESUBMISSION
SUPPLEMENTAL REPORT

PLANS OF SUBDIVISION and PLANS OF CONDOMINIUM &
ZONING BY-LAW AMENDMENT
APPLICATIONS
30T-17401, 30T17402, 30CDM-17409 and 30CDM-17410

Conservation Drive and Beaver Creek Road
City of Waterloo

Date:
July 2020

Prepared for:
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Our File 14148A

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1.0 INTRODUCTION

MacNaughton Hermsen Britton Clarkson Planning Limited ("MHBC Planning") has been retained by 1017081 Ontario Limited and Gabriella Elizabeth Groff ('Northgate') and 1455136 Ontario Ltd. ('Erbsville Kartway') to provide planning advice and to prepare a consolidated Planning Response Report in support of Plans of Subdivision, Plans of Vacant Land Condominium and Zoning By-law Amendment applications (File Nos. 30T17401, 30T-17402, 30CDM-17409, 30CDM-17410, Z-17-14 and Z-17-15) for each property.

The subject lands are comprised of two parcels; the 'Northgate' lands and the 'Erbsville Kartway' lands. MHBC Planning has been responsible for providing input to the Beaver Creek Meadows District Plan, as well as the preparation of the aforementioned planning applications, submitted to the City of Waterloo and Region of Waterloo in July 2017. MHBC Planning has also coordinated with other disciplines, and has been responsible for on-going liaison with City of Waterloo staff, Agency staff and the public.

1.1 Application and Consultation Process

Draft Plan of Subdivision, Draft Plan of Condominium and Zoning By-law Amendment applications were submitted in July 2017, and deemed complete by the Region of Waterloo on August 4, 2017 and by the City of Waterloo on August 9, 2017. The applications were subsequently circulated by both the City and Region. A Neighbourhood Open House was held on September 27, 2017 to gather input from the community. An Informal Public Meeting was held on November 27, 2017 at Waterloo City Council, where the application was presented to Council and the community. Post-circulation comments were received from the Region of Waterloo and the City of Waterloo in December 2017. Following additional discussions with the City of Waterloo, a Resubmission was prepared and submitted to the City and agencies in March 2019. The resubmission included:

- Revised Draft Plans of Condominium and Subdivision;
- A Comparison Plan, illustrating the changes made between the July 2017 submission and the March 2019 resubmission;
- A Neighbourhood Design Summary;
- Proposed Zones to implement the Subdivisions and Condominiums

- A Technical Memorandum prepared by MTE that evaluated a revised gravity sewer design;
- A Technical Memorandum prepared by MTE that evaluated the relocation of the stormwater management facility;
- A Technical Letter prepared by Paradigm Transportation Solutions that evaluated the required storage length for left turn lanes on Conservation Drive at Streets One, Seven and Three;
- A Technical Memorandum prepared by NRSI that evaluated the proposed changes to the Draft Plan; and
- A Covering Letter, prepared by MHBC that summarized the changes to the Draft Plans.

Following the March 2019 resubmission, the City provided additional comments on August 29, 2019.

MHBC reviewed the post-circulation comments together with Northgate and Erbsville Kartway and other consultants retained by the owners. In response to the August 2019 comments, the following was provided to the City, Region and GRCA on April 16, 2020:

- Revised Draft Plans of Subdivision and Condominium;
- A Consolidated Draft Plan;
- A Comparison Plan, illustrating the changes made between the July 2017 Plans and the April 2020 revised Plans;
- A Covering Letter describing the changes made to the Draft Plans;
- A Detailed Response Table that included all August 2019 City comments, a response and follow-up Action Items. A copy of the Response Table is included in Appendix C for reference.

This report has been prepared in support of a formal resubmission of revised Draft Plans of Subdivision and Condominium, a revised Zoning By-law amendment and as a response to the post-circulation comments that were received. This report should be read in conjunction with the Planning Justification Report prepared by MHBC, dated July 2017.

2.0 SUMMARY OF AGENCY FEEDBACK

Post-circulation comments provided by the Region of Waterloo (the "Region"), the City of Waterloo (the "City") and the Grand River Conservation Authority (the 'GRCA') have been included as **Appendix A**. The comments have either been addressed through this resubmission and the revised Draft Plans, or can be addressed through conditions of draft plan approval.

2.1 Region of Waterloo

The Region's post-circulation comments, dated December 29, 2017, cover a series of aspects of the development, generally summarized in the following key topic areas:

- Water Services
- Environmental Planning
- Road Noise
- Transit Planning
- Source Water Protection
- Archaeology
- General Planning

The Region's comments have been addressed through the revisions to the Draft Plans and updates to the supporting technical Studies and Reports, or can be addressed through conditions of draft plan approval. The Table in Appendix 'B' contains the Region's comments (which include circulated agencies) and responses to the comments.

2.2 Grand River Conservation Authority (GRCA)

The GRCA's post-circulation comments dated September 22, 2017, outline details relative to the design of the subdivision, proposed zoning, stormwater management, natural heritage and the GRCA's ownership of adjacent lands.

The GRCA's comments have been addressed through the revisions to the Plans, this resubmission and updates to the supporting technical Studies and Reports, or can be addressed through conditions of draft plan approval.

2.3 City of Waterloo

The City's post-circulation comments dated August 29, 2019, outline details relative to the proposed zoning; transportation and engineering; trails/sidewalks; and, parks and environmental planning considerations. The City has also provided detailed comments specific to individual blocks and stages within the proposed plans. The main components of the City's comments are listed below:

- The inclusion of required buffers within the Draft Plan(s);
- The conveyance of Core Natural features to the City;
- The land area to be considered for the purposes of calculating parkland dedication;
- Neighbourhood 7 (N7) as identified in the District Plan;
- The staging of the development;
- Blandings Turtle Habitat;
- Stormwater Management;
- Alignment with proposed roads on the north side of Conservation Drive; and
- Active Transportation.

The City's general design comments have been addressed through revisions to the Draft Plans. Responses and actions to the City's comments were included in the Comment Response Table previously submitted in April 2020 (included within Appendix 'C'). Section 3 of this Report provides more detailed responses to the key issues identified in the City and Agency comments.

3.0 DESIGN RESPONSE

The City's suggested design revisions, as detailed in their August 2019 letter, were considered and analyzed by MHBC together with the consulting team. The goal of the design response is to respond to the comments, where appropriate, and to continue to ensure the general intent of the District Plan is maintained. The original Draft Plans of Subdivision and condominium (as submitted to the City and Region on July 7, 2017) are dated July 4, 2017. The revised draft plans which accompany this report are dated June 15, 2020. For ease of comparison, the original and revised plans of subdivision and condominium are included as **Figure 1** of this report, with corresponding numbers identifying the key areas of change (discussed further below). A copy of the revised draft plans of subdivision and condominium are included as **Figures 2, 3, 4 and 5**. A consolidated Plan encompassing all four plans is included as **Figure 6.**

3.1 Revisions to the Draft Plans of Subdivision and Vacant Land Condominium

The following summarizes the main design revisions between the original (July 2017) and revised Draft Plans of Subdivision and Condominium with corresponding numerical references shown on the Plan in Figure 1:

Overall Plans (Northgate and Erbsville Kartway)

1. The boundary of Block 1 within the Northgate Vacant Land Condominium has been modified.
2. 30 cm reserves are now included on the Plans along Beaver Creek Road and Conservation Drive, except for where they coincide with intersections, natural features or Park Block 1/Stage 2.

Northgate Draft Plan of Subdivision

Stages 1, 2 and 3

3. Street One was shifted further to the west to achieve greater separation from the roundabout at Beaver Creek Road and Conservation Drive. The location of Street One was determined through an evaluation by Paradigm Transportation Solutions (Paradigm), summarized in their Technical Memorandum provided to the City in March 2019. The location of Street One, and its ability for full turn movements, is supported by

the further analysis provided in the updated Transportation Impact Study (TIS) prepared by Paradigm and dated June 2020.

4. The shifting of Street One has resulted in minor changes to the size of the Blocks adjacent to the street (in Stage 3).
5. Blocks 2 and 3 within Stage 2 (now Stage 3) were assessed for their development potential with regard to the Official Plan. Block 3 is subject to Specific Provision Area 37, which permits additional density (300 bedrooms/ha) and height (6 storeys/20 metres). Block 2 is located along Conservation Drive where apartments and stacked townhomes are contemplated land uses, and potential densities are greater than the other multiple Blocks. The unit ranges identified on these Blocks have been increased as a result.
6. There are three Stages for the lands on the east side of Beaver Creek. The Blocks have been renumbered accordingly, starting with '1' in each Stage. The Park Block was previously Block 4/Stage 2, whereas it is now Block 1/Stage 2.
7. A turn-circle is now included at the intersection of Streets One and Two. Paradigm, in consultation with MTE and MHBC reviewed Streets One and Two and recommended conceptual traffic calming measures. The details of the traffic calming measures are included within the revised TIS prepared by Paradigm and can be implemented through more detailed engineering design and conditions of draft approval.
8. Park Block 6 has been changed to Walkway Block 11, consistent with staff comments and the District Plan, which does not include a park in this location. The Walkway Block will provide access to the trail system.
9. Walkway Block 7/Stage 1 has been shifted further to the north and is now Walkway Block 12/Stage 1. The Walkway Block coincides with the terminus of the multi-use trail within the Street Two road allowance.
10. A portion of Street Two has been widened to facilitate the future construction of a 3.0 multi-use trail from Block 9 out to Beaver Creek Road. The curvature of Street Two as it approaches Beaver Creek Road has been adjusted.
11. Open Space Blocks 8 and 9/Stage 1 and Block 5/Stage 2 (now Blocks 13 and 14/Stage 1 and Block 4/Stage 3) have been revised to reflect updates to the wetland and dripline boundaries identified by NRSI and confirmed with City, Regional and GRCA staff.

38. Stage includes a Temporary Stormwater Management Facility, denoted on Blocks 7, 8 and 9. The Block labelling also reflects the intended residential land use and unit ranges.

Stages 4 through 8

12. Street Three/Stage 3 is now shown as Street Seven/Stage 4. The Street has been shifted to the west to avoid intersection conflicts with the future development of the lands on the north side of Conservation Drive, and to align with the existing access to the

Creekside Church lands. The Block pattern on either side of Street Seven has been adjusted accordingly.

13. Park Block 21/Stage 3 has been moved (now referred to as Block 1/Stage 5), to provide a more suitable location with preferred natural grades for its intended use. Park Block 1/Stage 5 is now significantly larger and has more frontage on Street Six, creating a terminus view.
14. Stormwater Management Block 23/Stage 3 has been shifted to the south (now referred to as Block 26/Stage 4), where the grades are better suited for its intended use.
15. The combined Park Block 1/Stage 5, Stormwater Management Block 26/Stage 4 and Block 25/Stage 4 (pumping station) create a large area of future public lands adjacent to the natural feature. All of the Blocks are outside of the floodplain.
16. Walkway Block 22/Stage 4 has been aligned with the relocated Stormwater Management Block.
17. The alignment of Street Six has been adjusted to provide additional street frontage for Park Block 1/Stage 5.
18. A portion of Street Three has been renamed Street Eight to reflect the road pattern and provide greater clarity for movement within the subdivision.
19. A new Open Space Block (Block 24/Stage 4) has been added to the Plan. This Block reflects the natural feature buffers corresponding with the wetland and/or dripline boundaries identified by NRSI and confirmed by City, Regional and GRCA staff.
20. Park Consolidation Block 24/Stage 3 has been revised to a Walkway Block (Walkway Consolidation Block 29/Stage 4) in response to staff comments and to be consistent with the District Plan which does not include a park in this location.
21. The proposed Vacant Land Condominium has been divided into three (3) Stages (Stages 6, 7 and 8).
22. New Open Space Blocks (Blocks 2 and 3/Stage 6 and Blocks 2 and 3/Stage 7) were added to the Plan. The Blocks include the buffers associated with the dripline and/or wetland boundaries identified by NRSI and confirmed by City, Regional and GRCA staff.
23. A second temporary cul-de-sac is shown within Block 1/Stage 7 to facilitate the staging of development. Stage 7 contains one (1) development Block (Block 1) and two (2) Open Space Blocks (Blocks 2 and 3).
24. The buffers associated with the dripline and/or wetland boundaries identified by NRSI and confirmed by City, Regional and GRCA staff are now included within the limits of the Plan, in Stage 8.
35. A new Walkway Block (Block 23/Stage 4) has been added to ensure trail continuity.

Northgate Draft Plan of Vacant Land Condominium

25. The boundary of the Draft Plan has been modified. The 2017 Plan contained six (6) units fronting onto Street Six. The revised Draft Plan does not contain any units fronting on Street Six. The common element on the south portion of the lands has been reduced. A portion of that common element is now outside the limits of the Draft Plan of Condominium and is part of the Draft Plan of Subdivision (as described above – in Stages 6 and 7).
26. The limits of the Draft Plan have also been revised to the north of the "Private Road" to include the buffers associated with the dripline and/or wetland boundaries identified by NRSI and confirmed by City, Regional and GRCA staff. The buffers are included within a new Common Element area.
27. The Draft Plan now has 3 Stages, whereas previously, 2 Stages were proposed. The Draft Plan now includes an additional temporary cul-de-sac on Unit 6/Stage 2 to accommodate the staging of development.
28. The "Lot Consolidation Blocks" are now referred to as "Block Consolidation." The entire condominium unit will be located within the Erbsville-Kartway Draft Plan of Condominium. The result is a reduction in the number of units from 56 to 49.
36. The Private Road has been shifted to minimize the need for area grading and related impacts on the natural features.

Erbsville-Kartway Draft Plan of Subdivision

Stages 1 and 2

29. Park Block 3/Stage 1 has been revised to a Walkway Block (Walkway Consolidation Block 3/Stage 1) in response to staff comments and to be consistent with the District Plan which does not include a park in this location.
30. Block 4/Stage 1 has been updated to reflect the revised dripline boundary identified by NRSI and confirmed by City, Regional and GRCA staff. The corresponding boundary of Residential Consolidation Block 1/Stage 1 was adjusted accordingly.
31. The "Lot Consolidation Blocks" are now referred to as "Block Consolidation". The entire condominium unit is now included within the Erbsville-Kartway Draft Plan numbered as Units 24-26.
32. The boundary of the natural feature has been updated to reflect the revised dripline boundary identified by NRSI and confirmed by City, Regional and GRCA staff.
33. A new Open Space Block (Block 2/Stage 2) has been created that reflects the boundary of the natural features and the associated buffers identified by NRSI and confirmed by City, Regional and GRCA staff. The boundary of Block 1/Stage 2 has been adjusted to reflect the boundary of the Open Space Block 2/Stage 2.

Figure 1



Original Draft Plan Submission
July 7,2017

Area Schedule	Northgate Land Corporation 30T-17401			1455136 Ontario Inc. 30T-17402			Northgate Land Corporation & 1455136 Ontario Inc.		
	TOTAL			TOTAL					
Description	Lots/Blks	Area	Units	Lots/Blks	Area	Units	Lots/Blks	Area	Units
Residential	26	6.621	136-210	2	0.514	7-11	28	6.621	143-221
Multiple Residential	6	7.669	300-365				6	7.669	300-365
Multiple Res./Mixed Use	1	1.951	117-195				1	1.951	117-195
Park	4	1.284		1	0.043		5	1.284	
Walkway	2	0.037					2	0.037	
Open Space	3	1.851		1	0.892		4	1.851	
Pumping Station	2	0.454					2	0.454	
Storm Water Mgmt	1	0.805					1	0.805	
Vacant Land Condominium	1	7.219	56	1	4.966	24	2	12.185	80
Future Residential Consolidation Block	2	0.237	7-11				2	0.237	7-11
Future Common Element Consolidation Block	1	0.014					1	0.014	
Road Widening	4	0.892		1	0.040		5	0.892	
0.3m Reserve	5	0.013					5	0.013	
Roads		3.863			0.001			3.863	
TOTAL	55	**30.959**	616-837	6	6.456	31-35	61	**37.415**	647-872

Note: Draft Plan is dated July 4 2017.

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

Key Plan



Revised Draft Plan Submission
July 14,2020

Area Schedule (39)	Northgate Land Corporation 30T-17401			1455136 Ontario Inc. 30T-17402			Northgate Land Corporation & 1455136 Ontario Inc.		
	TOTAL			TOTAL					
Description	Lots/Blks	Area	Units	Lots/Blks	Area	Units	Lots/Blks	Area	Units
Residential	25	6.757	141-215				25	6.757	141-215
Residential / SWM	2	0.296	9-11				2	0.296	9-11
Mult. Residential / SWM	1	0.462	40				1	0.462	40
Multiple Residential	5	4.621	239-323				5	4.621	239-323
Multiple Res./Mixed Use	1	2.176	131-320				1	2.176	131-320
Park	2	1.115					2	1.115	
Walkway	4	0.077					4	0.077	
Open Space	8	4.918		2	3.759		10	8.677	
Pumping Station	2	0.326					2	0.326	
Storm Water Mgmt	1	0.864					1	0.864	
Residential Consolidation	2	0.238	9-14	2	0.607	10-14	4	0.845	19-28
Vacant Land Condominium	3	22.329	49	1	1.912	23	4	9.035	72
Block Consolidation	3	0.074	3	3	0.100	3	6	0.174	6
Future Common Element	1	0.037					1	0.037	
Walkway Consolidation	1	0.004		1	0.010		2	0.014	
Road Widening	4	0.966		1	0.040		5	1.006	
0.3m Reserve	13	0.032		1	0.001		14	0.033	
Roads		3.998						3.998	
TOTAL	78	49.290	621-975	11	6.429	36-40	89	55.719	857-1,015

(6) Denotes Plan Revisions

Rev. No.	Date	Issued / Revision	By
2	July 14,2020	Input Stormwater Management Block in Stage 1. Stage 8 Expanded. Revise Area Schedule.	LHB
1	June 15,2020	Input Conceptual & Proposed Developments North of Conservation Drive.	LHB

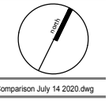
Notes:
- Topographic information prepared by MTE Engineering.

MHBC PLANNING URBAN DESIGN & LANDSCAPE ARCHITECTURE
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Original & Revised Draft Plan Submissions

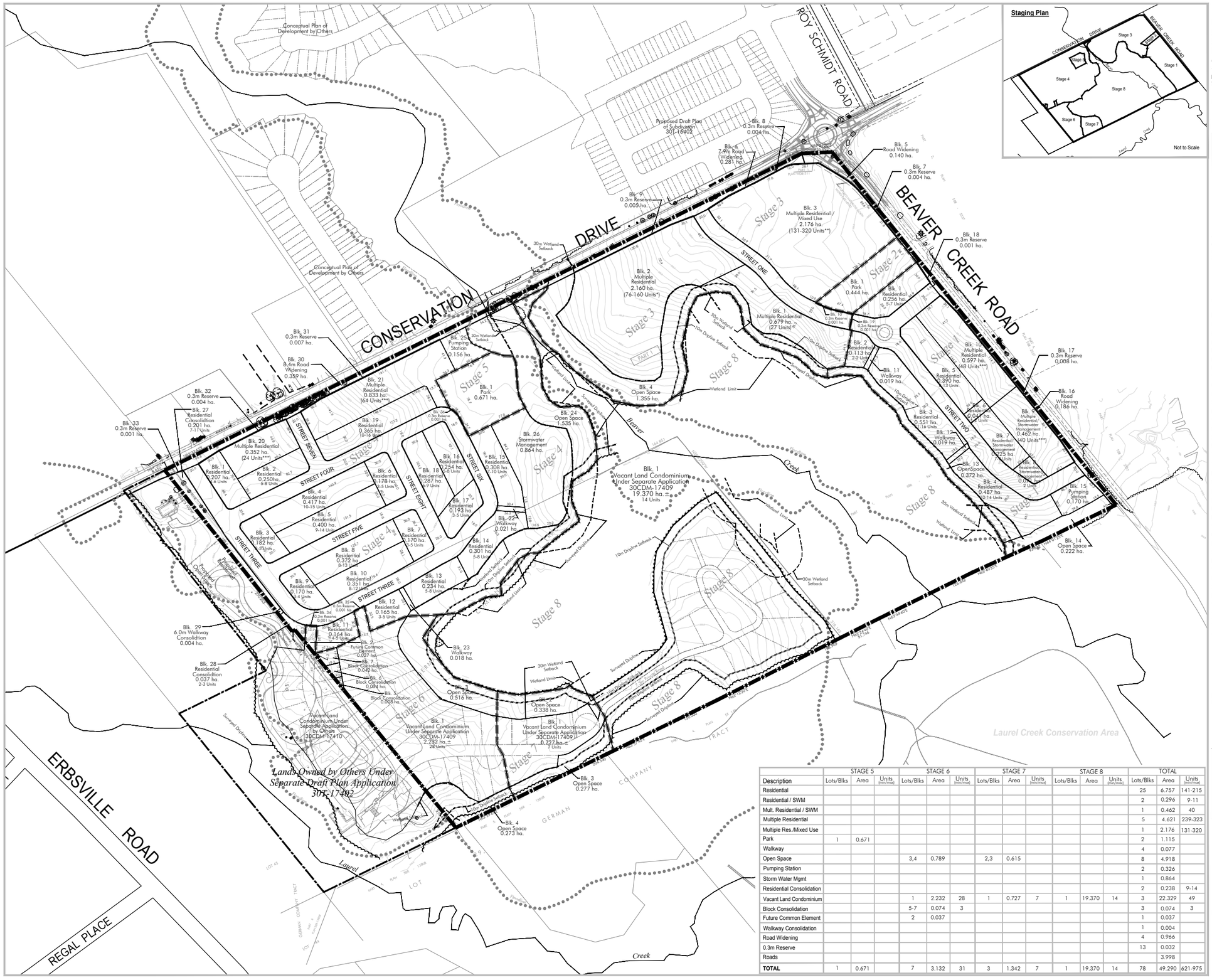
Date: July 14,2020
File No.: 14148A
Plan Scale: Not to Scale
Drawn By: L.H.B.
Checked By: P.B.
Other:

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



Drawing: K:\14148A-Northgate-Waterloo\Report\Figure 1 - Draft Plan Comparison July 14 2020.dwg

Figure 2



Staging Plan

Legal Description

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

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: JUNE 22, 2017

Trevor McNeil, B.Sc., O.L.S., O.L.I.P.
MTE Ontario Land Surveyors Ltd.

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 — **30T - 17401**

Description	STAGE 1 Lots/Blks	Area	Units (Units/Hect.)	STAGE 2 Lots/Blks	Area	Units (Units/Hect.)
Residential	1-6	1.838	37-54			
Residential / SWM	7,8	0.296	9-11			
Mult. Residential / SWM	9	0.462	40			
Multiple Residential	10	0.597	48			
Multiple Res./Mixed Use						
Park				1	0.444	
Walkway	11,12	0.038				
Open Space	13,14	0.594				
Pumping Station	15	0.170				
Storm Water Mgmt						
Residential Consolidation						
Walkway Consolidation						
Road Widening	16	0.186				
0.3m Reserve	17-19	0.010				
Roads		0.886				
TOTAL	19	5.077	134-153	1	0.444	

Description	STAGE 3 Lots/Blks	Area	Units	STAGE 4 Lots/Blks	Area	Units (Units/Hect.)
Residential				1-19	4.919	104-161
Residential / SWM						
Mult. Residential / SWM						
Multiple Residential	1,2	2.839	103-187	20,21	1.185	88
Multiple Res./Mixed Use	3	2.176	131-320			
Walkway				22,23	0.039	
Open Space	4	1.355		24	1.565	
Pumping Station				25	0.156	
Storm Water Mgmt				26	0.864	9-14
Residential Consolidation				27,28	0.238	
Walkway Consolidation				29	0.004	
Road Widening	5,6	0.421		30	0.359	
0.3m Reserve	7-10	0.014		31-36	0.008	
Roads		0.463			2.649	
TOTAL	10	7.268	234-507	36	11.986	201-263

Description	STAGE 5 Lots/Blks	Area	Units (Units/Hect.)	STAGE 6 Lots/Blks	Area	Units (Units/Hect.)	STAGE 7 Lots/Blks	Area	Units (Units/Hect.)	STAGE 8 Lots/Blks	Area	Units (Units/Hect.)	TOTAL Lots/Blks	Area	Units (Units/Hect.)
Residential													25	6.757	141-215
Residential / SWM													2	0.296	9-11
Mult. Residential / SWM													1	0.462	40
Multiple Residential													5	4.621	239-323
Multiple Res./Mixed Use													1	2.176	131-320
Park	1	0.671											2	1.115	
Walkway													4	0.077	
Open Space				3,4	0.789		2,3	0.615					8	4.918	
Pumping Station													2	0.326	
Storm Water Mgmt													1	0.864	
Residential Consolidation													2	0.238	9-14
Vacant Land Condominium				1	2.232	28	1	0.727	7	1	19.370	14	3	22.329	49
Block Consolidation				5-7	0.074	3							3	0.074	3
Future Common Element				2	0.037								1	0.037	
Walkway Consolidation													1	0.004	
Road Widening													4	0.966	
0.3m Reserve													13	0.032	
Roads														3.998	
TOTAL	1	0.671		7	3.132	31	3	1.342	7	1	19.370	14	78	49.290	621-975

No.	Date	Issued / Revision	By
14	July 14.2020	Input Stormwater Management Block in Stage 1. Stage 8 Expanded. Revise Area Schedule.	LHB
13	June 15.2020	Input Conceptual & Proposed Developments North of Conservation Drive.	LHB
12	May 28.2020	Walkway Added in Stage 4. Revise Private Road in Stage 7.	LHB
11	April 9.2020	Plan Revised per City and Regional Comments.	LHB
10	October 24.2019	Updated Contours, Wetland Limits, Driplines,Topographic Features and Plan Revisions.	LHB
9	August 28.2019	Frontages and Additional Dimensioning Added to All Blocks.	LHB
8	July 31.2019	Revise Road Widening at Beaver Creek Road & Conservation Drive. Revise Area Schedule.	LHB
7	Mar. 11.2019	Revise Walkway-Stage 1, Pumping Station-Stage 3, Park-Stage 4, Adjust Limits of Plan & Revise Area Schedule.	LHB
6	Feb. 26.2019	Revise Stages 3 & 4 Lotting, Park and SWM Areas. Revise Area Schedule.	LHB
5	Dec. 20.2018	Revise Stage 4 Park, Add Residential Unit Yields per Block. Revise Area Schedule.	LHB
4	Nov. 14.2018	Edits to Street One, Stage 2 & Stage 5 Lotting, Stage 3 SWM Pond, Parks & Area Schedule.	LHB
3	Oct. 24.2018	Streets 1 & 2, Park and Multiple Blocks Redesigned. Area Schedule Revised.	LHB
2	Oct. 18.2018	Stages 3 & 4 Redesigned. Area Schedule Revised.	LHB
1	Oct. 10.2018	West Area Revised to Align Main Access with Church Access	LHB

Notes:

- Boundary information provided by MacDonald Tamblyn Surveying Ltd., February 5,2008, Plan 58R-16404.
- Topographic information provided by MTE Engineering, September-October 2016. Contour Interval - 0.5m.
- Single Family Residential Lots based on: min. @ 13.7m wide lots, max. @ 9.0m wide lots.
- * Stewart Creek Meadows District Plan, Low Density Residential 2 calculated at 20-40 Units per Hectare.
- ** Mixed Use Blocks based on Beaver Creek Meadows District Plan - Mixed Use Medium Density Residential calculated at 60 Units per Hectare. Maximum Units based on City of Waterloo Official Plan Density of 300 Bedrooms per Hectare Split at 32% Two Bedroom Units and 68% One Bedroom Units.
- *** 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 Development Resource On-Line Mapping, January 23,2017.

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Approval Stamp

Date	July 14,2020
File No.	14148A
Plan Scale	1:2,000
Drawn By	L.H.B.
Checked By	P.B. / T.H.

Project

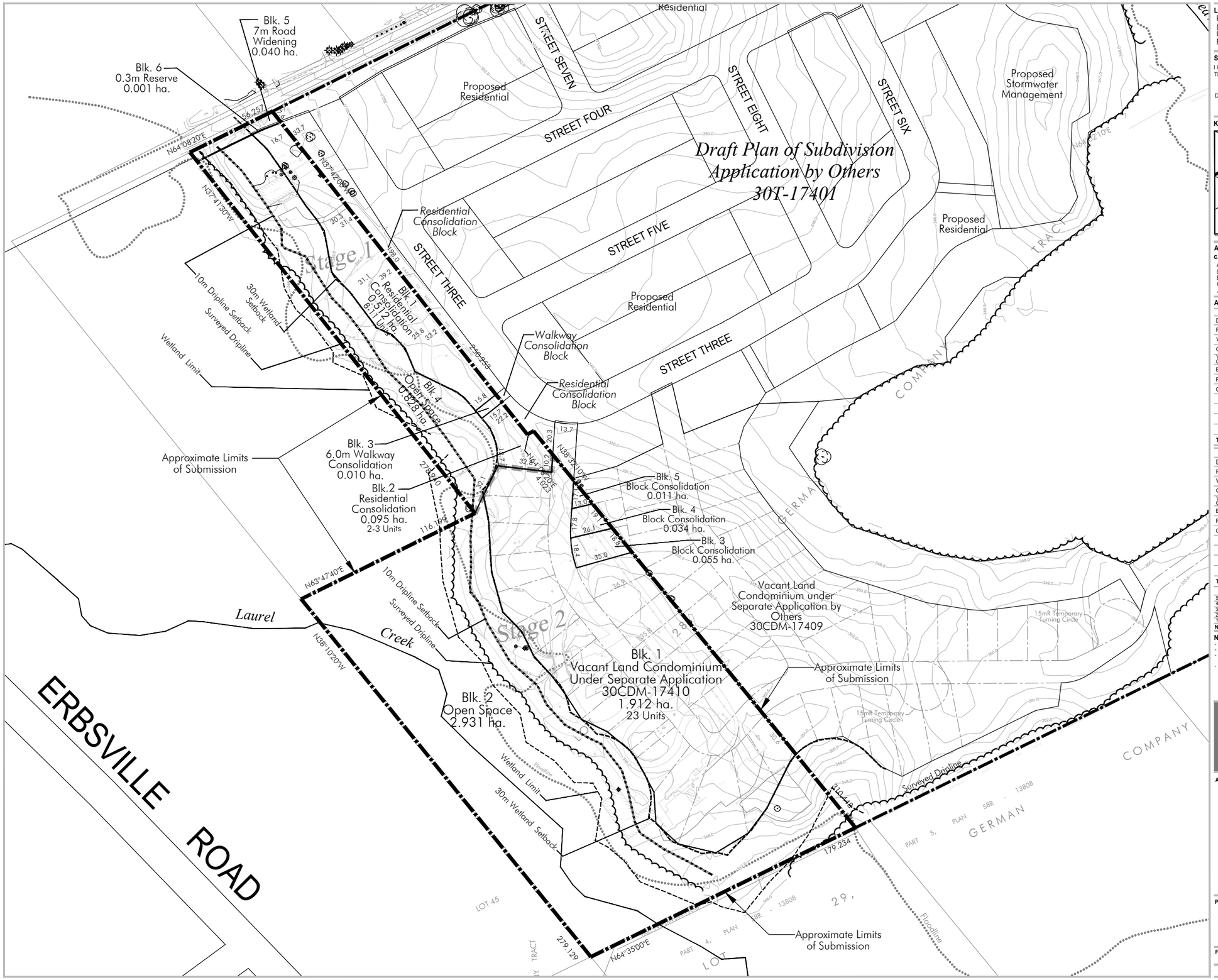
1017081 Ontario Limited and Gabriella Groff
Conservation Drive
Waterloo, Ontario

north

File Name **DRAFT PLAN OF SUBDIVISION**

K:\14148A-NORTHGATE-WATERLOO\REPORT\FIGURE 2 - NORTHGATE DRAFT PLAN JULY 14 2020.DWG

Figure 3



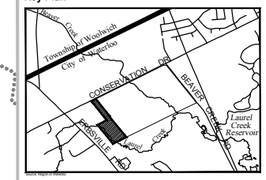
Legal Description
PART OF LOT 28, GERMAN COMPANY TRACT,
(GEOGRAPHIC TOWNSHIP OF WATERLOO),
CITY OF WATERLOO,
REGIONAL MUNICIPALITY OF WATERLOO

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: June 29, 2017

Trevor McNeil, B.Sc., O.L.S., O.L.I.P.
MTE Ontario Land Surveyors Ltd.

Key Plan



Subject Lands

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 **30T - 17402**

Description	STAGE 1 Lots/Blks	STAGE 1 Area	STAGE 1 Units (density/Blk)	STAGE 2 Lots/Blks	STAGE 2 Area	STAGE 2 Units (density/Blk)
Residential Consolidation	1,2	0.607	10-14			
Walkway Consolidation	3	0.010				
Open Space	4	0.828		2	2.931	
Vacant Land Condominium				1	1.912	23
Block Consolidation				3-5	0.100	3
Road Widening	5	0.040				
0.3m Reserve	6	0.001				
TOTAL	6	1.486	10-14	5	4.943	26

Description	TOTAL Lots/Blks	TOTAL Area	TOTAL Units (density/Blk)
Residential Consolidation	2	0.607	10-14
Walkway Consolidation	1	0.010	
Open Space	2	3.759	
Vacant Land Condominium	1	1.912	23
Block Consolidation	3	0.100	3
Road Widening	1	0.040	
0.3m Reserve	1	0.001	
TOTAL	11	6.429	36-40

No.	Date	Issued / Revision	By
5	May 28,2020	Update Adjacent Subdivision Road and Lotting Layout.	LHB
4	April 15,2020	Area Schedules Edits.	LHB
3	April 9,2020	Plan Revised per City and Regional Comments, New Wetland and Dripline Data.	LHB
2	March 11,2019	Additional Updates to Abutting Subdivision Plan. Notation Edits. Update Area Schedule.	LHB
1	November 7,2018	Update Abutting Subdivision Plan.	LHB

Notes:
- Boundary information based on previous survey by Guenther Rueb Surveying Limited (Job # 89-32(2).
- Topographic information provided by Stantec Consulting. Contour Interval - 0.5m.
- Floodline mapping obtained from North Waterloo Scoped Subwatershed Study, November 2012 and GRCA Developement Resource On-Line Mapping, January 23,2017.
- Single Family Residential Lots based on: min. @ 13.7m, max. @ 9.0m wide lots.

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Approval Stamp

Date May 28,2020

File No. 14148A

Plan Scale 1:1,000

Drawn By L.H.B.

Checked By P.B. / T.H.

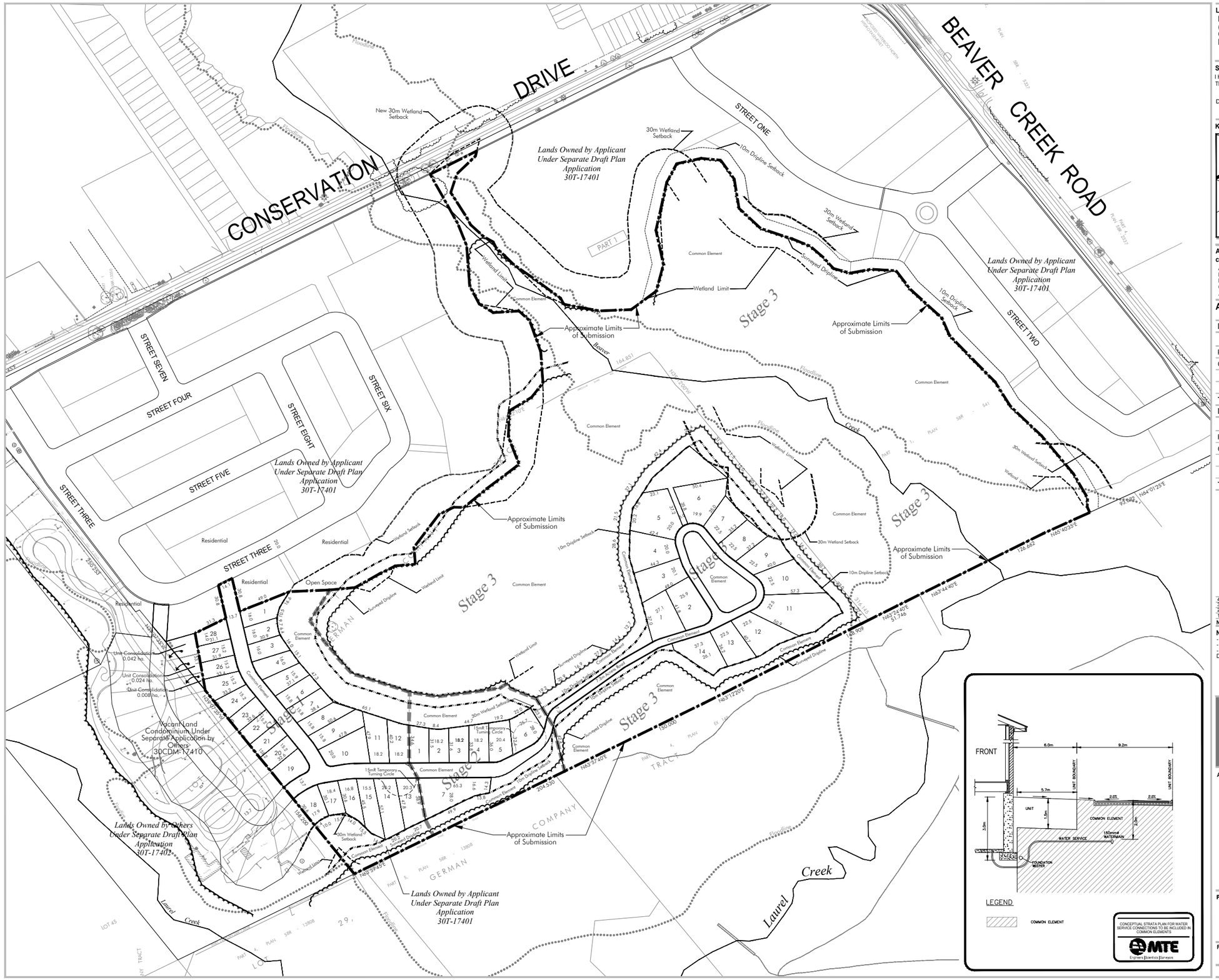
Project
1455136 Ontario Inc.
Conservation Drive
Waterloo, Ontario

north

File Name **DRAFT PLAN OF SUBDIVISION**

K:\14148A-NORTHGATE-WATERLOO\REPORT\FIGURE 3 - DRAFT PLAN MAY 28 2020.DWG

Figure 4



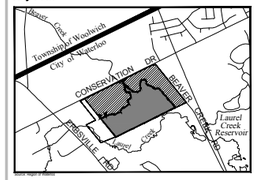
Legal Description
PART OF LOT 28, GERMAN COMPANY TRACT,
(GEOGRAPHIC TOWNSHIP OF WATERLOO),
CITY OF WATERLOO,
REGIONAL MUNICIPALITY OF WATERLOO

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: JUNE 22, 2017

Trevor McNeil, B.Sc., O.L.S., O.L.I.P.
MTE Ontario Land Surveyors Ltd.

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, Common Element		
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 **30CDM - 17409**

Description	Stage 1			Stage 2		
	Units	Area	Units (min/max)	Units	Area	Units (min/max)
Residential	1-28	1.800	28	1-7	0.556	7
Common Element		1.332			0.786	
TOTAL	28	3.132	28	7	1.342	7
Description	Stage 3			Total		
	Units	Area	Units (min/max)	Units	Area	Units (min/max)
Residential	1-14	1.690	14	49	4.046	49
Common Element		17.680			19.798	
TOTAL	14	19.370	14	49	23.844	49

No.	Date	Issued / Revision	By
4	July 14,2020	Revise Limits for Stages 1, 2 & 3. Revise Area Schedule.	LHB
3	May 28,2020	Revise Private Road in Stage 2	LHB
2	April 9,2020	Plan Revised per City and Regional Comments, New Wetland and Dripline Data.	LHB
1	November 7,2018	Edits to Lots 1-4, Stage 2 Area Schedule Revised.	LHB

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.
- 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 14,2020

File No. 14148A

Plan Scale 1:1,500

Drawn By L.H.B.

Checked By P.B. / T.H.

Project
1017081 Ontario Limited and Gabriella Groff
Conservation Drive
Waterloo, Ontario

north

File Name
DRAFT PLAN OF VACANT LAND CONDOMINIUM

K:\14148A-NORTHGATE-WATERLOO\REPORT\FIGURE 4 - DRAFT PLAN CONDO JULY 14 2020.DWG

Figure 5

CONSERVATION DRIVE

STREET FOUR

STREET FIVE

STREET SIX

STREET SEVEN

STREET EIGHT

STREET THREE

Lands Owned by Applicant Under Separate Draft Plan Application 30T-17402

Lands Owned by Others Under Separate Draft Plan Application 30T-17401

Residential

Open Space

Vacant Land Condominium Under Separate Application by Others 30CDM-17409

Approximate Limits of Submission

Laurel Creek

10m Dripline Setback

30m Wetland Setback

Surveyed Dripline

Floodline

Wetland Limit

Common Element

15mR Temporary Turning Circle

N64°08'20"E 56.257

N38°30'00"W

N37°41'30"W

N38°30'00"W 16.122

N63°32'25"E 5.024

250.353

263.353

N63°47'40"E

N38°10'20"W

N64°27'35"W

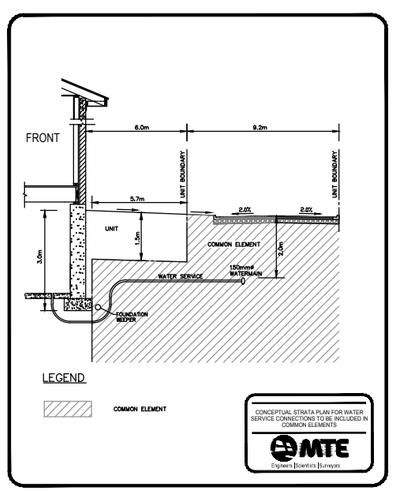
N64°35'00"E 279.129

179.234

116.164

27.240

158.08



Legal Description

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

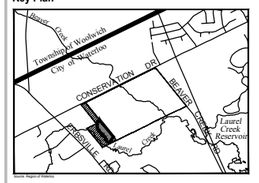
Surveyor's Certificate

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: June 29, 2017

Trevor McNeil, B.Sc., O.L.S., O.L.I.P.
MTE Ontario Land Surveyors Ltd.

Key Plan



Subject Lands

Additional Lands Owned by Applicant

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, Common Element		
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 **30CDM - 17410**

Description	Units	Area	Units (density/ac)
Residential	1-26	1.751	26
Common Element		0.384	
TOTAL	26	2.135	26

Note: Lot Consolidation Block will be consolidated with 30CDM-17409 to create complete units.

No.	Date	Issued / Revision	By
3	May 28,2020	Update Adjacent Subdivision Road and Lotting Layout.	LHB
2	April 9,2020	Plan Revised per City and Regional Comments, New Wetland and Dripline Data.	LHB
1	November 7,2018	Update Abutting Subdivision Plan.	LHB

Notes:

- Boundary information based on previous survey by Guenther Rueb Surveying Limited (Job # 89-32(2).
- Topographic information provided by Stantec Consulting. Contour Interval - 0.5m.
- 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 May 28,2020

File No. 14148A

Plan Scale 1:1,000

Drawn By L.H.B.

Checked By P.B. / T.H.

Project

1455136 Ontario Inc.
Conservation Drive
Waterloo, Ontario

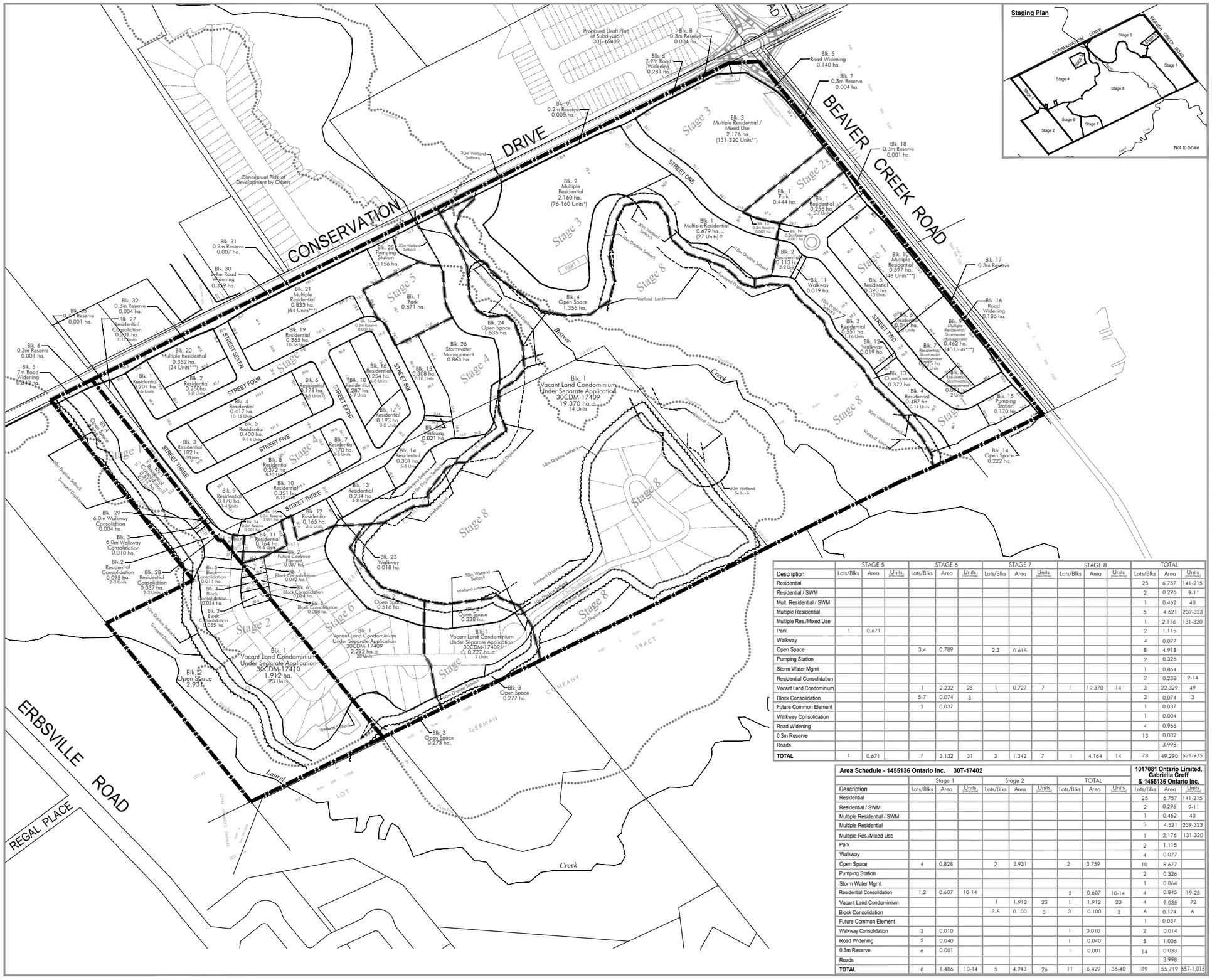
north

File Name

DRAFT PLAN OF VACANT LAND CONDOMINIUM

K:\14148A-NORTHGATE-WATERLOO\REPORT\FIGURE 5 - KARTWAY DRAFT PLAN CONDO MAY 28 2020.DWG

Figure 6


CONSERVATION DRIVE
BEAVER CREEK ROAD
STREET ONE
STREET TWO
STREET THREE
STREET FOUR
STREET FIVE
STREET SIX
STREET SEVEN
STREET EIGHT
STREET NINE
Proposed Draft Plan of Subdivision 30T-15402
Conceptual Plan of Development by Others
Blk. 1 Vacant Land Condominium Under Separate Application 30CDM-17409 19.370 ha.± 14 Units
Blk. 1 Vacant Land Condominium Under Separate Application 30CDM-17410 1.912 ha. 23 Units
Blk. 1 Vacant Land Condominium Under Separate Application 30CDM-17409 0.727ha.± 7 Units
Blk. 1 Vacant Land Condominium Under Separate Application 30CDM-17409 2.232 ha.± 28 Units
Blk. 1 Multiple Residential 0.679 ha. (27 Units)
Blk. 1 Residential 0.256 ha. 2-7 Units
Blk. 2 Residential 0.113 ha. 2-2 Units
Blk. 1 Park 0.444 ha.
Blk. 1 Park 0.671 ha.
Blk. 2 Multiple Residential 2.160 ha. (76-160 Units*)
Blk. 3 Multiple Residential / Mixed Use 2.176 ha. (131-320 Units**)
Blk. 4 Open Space 1.355 ha.
Blk. 24 Open Space 1.535 ha.
Blk. 2 Open Space 0.516 ha.
Blk. 2 Open Space 0.338 ha.
Blk. 3 Open Space 0.277 ha.
Blk. 3 Open Space 0.273 ha.
Blk. 14 Open Space 0.222 ha.
Blk. 32 Open Space 2.931
Blk. 4 Open Space 0.222 ha.
Blk. 25 Pumping Station 0.156 ha.
Blk. 15 Pumping Station 0.170 ha.
Blk. 26 Stormwater Management 0.864 ha.
Blk. 7 Residential/ Stormwater Management 0.225 ha. 2-7 Units
Blk. 8 Residential/ Stormwater Management 0.225 ha. 2-7 Units
Blk. 9 Residential/ Stormwater Management 0.225 ha. 2-7 Units
Blk. 10 Multiple Residential/ Stormwater Management 0.462 ha. (40 Units***)
Blk. 5 Residential 2.390 ha. 13 Units
Blk. 6 Residential 0.041 ha. 2 Units
Blk. 17 0.3m Reserve
Blk. 16 Road Widening 0.186 ha.
Blk. 15 Pumping Station 0.170 ha.
Blk. 5 Road Widening 0.140 ha.
Blk. 6 7.9m Road Widening 0.281 ha.
Blk. 7 0.3m Reserve 0.004 ha.
Blk. 8 0.3m Reserve 0.004 ha.
Blk. 9 0.3m Reserve 0.005 ha.
Blk. 18 0.3m Reserve 0.001 ha.
Blk. 19 0.3m Reserve 0.001 ha.
Blk. 31 0.3m Reserve 0.007 ha.
Blk. 30 0.4m Road Widening 0.002 ha.
Blk. 33 0.3m Reserve 0.001 ha.
Blk. 32 0.3m Reserve 0.004 ha.
Blk. 27 Residential Consolidation 0.201 ha. 7-11 Units
Blk. 6 0.3m Reserve 0.001 ha.
Blk. 5 7m Road Widening 0.044 ha.
Blk. 29 6.0m Walkway Consolidation 0.004 ha.
Blk. 3 6.0m Walkway Consolidation 0.010 ha.
Blk. 2 Residential Consolidation 0.095 ha. 2-3 Units
Blk. 28 Residential Consolidation 0.037 ha. 2-3 Units
Blk. 5 Block Consolidation 0.011 ha.
Blk. 4 Block Consolidation 0.034 ha.
Blk. 3 Block Consolidation 0.055 ha.
Blk. 7 Block Consolidation 0.042 ha.
Blk. 6 Block Consolidation 0.024 ha.
Blk. 8 Block Consolidation 0.008 ha.
Blk. 2 Future Common Element 0.037 ha.
Blk. 1 Residential 0.207 ha. 4-6 Units
Blk. 2 Residential 0.250ha. 5-8 Units
Blk. 4 Residential 0.417 ha. 10-15 Units
Blk. 5 Residential 0.400 ha. 9-14 Units
Blk. 3 Residential 0.182 ha. 3-5 Units
Blk. 8 Residential 0.372 ha. 8-13 Units
Blk. 9 Residential 0.170 ha. 3-4 Units
Blk. 10 Residential 0.351 ha. 8-12 Units
Blk. 11 Residential 0.164 ha. 3-5 Units
Blk. 12 Residential 0.165 ha. 3-5 Units
Blk. 13 Residential 0.234 ha. 5-8 Units
Blk. 14 Residential 0.301 ha. 5-8 Units
Blk. 16 Residential 0.254 ha. 5-8 Units
Blk. 17 Residential 0.193 ha. 3-5 Units
Blk. 18 Residential 0.287 ha. 5-9 Units
Blk. 19 Residential 0.365 ha. 10-16 Units
Blk. 20 Multiple Residential 0.352 ha. (24 Units***)
Blk. 21 Multiple Residential 0.833 ha. (64 Units***)
Blk. 22 Walkway 0.021 ha.
Blk. 23 Walkway 0.018 ha.
Blk. 11 Walkway 0.019 ha.
Blk. 12 Walkway 0.019 ha.
Blk. 4 Residential 0.487 ha. 9-14 Units
Blk. 3 Residential 0.551 ha. 7-16 Units
Blk. 13 OpenSpace 0.372 ha.
Blk. 10 Residential/ Stormwater Management 0.225 ha. 2 Units
Blk. 33 Residential 0.597 ha. (48 Units***)
Blk. 18 Residential 0.287 ha. 5-9 Units
Blk. 19 Residential 0.365 ha. 10-16 Units
Blk. 20 Multiple Residential 0.352 ha. (24 Units***)
Blk. 21 Multiple Residential 0.833 ha. (64 Units***)
Blk. 1 Residential 0.207 ha. 4-6 Units
Blk. 2 Residential 0.250ha. 5-8 Units
Blk. 4 Residential 0.417 ha. 10-15 Units
Blk. 5 Residential 0.400 ha. 9-14 Units
Blk. 3 Residential 0.182 ha. 3-5 Units
Blk. 8 Residential 0.372 ha. 8-13 Units
Blk. 9 Residential 0.170 ha. 3-4 Units
Blk. 10 Residential 0.351 ha. 8-12 Units
Blk. 11 Residential 0.164 ha. 3-5 Units
Blk. 12 Residential 0.165 ha. 3-5 Units
Blk. 13 Residential 0.234 ha. 5-8 Units
Blk. 14 Residential 0.301 ha. 5-8 Units
Blk. 16 Residential 0.254 ha. 5-8 Units
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Blk. 12 Walkway 0.019 ha.
Blk. 4 Residential 0.487 ha. 9-14 Units
Blk. 3 Residential 0.551 ha. 7-16 Units
Blk. 13 OpenSpace 0.372 ha.
Blk. 10 Residential/ Stormwater Management 0.225 ha. 2 Units
Blk. 33 Residential 0.597 ha. (48 Units***)
Blk. 10 Multiple Residential/ Stormwater Management 0.462 ha. (40 Units***)
Blk. 5 Residential 2.390 ha. 13 Units
Blk. 6 Residential 0.041 ha. 2 Units
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Blk. 8 Residential/ Stormwater Management 0.225 ha. 2-7 Units
Blk. 9 Residential/ Stormwater Management 0.225 ha. 2-7 Units
Blk. 17 0.3m Reserve
Blk. 16 Road Widening 0.186 ha.
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Blk. 5 Road Widening 0.140 ha.
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Blk. 18 0.3m Reserve 0.001 ha.
Blk. 19 0.3m Reserve 0.001 ha.
Blk. 31 0.3m Reserve 0.007 ha.
Blk. 30 0.4m Road Widening 0.002 ha.
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Blk. 6 0.3m Reserve 0.001 ha.
Blk. 5 7m Road Widening 0.044 ha.
Blk. 29 6.0m Walkway Consolidation 0.004 ha.
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Blk. 2 Residential Consolidation 0.095 ha. 2-3 Units
Blk. 28 Residential Consolidation 0.037 ha. 2-3 Units
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Blk. 3 Block Consolidation 0.055 ha.
Blk. 7 Block Consolidation 0.042 ha.
Blk. 6 Block Consolidation 0.024 ha.
Blk. 8 Block Consolidation 0.008 ha.
Blk. 2 Future Common Element 0.037 ha.

Erbsville-Kartway Draft Plan of Vacant Land Condominium

34. The number of units has increased from 24 to 26.

Surrounding Lands

37. The road connections and development patterns of the surrounding developments are shown on the plans for context.

Area Schedules

The Draft Plans note the intended land uses (unless the land use is intended for single/semis), and provides unit ranges in each Block. The Area Schedules have been updated to reflect the changes described above. The total land area within the combined plans of subdivision has increased from 37.415 hectares to 55.719 hectares, which reflects the inclusion of additional Open Space Blocks intended to be conveyed to the City of Waterloo and the expansion of Block 1 within the Northgate Draft Plan of Vacant Land Condominium. The maximum unit yield range has increased to 657 to 1,015 to reflect the greater development potential of Blocks 2 and 3/Stage 3 (Northgate), as well as the minor adjustments to the Block sizes and orientations resulting from the changes described above.

Table 1 provides a summary of the main statistical changes of the original and revised draft Plans of Subdivision.

Table 1 Original and Revised Draft Plans of Subdivision Comparison (Consolidated)

CONSIDERATION	Original Plans (July 2017)	Revised Plans (April 2020)
Total Units	647-872 units	657-1,015 units
Total Multiple Units	300-365 units	279-363 units
Multiple/Mixed-Use Units	117-195 units	131-320 units
Vacant Land Condominium Units	80 units	72 units
Residential		150-226
Residential and Block Consolidation	7-11 units	25-34 units
Walkways	0.037 ha	0.077 ha
Park	1.284 ha	1.115 ha
Open Space	1.851 ha	8.677 ha
Pumping Station	0.454 ha	0.326 ha
Roads	3.863 ha	3.998 ha

Road Widening	0.892 ha	1.006 ha
30 cm Reserve	0.013 ha	0.033 ha
Total Land Area	37.415 ha	55.719 ha

These design changes provide for an appropriate response to input received, having regard for the approved land use policy framework and a range of interrelated planning, development, design and process related considerations.

3.2 Natural Feature Buffers

In 2019, the project team, together with the City, Region and GRCA conducted a site walk and identified the limits of the natural features. The limits were subsequently surveyed and are included on the revised Draft Plans (identified as "surveyed dripline" or "wetland limit" on the Draft Plan). The boundaries were agreed to by the GRCA, City and Region. The proposed development within the draft plans are located entirely outside of the limits of the identified features.

Section 2.1.8 of the Provincial Policy Statement (PPS, 2020) states that:

Development and site alteration shall not be permitted on adjacent lands to the natural heritage features and areas identified in policies 2.1.4, 2.1.5 and 2.1.6 unless the ecological function of the adjacent lands has been evaluated and it has been demonstrated that there will be no negative impacts on the natural features or on their ecological functions.

Consistent with policy 2.1.8, NRSI prepared an Environmental Impact Study (EIS) as part of the supporting studies which informed the design of the submission and formed part of the complete application submission in 2017. As part of the project teams' consideration of the City and Agency comments and subsequent revisions to the Draft Plan, NRSI has prepared an updated EIS, which accompanies this resubmission. The EIS concludes that with the included buffers, the development and site alternation on the lands adjacent to the natural heritage features will not have negative impacts on the features or their ecological functions.

The Growth Plan for the Greater Golden Horseshoe (2019) includes policies regarding the requirement for a "vegetation protection zone" measured from the outside boundary of a key natural heritage feature (i.e. a wetland) outside of Settlement Areas. In recognition of the different provincial planning objectives, the Growth Plan distinguishes between wetlands located within Settlement Areas, and wetlands located outside of Settlement Areas. For wetlands located outside of Settlement Areas, Section 4.2.4.1 requires a minimum 30 metre vegetation protection zone from an identified wetland. Lands outside of Settlement Areas are

expected to accommodate less growth (employment and residential) and as such, the development pattern and balancing of planning objectives is considered through a different set of criteria. For lands within Settlement Areas, where the majority of growth is expected to occur, there is a recognition that development and the protection of natural heritage features are both key provincial planning objectives and that consideration of individual context is required when balancing these objectives. As such, no minimum required vegetation protection zone is required from a wetland within a Settlement Area. As the subject lands are located with a Settlement Area, the Growth Plan affords some flexibility to consider context, as well as other planning objectives identified in provincial and municipal planning documents.

As Table 1 and Figure 1 demonstrate, there have been changes made to the various components of the Draft Plans. The Open Space Blocks reflect the buffers associated with the boundaries of the natural features identified by NRSI and confirmed by the Region, GRCA and City. The Open Space Blocks include the following:

- Blocks 13 and 14, Stage 1 (Northgate)
- Block 4, Stage 3 (Northgate)
- Block 24, Stage 4 (Northgate)
- Blocks 2 and 3, Stage 6 (Northgate)
- Blocks 2 and 3, Stage 7 (Northgate)
- Block 4, Stage 1 (Kartway)
- Block 2, Stage 2 (Kartway)

The Blocks are proposed to be conveyed to the City. The naturalization and enhancement of the buffers will be proposed, evaluated and ultimately approved through a condition of draft plan approval, requiring the preparation and submission of a Rehabilitation and Naturalization Plan.

The North Waterloo Scoped Subwatershed Study (NWSSS) recommended development setbacks for features present in the Subwatershed, including:

- Provincially Significant Wetland (PSW) – 30 m
- Upland Woodlands – 10 m
- Beaver and Laurel Creeks – 30 m
- Hedgerows – 5 m

The NWSSS does permit the consideration of reduced buffers, and provides the following guidance in that regard:

There is the potential for minor deviation in the recommended setbacks, where it is demonstrated through an EIS that: on average, the recommended setback width is met; and that the recommended setback/buffer is a proposed development or land use change will achieve the intended buffer objectives and appropriate level of environmental protection.

The proposed buffer widths from the dripline are a minimum of 10 metres, and from wetlands a minimum of 30 metres, except for a small area adjacent to Blocks 13 and 14 in Stage 4 (Northgate). The surveyed limits of the wetland to the south of Blocks 13 and 14 is irregular due to an area of phragmites that extends from the wooded wetland, which results in a corresponding irregular buffer limit. To allow for appropriately sized lots within portions of Blocks 13 and 14, the depth of the buffer varies, although a minimum of 20.7 metres is maintained. An addition to the buffer is proposed to the rear of Block 13 to increase the depth of the buffer in that location, to offset the encroachment. In certain places, it is less than 30 metres, whereas in others, it is greater than 30 metres. The encroachments are considered minor in area and in level of disturbance. The Revised EIS prepared by NRSI proposes a mitigation strategy for this area, which can be included as a condition of draft plan approval, as part of the Rehabilitation and Naturalization Plan.

As noted above, the owners are willing to convey the Blocks to the City, through conditions of draft approval, and to locate public trails within the Blocks as part of parkland dedication. The trails are proposed in locations that are generally consistent with Map 5 of the District Plan, and are generally intended to be located in the outer 5 metres of the buffers. The accompanying Active Transportation Master Plan, included as Appendix F, illustrates the proposed trail network within the Draft Plans, and their location within the Open Space Blocks.

To ensure that the enhancement of the buffer to the south of Blocks 13 and 14 (Stage 4) achieves its objective, a trail is not proposed in this portion of the Open Space Block. In lieu of a trail connection, Street Three includes a multi-use trail, which connects with the walkway (Block 22/Stage 4) that provides a connection to the trail network via the stormwater management facility (Block 26/Stage 4). An additional connection is also provided to the west of Block 13, between Blocks 12 and 13, via a walkway Block (Block 23/Stage 4) and further to the west, through the walkway on the Kartway Plan (Block 3/Stage 1).

3.3 Conveyance of Core Natural Features

The Core Natural Features, which form part of ESPA 80, as identified in the Regional Official Plan, are located outside the limits of the Draft Plan (Northgate). Section 8.2.2 (14) of the City's Official Plan states that through the development application review process, elements of the Natural System will be placed in an appropriate zoning category. The proposed Zoning By-law

Amendment, in recognition of this policy, proposes to zone the Core Natural Features "Conservation (OS3)" similar to other such features in the City. Further to subsection (14), subsection 8.2.2 (17) states that:

> Where lands shown as part of the Natural System on Schedule 'A4' – Natural System are under private ownership, nothing in this Plan will be construed to imply that such lands are available for use by the general public or will be acquired by the City or other public agency.

Furthermore, Subsection 8.2.2 (20) states that the City will support private landowners in their efforts to maintain, enhance, and restore the Natural System, using a series of tools. The owner intends to retain the Core Natural Feature that are outside the limits of the Draft Plan in private ownership, as part of Block 1 within the Northgate Draft Plan of Vacant Land Condominium. The condominium process, and the legislative tools associated with it, provide suitable mechanisms for preserving the lands and their natural function, while ensuring that sufficient funds and protocols are established to ensure its ongoing maintenance. The inclusion of the lands within the Draft Plan of Condominium allows for the use of conditions of approval and related agreements to regulate the long-term preservation and maintenance of the feature and its ecological functions.

From a land use planning perspective, the inclusion of the Core Features as a protected common element within the condominium and municipal ownership both represent acceptable options for the long term preservation and maintenance of the feature. Public ownership does not guarantee that the feature will be protected to a greater extent than private ownership. The retention of the feature within private ownership will assist in reducing the number of pedestrians and cyclists accessing the area and potentially negatively impacting the feature and its functions. The public will still have access to the area, through the use of public trails within the buffers, allowing the community to experience the feature, without directly traversing into and through the feature in an unregulated way (and in a manner that may negatively impact the feature).This affords an appropriate level of protection for the features, while ensuring that a publically accessible trail can be implemented.

Conservation Easement

In addition to restricting access to the lands and establishing funds through the condominium process, the owner proposes to grant a conservation easement over the lands, adding a further level of protection. The easement would be granted in favour of the City of Waterloo. The contents of the easement, including the long-term maintenance of the feature, can be determined by the owner and the City of Waterloo while the requirement for the easement can be implemented through a condition of draft plan approval for the Vacant Land Condominium.

In summary, the Core Natural Features will be protected and preserved through:

- Limiting access by retaining the lands in private (condominium) ownership;
- The establishment of funds to ensure the long-term maintenance of the features, through the condominium process and related legislative tools (i.e. reserve funds);
- The zoning of the lands to the Conservation (OS3) zone – the most restrictive zone in the City's By-law (2018-050);
- The establishment of a Conservation Easement over the lands, in favour of the City of Waterloo to provide additional long term protection and the establishment of best management practices for the long term health of the features and their ecological functions.

3.4 Blandings Turtle Mitigation

Blandings Turtle is a Threatened species in Ontario and receives both individual and general habitat protection through legislation (Endangered Species Act). Section 2.1.6 of the Provincial Policy Statement (PPS) states that development and site alteration shall not be permitted in habitat of endangered species and threatened species, except in accordance with provincial and federal requirements. As there are multiple development and/or infrastructure related projects proceeding concurrently in the Beaver Creek Meadows District, the Ministry of Natural Resources and Forestry (MNRF) advised that a collaborative approach would be appropriate, and preferred, to ensure the mitigation measures were being considered throughout the District.

There are three types of Blandings Turtle Habitat within the Beaver Creek Meadows District:

- Category 1: Nest and area within 30 m or Overwintering sites and the areas within 30 m of those sites;
- Category 2: The wetland complex (i.e. all suitable wetlands or waterbodies within 500 m of each other) that extends up to 2 km from an occurrence, and the area within 30 m of those suitable wetlands or waterbodies;
- Category 3: Area between 30 m and 250 m around suitable wetlands and waterbodies identified in Category 2, within 2 km of an occurrence.

There is no Category 1 habitat on the subject lands. The mitigation strategy includes avoiding impacts to Category 2 habitat wherever possible. When grading or construction activities (e.g. stormwater management ponds) require minor encroachments into the Category 2 habitat, measures are proposed to minimize any impacts, including culverts for eco-passage, construction fencing and permanent directional fencing. The permanent fencing is intended to

prevent the turtles from accessing the open water portion of ponds, based on guidance from the Ministry.

The focus of the Mitigation Strategy has been on mitigating impacts to Category 3 habitat. The Strategy includes the following measures, which are proposed in appropriate locations throughout the District:

- Turtle barrier and directional fencing
- Eco-passages
- Culvert improvements

The comprehensive approach to mitigation will ensure that all of the habitat within the District is appropriately protected and that a consistent mitigation strategy is applied. The recommendations of the Memorandum prepared by NRSI (appended to the Revised EIS) can be implemented through conditions of draft plan approval, and ultimately, through the subdivision agreement with the City of Waterloo, as they apply to the Northgate/Erbsville Kartway lands. The project team recommends that the same mitigation strategy be utilized for other developments/projects within the District, including the reconstruction of Beaver Creek Road and Conservation Drive.

3.5 Neighbourhood 7

Neighbourhood 7 (N7) is located in the southern portion of the subject lands, west of Beaver Creek and generally includes 14 vacant land condominium units, a private road and associated buffers adjacent to the delineated natural features. The Draft Plan of Condominium (Northgate) proposes a private road that provides access from Stage 7 through to Stage 8 and the 14 proposed condominium units. The Revised EIS by NRSI (July 2020) identifies the dripline boundary (the limits of which were surveyed and supported by GRCA, Regional and City staff) and recommends 10 metre buffers, consistent with the buffer recommendations from the NWSSS. The private road is located outside of the feature, within lands currently subject to agricultural uses, and outside of the recommended buffers. Further mitigation measures are proposed in the Revised EIS, including eco-passages to provide additional connections between the GRCA lands south of the Draft Plan to the Core Environmental feature north of Stage 8.

Provincial Policy Statement

The provincial policy-led planning system recognizes and addresses the complex inter-relationships among environmental, economic and social factors in land use planning. The Provincial Policy Statement (PPS) supports a comprehensive, integrated and long-term approach to planning, and recognizes linkages among policy areas.

The PPS is more than a set of individual policies. It is to be read in its entirety and the relevant policies are to be applied to each situation. When more than one policy is relevant, all of the relevant policies should be considered to understand how they work together. In this regard, the PPS contains a number of policies that are relevant to the development of the subject lands, including Neighbourhood 7 (N7). More specifically, the PPS contains policies requiring the efficient use of land and the provision of housing within settlement areas, in the context of ensuring that sensitive resources such as natural heritage features are protected.

Part IV of the PPS provides the vision for Ontario's Land Use Planning System:

> The Provincial Policy Statement focuses growth and development within urban and rural settlement areas while supporting the viability of rural areas. It recognizes that the wise management of land use change may involve directing, promoting or sustaining development. Land use must be carefully managed to accommodate appropriate development to meet the full range of current and future needs, while achieving efficient development patterns and avoiding significant or sensitive resources and areas which may pose a risk to public health and safety. Planning authorities are encouraged to permit and facilitate a range of housing options, including new development as well as residential intensification, to respond to current and future needs.

The vision included within Part IV is expressed further through Section 1.1.1, which includes policies regarding healthy, liveable and safe communities.

Healthy, liveable and safe communities are sustained by:

a) promoting efficient development and land use patterns which sustain the financial well-being of the Province and municipalities over the long term;

b) accommodating an appropriate affordable and market-based range and mix of residential types (including single-detached, additional residential units, multi-unit housing, affordable housing and housing for older persons), employment (including industrial and commercial), institutional (including places of worship, cemeteries and long-term care homes), recreation, park and open space, and other uses to meet long-term needs;

c) avoiding development and land use patterns which may cause environmental or public health and safety concerns.

The development of the proposed plan of subdivision, including N7 and the private access road, contributes to the provision of housing and the efficient use of land, while ensuring all identified natural heritage features are protected.

With regard to the natural heritage features, Sections 2.1.4 and 2.1.5 of the PPS state that:

> 2.1.4 Development and site alteration shall not be permitted in:
> a) significant wetlands in Ecoregions 5E, 6E and 7E1; …
>
> 2.1.5 *Development* and *site alteration* shall not be permitted in:
> …
> b) *significant woodlands* in Ecoregions 6E and 7E…;
> c) *significant valleylands* in Ecoregions 6E and 7E…;
> d) *significant wildlife habitat*;
> e) *significant areas of natural and scientific interest*; …
>
> unless it has been demonstrated that there will be no *negative impacts* on the natural features or their *ecological functions*

As discussed in Section 3.2 of this Report, all developed areas of the subdivision, including N7 and its private access road, are located outside the boundaries of all natural heritage features and areas identified through the Revised EIS. The limits of the features were surveyed and incorporated into the Draft Plan.

Also as discussed in Section 3.2, Section 2.1.8 of the PPS requires that development on lands adjacent to natural heritage features has no negative impact on those features or their ecological functions. The Revised EIS concluded that the recommended buffers and other mitigation measures will ensure that proposed development on lands adjacent to natural heritage features and areas, including N7 and the associated private access road, will have no negative impact on those features or their ecological functions. Accordingly, the development of N7 including the private access road is consistent with Section 2.1.8 of the PPS regarding development on lands adjacent to natural heritage features and areas.

The PPS recognizes the important role that municipal Official Plans play in guiding development within Ontario. Section 4.6 of the PPS specifically recognizes this role:

> The official plan is the most important vehicle for implementation of this Provincial Policy Statement. Comprehensive, integrated and long-term planning is best achieved through official plans.
>
> Official plans shall identify provincial interests and set out appropriate land use designations and policies. To determine the significance of some natural heritage features and other resources, evaluation may be required.

As discussed in further detail below, the proposed development of N7 and the private access road implement the Urban Designated Greenfield Area and Low Density Residential

designations, and related policies, applied to the southern agricultural field in the Region of Waterloo and City of Waterloo Official Plans.

Regional Official Plan

The entirely of the subject lands are designated Urban Designated Greenfield Area on Map 3a (Urban Area) of the Region of Waterloo Official Plan (ROP). Map 4 (Greenlands Network) of the ROP identifies N7 as being outside of the Greenlands Network. While the open agricultural area used to access the agricultural field currently within N7, and which will accommodate the private access road to N7, is identified on Map 4 as within the Core Environmental Features area, Policy 7.A.6 of the ROP states that the interpretation of the boundaries of Core Environmental Features, as required to support the review of development applications, will be achieved through the completion of Environmental Impact Statements, or other appropriate studies.

As noted above, the Revised EIS has determined that the agricultural area on which the access road to N7 is proposed to be constructed is outside the boundaries of the natural heritage features within the lands, and therefore the boundaries of the Core Environmental Features identified on Map 4 of the ROP should be interpreted to also exclude that area. Policies 7.A.7 and 7.A.8 of the ROP provide:

> 7.A.7 Boundary interpretations not consistent with the Technical Appendix for Landscape Level Systems and Core Environmental Features must be approved by Regional Council, in consultation with the Province, Area Municipalities, the Grand River Conservation Authority and other stakeholders.
>
> 7.A.8 Boundary interpretations not generally in conformity with the Greenlands Network as shown on Map 4 will require an amendment to this Plan.

An interpretation of the boundaries of the Core Environmental Feature that excludes the open agricultural area providing access to the field is consistent with the *Region of Waterloo Greenlands Network Implementation Guideline* (May 18, 2016) regarding boundary interpretations, and generally conforms to the boundaries of the Greenlands Network shown on Map 4, considering the scale of that mapping.

Policy 7.C.10 of the ROP provides, in the same manner as the policies of the PPS discussed above, as follows:

> 7.C.10 *Development* or *site alteration* will only be permitted on lands contiguous to a Core Environmental Feature where an *Environmental Impact Statement*, or similar study, submitted in accordance with the policies in Section 7.G has

> determined to the satisfaction of the Region, Area Municipalities, the Grand River Conservation Authority and/or the Province, as appropriate, that approval of the proposed *development* or *site alteration* would not result in *adverse environmental impacts* on the features and *ecological functions* of the Core Environmental Feature. The Region may require conditions of approval to implement such recommendations.

As discussed above, the Revised EIS by NRSI for the proposed development has concluded that with the implementation of buffers and other mitigations measures, which will be secured through the registration of the plan of subdivision and draft plan conditions, the proposed development within N7 including the private access road will have no negative impact on the Core Environmental Features or their ecological functions.

Policy 7.C.9 of the ROP states that:

> *Development* or *site alteration* will not be permitted within Core Environmental Features, except for:
> ...
> (d) *infrastructure* projects in accordance with Policies 7.C.12 and 7.C.13....
>
> Any application for *development* or *site alteration* for the above uses will require the submission of an *Environmental Impact Statement*, to the satisfaction of the Region, to determine the mitigation measures to be implemented, as appropriate, through the development review process.

The definition of "*infrastructure*" in the Glossary of the ROP includes "local and private roadways." Policy 7.C.12 of the ROP also provides that where linear infrastructure, including a road, is proposed within or contiguous to a Core Environmental Feature, the submission of an Environmental Impact Statement is required. Accordingly, even if the open agricultural area providing access to the field within N7 were interpreted to be within the Core Environmental Feature as shown on Map 4, the private roadway within the area is permitted as an infrastructure project, subject to the submission of an Environmental Impact Statement that determines appropriate mitigation measures to be implemented.

Policy 7.C.13 of the ROP goes on to provide that infrastructure may be approved within a Core Environmental Feature where an Environmental Impact Statement demonstrates that the construction of the project will result in only localized and/or reversible impacts to the features and ecological functions of the Core Environmental Feature, and that other alternatives are less feasible from a technical, environmental and/or financial perspective.

As discussed above, the Revised EIS demonstrates there are no negative impacts to the Core Environmental Features, as the private road and proposed condominium units are located entirely within active agricultural lands outside of the ESPA, provided that recommended mitigation measures are implemented.

More specifically, the proposed private road is located within an area that is 35 metres wide that currently accommodates large farming equipment and cultivation. The farming equipment is used to cultivate the southern agricultural field that is proposed to accommodate the 14 vacant land condominium units. The use of a private road allows for a narrower cross-section, as compared with a public road. The construction of the road, including related grading can occur outside the limits of the Core Environmental feature, with no related encroachment into the proposed buffers. With appropriate mitigation measures, recommended in the Revised EIS prepared by NRSI, there are no negative impacts to the feature or its ecological functions. Furthermore, and in consideration of the ROP policy, there are no other alternative locations to provide access to N7 that would not otherwise cause more adverse impacts on the features and their ecological functions.

For the reasons discussed above, the proposed development of N7, including the private access road, fully conform with the policies of the ROP.

City of Waterloo Official Plan

The development lands within N7 are designated "Low Density Residential" in the Official Plan (Schedule A), which permits low rise forms of housing, including the proposed single detached dwellings. The open agricultural area connecting N6 and N7 is identified as part of a larger Core Environmental Feature on Schedule A4 to the Official Plan.

The relevant policies of the City Official Plan regarding Core Natural Features essentially mirror the policies of the ROP.

Section 8.2.2 (3) of the Official Plan states that:

> The boundaries of the natural features that make up the Natural System will be delineated more precisely through watershed studies, Environmental Impact Statements, or other appropriate studies accepted by the City and the other public agencies having jurisdiction.

Section 8.2.2 (4) of the Plan states that the boundaries associated with Core Natural Features may be refined by the Region in accordance with the policies contained in the Regional Official Plan. Furthermore, Section 8.2.11(1) states that Environmental Impact Statements may be used to identify the boundaries of elements of the Natural System (which includes Core Natural Features). As discussed above, the boundaries of the natural features on the subject lands were

identified by NRSI in 2019 and confirmed by City, Regional and GRCA staff. The limits of the features were then surveyed and included on the Draft Plan to define the development limits for the proposed Draft Plans, and are documented in the Revised EIS by NRSI. Accordingly, the boundaries of the Core Natural Features within the lands should be interpreted as excluding the open agricultural area that is proposed to accommodate the private access road servicing N7.

Policy 8.2.4(5) of the Official Plan, also provides that development or site alteration will be permitted on lands contiguous to Core Natural Features if it is demonstrated through an Environmental Impact Statement that there will be no adverse environmental impacts on the feature or its ecological functions. As discussed above, the Revised EIS concludes that the development of N7 and the private access road will have no impact on adjacent Core Natural Features or their ecological function, provided the recommended buffers and other mitigation measures outlined in the EIS are implemented. The buffers and mitigation measures will be secured through appropriate conditions of Draft Plan approval.

Like the policies of the ROP, section 8.2.4(3) and (4) of the Official Plan also provides that essential infrastructure (including transportation corridors) for which no other alternative is feasible, and where crossings and the area of disturbance will be minimized, are permitted within Core Natural Features, subject to an Environmental Impact Statement determining mitigation measures to be implemented. Although this policy remains under appeal, the ROP provides policy direction regarding the consideration of private roads as infrastructure. Accordingly, even if the open agricultural area that provides access to the field within N7 were deemed to be within the Core Natural Feature as mapped, the private roadway is permitted.

Provided the recommended mitigation measures outlined in the Revised EIS are implemented through appropriate conditions of Draft Plan approval, the private road, and development of N7 fully conforms to the policies of the Official Plan.

Beaver Creek Meadows District Plan

Map 4 (Natural System) of the District Plan identifies the development limits of N7. Map 1 (District Plan Area) applies a Special Policy Area to N7 (SPA 2), which includes additional policies in recognition of the adjacent Core Natural Features. SPA 2 requires the submission of an Environmental Impact Statement in support of development and the extension of infrastructure, including access (i.e. a road). Subject to the conclusion of the Environmental Impact Statement, a range of land uses are contemplated, including residential, open space, restoration area and stormwater management.

In conformity with the Regional and City Official Plans and the District Plan (SPA2), the Revised EIS has been prepared and submitted in support of the development of the proposed Draft Plan of subdivision, including the development of N7 and the private road providing access

connecting N6 and N7. As discussed above, the Draft Plans have been revised, in consideration of City and Agency comments. More specifically for N7, the Draft Plan was revised to include the buffers around N7 within the limits of the Plan and to recognize the resurveyed limits of the natural features confirmed by the GRCA, Region and City in 2019. The proposed private road (access) is located outside of the surveyed limits of the feature. The access road is also located outside of the recommended buffer areas and provides vehicular and pedestrian access to 14 vacant land condominium units. As discussed in the Revised EIS, the design of the private road includes consideration of an eco-passage, allowing for wildlife movement from the south under the road and into the core natural feature to the north. Furthermore, the location and design of the roadway were specifically chosen to minimize the need for area grading.

The buffer areas within N7 will be enhanced with native species, reviewed and approved through a required Naturalization and Rehabilitation Plan. The buffers will be maintained as common elements of the Condominium, with appropriate language in the condominium declaration to ensure their long term function. The community (public) trail network is located further to the west. Future condominium owners within N7 will be able to access the public trail network via the pedestrian sidewalk within the common element road. In this regard, public movement into the Core Natural Feature will be minimized.

The design of N7, including the private road is intended to minimize impacts on wildlife and human disturbance of the natural features. Wildlife movement corridors, and directional fencing will be utilized to ensure that wildlife have a save movement corridor from the GRCA lands to the south through to the Core Natural Feature to the north.

Ultimately, Neighbourhood 7 has been designed to implement the land use planning permissions established in the Official Plan and District Plan, while ensuring there are no negative impacts on adjacent natural features, provided the recommendations of the Revised EIS are implemented.

3.6 Parkland Dedication

The Planning Act permits a municipality to require up to 5% of lands for residential development to be dedicated for park purposes, or alternatively, 1 hectare of land per 300 units. The province introduced changes to the Planning Act through Bill 108, which would have modified the provisions regarding the dedication of parkland. More recently, the province has introduced, but not yet enacted, Bill 197, proposing significant amendments to the way Bill 108 would have changed the parkland dedication regime. In recognition of the uncertainty surrounding the changes to the Planning Act and their implications for parkland dedication, the two parks have been located within their own stage in the Draft Plan (Block 1, Stage 2 and Block 1, Stage 5). This may facilitate further discussions with the City once the final amendments to the Planning Act in relation to parkland dedication are known.

The Beaver Creek Meadows District Plan includes two parks within the subject lands, one in Neighbourhood 5 (N5) and one in Neighbourhood 6 (N6). The revised Consolidated Draft Plan includes two parks that align with the general location identified in the District Plan. Within N6, the park location has been modified to re-locate the park to an area where the natural grades are better suited for a park use and where a terminus view can be created at the end of Street Four through the park to the natural features. This will assist in visually linking the features and the public trail to the community. Furthermore, the relocation of the stormwater management facility to the south provides for a more suitable outlet to the Creek and a preferred design. The parks have been sized for their intended use and future programming potential and will serve as key amenity features for the community.

As discussed earlier, Open Space Blocks are proposed to be conveyed to the City through the plan of subdivision process. Map 5 of the District Plan identifies an Active Transportation network within the Beaver Creek Meadows District. The proposed Consolidated Draft Plan proposes to locate public trails within the Open Space Blocks, in areas identified on Map 5. Section 10.5 of the City's Official Plan contains the vision for Open Space lands within the City, including the following statement:

> To ensure that citizens have an appropriate level of park-based recreational and leisure opportunities, the City will strive to acquire land for park and trail purposes consistent with a Municipal Parkland Classification System.

Section 5.1.2 contains objectives for Trails and the Open Space Network. Section 5.3.3 contains policies specific to Trails. Specifically, Subsection 5.3.3(3) states:

> When planning for off-road components of the trail network, the City will consider the following:
>
> (a) Trails will be planned to connect and complete the park and open space system within the City of Waterloo and to adjacent municipalities. Trails will be located in all new park developments and may also be considered in other open space linkages, including stormwater management areas, creek valley lands, utility corridors or other areas as deemed appropriate by the City.

As such, the Official Plan acknowledges that trails form an important component of the City's park system. In this regard, the trails proposed within the Open Space Blocks are intended to form part of the parkland dedication to satisfy the requirements of the Planning Act (or a future Community Benefits Charge).

A walkway connection (Block 11/Stage 1) is proposed where Streets One and Two intersect that will provide access to a proposed trail network within the Open Space Blocks in Stages 1 and 3. A second walkway connection (Block 12/Stage 1) is proposed to provide an additional connection to the trail network from Street Two, further to the south. Pedestrian crossings of both Streets One and Two are also proposed in key locations to ensure movement between the Mixed-Use Node, the park, the multi-use trail within Streets One and Two and the trail system in the Open Space blocks. The conceptual locations are shown on the Active Transportation Master Plan (ATMP).

On the west side of the Plan, Park Block 1/Stage 5 is sized and located to provide a full range of park amenities. The conceptual park plan shows options for multiple components consistent with staff's comments from August 2019, including areas for basketball/hockey, play equipment and a potential splash pad. The Park Block is also intended to directly connect to the proposed trail system located within Open Space Block 24/Stage 4. The park has frontage on Street Six and abuts residential development to the north and south, ensuring eyes on the park from multiple locations. The park is easily accessed through Street Six, as well as multiple trail connections as shown on the ATMP.

An additional walkway connection is provided (Block 22/Stage 4) to provide access from Street Six to the pathway around the stormwater management facility, which will then connect to the proposed trail network within Open Space Block 24/Stage 4. As discussed earlier, the buffer to the rear of Blocks 13 and 14 will not contain a trail. The multi-use pathway on Street Three will be utilized to connect Walkway Block 22 to Walkway Block 23, which allows trail users to reconnect to the proposed public trail within Open Space Block 24/Stage 4 and Open Space Block 2/Stage 6. Furthermore, Block 29/Stage 4 (Northgate) and Block 3/Stage 1 (Kartway) will be combined into a single walkway that will provide access to the proposed trail network on the west side of the Consolidated Plan. Finally, a common element is proposed within the Kartway Vacant Land Condominium to provide access from the private road to the public trail system. These walkway blocks/connections are consistent with the locations of the "other green spaces" designation on Map 3 of the District Plan.

The combination of public parks in both N5 and N6, and a comprehensive public trail system linking the neighbourhoods provides future residents with a variety of recreational amenities, including active and passive, consistent with the Official Plan.

3.7 Staging of Development

The Draft Plans have been divided into stages to facilitate the orderly development of the lands. On the east side of Beaver Creek, the Northgate Draft Plan has been divided into three (3)

stages, with the public park in its own stage as discussed above. The multiple residential and mixed-use development within and adjacent to the Node are located within their own stage.

West of the Creek, the lands have been divided into multiple Stages, with Northgate's vacant land condominium divided into three (3) stages (Stages 6, 7 and 8). Stage 4 of the Northgate subdivision generally contains the majority of the freehold lots and blocks, as well as the stormwater management facility and a pumping station. The multiple stage development pattern for the vacant land condominium will allow for the lands to develop in phases, initially on a single access (Stage 6), and then allow for additional vacant land units when a second access is developed (Stage 7). Neighbourhood 7 (N7) has been identified as its own Stage (Stage 8), as it will rely on the registration of Stages 6 and 7, as well as Stage 2 within the Kartway draft plan.

The registration and development of Stage 4 and Stage 6 of the Northgate Plan will be coordinated with Stages 1 and 2 of the Kartway Plan, given the requirement for future consolidation of Blocks and street access (i.e. access and frontage on Street Three). The sequencing of registration and consolidation of the affected Blocks can be required as a condition of draft plan approval.

3.8 Stormwater Management

Stormwater management for the subject lands was developed using the infiltration targets established in the North Waterloo Scoped Subwatershed Study (NWSSS). The targets will be met or exceeded within the development using a series of infiltration techniques, with the objective of mimicking current conditions to the extent possible. The Preliminary Stormwater Management Report includes a more detailed analysis of the infiltration techniques.

The Consolidated Draft Plan includes one stormwater management Block (Block 26, Stage 4). The SWM facility will provide stormwater management for the western portion of the development (N6). Lands on the east side of the Creek (N5) are proposed to drain towards an off-site Communal Stormwater Management facility located on lands on the east side of Beaver Creek Road. Block 2, Stage 3 of the Northgate Subdivision will develop with a private stormwater management facility, the details of which will be finalized through the site plan approval process.

The process and supporting documents associated with the Communal SWM facility have been coordinated with the City and other agencies. The facility will serve multiple developments within Beaver Creek Meadows and is designed to be constructed in phases to better coordinate the timing of the community's development. The requirement for the design of the Communal SWM facility to be completed to the City's satisfaction can be secured as a condition of Draft Plan approval. Furthermore, the subdivision agreement associated with the Northgate Draft

Plan can require that the Communal facility be constructed and operational prior to the servicing of the Northgate lands.

In recognition that the Communal facility relies on other landowners and other approval processes, the Northgate draft plan can also develop with a temporary stormwater management facility in Stage 1 (shown as Blocks 7, 8 and 9/Stage 1). The facility is intended to allow the Northgate lands to proceed independent of the Communal facility, should the need arise. The temporary nature is tied to the timing of the Communal SWM facility – once the Communal facility is constructed and operational, the temporary facility would be decommissioned by Northgate. Alternatively, if it is determined that the Communal facility will not proceed, an alternate permanent stormwater management facility can be constructed in place of the temporary facility within the Northgate lands (alternate designs for a temporary and permanent facility are included in MTE's Preliminary Stormwater Management Reports). Blocks 7, 8 and 9 have been sized to accommodate the alternate designs. If the Blocks are not required for a SWM facility, they will be developed for residential uses. The detailed obligations regarding the potential SWM facility in this location can be specified in conditions of draft plan approval and the subdivision agreement.

3.9 External Road Connections

The District Plan establishes a community road network, centred upon Conservation Drive (Major Collector) and Beaver Creek Road (Minor Collector). Additional Minor Collector roads are conceptually identified, to facilitate the movement of pedestrians, cyclists and vehicles between the Neighbourhoods within the District.

Road connections on the north side of Conservation Drive are conceptually identified on Map 2 – Community Structure and Map 3 – Land Uses of the District Plan. Key connections that directly impact the Consolidated Draft Plans are adjacent to the Mixed-Use Node (west of Beaver Creek Road) and further to the west along Conservation Drive. The Draft Plan includes three street intersections with Conservation Drive (Streets One, Three and Seven).

The Street One intersection has been located in consideration of input from Paradigm and to provide an appropriate distance from the intersection of Beaver Creek Road and Conservation Drive. The preliminary plans prepared for Neighbourhood 2 (N2) have been circulated to other developers and it is understood there should be no issue with aligning streets. The location of the Street One intersection with Conservation Drive provides for all turning movements. This will allow for more direct movements to those lots adjacent to Street One and will assist in minimizing turning movements within and through the proposed roundabout in order to access the Blocks of concern. In this regard, it will assist in preserving the capacity of the Conservation Drive/Beaver Creek Road roundabout for movements within and through the community rather than accommodating turning movements relating to accessing the Blocks within Stages 1 and 3.

Street Two is consistent with the District Plan. Minor modifications have been made to the alignment of Street Two to accommodate a multi-use trail and in consideration of the natural features and associated buffers that were flagged by NRSI and confirmed by City, Regional and GRCA staff in 2019. Stages 1-3 (Northgate) have three accesses to the surrounding road network, which aligns with the District Plan.

The road network on the west side of the Consolidated Plan has been modified as a result of other plan changes, to better align with the driveway leading to the Creekside Church on the north side of Conservation Drive and to provide sufficient separation from the conceptual road that provides access to the "Brohman lands" on the north side of Conservation Drive, opposite Block 21/Stage 4. In particular, revisions to the Draft Plan related to the park (Block 1/Stage 5), stormwater management facility (Block 26/Stage 4) and the internal road network has resulted in the elimination of a second intersection of Street Three and Conservation Drive. The revised plan includes a new intersection with Conservation Drive (Street Seven) that is further to the west. The Street Seven intersection has been shifted to align with the access to Creekside Church property and to avoid conflicts with a future access contemplated for Neighbourhood 1 (N1) on the north side of Conservation Drive. The westerly portion of Street Three has not changed and remains consistent with the District Plan.

The remainder of the internal road network remains in a modified grid pattern, consistent with the District Plan, save for the terminus of the private road in Stage 8 (Northgate Vacant Land Condominium) which has been designed as a cul-de-sac in recognition of its location and context.

3.10 Active Transportation

Map 5 of the District Plan includes a conceptual Active Transportation network intended to provide linkages within individual neighbourhoods, as well as to key destinations within the District. MHBC and the project team have worked to establish a complete network of connections within the Consolidated Plan, as well as to ensure those connections link with the broader neighbourhood via Conservation Drive and Beaver Creek Road.

As discussed earlier, the Open Space Blocks that contain the buffers associated with the natural features are proposed to also contain public recreational trails. Figure 7 shows the conceptual Active Transportation Master Plan for the subject lands, which includes the following components:

- Multi-Use Pathways
- Public Sidewalks
- Raised Bike Lanes
- Buffered Bike Lanes

- Trails
- Walkways
- Pedestrian Crossings
- Pedestrian Easement
- Proposed Bridge

The multi-use pathways are conceptually shown in locations identified by the City (in their August 2019 comments), or those that form part of the Beaver Creek Road and Conservation Drive reconstruction project. A multi-use trail is proposed along the south side of Conservation Drive, abutting the subject lands. A multi-use pathway is proposed along Street Three and Street Six that will connect the proposed public park with Conservation Drive along one continuous multi-use pathway. A multi-use pathway is also proposed on Street One and a portion of Street Two. The pathway on Street One provides a connection from Conservation Drive through to Beaver Creek Road, allowing pedestrians and cyclists to by-pass the roundabout, if so desired. The multi-use pathway on Street Two provides a connection into N5 from Beaver Creek Road with additional connections to the broader public trail network via a proposed walkway (Block 13/Stage 1).

Public sidewalks are proposed on both sides of all public streets, except where a multi-use trail is already proposed. The public sidewalks provide additional connections through both N5 and N6, including to the public parks and the broader Beaver Creek Meadows community.

The reconstruction of Beaver Creek Road and Conservation Drive includes a raised bike lane (Conservation Drive) and a buffered bike lane (Beaver Creek Road). Connections to both bike lanes are provided via multi-use pathways, public sidewalks and local streets.

As discussed earlier, a public trail network is proposed within both N5 and N6, within the Open Space Blocks to be conveyed to the City. The Active Transportation Master Plan contemplates the trails within the outside limits of the buffer (closer to the residential dwellings), subject to detailed grading considerations. Access to the trail network is provided via public walkways in both neighbourhoods, as well as through the public park in N6, the SWM facility in N6 and directly from both Conservation Drive and Beaver Creek Road. A portion of the trail crosses the private (condominium) road in Stage 7 (Northgate). An easement is proposed over this road to allow the public to continue along the trail. The easement would connect the trail within Block 2/Stage 7 to the trail within Block 3/Stage 7. The trail networks within each neighbourhood are proposed to be connected via a pedestrian bridge over Beaver Creek to the east of the pumping station. The future design and construction of this bridge requires further discussions with City staff. Pedestrian crossings have also been proposed in key locations in both neighbourhoods to facilitate movement from the on-road to the off-road trails. Where the grades within the areas planned for off-road trails are such that some residents are unable to utilize the trails,

movement through the community is supplemented by the multi-use pathways and the sidewalks.

The ATMP includes a complete active transportation network that provides for multiple forms of movement and key connections to the adjacent Major and Minor Collector Roads.

3.11 Density

The Beaver Creek Meadows District Plan contains an overall density target of 58 residents and jobs combined per gross hectare. This density target was subsequently carried forward into the City's Official Plan through a City initiated Official Plan Amendment, as Specific Provision Area 62 (SPA 62). The Growth Plan (2019) Greenfield Density Target is 50 persons and jobs per hectare, while the Regional Official Plans' Greenfield Density Target is 55 persons and jobs per hectare. While these targets are not meant to be applied on a site by site basis, they have been considered in the development of the plan, and in the revisions to the design advanced since the July 2017 submission.

As discussed earlier, there have been revisions made to the Draft Plans that have altered the layout of Blocks, roads and the inclusion of additional open space areas within the Plan. Updated density calculations have been included in the following table:

Table 2: Density Calculations for Consolidated Plan

Use	Units	Persons per Unit*	Total Persons	Total Jobs**
Single/Semi Detached	141-215	3.45	489 - 742	14.4 – 21.4
Multiple Residential	288 – 374	2.58	743 - 965	20.1 – 26.2
Mixed Use Node	131-320	1.9	249 – 608	7 - 17
Vacant Land Condominium	72	3.45	249	7
Future Development and Block Consolidation	25-34	3.45	86 - 117	1.8-2.7
GRAND TOTAL	**657-1,015**	**-**	**1,816 – 2,681**	**51 – 75**
TOTAL PERSONS AND JOBS	**1,867 – 2,756**			
Net Land Area (ha) including buffers	**40.513**			
NET PERSONS AND JOBS PER HECTARE	**46 - 68**			

* 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.

The broad mix of proposed housing types and built form results in a median density within the Consolidated Plan that will assist the City in achieving the Beaver Creek Meadows District Plan density target while exceeding both the Growth Plan and Regional Official Plan Greenfield Density Targets.

4.0 Zoning By-law Amendment

4.1 Proposed Land Uses and Zones

At the time of the application submission in July 2017, the City was in the process of reviewing its two Zoning By-laws, however By-law 1418 remained the in-force By-law for the subject lands. In this regard, a zoning framework for the Plans of Subdivision and Condominium was submitted that included zones within By-law 1418. Since the July 2017 submission, the City has repealed By-laws 1418 and 1108 and replaced them with a new Comprehensive Zoning By-law (2018-050).

In recognition of the new in-force Zoning By-law, the proposed zoning framework has been revised to align with the new By-law, and to respond to the City's August 2019 comments. The general approach for the proposed Draft Plans of Subdivision and Condominium is to utilize zones that exist within By-law 2018-050, with appropriate site specific performance standards to align with the District Plan while accounting for site context and design considerations. The following is a summary of the (revised) proposed zones and land uses, and the currently proposed Zoning By-law amendment schedule, as illustrated on **Figure 8** and within **Appendix E**.

Residential One (R1) Zone

The two Vacant Land Condominiums are intended for single detached dwellings, and will generally have larger lot frontages and areas (as compared with other residential lots within the draft plans). These lands are designated Low Density Residential in the Official Plan, which permits single detached dwellings. The lands are designated Low Density Residential One (LDR 1) within the District Plan, which also permits single detached dwellings. The R1 zone aligns with the intended built form and is a zone that applies widely on the west side of Waterloo (e.g. Beechwood and Laurelwood). By-law 2018-050 considers a private road as a "Street" for the purposes of applying zoning regulations. No site specific regulations are required, other than the proposed removal of "coach house" as a permitted ancillary use. Coach houses are not contemplated as part of the development of the Vacant Land Condominium.

Residential Five (R5) Zone

The R5 zone applies to the portion of the development that is designated Low Density Residential in the Official Plan and Low Density Residential 1 in the District Plan located within either of the two Draft Plans of Subdivision but outside of the lands within the Condominiums. There is one minor deviation from the District Plan – a portion of the Northgate/Kartway Plans on either side of Street Three adjacent to Conservation Drive (a portion of Block 1/Stage 4-Northgate and Block 27/Stage 4 Northgate and Block 1/Stage 1-Kartway). The District Plan designates the lands immediately adjacent to Conservation Drive as Low Density Residential 2 (LDR 2), which does not permit single or semi-detached dwellings. The proposed R5 zone is intended to permit single and semi-detached dwellings on these lands to provide for a specific character along the street, as this is the main entryway into the subdivision from the west. The development of single or semi-detached dwellings will also minimize the number of driveways in close proximity to the Street Three/Conservation Drive intersection. In recognition of the potential for fewer townhomes in this location, a site specific provision is proposed for Blocks 2, 3 and 4/Stage 1 (Northgate) that will permit townhomes on those lands, which are designated Low Density Residential 1. As the previous discussion regarding the density of the development demonstrates, the targets established in provincial and municipal planning documents are still being achieved.

Additional site specific performance standards are proposed to better align the zones with the District Plan, including specific minimum lot frontages and areas. Performance standards are also proposed to permit the projection of a dwelling beyond the garage and to regulate maximum garage width. These performance standards are intended to facilitate the development of housing forms that respond to the street and foster neighbourhood socialization while minimizing the appearance of garages from the public realm.

As discussed above, lands on the east side of the Northgate Draft Plan (Blocks 2, 3 and 4/Stage 1) are proposed to have an additional site specific provision that would allow "Freehold Townhouse Building" in addition to single and semi-detached buildings. This will provide additional flexibility in the future development of Blocks 2-4 and allow for a wider variety of low-rise housing choice close to the Node. Townhomes are permitted within the Low Density Residential 1 District Plan designation, as well as within the Low Density Residential designation in the Official Plan.

All lands zoned R5 would also be subject to a minimum 20 metre setback from a building used as a sewage pumping station (Block 12/Stage 1 and Block 25/Stage 4 Northgate) to ensure land use compatibility is addressed.

Residential Eight (R8) Zone

Lands within the Low Density Residential 2 (LDR 2) designation of the District Plan do not permit single detached or semi-detached dwellings (although both single and semi-detached dwellings are permitted in the Official Plan). Accordingly, the majority of the lands designated LDR 2 are proposed to be zoned Residential Eight (R8). Permitted uses are proposed to be limited to:

- Freehold Townhouse Building
- Townhouse Building
- Stacked Townhouse Building; and
- Triplex Building

Site specific performance standards are proposed to align the R8 Zone with the District Plan and to recognize site context. Similar to the aforementioned R5 zone, performance standards are proposed for projections in front of the garage, garage width and the inclusion of a minimum setback from a sewage pumping station. Additional performance standards are included to allow for stairs and landings to encroach into the front yard, which will assist in the building location and design of the Blocks fronting on Beaver Creek Road and Conservation Drive (where vehicular access is proposed to the rear of the buildings). These Blocks (e.g. Blocks 9 and 10/Stage 1 and Blocks 20 and 21/Stage 4) are intended to contain housing types with entrances facing the street. The reduced setbacks for stairs and landings will permit the development of stacked townhomes which require a raised entrance.

Height and density are consistent with the Official Plan. Visitor parking is required for "Townhouse" and "Stacked Townhouse" dwellings, but not for a "Freehold Townhouse" dwelling.

The performance standards for "Freehold Townhouse" that apply in the R8 zone would also apply to a Freehold Townhouse in the R5 zone within Blocks 2-4 in Stage 1.

All lands zoned R8 would also be subject to a minimum 20 metre setback from a building used as a sewage pumping station (Block 15/Stage 1 and Block 25/Stage 4 Northgate) to ensure land use compatibility is addressed. Finally, to implement the Preliminary Noise Assessment submitted with the application, outdoor amenity areas are subject to a minimum setback from the centerline of Conservation Drive and/or Beaver Creek Road.

Residential Nine (R9) Zone

The District Plan provides additional direction for lands along Conservation Drive, including potential for apartment buildings. The Official Plan designates these lands Low Density Residential, which contemplates stacked townhomes and apartment buildings, subject to specific criteria. Block 2/Stage 3 within the Northgate Draft Plan is proposed to be zoned Residential Nine (R9), which permits more intensive, low rise built forms, consistent with the District Plan and reflective of the Block's frontage on Conservation Drive and proximity to the Node. "Freehold Townhouse" is not proposed to be permitted, as driveway access to Conservation Drive is not contemplated (or encouraged in the District Plan), and the shape and size of the Block is more conducive to cluster townhomes.

Apartments and Stacked Townhomes are permitted, as well as senior's oriented housing (Assisted Living and Long Term Care Facilities). The R9 zone allows for a more efficient use of the Block size given its constraints and to achieve the Official Plan and District Plan density objectives, while maintaining a low-rise massing that allows for a transition from the adjacent Node into the remainder of the subdivision to the west and southwest. The inclusion of townhomes allows for flexibility in the more constrained portions of the Block, where stacked townhomes and apartment buildings may be difficult to accommodate.

Consistent with the Official Plan, additional height is permitted (4 storeys/12 metres) and density is measured in bedrooms per hectare (maximum of 150 bedrooms/ha). A site specific provision is included to require a minimum 20 metre separation from a sewage pumping station, as well as to provide an exception related to split zoning. A portion of Block 2/Stage 3 is located within the Node and a different zone is proposed to apply to this portion of the Block (discussed below). To ensure that the boundary between the two zones does not become a "lot line" as per Section 3.S.5 of the Zoning By-law, relief from this provision is required. The regulations of the R8 zone would apply to "Townhouse" and "Stacked Townhouse."

Similar to the R8 Zone, to implement the Preliminary Noise Assessment submitted with the application, outdoor amenity areas are subject to a minimum setback from the centerline of Conservation Drive.

Residential Mixed-Use-20 (RMU-20) Zone

Specific Provision Area 37 (SPA 37) in the City's Official Plan identifies a "Future Node" for the Beaver Creek Meadows community, which is intended to be developed as a Minor Node within the City's planning framework. The SPA contemplates a range of land uses, including mixed-use buildings, and provides for the consideration of additional height (20 metres/6 storeys) and density (300 bedrooms/ha).

The District Plan establishes the boundary of the Node, which includes a portion the Draft Plan of Subdivision (Northgate), and also provides more detailed policies regarding land uses, height and density, amongst other matters. Block 3/Stage 3 and a portion of Block 2/Stage 3 are located within the boundary of the Node. They are more specifically designated "Mixed-Use Medium Density Residential" in the District Plan. Permitted uses within the Mixed-Use Medium Density Residential designation include townhouses, triplexes, terrace dwellings (stacked townhomes) and low-rise apartments. The minimum height is 9 metres and the maximum height is 6 storeys. The District Plan measures density in units per hectare, with a planned density range of 60-100 units per hectare.

Block 3 and a portion of Block 2/Stage 3 are proposed to be zoned RMU-20 to implement both the Official Plan and the District Plan. The permitted uses align with the District Plan, and include permission for mixed-use buildings, apartments and stacked townhomes. Additional permission is provided for "Live-Work" Units, which would allow for a small mixed-use built form along the easterly portion of Block 2 adjacent to Street One. Performance standards are consistent with the RMU Zone in By-law 2018-050 and include:

- greater ground floor heights for certain building types,
- minimum amenity area requirements,
- parking requirements that include dedicated visitor parking, and
- regulations for structured parking.

Similar to the provision discussed above for the R9 zone regarding split zoning, the same provision is included in the RMU-20 zone such that the zone boundary between the R9 and RMU-20 zones within Block 2 does not become a lot line. The same regulation that applies to the R8 and R9 zones regarding the minimum setback from the centerline of Conservation Drive and Beaver Creek Road for outdoor amenity areas also applies to the RMU-20 zone.

Parks & Recreation (OS1) Zone

The OS1 zone is proposed for the parks, walkways and the two pumping stations proposed within the plans of subdivision. The OS1 zone applies throughout the City for the same or similar land uses and is the most appropriate zone for the intended use of the identified Blocks. No amendments to the zone are proposed.

Conservation (OS3) Zone

The OS3 zone is the most restrictive zone in By-law 2018-050 and is proposed for the natural features within the subdivision, as well as the associated buffers and for the stormwater management facility. The same zone is applied widely throughout the City for the same land uses. The Core Natural Features that form part of the Northgate Draft Plan of Vacant Land

Condominium are also proposed to be zoned OS3, consistent with the Official Plan and District Plan designations.

As discussed earlier, a temporary stormwater management facility is proposed within Blocks 7-9/Stage 1 (Northgate). These three Blocks are proposed to be dual zoned R8 and OS3, in recognition of the potential that the temporary stormwater management facility may need to become a permanent facility. In this regard, the dual zoning will allow either use to proceed – the residential use intended should the facility be temporary in nature, or the stormwater management use should the facility need to become permanent. Section 3.D.5 of By-law 2018-050 provides regulations for lands with dual zoning where the lands are developed with a single use, as would be the case with Blocks 7-9.

Summary

The Zoning By-law Amendment proposes zones that are intended to implement both the Official Plan and District Plan. The variety of zones will facilitate housing choice, and variety in built form, while permitting a mix of land uses within the Minor Node. The natural features and the associated buffers are proposed to be zoned "Conservation," the most restrictive zone in By-law 2018-050. In our opinion, the proposed Zoning By-law Amendment conforms to the Official Plan, implements the vision established in the District Plan and represents good planning.

5.0 SUMMARY OF REVISED SUPPORTING STUDIES

In response to the comments provided by the Region of Waterloo, City of Waterloo and Grand River Conservation Authority, and to review and assess the revisions to the Draft Plans, the supporting technical studies were updated. Summaries of the Reports/Studies are included below. For a more comprehensive assessment of each report or study, please review the individual document.

5.1 Revised Preliminary Stormwater Management Report

A revised Preliminary Stormwater Management (SWM) report, dated June 2020 has been prepared by MTE, in support of this resubmission. The preliminary SWM report is included as a document with this resubmission and should be consulted for a full discussion and analysis of the proposed stormwater management strategy for the subject lands.

The SWM Report focuses on presenting the stormwater management strategy for the lands within subwatersheds 391 and 309, generally west of Beaver Creek. The eastern portion of the Northgate lands, together with other lands within the Beaver Creek Meadows District will utilize a communal stormwater management facility, which is discussed below.

For the lands within subwatersheds 391 and 309, three stormwater management facilities are proposed as part of the development, identified within the report as facilities 5914, 5915 and 5917. The majority of the lands within subwatersheds 391 and 309 will be serviced by facility 5914, which will be transferred to municipal ownership (Block 26/Stage 4). The other two facilities serve relatively small catchment areas. The first (5915), is located within Block 2/Stage 3 and will provide stormwater management for the future development of the multi-unit residential development. The detailed design will be further analyzed and approved through a subsequent site plan approval application. The second (5917) is located within N7 and will provide stormwater management for Stage 8 of the Draft Plan. Both facilities are intended to remain in private ownership.

The Report concludes that:

- The stormwater management strategy will provide the Northgate and Erbsville Kartway Draft Plans with appropriate levels of quality, quantity, erosion, water balance and temperature control.
- "Enhanced" quality control of stormwater runoff can be provided in the proposed stormwater management facility.
- Quantity control targets for post-development peak flows as identified in the North Waterloo Scoped Subwatershed Study can be achieved in the proposed stormwater management facility for the 2 year through the 100 year storm events.
- Adequate storage and release rate control has been provided to meet the extended detention storage and drawdown requirements for the 25 mm storm events.
- Implementing erosion and sediment controls during construction will minimize any negative impacts of construction activities on the adjacent properties and the receiving watercourse.
- Water Balance targets can be satisfactorily met through the use of the prescribed lot-level, conveyance, and end-of-pipe infiltration measures recommended in the Report.
- Based on a conservative mass balance analysis, the expected average post-development groundwater chloride concentration of 15mg/L is below the Ontario Drinking Water Standard of 250mg/L and the Reasonable Use Concept limit of 126mg/L.

5.2 Communal SWM Facility

A portion of the stormwater outletting from the subject lands may utilize the proposed communal stormwater management facility located on the east side of Beaver Creek Road, south of Conservation Drive. MTE consultants has been working on behalf of multiple land owners in the Beaver Creek Meadows District regarding evaluation of alternatives, and the subsequent preliminary design of the stormwater management facility.

The modelling used by MTE for the communal stormwater management facility design has also been used for the subject lands. The infiltration targets established in the Subwatershed Study can be achieved. For further analysis, please refer to the enclosed Revised Preliminary Stormwater Management Report.

In recognition that the Communal facility relies on other landowners and other approval processes, the Northgate draft plan can also develop with a temporary stormwater

management facility in Stage 1. The temporary facility is intended to allow the Northgate lands to proceed independent of the Communal facility, should circumstances warrant. The temporary facility will be designed and constructed in a manner that would allow for it to become a permanent facility should the Communal facility not be designed and/or constructed to attenuate the portion of the Northgate lands that drains to this facility. Until such time as the Communal facility is built with capacity to accommodate a portion of the Northgate lands, the subdivider will be responsible to design, construct and maintain the temporary facility. Should the Communal facility be designed and constructed to accommodate the Northgate lands, the temporary facility can be decommissioned by Northgate at that time. The facility is identified on the Draft Plan as Blocks 7, 8 and 9/Stage 1. The construction, maintenance and potential decommissioning of the facility or its conversion from temporary to permanent can be addressed through appropriate conditions of draft plan approval and the subdivision agreement.

5.3 Revised Water Distribution Analysis

The purpose of the Water Distribution Analysis was to confirm that adequate water pressure and supply was available to support the development through connection to the existing and future water distribution network. The report concludes that:

- Connections to the proposed Regional watermains will adequately service the proposed water distribution network for the proposed Northgate and Erbsville Kartway Subdivision. It is expected that the future 300 mm diameter watermain extensions will be undertaken coincident with upgrading of both Conservation Drive and Beaver Creek Road prior to servicing of the subject lands.
- The proposed water distribution network will provide system pressures within the respective pressure guidelines and will not require pressure reducing valves.
- Water model results indicate that the proposed water distribution system will adequately provide the recommended fire flows at the minimum MECP pressure of 140kPa.
- Pipe velocities were less than the DGSSMS recommended 5.0m/s for all municipal pipes within the subdivision under fire flow conditions. The pipe sizes within the private condominium development, experiencing pipe velocities greater than 5.0m/s, were not increased for the sole purpose of reducing the maximum velocity experienced under the rare fire flow condition, as this may create an environment for stagnant water conditions to arise under normal daily demands.

The requirement for a Final Water Distribution Analysis can be secured through an appropriate condition of Draft Plan approval.

5.4 Revised Environmental Impact Study

The Revised Environmental Impact Study (EIS) is the result of an iterative process amongst the study team to revise the Draft Plans, taking into account the comments received from the City, Region and GRCA on the first EIS (2017) and Draft Plans and the recommendations of NRSI to protect the natural features.

This revised EIS contains an updated detailed characterization of existing natural features based on the results of a background review, as well as extensive original field surveys from the annual monitoring reports. Field survey data presented in this report is current up to and including the 2019 monitoring year. In 2019, the boundaries of the woodland and the wetland were re-flagged, reviewed and surveyed to update the mapping to current conditions. The report identifies natural feature boundaries and constraints in association with the land use policy designations, assesses potential impacts and provides mitigation measures to ensure that the proposed development will have no negative impacts on the features or their ecological functions.

As discussed earlier, the EIS identified the limits of the natural features, recommended buffers for the features, as well as other mitigation measures consistent with municipal and agency policies and guidelines. A number of the key recommendations have already been discussed in this Report with regard to buffers, core natural features, N7 and the access road and Blandings Turtle.

As noted earlier, there are a number of development and construction projects occurring within the District, requiring coordination, particularly with respect to minimizing impacts on natural features. In this regard, the EIS recommends that the road construction (Beaver Creek/Conservation), infrastructure and wildlife crossing improvements all be undertaken at one time, limiting the duration and extent of disturbance to the creek and corridor. Furthermore, the hedgerow within Block 14/Stage 1 was identified as having a linkage function with the NWSSS. The City, during its construction of Beaver Creek Road should consider the hedgerow and its functionality when undertaking the road improvements.

The EIS concludes that the development preserves the core natural features, includes appropriate recommended buffers between the site's natural features and the proposed development, and strategically locates the stormwater management facility, park and pumping station (all to be publically owned) adjacent to the Beaver Creek corridor. As a result, the riparian corridor of Beaver Creek will be effectively widened to over 125 metres. In consideration of the design of the Draft Plans, the stormwater management strategy, the monitoring program and the stewardship plan, and provided the recommendations in this EIS and the reports of the study team are implemented through appropriate conditions of Draft Plan

approval, no negative impacts to natural features or their ecological functions are anticipated as a result of the proposed development.

5.5 Revised Transportation Network Study

Paradigm Transportation Solutions prepared a Revised Transportation Network Study, which reviewed the proposed Draft Plans of Subdivision (Northgate and Kartway), as well as surrounding proposed developments within Beaver Creek Meadows, and projected growth within the broader study area. The study area is bound to the west by Erbsville Road/Kressler Road, to the north by Benjamin Road, to the east by Westmount Road and to the south by Laurelwood Drive. The Report considers the current traffic operations, the impact of net increases in traffic and the need for any traffic calming measures within the proposed Draft Plans of Subdivision.

Although the Study considers the broader transportation network and the need for improvements thereto, the focus of the Study with respect to the Northgate and Erbsville-Kartway Draft Plan was to assess the locations of the intersecting streets, with particular consideration for Streets One, Three and Seven along Conservation Drive. The Report considered the locations of both existing and proposed new development on the north side of Conservation Drive, the general street layout within the District Plan, as well as specific considerations for the Northgate/Erbsville Kartway Plan.

The Study also considered left turn lane warrants within the study area. With regard to the Northgate-Kartway Draft Plans, the Report recommends:

- A westbound left turn lane on Conservation Drive at Street One/Street H;
- A westbound left turn lane on Conservation Drive at Street Three;
- A westbound left turn lane on Conservation Drive at Street Seven/Creekside Church.

These improvements should be considered through the City's reconstruction project for Conservation Drive.

The Study concludes that the proposed intersection locations for Streets One, Three and Seven at Conservation Drive are all acceptable, including permission for a full movement access at Street One/Conservation Drive. The City and/or Region should review and consider the other recommended improvements within the Study area, as appropriate, within their capital and operating budget programs.

6.0 Conclusion

In summary, the revised Draft Plans of Subdivision and Condominium and implementing Zoning By-law Amendment are reflective of sound land use planning practices and respond to staff and agency comments, for the following reasons:

- The proposed development appropriately balances the planning objectives outlined in the Provincial Policy Statement;
- The proposed development within the subdivisions are located outside of the Core Natural features, and include appropriate mitigation measures to ensure there are no negative impacts on the site's features, or their ecological functions;
- The Private (access) Road connecting Neighbourhood 6 to Neighbourhood 7, which is located outside the limits of the identified features, has been evaluated, mitigation measures implemented/recommended, and its inclusion as infrastructure is consistent with the Regional and City Official Plans;
- The proposed subdivisions will contribute towards 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 community, including provision for a mix of uses within the Node;
- The proposed subdivisions will contribute to the future build-out of the Beaver Creek Meadows District;
- The proposed subdivisions can be adequately serviced with planned municipal infrastructure;
- The proposed subdivisions have been designed to be pedestrian-oriented, cyclist-friendly and will provide support for the future extension of transit services;
- The proposed subdivisions will provide direct pedestrian connections to planned parks, and the broader active transportation system within the community, including the planed commercial and mixed-use Beaver Creek Meadows Node.

Accordingly, it is concluded that the revised Plans of Subdivision and Condominium and Zoning By-law Amendment applications: conform with A Places to Grow Growth Plan (2019), are consistent with the PPS (2020), conform with the Regional Official Plan and the City of Waterloo Official Plan, have had adequate and appropriate regard for Section 2 and Section 51 (24) of the Planning Act and represent good planning.

Appendix A

Post-Circulation Comments

Region of Waterloo and City of Waterloo

Grand River Conservation Authority

Administration Centre: 400 Clyde Road, P.O. Box 729 Cambridge, ON N1R 5W6

Phone: 519-621-2761 Toll free: 1-866-900-4722 Fax: 519-621-4844 www.grandriver.ca

December 12, 2017

Adam Betteridge, MCIP, RPP
Planning, Development and Legislative Services
Regional Municipality of Waterloo
150 Frederick Street, 8th Floor
Kitchener, ON
N2G 4J3

Re: Draft Plan of Subdivision: 30T-17401
Draft Plan of Vacant Land Condominium: 30CDM-17409
Zone Change Application: Z-17-14
Southwest Corner of Conservation Drive and Beaver Creek Road, City of Waterloo
Northgate Land Corporation / MHBC Planning

Dear Mr. Betteridge,

Further to our letter dated September 22, 2017, the Grand River Conservation Authority (GRCA) Property Division would like to include the following additional comments for your consideration.

We note that the proposed subdivision shares a common boundary with GRCA property. Staff are concerned that private landowners may try to access GRCA property, which is not permitted. As such, we kindly request that the Region of Waterloo include the following Draft Plan Conditions to address this concern:

1. That prior to final approval, the Subdivider agrees to install permanent fencing along the common boundary between the subdivision lands and Grand River Conservation Authority property. The fence should be a minimum 1.2 metre chain-link fence installed to O.P.S.S.-541 and O.P.S.D.-900.01 specifications using Class A fencing fabric, or an alternative deemed acceptable by the Grand River Conservation Authority. The fencing will not include any gates to access the Grand River Conservation Authority property.

2. That prior to final approval, the Subdivider agrees to create informational material for potential purchasers to notify them of the adjacent Grand River Conservation Authority land, to the satisfaction of the Grand River Conservation Authority. Such material will include mapping and will specify that access to Grand River Conservation Authority land from private lots is not permitted. The Subdivider further agrees to make the materials available in all sale centres for the subdivision and to provide the materials to each landowner upon purchase of any private lot within the subdivision.

We trust that the above can be incorporated into the Draft Plan Approval conditions for the subdivision.

If you have any questions or concerns regarding this letter, please do not hesitate to contact the undersigned.

Sincerely,

Samantha Lawson, MCIP RPP
Manager of Property - Grand River Conservation Authority
519-621-2763 ext. 2210 | slawson@grandriver.ca

c.c. Laura Dewar – City of Waterloo (email)
Paul Britton – MHBC (email)
(applicant) 1017081 Ontario Ltd. c/o Paul Grespan, 675 Riverbend Drive, Kitchener ON, N2K 3S3

Region of Waterloo

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Paul Britton
MHBC Planning
200-540 Bingemans Centre Drive
Kitchener ON
N2B 3X9
(Sent via email: pbritton@mhbcplan.com)

File: D18-20/17401
D19-20/17409
C14-60/4/17014

December 29, 2017

Dear Mr. Britton:

Re: Post Circulation Comments
Subdivision Plan 30T-17401
Plan of Condominium 30CDM-17409
Zoning By-law Amendment Application Z-17-14
Gabrielle Elizabeth Groff & 1017081 Ontario Limited
(Northgate Land Corporation)/MHBC Planning
s/w corner, Conservation Dr. & Beaver Creek Rd.
City of Waterloo

The subject applications were received by the Region on July 7, 2017 from MHBC Planning; applications 30T-17401 and 30CDM-17409 were deemed complete by the Region's Director of Community Planning on August 4, 2017. The City of Waterloo's Director of Planning Approvals accepted Zoning By-law Amendment Application Z-17-14 as complete as of August 2, 2017. Regional staff have reviewed the above-noted applications and can provide the following comments.

The approximately 49.2 ha (121.57 ac) 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. The subdivision plan dated July 4, 2017 from MHBC Planning provides development on 30.959 ha (76.5 ac) of the above-noted 49.2 ha property consisting of primarily residential uses to be developed in multiple stages and on full municipal services as follows:

Residential:
a) 26 blocks for 136-210 single-detached dwelling units;
b) 1 vacant land condominium block (to contain 54 units as per application 30CDM-17409);
c) 7 blocks to contain a total of 300-365 multi-residential dwelling units;
d) 1 block for 117-195 Multiple Residential/Mixed Use units; and,
e) 1 block to be consolidated with adjacent "Erbsville Kartway" lands for future development of 7-11 residential lots/dwelling units.

Park/Open Space:
a) 4 blocks (approx. 1.29 ha total) for dedicated park land; and,
b) 2 blocks (approx. 1.85 ha total) for open space.

The remaining 18.2 ha (45 ac) (approx.) comprises environmental lands proposed to remain held in private ownership.

The plans have been designed and submitted to be reviewed and developed comprehensively with adjacent lands to the west held under separate ownership. Comments for those applications (being 30T-17402, 30CDM-17410, and Z17-15 by 1455136 Ontario Limited (Erbsville Kartway)) will be provided under separate cover. There is overlap of comments between the two developments as a result of reviewing the separate applications together. Where it is believed that there has been unintended overlap of the below comments, confirmation from the Region will be required.

The comments below have been numbered for discussion purposes. For the most part the same comments have been provided for both developments. Where a comment does not apply to one of the developments, a comment of "(Does not apply to the subject applications.)" will be applied.

Reference to the separate developments in the below comments will be as follows: Reference to the lands and/or applications submitted by Gabrielle Elizabeth Groff & 1017081 Ontario Limited (Northgate Land Corporation) will be referenced as "Northgate"; and, reference to the lands and/or applications submitted by 1455136 Ontario Limited (Erbsville Kartway) will be referenced as "Erbsville Kartway".

DELEGATED AUTHORITY COMMENTS

1. Hydro One, and Telecon Design (Telus) have no concerns regarding the applications.

2. Rogers Cable, Bell Canada, MPAC, Ontario Power Generation Inc., Waterloo Catholic District School Board, Conseil scolaire de district catholique Centre-Sud, and Le Conseil scolaire de district du Centre-Sud-Quest have not responded to this circulation. By separate letter including a copy of these comments, these agencies are asked to respond at their earliest opportunity if they have any comments.

3. Township of Woolwich
The Township has no objections to these applications, however, does require to be kept further informed. Should any additional transportation and traffic reports be provided, the Township will require such for review.

4. Waterloo-North Hydro Inc.
In a letter dated August 25, 2017 (attached as Appendix A), WNH has advised that the Developer will be required to comply with its requirements and/or conditions of electrical service including the establishment of necessary easements, agreement(s), and detailed engineering design and construction. Furthermore, if necessary, the Developer will be responsible for all costs associated with relocation of and existing WNH facilities as a result of this development.

5. Union Gas
Union Gas requires the necessary easements and/or agreements for the provision of gas services for this project be provided to the satisfaction of Union Gas.

6. Canada Post
In comments dated August 29, 2017 (Appendix B), Canada Post provided general requirements for the location and construction of centralized Community Mail Boxes.

7. Grand River Conservation Authority
The Grand River Conservation Authority (GRCA) has reviewed the application and supporting documentation and have identified in a final letter dated September 22, 2017 that a number of items need to be addressed and/or clarified by the applicant prior to draft plan approval. The GRCA's comments dated September 22, 2017 are attached as Appendix C.

In addition, a letter from the GRCA's Manager of Property dated December 12, 2017 (attached as Appendix D), the GRCA informed the Region that it will require, as conditions of draft plan approval, permanent fencing along the common boundary/property line, and, informational material for potential purchasers of the adjacent GRCA lands, specifically, that access to GRCA lands from private property is not permitted. The specific conditions that the GRCA requires are included within the December 12, 2017 letter.

8. Waterloo Region District School Board
The WRDSB stated in an email dated September 7, 2017 (Appendix E) that it has no current needs for a school site within these plans, however requires conditions of draft plan approval pertaining to: students being directed to schools outside the neighbourhoods within the plan; sufficient accommodation may not be available for all anticipated students; and, students may be accommodated in temporary facilities and/or bussed to a school outside the area, and further, that students may, in future, be transferred to another school.

9. City of Waterloo
The City of Waterloo has provided comments dated December 22, 2017 (attached as Appendix F). The City of Waterloo does not support the draft approval of the applications as submitted for reasons included within the December 22, 2017 letter.

REGIONAL COMMENTS
Regional Engineering and Planning staff have reviewed the above noted applications and provide the following comments:

Water Services
10. The Planning Justification Report dated July 2017 (PJR) prepared by MHBC has been reviewed. The preferred condominium configuration was identified as potentially creating a Non-Municipal Year-Round Residential System (NMYRRS), under the Safe Drinking Water Act (SDWA), 2002 (pg.3). The NMYRRS was not mentioned in the subsequent reports. Whether the following parcel and servicing designs constitute a NMYRRS must be confirmed in consultation with the City of Waterloo prior to draft plan approval; additional requirements may be applicable under the SDWA if a NMYRRS is confirmed.

11. In the Pre-Consultation it was stated that road elevations below 348.7 mASL 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 (see Appendix-A, pg. 4). The Preliminary Water Distribution analysis within the Functional Servicing Report dated July 5th, 2017 (FSR), and prepared by MTE Consultants Inc. indicates that node J-25 will be under this threshold at 348.00 meters and thus must be handled accordingly (and may require a condition of draft plan approval) (see table 3.1 and 3.2, pgs. 11-12).

12. During the Pre-Consultation an overview of proposed watermain upgrades in proximity of the development and their estimated timings was provided by Regional Water Services (see Appendix A, table 1 of the Design Guidelines and Supplemental Specifications for Municipal Services for January 2016). Staff advises that these timelines have been amended; work on Conservation Drive from east of Beaver Creek Road to Erbsville Road and on Erbsville Road from Regal Place to Conservation Drive is now estimated for 2019/2020. Work on Beaver Creek Road from north of Laurelwood Drive to Conservation Drive is now estimated for 2018.

13. Prior to draft plan approval, Engineering and Planning staff will require clarification on whether the development intends to proceed as a single condominium or separate condominium properties, as this will impact water servicing options and affect our recommendations.

14. On page 13, it is written that there are to be 4 connection points to the existing municipal water supply, but the water distribution plan labeled Figure 5 contains 5 connection points. Engineering and Planning staff request clarification on the number of intended connections to the municipal system prior to draft plan approval.

15. In the FSR, MTE proposes two options for providing water service to the development. Option 1 involves the condominium complex having 2 connections to the municipal water distribution system (FSR, Appendix-C, Figure 2). Option 2 involves the condominium having 1 connection to the municipal water distribution system and looping the watermain internally (FSR, Appendix-C, Figure 3). Decision on these options are up to the City of Waterloo, feasibility will also depend on whether the condominium complex intends to proceed as separate or combined properties. For Option 2, it should also be noted that the 150mm looping segment must be placed on the owners property, not within the municipal road (FSR, Appendix-C, Figure 3). If the two condominium plans are deemed to create NMYRRS, the interconnection between the two plans would not be allowed between nodes J-13 and J-15. Each would receive their supply connection off Street Three. This will need to be determined prior to draft plan approval.

16. Engineering and Planning staff wish to acknowledge that proposed draft plan 30T-17402 is dependent on services located within proposed draft plan 30T-17401.

Environmental Planning

17. Regional Environmental Planning staff and the Region's Ecological and Environmental Advisory Committee (EEAC) subcommittee members have reviewed the following plans and reports related to the proposed Northgate (as well as the Erbsville Kartway) development in the City of Waterloo:

- Draft Plan of Subdivision and Draft Plan of Vacant Land Condominium, Northgate (MHBC Planning, July 4, 2017)
- Draft Plan of Subdivision and Draft Plan of Vacant Land Condominium, Erbsville Kartway (MHBC Planning, July 4, 2017)
- Planning Justification Report (MHBC Planning, July 2017)
- Planning Justification Report Addendum (MHBC Planning, July 28, 2017)
- Environmental Impact Study (NRSI, July 2017)
- Preliminary Stormwater Management Report (MTE, July 5, 2017)
- Functional Servicing Report (MTE, July 5, 2017)
- Hydrogeology Study (MTE, July 5, 2017)
- GRCA Comments, Northgate (September 22, 2017)
- GRCA Comments, Erbsville Kartway (September 22, 2017)
- MNRF Comments (November 3, 2017)

18. Based on the information provided Staff and EEAC are not in a position to support these applications at this time. Staff and EEAC offer the following comments for consideration and response:

19. Draft Plan of Subdivision and Draft Plan of Vacant Land Condominium (Northgate Lands)

a. Similar to GRCA Comment #8 (September 22, 2017- Appendix C), it is standard practice to show proposed trail locations on a Draft Plan of Subdivision. Please revise to show proposed trail locations within buffers areas in addition to the proposed crossing location at Beaver Creek.

b. It is noted that the buffer lands in Stages 1 and 2 are within the limits of the plan of subdivision while buffer lands are excluded from the submission in Stages 3 – 5. All buffers should be included within the draft plan.

c. On the proposed Draft Plan of Subdivision, it appears that the "Approximate Limits of Submission" line is located within the Core Environmental Feature to the immediate south of Lot 15 (Stage 5). This effectively creates the lot called "Additional Lands Owned by Applicant" through a Core Environmental Feature which is not supported. Development (including lot creation) is not permitted within Core Environmental Features. Please revise the plan.

20. Planning Justification Report (including Addendum)

a. Staff understands that the applicant is proposing that Core Environmental Features be owned in the future by one or more of the proposed condominium corporations to be located contiguous to features and its required buffers. Both staff and EEAC are not supportive of this approach. This was conveyed to the applicant at both a meeting with City and GRCA staff on September 8, 2017 and at the EEAC site visit on September 12, 2017.

In accordance with ROP Policy 7.I.10, staff encourages Area Municipalities to secure ownership of Core Environmental Features. The report does not provide a planning justification for retaining Core Environmental Features in private ownership nor does it discuss the advantages and disadvantages of different ownership options (e.g. public,

private, not-for-profit, land trust, etc.). In addition, there is no rationale provided for not including ESPA 80 within the limits of the plan of subdivision (identified as "Additional Lands Owned By Applicant").

As explained in pre-submission comments, both staff and EEAC recommend that Core Environmental Features be secured by public bodies/agencies. Otherwise staff will require as a condition of approval that one or more comprehensive conservation easements be registered on title in favour of the Region, the City of Waterloo, and/or the GRCA (which owns adjoining land) in order to ensure that the recommendations of the NWSSS, EIS and other requirements of relevant review agencies are implemented.

21. Environmental Impact Study

a. The Region's Greenland Network Implementation Guideline (GNIG) was approved by Regional Council in 2016. Please refer to the current document (p. 2 and 9.0 References).

b. Maps in the report should use the most current available aerial photography as per the GNIG (Section 2, p.24). It appears that most maps use 2014 airphotos but 2016 imagery is available from the Region. Please clarify/revise.

c. Winter wildlife surveys are required in accordance with the GNIG (EIS Table 2 Field Survey Summary, p. 10). The EIS should be revised to include winter wildlife surveys.

d. Please provide additional explanation of changes to the woodland dripline boundary as compared to the NWSSS (Section 2.1.6, pp.13-14). What was the nature of tree cutting along the eastern edge of Wildlife Survey Unit (WSU) 13 observed in 2016 (Table 4, p. 37)? Staff would like to see a figure showing the NWSSS natural heritage system (currently shown on Map 1) compared to any deviations as noted in the report and any tree cutting as noted in the EIS and 2016 pre-construction monitoring report (NRSI, March 2017).

Once complete, please provide a copy suitable for input into a GIS (i.e. shapefiles). In addition, as mentioned previously in the review of monitoring reports for these lands, staff strongly recommend that the owner contact the Regional Forester prior to any tree cutting to ensure compliance with the Woodland Conservation Bylaw.

e. Please provide further details on the occurrences of Common Nighthawk within the subject lands. The EIS states that "the subject property may provide marginal nesting habitat for Common Nighthawk" (p. 59) and indicates a probable breeding status. Where in the WSUs were the birds observed and what was their behaviour?

f. The second sentence (first paragraph) under Section 5.5.2 (p.81) is not accurate and should be revised to the following: "This road and servicing will be located along the existing agricultural access to the field **which may be considered in accordance with Policies 7.C.9, 7.C.12 and 7.C.13 in the Regional Official Plan**, subject to the completion of an EIS."

g. The second sentence (second paragraph) under Section 5.5.2 (p.81) is not accurate and should be revised. All tree removals in the location of the agricultural access have not been overseen by the Region:

i. The Region approved a Notice of Intent to Cut Trees pursuant to Regional By-law No. 99-045 (the former Tree By-law) on January 6, 2005 for some tree cutting under the supervision of a Registered Professional Forester (RPF) at different locations within the subject lands. Subsequently, two complaints of tree-cutting on the subject lands were received in 2005 and addressed by Regional By-law enforcement staff.

ii. The Region received a complaint on January 5, 2009 concerning some tree cutting within the subject lands. This tree-cutting was undertaken without the Region's prior knowledge or consent. Staff were satisfied that a contravention of the Woodland Conservation By-law had taken place and By-law Enforcement staff issued an Order to Stop Destruction or Injury of Trees with force and effect for one year. Following conclusion of the investigation, staff determined that there was not enough evidence to pursue a prosecution under the By-law.

iii. Tree cutting for the purposes of removing trees damaged by ice and wind within the agricultural clearing inside ESPA 80, the agricultural access and some other small areas along the dripline was undertaken following consultation with, and under the supervision of, the Regional Forester (circa 2014).

h. EEAC and staff are of the opinion that development within the field inside ESPA 80 is not the preferred ecological outcome since the proposed development would likely result in adverse environmental impacts (as defined by the ROP) on natural features and functions. For example, the EIS appears to be missing a detailed discussion and analysis of some potential impacts including but not limited to construction of the access road in Stage 5, road salting, pesticide/herbicide use by residents, spread of invasive species and light pollution. As previously mentioned in correspondence to the consultants (email dated October 6, 2017), the subcommittee is of the opinion that the EIS (section titled "Field Restoration and ESPA 80" pp.83-85) has not adequately addressed item h) from the recommended EEAC Terms of Reference (February 29, 2016) which reads as follows: "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." It is the opinion of staff and EEAC that restoration of the agricultural field within ESPA 80 should be considered in the context of Greenlands Network Objectives 7.1 through 7.6 and North Waterloo Scoped Subwatershed Study (NWSSS), and should:

i. Define goals and objectives through development of a restoration plan (e.g. goals could include increased forest cover, increased interior/deep interior habitat, protection of hydrology/groundwater);

ii. Consider effects of area restoration at all appropriate scales (e.g. agricultural field, ESPA 80, subwatershed area, etc.);

iii. Consider reasonable time frames for restoration outcomes (e.g. growth of mature forest may take several decades);

iv. Identify treatments/solutions (e.g. reforestation, linkages, grassland, or a combination of habitats/solutions);

v. Develop alternative concepts that could achieve the defined goals and compare the positive/ negative effects of each (i.e. the proposed concept is the only one that we are aware of that has been considered); and

vi. Identify targets, criteria for success, monitoring and feedback in order to make adjustments relative to goals and objectives.

Please note that staff and EEAC will not be in a position to make a final recommendation until all ToR items have been addressed.

i. Staff and EEAC are of the opinion the access road design and associated servicing proposed by the proponent through ESPA 80 (Map 7) lacks sufficient detail to assess potential adverse environmental impacts on ecological features and functions. For example, information is not clearly shown with respect to the limits of construction or site alteration and staff is concerned with the amount of grading, filling, and disturbance required adjacent to and potentially within ESPA 80. The design shows "minor filling" within the buffer and up to the dripline but this is not explained in the text of the report (Section 5.5.2). Filling up to the dripline is generally not supported and buffers are not intended to be used in this way – please clarify and provide a detailed grading and drainage plan.

j. Staff and EEAC are concerned that road salt and other contaminants have the potential to create adverse environmental impacts on ESPA 80. What effect will the infiltration of road salt and other contaminants have on groundwater throughout the development? Specifically, how will infiltration through the permeable pavement access road and LID facility in Stage 5 affect local groundwater and/or other ecological features and functions (See comments 31 b) and 33 g) below)?

k. The Laurel Creek Nature Centre exists contiguous to the subject lands (to the south) and school boards have been using the forest as a key educational resource for many years. EEAC is concerned with the compatibility of the proposed development with the educational use of the forest. How will the proposed development ensure that this function will be protected? In addition, the current boundary fence between the two properties appears to act as a barrier to wildlife movement. Is there another fencing option in this location that could better maintain the wildlife linkage?

l. Trails do not appear to be shown on Map 2 as indicated in the text of the report (p. 91). Please show the location of trails and the Beaver Creek crossing on a map in addition to describing and assessing any potential adverse environmental impacts to Core Environmental Features as a result of trail development.

m. Upon visiting the property, there appears to be locations where Buckthorn has established in areas where historical tree cutting / vegetation removal has occurred yet

the report indicates that this species "is not identified as problematic at this time" (p.95). If left unchecked, this species will spread into other areas. Please revise the EIS to include measures that can be implemented to control its spread.

n. Please also include circulation of monitoring reports to the Region (p.92 and 103). In addition, please note that the Region typically requires, as a condition of final approval, that two years of post-construction monitoring following 90% buildout of the subdivision be implemented, similar to the City of Waterloo requirement.

o. What is the rationale for not including amphibian and breeding bird monitoring during the post-construction period (pp.102-103)? This is typically included in biological monitoring programs – please include.

p. The EIS states: "There are additional lands to be added to the buffers that more than off-set this encroachment" (p.105). Please note that the Region does not have an offsetting policy for buffer areas. This sentence should be removed from the report and the buffers corrected on the revised plan.

q. Please include the approved EEAC Terms of Reference and the minutes from the February 29, 2016 EEAC meeting as an appendix to the EIS.

22. Preliminary Stormwater Management Report

a. Please note that staff will require, as a condition of draft plan approval, submission and review of the proposed communal stormwater facility study prior to issuing final comments on the stormwater strategy for these lands. Consultation with the City and the GRCA may be required prior to the issuance of comments (see comment under 42. b. below).

b. The limits of Catchment 3917 (Stage 5) appears to be different on Figure 5.3 and 5.5. Please clarify.

c. What implementation tool is proposed to ensure that permeable pavement on a private road is maintained in perpetuity and not re-paved in asphalt should a condominium corporation choose to do so in the future? Further, there may be implications if it is determined that there will be impacts from salt as per comment nos. 22 j), 32 b), and 34 g).

d. The hydrogeological study indicates that only some groundwater is supporting the central wetland at certain times of the year (p. 13). Similar to GRCA comment #17, please provide further details on the effect of infiltration as an ecological enhancement and the extent of changes to the hydroperiod in wetlands.

23. Hydrogeology Study

a. Groundwater elevation maps did not include any data to support the contours that were drawn. The level of the water table at each well location should be indicated on the figures. Please revise.

b. The cross sections contained in the report included unsupported stratigraphy. The investigations completed at the site were relatively shallow, yet the cross sections depicted geology well below the depths investigated. The source (wells/boreholes) should be included on the cross sections, or the cross sections should be revised to only show the stratigraphy to the actual depths investigated. Please revise.

Road Traffic Noise Study

24. Regional Corridor Planning staff have reviewed the Preliminary Environmental Noise Assessment authored by MTE, dated 5 July 2017, and generally concur with the conclusions. The study indicated that with noise mitigation (provision for air conditioning, noise warning clauses) the proposed development location is appropriate.

25. As a condition of draft plan approval, the applicant will be required to complete a detailed noise study prior to registration and once the finished grades, house locations and OLA's are established.

Transit Planning

26. Future GRT routing in this area would be along Conservation Drive. GRT will require the developer to fund the installation of three concrete landing pads for these stops along Conservation Drive. The price for each pad is currently $2,700 each, for a total of $8,100 for all three pads.

27. Based on the current information, general stop locations would be required along Conservation Drive. Depending on the ultimate development of the lots/blocks where stop locations will be required, the developer should be advised that GRT may require easements and/or shelters in addition to the concrete landing pads along Conservation Drive.

Source Water Protection

28. Regional Hydrogeology and Source Water (HSW) staff have reviewed the applicable technical reports applications for draft plans of subdivisions 30T-17401 and 30T-17402, and draft plans of condominiums 30CDM-17409 and 30CDM-17410 and the supporting technical information. HSW reviewed the following documents:

- 30T-14701 and 30T-14702 Plan of Subdivision application forms
- 30CDM-17409 and 30CDM-17410 Plan of Condominium application form
- Planning Justification Report (MHBC, 2017a)
- Zoning By-Law Amendment Applications letter report (MHBC, 2017b)
- Hydrogeology Study (MTE, 2017a)
- Preliminary Stormwater Management Report (MTE, 2017b)
- Functional Servicing Report (MTE, 2017c)

29. Following review of the technical reports, HSW can not support the proposed developments at this time due to the unknowns surrounding the proposed consolidated stormwater management (SWM) facility that will handle runoff from a portion of the Northgate Lands.

HSW offers the following comments and requirements regarding the technical information contained within the above-noted documents:

30. Plan of Subdivision application form;
Planning Justification Report (MHBC, 2017a);
Zoning By-Law Amendment Applications letter report (MHBC, 2017b); and,
Functional Servicing Report (MTE, 2017c)

a. No comments.

b. (Does not apply to the subject applications.)

31. Plan of Condominium application form:

a. A Salt Management Plan (SMP) will need to be prepared for private roads and/or parking lots created as part of the Plan of Condominium. It will be a condition of draft plan approval that the SMP is submitted at Site Plan Control.

b. The proponent has indicated that permeable pavement will be used as a means for stormwater management within this condominium block (MTE, 2017b). HSW would like to see a post-construction monitoring program implemented to assess the effectiveness of permeable pavement to infiltrate road runoff. This will be required as a future condition of draft plan approval.

32. Hydrogeology Study (MTE, 2017a)

a. HSW agrees with MTE's recommendation to complete *in-situ* infiltration testing at all End-Of-Pipe (EOP), conveyance and communal Low-Impact Development infiltration facilities. This testing should be completed and as part of a future condition of draft plan approval presented in a Final SWM report for each of the above-noted infiltration features.

b. HSW agrees that the recommendations presented in Section 7.0 of the report should be implemented. Post-construction monitoring shall continue for a minimum of two years following 90% build-out. The proponent should complete these recommendations through a future condition of draft plan approval.

c. HSW requires clarification on the timing and frequency of groundwater elevation and groundwater quality monitoring, as well as the groundwater quality parameters being considered. This should be completed prior to draft plan approval.

33. Preliminary Stormwater Management Report (MTE, 2017b)

a. Water balance values need to be expressed in both mm/a and m^3/a in an updated Preliminary SWM Report. A more detailed breakdown of infiltration sources should also be provided (i.e. volume from roads vs. roof tops vs. pervious areas etc.) and should be broken down by lot-level, conveyance and EOP infiltration features. Please revise and resubmit the Preliminary SWM Report.

b. A relatively large component of infiltration in subcatchments 3915 and 3917 appears to be from roads and/or parking lots; however, without a detailed breakdown of the water balance in terms of m^3/a this could not be determined. Infiltration of salty runoff should

only be implemented to make up for infiltration shortfalls from clean sources. This will be evaluated following re-submission of the Preliminary SWM Report.

c. A Salt Impact Assessment (SIA) was not submitted as part of this application. This needs to be included in an updated Preliminary SWM Report.

d. HSW agrees that Oil-Grit Separator (OGS) units should be installed upstream of any conveyance infiltration facility, and is to be secured as part of a future condition of draft plan approval.

e. Based on the contours of the composite high groundwater table and the proposed grading contours for SWMF 5914, it appears that the bottom of the pond will intersect the water table. How does the developer propose to maintain hydraulic separation between the bottom and sides of SWMF 5914 and groundwater to prevent the pond from passively dewatering shallow groundwater? Please confirm/clarify through re-submission of the Preliminary SWM Report.

f. The proponent should also confirm that the bottom and sides of SWMF 3915 will not intersect the water table. Please confirm through re-submission of the Preliminary SWM Report.

g. Permeable pavement is proposed for the private condominium road within Catchment 3917. Based on the results of the updated Preliminary SWM Report, HSW may or may not support this proposed approach to stormwater management because most or all salt applied to the road will be infiltrated. This will be evaluated following re-submission of the Preliminary SWM Report.

h. LID infiltration is proposed for runoff from both pervious and impervious surfaces for LID 5917. Based on the results of the updated Preliminary SWM Report, HSW may or may not support this proposed approach to stormwater management because the LID feature will infiltrate salty runoff. This will be evaluated following re-submission of the Preliminary SWM Report.

i. Conveyance infiltration facilities are proposed within the development. Based on the results of the updated Preliminary SWM Report, HSW may or may not support this proposed approach to stormwater management because this will infiltrate salty runoff. This will be evaluated following re-submission of the Preliminary SWM Report.

j. HSW agrees with the recommendation that all lot-level infiltration galleries should be oversized by 15%. This will be secured as part of a future condition of draft plan approval.

k. Sump pumps should not be connected to storm sewers. Please revise the Preliminary SWM Report.

l. A consolidated SWM Facility has been proposed by multiple land developers within the Subwatershed. This consolidated SWMF will manage runoff generated for Catchment 3102. The consolidated SWMF will need to be approved by the Region, City, GRCA, development group, and other stakeholders prior to draft plan approval of these Draft Plan of Subdivision and Draft Plan of Condominium applications.

m. The proponent proposes to submit Final SWM Reports at Site Plan control for stormwater controls located on private property. This approach might be acceptable, so long as the balance of HSW's comments can be satisfactorily addressed following re-submission of the Preliminary SWM Plan.

34. In summary HSW requires clarification and/or additional information on a number of items related to the Preliminary SWM Report. This information should be presented in an updated Preliminary SWM Report to the satisfaction of the Region, City and GRCA.

Archaeology

35. Staff have reviewed the Archaeological Assessment Report Entitled, "Original Report on Archaeological Assessment (Stages 1 & 2) Northgate Land Corp. & Erbsville Kartway Lands Conservation Drive, Part of Lot 28, German Company Tract Geographic Township of Waterloo, City of Waterloo, Regional Municipality of Waterloo, Ontario ", Dated Sep 6, 2016, as well as the Supplementary Documentation and the October 18, 2016 letter from the Ministry of Tourism, Culture and Sport, and acknowledge that a Stage 2 assessment is recommended (item no. 7 in the October 18, 2016 letter) for the woodlot because it has archaeological potential. Such assessment will need to be completed in consultation with the Region and the City prior to Draft Plan Approval.

General Planning

36. Northgate/Erbsville Kartway Consolidation

a. It is noted that the two properties (Northgate/Erbsville Kartway) will be consolidated. Prior to draft plan approval it will need to be determined of which stage of the Northgate plan will consolidation occur, as this may have implications for the phasing of the development.

b. It will need to be determined prior to draft plan approval as to when the go-kart operation will cease, as it is considered an incompatible land-use with residential uses proposed. In the absence of a noise study, the go-kart operation will need to cease operation prior to registration of any stage of the Northgate plan.

c. The 0.3m Reserve Block (No. 26/stage 3) will need to be extended to the north of Block 24 ("Future Res. Consolidation Block").

d. In the PJR, a counting error was also noted in the number of vacant land condominium units; 2 units appear to be missing from the final count. This would alter the total number of units from 78 to 80 (pg. 9). Please confirm and correct the count with what can be seen on Draft Plan Consolidation labeled Figure 4. Please revise.

37. Density calculations appear to have excluded the buffer areas; please revise the density calculations to include these areas.

38. Prior to draft plan approval, confirmation from the City of Waterloo that the applications conform with the City's Official Plan, and any other applicable Secondary Plan and/or District Plan (i.e. the Beaver Creek Meadows District Plan), will be required.

39. A Record of Site Condition will be required by the Region prior to the approval of any zoning by-law.

40. It is noted that the scale shown on the draft plan is not correct. Please revise.

41. Stormwater Management

a. It is noted in the PJR (pg. 11, second paragraph) that a SWM facility will be located on Block 25, stage 3, however the draft plan shows a SWM block on block 23, stage 3. Please revise.

b. The off-site Joint SWM facility will need to be finalized to the satisfaction of the City, GRCA, and Region in order to further evaluate the subject applications.

42. Parks and Open Space

a. It is the opinion of Regional staff that:

i. the portion of lands excluded from the limits of the subdivision should be included and conveyed to a public authority as part of, or prior to registration of phase 1, as per discussions at a meeting with the proponent/applicant, and City, Region, and GRCA staff on September 8, 2017.

ii. Environmental lands to the south of Stage 5 should also be shown as a contiguous block on a revised draft plan and conveyed to a public authority as noted above in comment no. 20 a).

b. There are duplicates of Blocks 24 and 25 within stage 3 of the draft plan of subdivision. Please revise.

c. Proposed Active/Passive uses will need to be determined to the satisfaction of the City of Waterloo.

43. Community Connectivity

a. Street Three (stage 3) appears to intersect itself. A seventh street should be established to the satisfaction of, and if deemed necessary by, the City of Waterloo.

b. Streets will be required to be named to the satisfaction of the City of Waterloo and should be shown on the revised draft plan.

c. It should be confirmed that all proposed streets will align with planned/existing streets in neighbouring subdivisions.

44. Design and Development – Stage 5

a. It is noted that a temporary turning circle is proposed upon portions of units 13 and 14, Stage 1 of the Vacant Land Condominium ("VLC"); It should be confirmed if the location of this temporary turning circle will have impact for the development of units 13, 14, and 15.

b. It is noted in the PJR under subsections 5.1.1 and 5.1.3 that the development includes sidewalks, trail networks, and access to transit to encourage walkability and connectivity; access through ESPA 80 to units 5 through 19 within Stage 2 of the VLC does not appear to include a sidewalk or proper street lighting, and the cross-sections shown on Map 7 of the EIS for this proposed access road provides little to suggest that the health and safety of pedestrians has been considered through this approximately 200m section. Further, the walking distance to the closest transit stop for these units will be approximately 1km. Please provide more detail with regard to Stage 2 of the VLC, specifically, how this component of the plan can be developed to address these concerns (including comment nos. 21 i) and j) above) in accordance with Section 1.1.1 c) of the Provincial Policy Statement, 2.2.7.1 of the Growth Plan of the Greater Golden Horseshoe (2017), and Sections 2B and 2.D.17 of the Regional Official Plan.

c. Regional staff were in attendance at a Public Meeting held by the City of Waterloo on November 27, 2017 and noted that 5 separate delegations presented to City Council that evening, each providing significant concerns relating to the proposed development through ESPA 80 to units 5 through 19 of Stage 2 of the VLC. Regional staff understands that these concerns have been included as part of the public record, and will require a detailed response addressing each of the concerns raised that evening.

Region Planning Fees

45. Regional staff acknowledges receipt of the application fees for the plan of subdivision, plan of condominium, zone change and EIS review.

In summary, while the above comments are specific and detailed in nature, there are fundamental concerns that remain with the subject applications. The above comments shall not be implied that the Region is currently in a position to support the subject applications.

If you have any questions, please call.

Yours truly,

Adam Betteridge, MCIP, RPP
Principal Planner
abetteridge@regionofwaterloo.ca
(519) 575-4757 ex. 3120

cc. Dave Aston, MCIP, RPP, MHBC Planning
Laura Dewar, MCIP, RPP, City of Waterloo Planning
Michelle Sergi, MCIP, RPP, Region of Waterloo

Appendix A

Engineering Department
Rocket Wei, P.Eng.
Engineering Supervisor, Underground Distribution & GIS

WATERLOO NORTH HYDRO INC.
PO Box 640
526 Country Squire Road
Waterloo ON, N2J 4G8
Tel: 519-888-5551
Fax: 519-888-7049

DRAFT PLAN OF SUBDIVISION REVIEW COMMENTS

Aug 25, 2017

To: **Adam Betteridge**
Principal Planner
150 Frederick St, 8th Floor
Kitchener, Ontario N2G 4J3
abetteridge@regionofwaterloo.ca
519-575-4500 Ext. 3120

Cc: pbritton@mhbcplan.com

Re: **30T-17401 for Gabrielle Elizabeth Groff & Nothgate Land Corp** (the "**Customer**")
South-West corner of Conservation Drive and Beaver Creek Road, Waterloo – 835 Units (Maximum)

Waterloo North Hydro Inc. ("**WNH**") has reviewed the Customer's draft plan application to The Regional Municipality of Waterloo for the referenced project and has the following comments:

1. **Conditions of Service**: WNH standard conditions in effect at the time of servicing will apply.

2. **Existing System**: WNH has 27.6kV overhead distribution lines on Conservation Dr and 8kV single phase line on Beaver Creek Rd. WNH intends to maintain the overhead distribution system on all abutting streets; however, an upgrade of the 8kV line may be required by this development.

3. **Relocation of Existing Facilities**: Any relocation of existing WNH facilities, if possible, will be at 100% of the applicant's cost.

4. **Expansion and Upgrade**: If upgrades or additions to WNH existing distribution system triggered by a subdivision development are necessary to be made, such expansion will be done at the applicants cost as calculated by WNH using an economic evaluation formula prescribed by the Ontario Energy Board (OEB).

5. **Set Back**: The proposed building(s) must be set back a minimum of 5.0m from any high voltage conductors. Any objects (crane, similar hoisting device, backhoe, power shovel or other vehicle or equipment) shall not be brought closer than 3 meters to an energized overhead conductor owned by WNH. Set back from padmounted equipment must be as per Ontario Electrical Safety Code (OESC) Section 26-014. Decreased setbacks (if proposed) may necessitate the installation of non-combustible barrier walls between WNH padmounted equipment and the housing unit at 100% the developer's cost.

6. **Road Widening**: The Regional Municipality of Waterloo should review the pole locations in relation to any planned road widening. A larger building set back may be required now to facilitate the relocation of WNH's poles in future.

7. **Access to Meters**: WNH requires a minimum 1.2 m (4') wide clear access in front of and around a single meter location on the side of the lot where the service stub is located. If less than 1.2m (4') is provided, a registered easement on the adjacent lot must be granted at no cost to WNH. If this access/easement cannot be provided, the meter must be placed on the front face of the house. For on-street townhouse blocks, ganged meter bases must be placed on the end units in accordance with WNH's final design.

8. **Easement**: A blanket easement over all townhouse blocks is required by WNH in order to construct and maintain hydro owned facilities. Additional easements may also be required depending on site conditions. Easements shall be at no cost to WNH and shall be granted to WNH prior to connection. Defined easement shall be free of encumbrances, including fences.

WATERLOO NORTH HYDRO INC.
PO Box 640
526 Country Squire Road
Waterloo ON, N2J 4G8
Tel: 519-888-5551
Fax: 519-888-7049

Engineering Department
Rocket Wei, P.Eng.
Engineering Supervisor, Underground Distribution & GIS

9. **Grading**: Any grading changes by the developer which will affect existing WNH facilities shall be reviewed and approved by WNH prior to starting any site grading.

10. **Landscaping**: The customer is to ensure any landscaping that will be within the vicinity of WNH infrastructure complies with the ESA *Planting Under or Around Powerlines & Electrical Equipment* guideline.

11. **Next Steps**: The applicant is encouraged to contact WNH with 1st submission drawings for further comment. WNH will only start the detail engineering design after receiving the 2nd submission package. Typically 13 weeks is required from the date of WNH receiving the 2nd submission package to the date of WNH issuing the Subdivision Agreement to Customer which will include connection and upgrade/expansion costs payable by the applicant. Customer shall install road crossings as per WNH design, curbs and asphalt prior to start of WNH construction.

Regards,

Rocket Wei, P.Eng.
Engineering Supervisor, Underground Distribution & GIS
rwei@wnhydro.com

Appendix B

CANADA POST
2701 RIVERSIDE DRIVE SUITE N0820
OTTAWA ON K1A 0B1
CANADAPOST.CA

POSTES CANADA
2701 PROM RIVERSIDE BUREAU N0820
OTTAWA ON K1A 0B1
POSTESCANADA.CA

August 29, 2017

Adam Betteridge
Principal Planner
Planning, Development and Legislative Services
Region of Waterloo
PO Box 9051
Kitchener ON N2G 4J3

Reference: Application for Draft Approval – Plan of Subdivision
File No.: 30T-17401
Municipality : Waterloo
Location : Conservation Drive & Beaver Creek Rd.
Owner and Applicant: Gabrielle Elizabeth Groff & 1017081 Ontario Inc

Adam:

Canada Post Corporation appreciates the opportunity to comment on the above noted application and it is requested that the developer be notified of the following:

Canada Post has reviewed the proposal for the above noted Development Application and has determined that the completed project will be serviced by centralized mail delivery provided through Canada Post Community Mail Boxes.

In order to provide mail service to this development, Canada Post requests that the owner/developer comply with the following conditions:

⇒ The owner/developer will consult with Canada Post to determine suitable permanent locations for the placement of Community Mailboxes and to indicate these locations on appropriate servicing plans.

⇒ The Builder/Owner/Developer will confirm to Canada Post that the final secured permanent locations for the Community Mailboxes will not be in conflict with any other utility; including hydro transformers, bell pedestals, cable pedestals, flush to grade communication vaults, landscaping enhancements (tree planting) and bus pads.

⇒ The owner/developer will install concrete pads at each of the Community Mailbox locations as well as any required walkways across the boulevard and any required curb depressions for wheelchair access as per Canada Post's concrete pad specification drawings.

⇒ The owner/developer will agree to prepare and maintain an area of compacted gravel to Canada Post's specifications to serve as a temporary Community Mailbox location. This location will be in a safe area away from construction activity in order that Community Mailboxes may be installed to service addresses that have occupied prior to the pouring of the permanent mailbox pads. This area will be required to be prepared a minimum of 30 days prior to the date of first occupancy.

⇒ The owner/developer will communicate to Canada Post the excavation date for the first foundation (or first phase) as well as the expected date of first occupancy.

⇒ The owner/developer agrees, prior to offering any of the residential units for sale, to place a "Display Map" on the wall of the sales office in a place readily available to the public which indicates the location of all Canada Post Community Mailbox site locations, as approved by Canada Post and the Region of Waterloo.

⇒ The owner/developer agrees to include in all offers of purchase and sale a statement, which advises the prospective new home purchaser that mail delivery will be from a designated Community Mailbox, and to include the exact locations (list of lot #s) of each of these Community Mailbox locations; and further, advise any affected homeowners of any established easements granted to Canada Post.

⇒ The owner/developer will be responsible for officially notifying the purchasers of the exact Community Mailbox locations prior to the closing of any home sales with specific clauses in the Purchase offer, on which the homeowners do a sign off.

Canada Post further requests the owner/developer be notified of the following:

1 The owner/developer of any condominiums will be required to provide signature for a License to Occupy Land agreement and provide winter snow clearance at the Community Mailbox locations

2 Enhanced Community Mailbox Sites with roof structures will require additional documentation as per Canada Post Policy

3 There will be no more than one mail delivery point to each unique address assigned by the Municipality

4 Any existing postal coding may not apply, the owner/developer should contact Canada Post to verify postal codes for the project

5 **The complete guide to Canada Post's Delivery Standards can be found at:**
https://www.canadapost.ca/cpo/mc/assets/pdf/business/standardsmanual_en.pdf

Regards,

Jamie Bere
Delivery Services Officer | Delivery Planning
Canada Post
955 Highbury Ave N
London ON N5Y 1A3
519-280-7968
james.bere@canadapost.ca

Appendix C

Administration Centre: 400 Clyde Road, P.O. Box 729, Cambridge, ON N1R 5W6

Phone: 519 621 2761 Toll free: 1-866 900-4722 Fax: 519-621-4844 www.grandriver.ca

September 22, 2017

Adam Betteridge, MCIP, RPP
Planning, Development and Legislative Services
Regional Municipality of Waterloo
150 Frederick Street, 8th Floor
Kitchener, ON
N2G 4J3

Re: Draft Plan of Subdivision: 30T-17401
Draft Plan of Vacant Land Condominium: 30CDM-17409
Zone Change Application: Z-17-14
Southwest Corner of Conservation Drive and Beaver Creek Road, City of Waterloo
Northgate Land Corporation / MHBC Planning

Dear Mr. Betteridge,

Further to our letter dated September 21, 2017, it has come to our attention that there is an Addendum to the Planning Justification Report (MHBC, July 2017), which includes a revised Zoning Schedule (Figure 7).

Based on our review of the Addendum, we wish to amend our previous comments as follows (bold text). Comments to be removed have been stroked out.

GRCA staff are still not in a position to recommend approval of the applications at this time. We look forward to receiving a response and revised materials that address our comments.

Required Comments to be Addressed:

Planning:

1. It is our understanding that discussion is ongoing regarding the decision to exclude the environmental lands **(and buffer on the west side of Beaver Creek)** from the limits of the subdivision. GRCA staff shared their concerns on this matter during a site meeting held on September 11, 2017. It is anticipated that the applicant will respond to the questions raised by the GRCA, City and Region and that a second meeting may be required.

~~2. Further to the above, page 12 of the Planning Justification Report (MHBC, July 2017) states that "although the Core Environmental Features are not within the limits of the Northgate Plan of Subdivision, the features and buffers are proposed to be rezoned to Green One (G1) Zone as part of a zone change application submitted on behalf of Northgate." Contrary to this statement, Figure 7 in the Planning Justification Report~~

~~shows the environmental lands remaining as Agricultural (A) zone. Please clarify. We request that the core environmental features and their buffers be zoned appropriately as Green One (G1).~~

3. Figure 7 in the Planning Justification Report **Addendum does not show** Green One (G1) zoning for the proposed location of Stormwater Management (SWM) Facility 5915 (east side of Beaver Creek), **nor is there a** corresponding SWM Block shown for Stage 2 on the Draft Plan. Please clarify.

~~4. According to the Draft Plan, Blocks 8 & 9 (Stage 1) and Block 5 (Stage 2) are shown as Open Space. However, this is not reflected in the proposed zoning shown on Figure 7 of the Planning Justification Report. In general, further clarification is needed regarding which areas will be zoned Open Space. The core feature buffer on the east side of Beaver Creek is captured under Open Space (as per the Draft Plan), but not the buffer on the west side of the creek. Please clarify.~~

~~5. Similar to the above, a portion of the core environmental features are proposed as Common Element under 30CDM-17409. Figure 7 in the Planning Justification Report shows the zoning of the Common Element as Agricultural (A) and/or Flexible Residential (FR), whereas the zoning for 30CDM-17410 (Erbsville Kartway) shows the Common Element as Green One (G1). Please clarify. We request that core environmental features and their buffers be zoned appropriately as Green One (G1).~~

6. We note that a portion of the stormwater for the subject lands will be directed toward an off-site SWM facility, the location and design of which has yet to be determined. Please be advised that GRCA staff are unable to provide a comprehensive review and/or support the subject draft plans without this information. We wish to acknowledge receipt of a draft Terms of Reference (MTE, September 7, 2017) for the communal SWM facility and we will provide comments under a separate cover upon completion of our review.

7. Pumping Station Block 10 (Stage 1) appears to be encroaching into the regulatory floodplain. This should be revised so that the limits of the block are kept outside of the hazard.

8. Section 6.5 of the Environmental Impact Study (EIS) states that "the proposed trail will be located outside of natural features and their buffers or will be located within the outer 5 metres of the buffer where appropriate." The location of proposed trails should be illustrated directly on the Draft Plan to ensure that this recommendation is implemented. Rationale should be added to the EIS for areas where the trail is proposed within the buffer.

9. Please be advised that GRCA comments on the *2016 Pre-construction Biological Monitoring Report* (NRSI, March 2017) have been provided to the City and NRSI under a separate cover (email to A. Dean, NRSI, dated August 29, 2017). It is anticipated that these comments will be addressed by NRSI and a response provided to GRCA staff. Please be further advised that we have not received a monitoring report from Stantec for the surface water and groundwater portion of the City's required monitoring program.

Engineering:

10. As per the North Waterloo Scoped Subwatershed Study (NWSSS), areas in catchment 391 need post-development flows controlled to unit flow rates. This has been achieved for subcatchment 3914; however, it is proposed that subcatchments 3915 and 3917 will only infiltrate the 25 mm storm event. Further information is required to address how these two areas will function under storms greater than the 25 mm event.

11. A volume reduction pond has been proposed for subcatchment 3915; however, no further information regarding this facility has been provided. Similarly, only a typical arrangement of the infiltration facilities has been provided. More information, such as configurations and dimensions of these facilities, is required.

12. SWM Report Section 5.8 - enhanced quality control for subcatchment 3915 is proposed to be achieved by using an oil-grit separator (OGS) as a stand-alone BMP. OGS units are to be considered an acceptable quality control BMP at enhanced level only and when part of a multi-component approach. As no further information has been provided regarding SWM facility 5915, it is unclear whether this facility will have a quality control component or not. Please clarify.

13. SWM Report Section 7.0 - the storage requirement of 125 m^3/ha for permanent pool of temporary sediment ponds is acceptable for minimum drawdown times of 48 hours and a L:W ratio of 4:1. For smaller ratios or drawdown time, the requirement is 185 m^3/ha.

Natural Heritage:

14. EIS Section 1.0 – road crossing mortality monitoring was last completed by MMM Group in the spring of 2014. Please clarify why additional road mortality surveys were not completed in 2015, 2016 and 2017. Since amphibian population abundance can vary greatly from year to year, additional road mortality surveys are recommended, particularly during the construction and post-construction periods.

15. EIS Section 1.0 – the first paragraph of page 2 states that 3 years of post-construction surface water and groundwater monitoring was completed by Stantec, yet this firm is not listed on page 1 as being part of the study team. Additionally, Stantec is named several times throughout the report. If Stantec is part of the study team, they should be recognized in the list on page 1.

16. EIS Section 4.2 – existing water balance calculations in Table 7 and much of the information presented are based on the findings of the NWSSS. We recommend that the key quantitative data collected and/or water balance calculations obtained during the pre-construction groundwater monitoring completed by Stantec also be reported within this section to help substantiate the overall conclusion that groundwater discharge represents a minor component of the wetland water balance and flow volume within Beaver and Laurel Creek. This information is also required to demonstrate that there will be no adverse impact on hydrologic functions within the adjacent wetland and watercourse features.

17. EIS Section 4.2 – if groundwater is a minor component of the wetland's water balance, it is unclear that an increase in infiltration and groundwater discharge will result in an

ecological enhancement. Please confirm whether the wetlands will become wetter and if this will have a negative impact on mature swamp communities. Please also confirm whether the hydroperiod will be altered. This will likely require further discussion with GRCA staff.

18. EIS Section 4.9 – page 67 states that "the final development setback and buffer management recommendations will be determined via site specific work..." The current EIS is meant to establish final development limits that take into consideration the ecological sensitivity and significance of the natural heritage system. We agree that a more detailed assessment of impacts would be required in the event of certain buffer encroachments; otherwise, most of the site specific work should already be completed and able to inform an effective development limit. Please clarify.

19. EIS Section 5.3 – it is requested that seasonal runoff and infiltration volumes within catchment 3914 be reviewed as part of the EIS. Please verify whether or not (and if so, to what degree) the proposed increase in infiltration will negatively impact swamp and forest areas in particular. Is there potential for more standing water for longer periods of time?

20. EIS Section 6.5 – the proposed east-west trail connection across the Beaver Creek riparian corridor needs to be illustrated on the Draft Plan. Two walkways are shown in separate locations (Block 7, Stage 1 and Block 6, Stage 4), but a trail connection and proposed creek crossing appear to be missing from the plan. Additional detail will be required to demonstrate that the trail alignment within the wetland buffer and proposed crossing location are consistent with the recommendations of the NWSSS, the current EIS, and the watercourse policies of the GRCA.

21. EIS Section 6.6 – it is anticipated that the proposed wildlife crossing structures will be located within an area which is part of the natural heritage system and is regulated by the GRCA. Therefore, design specifications tailored to target wildlife species (e.g. fish, amphibians, reptiles, small mammals) should be provided to the GRCA, the City and MNRF for review.

22. EIS Map 6 – areas of encroachment into buffer zones should be highlighted on this map

23. EIS Map 6 – wetland buffer areas that are less than or greater than the 30 metre minimum requirement of the NWSSS, should be highlighted on the map.

24. EIS Map 8 –the symbol for "Ecological Linkage" should be revised in the legend so that it correctly corresponds to the feature on the map.

25. EIS Map 8 – the orange circles on the map appear to be unidentified in the legend. Please clarify.

<u>Additional Comments for Consideration:</u>

GRCA Property:

a. As an adjacent landowner, the GRCA will be providing property related comments under a separate cover, which may or may not include Draft Plan conditions to address any items of concern.

b. EIS Section 6.2 – this section includes a recommendation to remove a 'knick-point' on Laurel Creek located on GRCA property. Please be advised that the location of the knick-point (as per Map 8) is not on GRCA property. The knick-point is located on property owned by the City of Waterloo (i.e. 658 Erbsville Road). Any work proposed on the watercourse in this location would not be covered under permissions granted for the subdivision; therefore, the City of Waterloo would be required to obtain a GRCA permit pursuant to Ontario Regulation 150/06.

If you have any questions or concerns regarding this letter, please do not hesitate to contact the undersigned.

Sincerely,

Kait Rosebrugh

Kaitlyn Rosebrugh
Resource Planner - Grand River Conservation Authority
519-621-2763 ext. 2292 | krosebrugh@grandriver.ca

c.c. Laura Dewar – City of Waterloo (email)
Paul Britton – MHBC (email)
(applicant) 1017081 Ontario Ltd. c/o Paul Grespan, 675 Riverbend Drive, Kitchener ON, N2K 3S3

Appendix D

Administration Centre: 400 Clyde Road, P.O. Box 729 Cambridge, ON N1R 5W6

Phone: 519-621-2761 Toll free: 1-866-900-4722 Fax: 519-621-4844 www.grandriver.ca

December 12, 2017

Adam Betteridge, MCIP, RPP
Planning, Development and Legislative Services
Regional Municipality of Waterloo
150 Frederick Street, 8th Floor
Kitchener, ON
N2G 4J3

Re: Draft Plan of Subdivision: 30T-17401
Draft Plan of Vacant Land Condominium: 30CDM-17409
Zone Change Application: Z-17-14
Southwest Corner of Conservation Drive and Beaver Creek Road, City of Waterloo
Northgate Land Corporation / MHBC Planning

Dear Mr. Betteridge,

Further to our letter dated September 22, 2017, the Grand River Conservation Authority (GRCA) Property Division would like to include the following additional comments for your consideration.

We note that the proposed subdivision shares a common boundary with GRCA property. Staff are concerned that private landowners may try to access GRCA property, which is not permitted. As such, we kindly request that the Region of Waterloo include the following Draft Plan Conditions to address this concern:

1. That prior to final approval, the Subdivider agrees to install permanent fencing along the common boundary between the subdivision lands and Grand River Conservation Authority property. The fence should be a minimum 1.2 metre chain-link fence installed to O.P.S.S.-541 and O.P.S.D.-900.01 specifications using Class A fencing fabric, or an alternative deemed acceptable by the Grand River Conservation Authority. The fencing will not include any gates to access the Grand River Conservation Authority property.

2. That prior to final approval, the Subdivider agrees to create informational material for potential purchasers to notify them of the adjacent Grand River Conservation Authority land, to the satisfaction of the Grand River Conservation Authority. Such material will include mapping and will specify that access to Grand River Conservation Authority land from private lots is not permitted. The Subdivider further agrees to make the materials available in all sale centres for the subdivision and to provide the materials to each landowner upon purchase of any private lot within the subdivision.

We trust that the above can be incorporated into the Draft Plan Approval conditions for the subdivision.

If you have any questions or concerns regarding this letter, please do not hesitate to contact the undersigned.

Sincerely,

Samantha Lawson, MCIP RPP
Manager of Property - Grand River Conservation Authority
519-621-2763 ext. 2210 | slawson@grandriver.ca

c.c. Laura Dewar – City of Waterloo (email)
Paul Britton – MHBC (email)
(applicant) 1017081 Ontario Ltd. c/o Paul Grespan, 675 Riverbend Drive, Kitchener ON, N2K 3S3

Appendix E

Adam Betteridge

From: Shawn Callon <shawn_callon@wrdsb.ca>
Sent: Thursday, September 07, 2017 10:00 AM
To: Adam Betteridge; Laura.Dewar@waterloo.ca; trevor.hawkins@waterloo.ca
Cc: Andrea Kean; planning@wrdsb.on.ca; Lauren Agar
Subject: Re: Shawn Callon re: Draft Plan of Subdivision in Waterloo

Hi Adam,

While we have no current school site needs in these plans we wish to modify our comments to include the following, which should apply to all plans within the Beavercreek Community:

The Board requires,
1) That the owner supply, erect, and maintain a sign (at its expense and according to the Board's specifications) affixed to the permanent development sign for the plan advising prospective residents that students may be directed to schools outside the neighbourhoods within the plan;

2) That the owner agree in the Subdivision/Condo Agreement to notify all purchasers of residential units and/or renters of same, by inserting the following clauses in all offers of Purchase and Sale/Lease, and that this remain on Title to the property/unit for heirs, successors and assigns:

"Whereas the Waterloo Region District School Board may designate this subdivision as a Development Area for the purposes of school accommodation, and despite the best efforts of the Board, sufficient accommodation may not be available for all anticipated students. You are hereby notified that students may be accommodated in temporary facilities and/or bussed to a school outside the area, and further, that students may, in future, be transferred to another school."

Thanks,

Shawn

Shawn Callon / Principal Planner
Planning Department
Waterloo Region District School Board

519-570-0003 x4308

Note my new address: shawn_callon@wrdsb.ca

On Mon, Aug 28, 2017 at 8:36 AM, Shawn Callon <shawn_callon@wrdsb.ca> wrote:
Hi Adam,

We have no comments on any of these applications.

Thanks,

Shawn Callon

Shawn Callon / Principal Planner
Planning Department
Waterloo Region District School Board

519-570-0003 x4308

Note my new address: shawn_callon@wrdsb.ca

On Mon, Aug 28, 2017 at 8:08 AM, Andrea Kean <andrea_kean@wrdsb.on.ca> wrote:

Good morning Shawn,

I recently received your fax regarding your sign-off for draft plan of subdivision application no. 30T-17401, being located on the s/w corner of Conservation Dr. and Beaver Creek Road in Waterloo.

I just want to confirm that there were a total of 4 applications forwarded to you: 2 draft plans and 2 associated draft plan of vacant land condominiums. I only received one comment form back from you. If your comments for having no concerns relate to all 4 applications, you can simply let me know be email if that is easier for you. The City of Waterloo will likely (or has already) forwarded two applications for associated zone change applications.

If you have any questions or concerns, please don't hesitate to email or call.

Regards,

Adam Betteridge, MCIP, RPP

Principal Planner

Planning, Development and Legislative Services

Regional Municipality of Waterloo

T: 519-575-4757 ext. 3120

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abetteridge@regionofwaterloo.ca

Appendix F

THE CITY OF Waterloo
INTEGRATED PLANNING & PUBLIC WORKS
Planning Approvals Division

December 22, 2017

Adam Betteridge, MCIP, RPP
Planning, Development and Legislative Services
Regional Municipality of Waterloo
150 Frederick Street
Kitchener, ON
N2G 4J3

Re: Post Circulation Comments
Subdivision Application 30T-17401 & Condominium Application 30CDM-17409 (Gabrielle Elizabeth Groff & 1017081 Ontario Limited)
Subdivision Application 30T-17402 & Condominium Application 30CDM-17410 (1455136 Ontario Limited)

City of Waterloo staff has had the opportunity to complete a preliminary review of the material submitted for Draft Plan of Subdivision Applications 30T-17401 and 30T-17402 and Draft Plan of Condominium Applications 30CDM-17409 and 30CDM-17410.

As proposed, Subdivision 30T-17402 is entirely dependent upon the approval of Subdivision 30T-17401 for essential infrastructure (such as roads, water and sanitary services) and requires consolidation of certain blocks for residential development and parkland. Additionally, Condominium Applications 30CDM-17409 and 30CDM-17410 are entirely dependent upon the approval of Subdivision Application 30T-17401 (Stage 5) and 30T-17402 (Stage 2).

Based on our preliminary review, City of Waterloo staff does not support the draft approval of the applications as submitted, for reasons including:

- The Core Natural Feature Lands and associated Buffers are substantially excluded from the application 30T-17401. Such lands should be included in the application;
- The submission does not meet municipal engineering standards and requirements;
- The submission has not fulfilled the requirements of the Environmental Impact Statement Terms of Reference. Staff is not satisfied with the scope of the Environmental Impact Statement;
- Components of the proposed development appear to be inconsistent with the intent of certain policies within the City's Official Plan and District Plan;
- There is insufficient information, including outstanding agency comments, to determine if the proposed development complies with applicable policies, requirements, and standards; and
- Components of the proposed development do not represent good planning, in staff's opinion.

The City of Waterloo is committed to providing accessible formats and communication supports for persons with disabilities. If another format would work better for you, please contact Integrated Planning & Public Works at 1.519.747.8752 or TTY at 1.866.786.3941.

Specifically within Draft Plan of Subdivision 30T-17401, significant concerns exist relative to: (a) the proposal to extend/construct private infrastructure through a Core Natural Feature; and (b) the proposal to develop the agricultural clearing inside the northern lobe of the Laurel Creek Forest Environmentally Sensitive Policy Area (ESPA 80).

The City will continue to review the applications and any further submissions by the applicant.

Sincerely,

Laura Dewar

LAURA DEWAR, MCIP RPP
Development Planner, Planning Approvals Division
Integrated Planning & Public Works Department
City of Waterloo
P: 519.747.6108
E: laura.dewar@waterloo.ca

Cc: Paul Britton, Partner, MHBC Planning
Joel Cotter, Director of Planning Approvals, City of Waterloo
Steve Ross, Director of Legal Services, City of Waterloo
Scott Nevin, Director of Growth Management, City of Waterloo
Ron Ormson, Director of Engineering Services, City of Waterloo
Cameron Rapp, Commissioner, Integrated Planning and Public Works, City of Waterloo

THE CITY OF Waterloo | **Integrated Planning & Public Works**
Planning Approvals

August 29, 2019

Shilling Yip
Planning, Development and Legislative Services
Regional Municipality of Waterloo
150 Frederick Street
Kitchener, ON N2G 4J3

Paul Britton, MCIP, RPP
Vice President/Treasurer
MHBC
540 Bingemans Centre Drive, Suite 200
Kitchener, ON N2B 3X9

Mr. Yip & Mr. Britton:

Re: City Comments Related to Informal Re-Submission
Northgate Land Corporation and Erbsville Kartway
Zone Change Application Z-17-14 and Z-17-15
Draft Plan of Subdivision 30T-17401 ('Northgate Lands')
Draft Plan of Subdivision 30T-17402 ('Kartway Lands')
Draft Plans of Condominium (Vacant Land) 30CDM-17409 and 30CDM-17410
Northwest Corner of Beaver Creek Road and Conservation Drive

Please accept this correspondence in relation to the consolidated development proposed of the Northgate Lands (Draft Plan of Subdivision 30T-17401 and Zone Change Application Z-17-14), the Kartway Lands (Draft Plan of Subdivision 30T-17402 and Zone Change Application Z-17-15), as well as Draft Plan of Condominium (Vacant Land) 30CDM-17409 and Draft Plan of Condominium (Vacant Land) 30CDM-17410. Through the evaluation of this development proposal, the City has reviewed the following supporting documents:

July 2017 – Original Submission

- *Planning Justification Report Plans of Subdivision, Plans of Condominium & Zoning By-Law Amendment Applications Beaver Creek Road and Conservation Drive City of Waterloo*, prepared by MHBC Planning Ltd. Kitchener. Dated: July 2017.
- *Northgate & Erbsville Kartway Subdivisions Beaver Creek Meadows District Waterloo, Environmental Impact Study*, prepared by Natural Resource Solutions Inc. Dated: July 2017.
- *Northgate & Erbsville Kartway Subdivisions Beaver Creek Meadows District, Waterloo, Preliminary Stormwater Management Report*, prepared by MTE Consultants Inc. Dated: July 5, 2017.
- *Northgate and Erbsville Kartway Subdivisions Beaver Creek Meadows District, Hydrogeology Study*, prepared by MTE Consultants Inc. Dated: July 5, 2017.
- *Northgate and Erbsville Kartway Subdivisions Beaver Creek Meadows District, Functional Servicing Report*, prepared by MTE Consultants Inc. Dated: July 5, 2017.

March 28, 2019 – Informal Resubmission

- Drawing: Draft Plan Consolidation, MHBC. Dated: March 11, 2019.
- Drawing: Submitted and Revised Draft Plans, MHBC. Dated: March 28, 2019.
- Drawing: Proposed Zoning, MHBC. Dated: March 25, 2019.
- Letter: *"Re: Informal resubmission – Northgate Land Corporation and Erbsville Kartway Applications Beaver Creek Meadows Community, Waterloo,* prepared by MHBC. Dated: March 28, 2019
- Technical Memo: *Subdivision 30T-17401 (Northgate Subdivision) Revised Sanitary Servicing for Stages 1 & 2*, prepared by MTE Consultants Inc. Dated: March 28, 2019.
- Technical Memo: *Subdivision 30T-17401 (Northgate Subdivision) and Subdivision 30T-17402 Stormwater Management block for Stages 3, 4 & the western portion of Stage 5,* prepared by MTE Consultants Inc. Dated: March 28, 2019.
- Memo: *Northgate South and Erbsville Kartway Subdivisions Draft Plan Resubmission*, prepared by Natural Resource Solutions Inc. Dated: March 28, 2019.
- Technical Memo: *Northgate Development Conservation drive intersection Locations*, prepared by Paradigm Transportation Solutions Ltd. Dated: March 21, 2019.
- *Neighbourhood Design Summary*, prepared by: MHBC.
- Draft Amending Zoning By-law, prepared by: MHBC.

Although separate applications were submitted for both the Northgate Lands and the Kartway Lands, the following comments are in response to the consolidated development as a whole. Comments below are provided in various parts, as follows:

Part A: Provides General Comments (applicable to the proposed development as a whole)
Part B: Provides Area Specific Comments (refer to Appendix A)

For reference purposes the plan as proposed is included as Appendix A.

It is City staff's understanding that the latest 'Informal Resubmission' was made with the intent to receive feedback from staff prior to a 'Formal Resubmission' is made. As a result, City of Waterloo staff has completed a preliminary review of the information listed above and provides the following comments in response, with the knowledge that additional information will be provided through the future 'Formal Resubmission'. Given that there are active appeals on the City's Official Plan, staff's review has been undertaken in the context of the 2012 Council-adopted Official Plan.

Prior to the City being in a position to recommend Draft Approval of the subdivision or condominium plans to the Region of Waterloo, or approval of the Zone Change application to Waterloo City Council, the following must be addressed and responded to in writing, with supporting studies and/or plans where necessary through a 'Formal Resubmission'.

Please note that City staff reserves the right to provide additional comments, or modify the above noted comments subject to further review and/or additional information as may be provided, particularly given the pending "Formal Resubmission" as noted above.

PART A: GENERAL COMMENTS

Planning:

Official Plan

1. The subject lands are designated Low Density Residential and Open Space on Schedule 'A' of the Official Plan. However, as previously noted, portions of the Official Plan are under appeal including the Low Density and Open Space designations as they apply to the subject lands.

2. Subsequent to the Official Plan, a District Plan was developed and adopted by City Council for the Beaver Creek Meadows area. The District Plan is consistent with and follows the land use framework established by the Official Plan. Therefore, the following review of the development applications is under the context of the 2012 Official Plan and Council adopted District Plan that followed.

3. In accordance with the Growth Plan (2017) and the Official Plan, the subject lands must achieve a density of 58 residents and jobs combined per hectare. Policy 2.2.7.3 of the Growth Plan state that density is to be measured over the entire area, excluding natural heritage features and areas/floodplains, rights of way for certain utilities, freeways and railways, employment areas, and cemeteries. Buffers around natural heritage features are not to be excluded from the calculation. Please provide calculations to confirm the density proposed, as per Policy 2.2.7.3.

4. The Low Density Residential (LDR) designation allows for consideration of a range of low-rise buildings as well as community uses and open spaces. The maximum density of any one site shall not exceed 150 bedrooms per hectare and the maximum height of building shall not exceed 10 metres. Please ensure the proposed development complies with the policies of the LDR designation in the Official Plan.

5. The Official Plan identifies a future minor node at the intersection of Beaver Creek Road and Conservation Drive, identified as Special Provision Area 37 (SPA 37). SPA 37 contemplates higher density and building heights than the LDR designation, as well as a range of uses to create a mixed-use centre with a concentration of neighbourhood-oriented retail, service commercial, institutional, employment and residential uses. Please ensure the proposed development complies with the policies of the SPA 37, as it relates to the future minor node at the intersection of Beaver Creek Road and Conservation Drive.

6. Block 3, Stage 2 (Multiple Residential Mixed-Use) proposes a mixed-use zone. The primary uses in this zone generally aligns with the intended mix of uses and neighbourhood oriented retail contemplated in SPA 37. Given the importance of providing for daily commercial needs for the larger neighbourhood area, the provision for mixed uses is strongly encouraged.

Beaver Creek Meadows District Plan

7. The proposed development lands are within the Council-adopted Beaver Creek Meadows District Plan (hereafter the 'District Plan'), and are designated 'Low Density Residential 1' (LDR 1), 'Low Density Residential 2' (LDR 2), 'Mixed-Use Medium Density Residential' (MUMDR), 'Open Space Land Uses – Park', 'Other Green Spaces', and 'Stormwater Management Facility'. The lands designated as MUMDR also form part of the Mixed-Use Node. Please ensure the

proposed development complies with the land use policies of the District Plan, as it relates to the subject lands.

8. The proposed density ranges are generally consistent with the District Plan. However, lands identified as buffer from the edge of the natural feature should be included within the density calculation. The final planned density within each neighbourhood should be consistent with the District Plan. A wide range of potential units is proposed for several Blocks, creating uncertainty as to what the actual potential developed density may be. A more accurate range of potential uses should be provided to ensure that development falls within the density requirements.

9. Overall, the number and ratio of proposed lower density development to proposed higher density development is less than what is outlined in the District Plan. Deviations from the District Plan are permitted, but the overall density of the subject lands (and ratio of low to high density uses) should be maintained. A primary goal of the District Plan was to allow for a wide range of housing types, styles and densities. Specifically, Policy 3.2.10 of the District Plan requires the development to include a variety of housing types and policy 3.2.8 states "…provide a range of housing forms and densities to facilitate affordability." Please confirm compliance with the above.

Roads and Traffic

10. A Traffic Management Plan is required to be submitted with all subdivision applications, as per Policy 3.9.1(f) of the District Plan. Traffic calming measures are to be recommended, reviewed and implemented as the subdivision is built, rather than installed / retrofitted after the fact. Traffic calming measures have been proposed as part of the informal resubmission. Final, approved measures will be included as conditions of Draft Approval, to be implemented as the subdivision is built out.

11. Consider adding a median to where Street Three intersects with Conservation Drive for improved traffic calming, similar to that proposed at Street Seven.

12. Consider renaming Street Three between Street Four and Street Three (east side), as it will function as a separate street from the remaining section of Street Three (i.e., the portion west and south of Street Four and Street Five).

13. Show and dimension daylight triangles where streets intersect, particularly with Conservation Drive and Beaver Creek Road. Please confirm that daylight triangles are shown as per TAC guidelines.

14. Include 0.3 metre reserves along Conservation Drive and Beaver Creek Road. Access to Conservation Drive and Beaver Creek Road will be restricted. All blocks fronting onto these roads will be accessed via streets internal to the proposed development. Further review of Block 17, Stage 3 (Pumping Station), will be required.

15. Recognizing that the development of lots within the Kartway Lands (Draft Plan 30T-17410) is entirely dependent upon the extension of roads and services through the Northgate Lands (Draft Plan 30T-17409), any approval of Draft Plan 30T-17410 by the City of Waterloo or Region of Waterloo is dependent upon approval of Draft Plan 30T-17409.

Parks, Trails and Neighbourhood Connections

16. A main principle of the District Plan is to create an attractive complete community with a strong emphasis on a well-connected and comprehensive active transportation network (refer to Map 5 of the District Plan). A key component of the system includes an interconnected network both within the District Plan neighbourhoods and with external networks.

17. Policy 3.9.10 of the District Plan states, "Trails shall be publically accessible". Further, policy 3.9.6 details that "active transportation routes are intended to encourage free circulation of the public throughout the District Plan community and to adjacent areas of the community by means of publicly-owned and maintained rails, sidewalks, bikeways roadways etc." Further, policy 4.3.9 h) Off Road Trials Network, states the network shall "be intended for full public access and be designed to reflect safe passage and restrict access to neighbourhood properties". Please ensure the intent of the District Plan policies are maintained and that public access throughout the comprehensive development is ensured.

18. There is a lack of pedestrian connections between streets. Please show walkways in strategic locations throughout the Draft Plans to increase pedestrian connectivity and to reduce walking distances as per policy 3.9.4 of the District Plan.

19. The total lands provided for parkland equals only 3.86% of the total land area. Please ensure that a minimum of 5% parkland is accommodated throughout the plans, as required by the Planning Act and the City's Parkland By-law.

Safety

20. As a condition of the subdivision agreement, each unit in the subdivision (residential, commercial, etc.) shall be required to install and activate a smoke alarm monitoring system. The City's Building Division will include this as a condition of every building permit issued.

Design Considerations and Land Use

21. Generally, the design of the Beaver Creek Meadows area should achieve a complete community, high quality design, and a high degree of connectivity, in addition to the urban design considerations for specific uses such as townhouses and single detached buildings. In particular, townhouses should be consistent with policies 3.4.17-19 of the District Plan which outlines several considerations including (but not limited to) a variety of roof designs, variation in elevation and preferred townhouse block length.

22. The development as a whole should be consistent with the City's Urban Design Manual.

23. All Blocks must identify the land use proposed on the Draft Plans. Please include land uses (e.g., Residential – Single Detached) on each block within the Draft Plans of Subdivision.

24. Please provide conceptual plans for all 'Multiple Residential' and 'Multiple Residential Mixed-Use' Blocks, being:
    - Block 5, Stage 1 (Northgate)
    - Blocks 1, 2 and 3, Stage 2 (Northgate)
    - Blocks 15 and 16, Stage 3 (Northgate)

The purpose of the conceptual plan is to confirm that the Block is of sufficient configuration and size to accommodate the proposed use and intended layout. All 'Multiple Residential' and 'Multiple Residential Mixed-Use' Blocks will be subject to Site Plan Review.

25. At a minimum, buildings along Conservation Drive should be designed to accommodate future main floor commercial uses (minimum ground floor heights will be recommended).

26. Updated Grading Plans are required. All proposed retaining walls throughout the Draft Plans shall be removed or minimized to the extent possible.

27. Please ensure that the Draft Plan clearly shows the proposed staging of the Kartway Lands.

28. It is understood that the following Blocks will be consolidated prior to development and prior to the issuance of a building permit:

LAND USE	NORTHGATE 30T-17401	KARTWAY 30T-17410
Residential	Block 19, Stage 3	Block 1, Stage 1
Residential	Block 20, Stage 3	Block 2, Stage 1
Park	Block 21, Stage 3	Block 3, Stage 1

29. Please resubmit individual Subdivision and Condominium Plans, in addition to the Consolidated Plan.

<u>Zoning By-law 2018-050</u>

30. Many Block dimensions are missing. Please ensure all block dimensions are shown, particularly frontage and depth, to ensure zoning compliance.

31. Confirm lot depths proposed meet minimum zoning requirements (no less than 30 metres). Some blocks appear to be smaller, such as (but not limited to) Block 1, Stage 1 of the Kartway Lands and Block 19, Stage 3 of the Northgate Lands.

32. Ensure corner lots are designed to accommodate sufficient space for minimum building setbacks in the Zoning By-law. Particularly at the corners of irregularly shaped blocks, such as:
    - Block 1, Stage 1 (Northgate)
    - Blocks 3 and 9, Stage 3 (Northgate)
    - Block 3, Stage 4 (Northgate)
    - Lots/Units 12, 21 and 30, Stage 5 (Northgate)
    - Lot/Unit 17, Stage 2 (Kartway)

33. Lands designated Mixed-Use Medium Density Residential within the District Plan (Map 3) shall have a density of between 35 to 60 units per hectare.

34. Impervious coverage limitations may be imposed in areas of the subdivision where a certain amount of infiltration is required to be restricted. Staff will review this concurrently with the additional information requested by engineering staff.

35. To align with the vision, guidelines and policies of the District Plan, City staff intend to implement a customized, cohesive zoning approach to the Beaver Creek Meadows District, based on the zoning framework established in Zoning By-law 2018-050. A preliminary zoning

matrix is included as Appendix B. Please note the information contained in Appendix B is in draft form and for discussion purposes only at this time. Please note it is subject to change and further evaluation.

Environmental:

36. It is the City's preference and long standing practice to secure environmental lands in public ownership. This was solidified through the Environmental Lands Acquisition and Maintenance Policy (1999). Under the policy, it was recognized that environmental lands should be publicly owned to the greatest extent possible to ensure the protection, preservation, monitoring, and maintenance of the lands for future generations. This approach is supported by Official Plan policy 8.2.2(15), which states land division that will have the effect of fragmenting the ownership of the Natural System, which this consolidated draft plan appears to do (e.g. south of lot 15 in Stage 5), will generally not be supported, except where such division facilitates public acquisition. In addition to the environmental lands, and as set out by Official Plan policy 8.2.4(11), the buffer areas established to help protect the environmental lands should also be secured in public ownership. For the Erbsville Kartway Lands, though not explicitly stated, staff understand that the environmental lands and buffer areas in Stage 1 are proposed to be dedicated to the City, but that the environmental lands and buffer areas in Stage 2 are proposed to remain in private ownership. This would not be acceptable to the City. For the Northgate lands, none of the environmental lands or buffer areas are included as part of the application except for the hedgerow in the southeast corner and a portion of the buffer area on the east side. Staff do not support the intent to retain the environmental lands and buffer areas in private ownership, nor do staff support the exclusion of the environmental lands and buffer areas from the application. All of the contiguous lands owned by the owner should be included in the application so that proper dedications consistent with the City's policies can take place.

37. Matters related to Species at Risk will need to be addressed to the satisfaction of the Province.

38. As per the direction provided by the North Waterloo Scoped Subwatershed Study (NWSSS) and the Environmental Impact Study (EIS), a condition of approval will require the distribution of an environmental stewardship brochure. The City has a universal one available entitled "Naturally Your Waterloo". Experience has shown that requiring builders/developers to purchase and distribute paper copies of the brochure to new homeowners is challenging because of the time span over which the development occurs. Given this, opportunities to distribute digital copies of the brochure should be explored by staff and the applicants.

39. The EIS recognizes that the timing of construction activities must have regard for the breeding bird season. As a condition of approval, all land clearing, earthen works, servicing works, infrastructure work and tree removal between April 1 and September 10 will be prohibited unless a nesting survey is undertaken that demonstrates the activities will not have the potential to disturb or destroy migratory birds or their active nests.

40. Section 3.3 of the EIS notes that Beaver Creek was observed to have high slopes with significant erosion and failing banks near the southeast edge of the Northgate lands. While it is stated that the stormwater management strategy has been designed to not impact the erosion sensitive banks of Beaver Creek, restorative creek works should be considered.

41. For the Erbsville Kartway lands, Table 4 of the EIS refers to the thicket of European Buckthorn that is partially on the site but does not speak to the Phragmites at the southern property

boundary that is described in Section 6.4. Table 4 also identifies the need to clean-up refuse material. For the Northgate lands, Table 4 identifies the need for a Phragmites Management Plan and the clean-up of refuse material. A comprehensive Invasive Species Control Plan and the clean-up of refuse material will be required as conditions of approval.

42. For the Erbsville Kartway lands, Table 4 of the EIS describes the existing steel drainage pipe directing flow from a portion of the race track into the creek and notes that drainage will be rectified as development proceeds. The location of the existing pipe should be shown on the Existing Conditions Plan (EC1.1) of the Functional Servicing Report. The need to rectify this disturbance and its impacts will be required as a condition of approval.

43. Section 3.9 of the EIS states that the "detailed bat habitat assessment completed by NRSI in 2014 did not identify any habitat features or structures suitable for bat use". However, under Section 5.6.1, it is noted that "during field surveys, bats were observed exiting one of the Erbsville Kartway buildings". Clarification is required.

44. Section 4.2 of the EIS notes that the wetlands are supported through a combination of groundwater discharge and surface water runoff as well as direct rainfall. It is also noted that groundwater inputs into Laurel Creek and Beaver Creek are occasional and minor, with groundwater not representing a significant portion of flow volumes. Based on this, it is unclear why increasing infiltration will benefit the wetlands and watercourses, as suggested by the EIS. Further explanation is required. In addition, please confirm that there are no risks associated with increasing infiltration to the extent proposed through the catchment-specific water balance changes outlined under Section 5.0 of the EIS (e.g. changes to wetland character, creek erosion, groundwater mounding, etc.).

45. As noted under Section 4.9 of the EIS, the NWSSS set out that "final setback (and buffer management recommendations) will be determined via site-specific EIS work, with further consideration of the following:
    - Species composition and diversity
    - Species sensitivity and requirements
    - Habitat sensitivity, including dependence on surface or groundwater inputs
    - Feature form and function
    - Enhancement opportunities (e.g. corridor widening)"

    Despite this direction, the EIS does not appear to give consideration to potential impacts on species composition and diversity and species sensitivity and requirements as part of its impact analysis and buffer recommendations. This information is required to further assess the adequacy of the proposed buffers.

46. Sections 5.3.2 and 5.4.2 of the EIS describe proposed encroachment into buffers. For clarity, areas of proposed encroachment should be included on a figure in the EIS.

47. In Section 5.4.2 of the EIS, under "Changes to Water Balance", Map 2 (the Draft Plan of Subdivision) is referred to for showing the location of stormwater management facility 5915. That facility does not appear on Map 2. Also, facility 5915 is mislabeled on Figure 5.5 of the Preliminary Stormwater Management Report. It is labelled 5917 instead of 5915.

48. Under Section 5.6.1 of the EIS, the requirements to address the Endangered Species Act as it relates to the Barn Swallow nesting confirmed on the Erbsville Kartway lands are outlined. If

nesting is confirmed closer to the date of building demolition and replacement habitat needs to be provided, preliminary thought should be given to where the replacement habitat structure(s) would be placed.

49. Section 5.7 of the EIS speaks to an oil-grit separator prior to SWMF 3915 to provide an enhanced level of quality control. Requirements for regular inspections and maintenance should be included in the Subdivision Agreement.

50. Section 5.9 of the EIS speaks to indirect impacts to wildlife as the result of the stormwater management ponds. While permanent turtle barrier fencing is proposed, the inclusion of timing windows for maintenance should also be considered as part of the Subdivision Agreement.

51. Section 5.10 of the EIS speaks to permanent fencing being installed at the development-natural area interface to prevent uncontrolled access and encroachment. Consistent with this, and with the NWSSS, City-standard black vinyl chain link fencing needs to be installed.

52. Section 5.10 of the EIS speaks to the trail system being located within the outer 5 metres of the buffers for both wetlands and woodlands. However, the only maps showing the trail network are the Active Transportation figures in Appendix B of the Planning Justification Report and the Neighbourhood Design Summary, and they are conceptual. A plan showing trail locations, including the creek crossing, should be provided and details on the creek crossing need to be addressed in the EIS. Also, the EIS states that the details of the trail system will be determined at the Site Plan stage. As stated in the NWSSS, trails in buffers are subject to a site-specific EIS that "demonstrates need and justification in consideration of the following evaluation criteria/guidelines:

- Public trails and associated grading may be suitable within portions of buffers, in consideration of broader trail link objectives and the following natural heritage considerations…: existing and potential tree root growth and potential impacts; steep slopes and erosion potential; potential interception of groundwater movement to dependent natural areas; and sensitivity and significance of adjacent vegetation communities and wildlife habitat."

While some discussion is provided under Section 5.0, the EIS does not appear to undertake a full evaluation related to trails. Given that not all blocks will be subject to Site Plan and that the blocks will develop at different times, the details of the trail system should be confirmed through the design of the subdivision and fully evaluated in the EIS.

53. A Rehabilitation and Naturalization Plan will be required at the time of detailed design. With specific reference to the buffer areas, Section 6.1 of the EIS states that "planting of the buffer with trees and shrubs is recommended in a few key locations". As the majority of the buffer areas are disturbed or currently tilled, all of these areas will require some level of planting or seeding. This is consistent with the buffer management recommendations of the NWSSS related to native species plantings and habitat creation. Also, the areas of soil erosion adjacent to Beaver Creek are noted as some of the key locations, but the area of erosion on the south side of the central wetland/woodland complex, which was identified in the 2016 Pre-development Biological Monitoring Report, is not.

54. Section 6.2 of the EIS refers to the off-site knick-point as an opportunity for restoration to improve channel connectivity. While the EIS states that it is on GRCA lands, it is actually City owned land. City staff are aware of the knick-point and will consider it in future capital project planning.

55. Section 6.4 of the EIS discusses the node of Phragmites at the southern property boundary that separates the Kartway and the Northgate properties and extends off site. It is noted that it will be a challenge to control unless a coordinated effort among landowners is initiated. There are two adjacent properties – one is City-owned and the other is privately owned. City staff are willing to discuss potential collective control measures.

56. Section 7.0 of the EIS discusses the monitoring program. It acknowledges that Terms of Reference for the during and post-construction stages will be prepared and submitted for agency review at the time of transition to those stages but also identifies areas of future scoping. Staff are not in a position to commit to the scope of the future monitoring program at this time. The details of each stage will be determined at the transition point and will be informed by the results of the monitoring work that will have been undertaken up until that point. This comment also applies to Section 6.0 of the Preliminary Stormwater Management Report, which also discusses the monitoring program. Further, while the 2018 Pre-development Biological Monitoring Report was submitted earlier this year, recent Groundwater and Surface Water Monitoring Reports are still outstanding. These reports should be submitted together and as soon as possible following the end of the monitoring year.

57. A peer review is currently being undertaken on the EIS. Following completion of the peer review, the City reserves the right to submit additional comment.

58. The Preliminary Stormwater Management Report notes that lot-level infiltration galleries are proposed for a number of the multi-residential blocks. Requirements for regular inspections and maintenance should be included in the Subdivision and/or Site Plan Agreement.

Active Transportation:

59. Trail connections throughout the consolidated development shall provide convenient transportation routes to enable residents to walk and cycle, reducing automobile dependency.

60. Trails, bikeways and sidewalks are critical to encourage more walking and cycling, and reduce car use to connect residents in the Northgate and Kartway subdivisions to the following amenities:
    a. Proposed school north of Conservation Drive;
    b. Creekside Church on the north side of Conservation Drive;
    c. Trails within Laurel Creek Conservation Area;
    d. Future trails connecting the Kartway lands to existing bike lanes and a proposed multi-use trail on Erbsville Road;
    e. Other homes in the neighbourhood;
    f. Mixed-Use Node at the intersection at Beaver Creek Road and Conservation Drive;
    g. Multi-use trails and sidewalks on Conservation Drive and Beaver Creek Road; and
    h. Future transit stops on Conservation Drive, Beaver Creek Road, and Erbsville Road.

<u>Beaver Creek Road, Conservation Drive and Internal Streets</u>

61. The District Plan identifies Conservation Drive as a Major Collector Road and Beaver Creek as a Minor Collector Road. The City will finalize the detailed design of Beaver Creek Road and Conservation Drive in accordance with recommendations of the Municipal Class Environmental

Assessment. The developer shall consult with the City to ensure intersections, and trail connections and crossings are aligned with the final design.

a. The final design for re-constructing Conservation Drive will include a single travel lane in each direction, raised bike lanes on both sides of the road, a multi-use trail on the south side and a sidewalk on the north side;
b. The final design for re-constructing Beaver Creek Road will include a single travel lane in each direction, buffered bike lanes on both sides of the road, a multi-use trail on the east side and a sidewalk on the west side;

62. The developer will be required to coordinate boulevard features on the south side of Conservation Drive and the west side of Beaver Creek Road to facilitate pedestrian/cyclist crossings at all intersections and trail crossings with the City designs for the respective collector roads.

63. The developer shall construct a 3.0 metre walkway to connect the Multiple Residential Block 16 to the proposed Multi-Use Trail on Conservation Drive.

Transit

64. Transit-oriented development guidelines recommend a transit stop within 400 metres of every home and trip destination. To achieve this goal, the District Plan designates Streets Three, a portion of Street Four and Street Seven as a potential transit route to serve residents in the proposed Condominium developments. The developer shall design these roadways with geometry and pavement structure to accommodate GRT buses.

65. Residents on Street One and Street Two would be within 400 metres of transit stops on Beaver Creek Road and Conservation Drive.

66. The developer shall consult with GRT to identify the locations of existing and proposed transit stops on the adjacent collector roads that will inform the design and construction of the transportation infrastructure.

Transportation Study and Traffic Calming

67. In accordance with the District Plan, Street One, Street Two, Street Three and Street Seven are considered to be minor collector roads. A transportation study is required that includes the data and analysis to support all traffic calming features, and road crossing locations. Please provide supporting information, justification and/or rationale for the chosen, proposed traffic calming features.

68. Whereas wide pavements encourage higher vehicle speeds, parked cars, painted buffers, street trees and boulevard features all have the effect of making the road feel narrower and encourage slower speeds. Such treatments are to be considered in developing the recommendations for the transportation study; the developer shall implement these recommendations in the construction of the public streets.

69. The preferred width of a pedestrian island is 3.0 metres to accommodate a bike and trailer combination. The minimum pavement width from the curb to the island is 4.2 metres. A widened road allowance at specific locations may be necessary to accommodate the island and crossing.

Active Transportation Master Plan (ATMP)

70. The developer shall prepare an Active Transportation Master Plan (ATMP) in compliance with Map 5 of the District Plan. The ATMP shall include all trails, sidewalks, bikeways, walkways, creek crossings, collector road crossings and related facilities within the proposed development. The ATMP will assist City Staff to coordinate trails, sidewalks and bikeways connectivity to adjacent developments, and collector road crossings beyond the limits of the development.

71. The ATMP shall include the proposed staging of construction, and indicate any easements over private roads in the proposed condominium developments for sidewalks, and/or multi-use trails, crossings and connections to the trails in buffers. Such easements shall be conveyed to the City through the subdivision approvals process.

72. The longitudinal grades on all trails and walkways shall not exceed 5%, except where cut and fill is constrained adjacent to the environmentally-sensitive lands.

73. On-road and off-road multi-use trails will be 3.0 metres wide and paved to City standards.

Multi-Use Trails and Sidewalks Within Road Allowances (to be included within the ATMP)

74. The developer shall construct paved 3.0 metre wide Multi-Use Trails on the following streets:
    a. On the west and south sides of Street One;
    b. On the west and south sides of Street Two from Block 7 to Beaver Creek Road;
    c. On the outside of the crescent on Street Three from Conservation Drive to Street Six; and
    d. On the outside of the crescent on Street Six from Street Three to Park Block 5.

75. The developer shall construct sidewalks in accordance with the City's Sidewalk Policy and as follows:
    a. On one side of Street One (on side opposite to multi-use trail);
    b. On both sides of Street Two, except where the multi-use trail is constructed;
    c. On one side of Street Three (on side opposite to multi-use trail);
    d. On both sides of Streets Four, Five and Seven; and
    e. On both sides of Street Six, except where the multi-use trail is constructed.

76. The multi-use trail crossing of Street Three should be re-located to the island adjacent to Park Block 6, as opposed to the skewed crossing shown outside the island and too close to the intersection.

Off-road Multi-Use Trails, Walkways & Creek Crossings

77. The ATMP shall include, subject to Comment 52 being addressed, the following Off-road Multi-Use Trails:
    a. Within all buffer areas, as per Map 5 of the District Plan, to the limits of the Northgate Lands and Kartway Lands to connect to the sidewalks, trails and bike lanes on Beaver Creek Road and Conservation Drive;
    b. Across Block 3, Stage 1 (Park) of the Kartway Lands and Block 21, Stage 3 (Park) of the Northgate Lands, from Street Three to the trail in the buffer;
    c. Across Block 5, Stage 4 (Park) from Street Six to the trail in the buffer;
    d. On Block 6, Stage 4 (Walkway) from Street Six to the trail in the buffer and SWM;

e. Across Block 6, Stage 1 (Park) from Street One to the trail in the buffer;
f. On Block 7, Stage 1 (Walkway) from Street Two to the trail in the buffer;
g. On Block 9, Stage 1 (Open Space) to connect the trail in the buffer to Beaver Creek Road;
h. Along Northgate condominium units 14 and 15, Plan 30CDM-17410 to connect the trail in the buffer to the south property boundary;
i. On the walkway block between Kartway condominium units 11 and 12, from the trail in the buffer to the on-street trail; and
j. Extend the trail in the buffer at the south west corner of the Kartway condominium plan to the creek crossing.

78. The ATMP shall include, subject to Comment 52 being addressed, the following creek crossings (pedestrian and cyclist bridges):
    a. Crossing Beaver Creek as per Map 5 in the District Plan, from the trail in the buffer adjacent to Block 5, Stage 4 (Park) to the trail in the buffer in Block 5, Stage 2 (Open Space).
    b. Crossing Laurel Creek as per Map 5 of the District Plan, from the trail in the buffer at the rear of Kartway condominium unit 14 to the opposite side of the creek.
    c. The bridges shall be designed with a full clear width of 3.0 metres, and with a live load capacity of 10 tones to accommodate large city maintenance vehicles.

79. Prior to Draft Approval, the developer shall prepare preliminary grading plans to sufficient detail to demonstrate constructability of the trails and bridges within the ATMP.

80. Prior to any site grading, preliminary area grading plans (including limits of grading within the buffers to accommodate the trails) shall be submitted to the City Engineer to support a Site Alteration Permit application.

81. Prior to construction of the ATMP infrastructure, the developer shall be responsible for the preparation of detailed engineering drawings, and obtaining all approvals and permits.

Landscape:

Parkland Comments

82. The required 5% parkland is to be distributed equally and logically throughout the plans.

83. Park blocks shall be developed at 80% at a 2% grade and the remainder could be up to 6%, must be sized to accommodate both active and passive facilities, and in alignment with Official Plan criteria.

84. Park frontage must meet the intent of the Park Frontage Policy.

85. Parkland programming to include both active (play equipment, soccer and baseball, basketball courts, winter ice rinks, etc.) and passive. Passive components are covered more generally in the Landscape Design Manual but would include benches, appropriate landscaping, etc.

86. AODA compliance is mandatory for all equipment and trail situations.

87. Dog waste units to be provided to divert from the Molok system. Details can be provided at detail design stage.

88. Infiltration galleries should not be located within any Park Blocks. It encumbers the parkland and reduces the developable area. If it must be located within park blocks then the area should not be calculated as parkland dedication and the park should be enlarged accordingly.

Environmental Comments

89. Further information is required on the Butternut status.

90. Will barn swallow relocation enclosures be built ahead of any work on site?

91. Invasive species control plans are required.

92. Naturalization of buffer plans including trail locations, are required.

General Comments

93. Black vinyl chain-link for permanent fencing is the city standard as opposed to galvanized fencing. All public/private interfaces should be fenced to prevent encroachments. If trails are installed within the buffer then consideration will be given to not fence these locations.

94. Subject to Comment 52 being addressed, it is strongly recommended that trails are established in all buffers and that all buffers be within City ownership. A community trail system will connect the consolidated development both internally and to the larger community, and will provide defined routes of travel near environmentally sensitive lands.

95. If Entrance Features are proposed on public lands, the Entrance Feature Policy comes into effect.

96. The proposed watercourse crossing should be designed to accommodate large city vehicles and have a minimum full clearance of 3 metres wide or larger. This must be shown on future submissions.

97. All trails shall be 3 metre wide asphalt, not stone dust, as per City standard. All trails indicated on the Active Transportation Master Plan are to be built by, and at the cost of, the Developer.

98. A full Vegetation Management Plan is required at first Engineering submission and prior to grading acceptance.

Engineering:

Roadworks and Lot Grading

99. Section 4.2 and Table 4.2.1 (FSR, page 8) provides a summary of the proposed roadways servicing the subdivisions. The City completed a Turn Lane Analysis (TLA) memo: *Update to Transportation Forecast and Left Turn Lane Requirements* (Stantec, July 7, 2017) to assess the proposed entrances onto Beaver Creek Road and Conservation Drive from all the active

development lands (i.e. Northgate, Cook-Mattamy and Activa). The March 2019 Draft Plan resubmission has shifted two of the proposed intersections on Conservation Drive further west, in particular Street One and Street Seven (formerly Street Three). The modification to these intersections do not appear to be in-line with the comments and recommendations provided in the 2017 TLA memo, nor Map 2 of the District Plan. It is noted that that as part of the March 2019 "Informal Resubmission" package, a brief turn lane analysis memo was provided for the proposed intersections onto Conservation Drive: "*Northgate Development Conservation Drive Intersection Locations*" (Paradigm, March 25, 2019). The 2032 traffic forecast provided in the March 2019 analysis appears to be greater than the City's 2035 forecasts in the 2017 TLA memo and the memo does not provide any background on the source and assumptions made for the traffic forecasts. Further justification as to why shifting these streets is a better option is required, including assurance that access to future development of other lands within the Beaver Creek District Plan are not being hindered.

100. Street Three in the Draft Plan Consolidation appears to be mislabeled Street Two in the Finished Grade Contour Plan (MTE Drawing 39502-104 AG1.1). Ensure all Streets are consistent with the Draft Plan of Subdivision and labeled accordingly.

101. MTE Drawing 39502-104 QU6.1 (Preliminary Groundwater Separation Plan):
   a. The majority of the groundwater contours on the west side of Beaver Creek appear to be missing elevation labels, please ensure all contours are labeled.
   b. The Street numbering is not consistent with the Draft Plan Consolidation (July 4, 2017). Please ensure all Streets are consistent with the Draft Plans of Subdivision and labeled accordingly.

102. In Section 4.2 (page 8) of the FSR and MTE Drawing 39502-104 QU6.1, the minimum vertical separation from the underside of footing elevations above the composite high groundwater elevations is discussed.
   a. As various SWM infiltration features are proposed throughout the Northgate/Kartway Lands, confirmation must be provided that groundwater mounding has been considered in the vertical separation analysis.
   b. Additional grading details for the following areas is required to ensure minimum 0.6 metre separation is provided:
      i. Lots bordering Street Three in the following locations:
         - North limits of Street Three at the west intersection with Conservation Drive.
         - Blocks west of Street Three
         - Blocks on the south side of Street Three.
      ii. Block 2, Stage 2 (Multiple Residential)
      iii. Blocks 4 and 5, Stage 1 (Multiple Residential) appears to have potential groundwater separation issues within the central portion of the Block. It is not clear how homes will be situated within Blocks 4 and 5, Stage 1 and therefore additional detail is required to ensure adequate groundwater separation is maintained in this area.

103. Section 4.3 (page 9) of the FSR discusses how the wetland and vegetation buffers were taken into consideration during the subdivision grading. Please delineate the wetland and vegetation buffers and corresponding setbacks on the AG1.1 (Finished Grade Contour Plan) Drawing.

Sanitary Servicing

104. Section 5.1 of the FSR (MTE, July 2017), discusses the requirement for dual sewers. Please illustrate the extents of the proposed dual sewers on Figure 4.0 in the FSR.

105. Please provide additional details on how inflow and exfiltration will be mitigated where the sanitary sewers are located within the groundwater. This information can be provided at the detailed design stage.

106. The block sizes for the two proposed pumping station sites (Block 10, Stage 1 and Block 17, Stage 3) have been reviewed by the City and are deemed adequate for future operations and maintenance activities. However, additional area will be required to facilitate staging and stockpiling operations for the construction of these stations. Coordination of the construction of these stations as it relates to the proposed phasing of the development will be required.

107. With regards to the proposed sanitary pumping station blocks, a minimum setback requirement for sensitive land uses is necessary to ensure odour and noise from the station can be adequately mitigated. In lieu of the Ministry of the Environment not having any specific setback requirements related to noise and odour setbacks for municipal sanitary pumping stations, the City will refer to MOE Guideline D-6 (*Compatibility Between Industrial Facilities and Sensitive Land Uses*, July 1995). Per Section 4.3 in Guideline D-6, the City requires a 20 metre minimum separation distance as identified for a Class 1 Industrial Facility to a sensitive use.

Water Servicing

108. The City notes that Region of Waterloo Water Services provided comments on the proposed subdivision water servicing in their Post Circulation Comments letter dated November 20, 2017. The City is in agreement with these comments and request that submissions made in response to these comments be circulated to City Staff as well as Regional Staff.

Stormwater Management

Comments on the Northgate & Erbsville Kartway Subdivisions Beaver Creek Meadows District, Waterloo, Preliminary Stormwater Management Report, MTE Consultants Inc., July 5, 2017:

109. Section 3.2 (page 8) describes the quantity and erosion control criteria and references the two sensitive reaches along Beaver Creek (BC-2 and BC-4) as identified in the NWSSS erosion assessment. Staff question if the reference to BC-2 is correct (should it be BC-3?). Please label the locations of the reaches on Figures 4.1 and 4.2.

110. Section 4.2 (page 11-12) states, *"Previous studies have demonstrated that amended topsoil can significantly reduce runoff volumes by absorbing, retaining, infiltrating and evapotranspiring a greater amount of precipitation than standard landscaping practices in new developments"*. Please provide reference for these studies.

111. At the bottom of page 12, it states, "*The post-development modeling parameters and impervious calculations have been included in Appendix A*". Appendix A provides details on catchment 3914 only. Please provide a summary table for all catchments detailing the various assumptions and model parameters used for each.

112. Section 5.5 provides an overview of the proposed water balance for the subject lands. With regards to the surface (runoff) water balance calculations in Appendix D (both western and eastern nodes) please provide the following:
    a. Clarify that footnote 3 is referencing figures in the NWSSS: "*3. Refer to Figures 6.1 and 6.2"*. There are no Figures 6.1 or 6.2 in the Preliminary SWM Report.
    b. Provide assumptions for the proposed runoff rates used in the water balance calculations. The proposed values identified for the following catchments do not match those in the NWSSS Table 11.5 (p. 242):
        - 3914 – Proposed (102.0) vs. Table 11.5 (234.5)
        - 3102 – Proposed (114.0) vs. Table 11.5 (196.3)
    c. In the calculation table it appears the infiltration rate (706 mm/yr) has been used for the roof areas as opposed to the runoff rate (20.5 mm/yr). Please clarify the assumptions here.

113. Section 5.5 outlines various SWM infiltration measures proposed. Please provide a summary table that lists each SWM infiltration measure, the corresponding area, infiltration rate, and resulting infiltration volume. As per the comments contained herein related to Area 5, City staff does not support the development of the access road or agricultural clearing and therefore the SWM strategy for these areas should be updated accordingly. The following provides additional comments on the infiltration measures proposed:
    a. <u>Amended Topsoil:</u>
        i. Amended topsoil is proposed in the single detached lots within Area 73914 representing a total area of the roof and yards of 4.506 ha. Please identify the portion of the 4.506 ha that is made up of the grassed/landscaped area and what volume of infiltration this area represents.
        ii. The report proposes, "…*directing roof downspouts to gently sloping landscaped areas that contain topsoil of sufficient permeability, depth … and quality to infiltrate and evaporate"*. Please provide more details on the "*sufficient permeability*" requirement of the amended soil and expand on what is meant by the term "*quality*".
        iii. As proposed, the amended topsoil would be on private land. The City would therefore have little control over maintaining this infiltration feature. Please provide details/best management practices on how homeowners should maintain this feature.
    b. <u>Infiltration Facilities Connected to Roof Areas:</u>
    Figure 5.5 indicates three infiltration facilities proposed within Area 88914 (Catchment 3914 - conveyance gallery within the Park Block) and Area 7914 (Catchment 3914 - likely two commercial subsurface storage systems, within multi-residential blocks) and on in Catchment 3915.
        i. SWMF 5915 is mislabeled 5917
        ii. The City does not support infiltration galleries within parks.
        iii. Please provide details on the proposed invert and base elevation of the respective infiltration facilities in relation to the composite high groundwater level and groundwater mounding.
        iv. Please provide details on the lifespan, performance and maintenance requirements for these facilities. Requirements for regular inspections and maintenance should be included within the Subdivision and/or Site Plan Agreements, as may be required.
    c. <u>End-of-Pipe Controls:</u>
    A volume reduction pond is proposed for the sub-catchment 3915 with an upstream OGS. Although the OGS will provide pretreatment it will not treat chlorides. City staff

have concerns relating to winter maintenance/road salting practices within a condominium area and the infiltration of chlorides to the groundwater.

114. Table 5.3 provides a comparison of the existing infiltration values, NWSSS infiltration targets, and the proposed infiltration values for each catchment. While proposed conditions are greater than the NWSSS targets, these infiltration targets are being met through various SWM practices that will be challenging for the City to enforce and/or maintain, such as amended topsoil, condominium features and end of pipe controls within condominium areas. Please provide an estimate on the typical life span/performance of the various infiltration features and details on inspection and maintenance recommendations.

115. Section 5.8 provides a high level overview of the Block level SWM approach that will be developed through a Site Plan Review process. The following provides comments on this section:

a. It is stated that *"the subject property contains a number of Blocks that will be developed through a Site Plan Approval process".* Please include a figure that delineates which blocks are proposed to go through Site Plan Review. Further, provide a corresponding table that specifies the specific SWM criteria for quantity, quality and water balance for each block that is subject to Site Plan Review. By identifying specific design criteria for each Block the table provides valuable guidance and will facilitate both the future design and approval process for these blocks. At a minimum, the table shall include the respective area for each block, any relative assumptions (i.e. percent impervious, etc.) and details for the following SWM design criteria:
   - Water quality control (i.e. *Enhanced*, 80% TSS removal and compliance with the Canadian Environmental Technology Verification (ETV) Program)
   - Water quantity control for each design storm
   - Surface water balance
   - Groundwater balance.

b. Conceptual SWM controls were provided for two Block areas, specifically areas 3915 and 3917. As per the comments contained herein related to Area 5, City staff does not support the development of the access road or agricultural clearing and therefore the SWM strategy for that area should be revised accordingly.

   Water Quality:

   - SWM 3915 – Proposes a STC6000 to meet 80% TSS removal. The City has concerns that the "City of Toronto" particle size distribution (PSD) used in the PCSWMM model for sizing the unit is not representative of urban runoff. The City would prefer the "CA ETV" PSD be used for future OGS sizing. The following study prepared by the Toronto and Region Conservation Authority provides a good reference for representative particle size distribution in urban areas: *"Characterization of Particle Size Distributions of Runoff from High Impervious Urban Catchments in the Greater Toronto Area"* (TRCA, September 2012).

   Water Quantity:

   - SWMF 3915 – Volume Reduction Pond. Please provide an analysis to show the evapotranspiration / infiltration rates combine to ensure the pond empties within a 72 hour period. Also, provide a cross-section for the pond that details the soil type, thickness and porosity of the base of the pond and the groundwater location.

116. With regards to the Monitoring Program discussed in Section 6.0, please provide details on what monitoring wells are proposed to be maintained during and post construction for the

groundwater monitoring component. Additional comments on specific details of this program are not required until the final SWM approach for the subdivision is confirmed.

117. The City's Development Engineering Manual is currently under review which will likely include updates related to the implementation of LID SWM design features. Additionally, the development of a citywide Stormwater Management Master Plan is currently underway with completion planned for the end of 2019. Updates to both of these guiding documents could impact the SWM approach for this subdivision including monitoring requirements.

PART B: AREA SPECIFIC COMMENTS

The comments outlined in Part B reference five (5) areas of the plan, as depicted on Figure 1, Appendix 'A' attached hereto.

AREA 1: Northgate Lands – Stage 1 and Stage 2

Planning:

Mixed-Use Node

118. The prosed updated plan as submitted partially addresses previous concerns regarding the provision for commercial uses. Policy 3.4.14 of the District Plan outlines the range of commercial uses that are permitted and encouraged for the Mixed-Use Node. Policy 3.4.12 identifies that the ground floor of buildings along Conservation Drive and Beaver Creek Road should be designed to allow for convertible frontage. Buildings along Conservation Drive and Beaver Creek Road should be designed to allow future commercial uses on the ground floor.

119. Considerations for commercial uses are strongly encouraged. There appears to be limited opportunities for commercial or live/work uses as currently shown. The provision for commercial uses within the Mixed-Use Node is an important component of the overall vision and structure of the District Plan. The District Plan contemplates a range of uses within the Mixed-Use Node, and a high degree of pedestrian orientation. Building heights within the Mixed-Use Node should be a minimum of 9 metres but should not exceed six storeys.

120. In the District Plan, a proposed new road was shown connecting land uses on the north side of Conservation Drive with the uses on the south side. This road also marked the western boundary for the Mixed-Use Node. In the current development proposal, the alignment of this road differs from that shown on the District Plan. Minor modifications to the road network are acceptable and anticipated as part of the District Plan, however the boundary of the Mixed-Use Node should not be altered. As a result, the proposed plan shows a node that is smaller than the Node in the District Plan. The Mixed-Use Node should not be reduced without sufficient justification for doing so, as it is intended to provide for a range of housing and employment opportunities that will contribute to creating a complete community in the Beaver Creek Meadows area. Consider revising the location of the Node to reflect the size as shown in the District Plan by adding a mixed-use block west of Street One where it intersects with Conservation Drive. This will also assist in achieving minimum density targets.

121. The Mixed-Use Node should be utilized to the extent possible to allow for a variety of uses and higher density as planned for by the District Plan, to ensure the goals of the District Plan are achieved, and to make up for any density shortfalls in lower density residential areas. The proposed density of 60-100 units per hectare is consistent with the District Plan.

122. Policy 3.6.2 of the District Plan encourages a range of residential development in the Mixed-Use Node. The plans submitted do not specify the types and layout of proposed residential uses. The proposed development should be consistent with policies 3.6.3 and 3.6.4 which require a high quality of urban design and visually interesting spaces that consider pedestrian movement and streetscapes.

Low Density Residential Neighbourhood

123. Block 1, Stage 1 is identified as Low Density Residential 2 on Map 3 of the Beaver Creek Meadows District Plan. No land use is noted on this block. Please confirm that this Blocks is proposed for uses contemplated within the Low Density Residential 2 land use designation in the District Plan.

124. Policy 3.2.1 of the District Plan discourages back-lotting and private driveways onto Beaver Creek Road and Conservation Drive. It is noted that priority lots are identified in the design summary as per the District Plan. Development of the final plan shall be consistent with the design considerations for residential uses as set out in policies 3.2.10 to 3.2.20 of the District Plan.

125. Based on the lotting concept provided, Block 2, Stage 2 appears to be underutilized (detailed lotting is not shown). It is strongly encouraged that higher densities are achieved on this block, within the range of that which is permitted, both to allow for a range of housing types and to make up for any lower density areas located elsewhere in the plan area.

126. Block 5, Stage 1 (Multiple Residential) appears to front the street, with both vehicular access and parking to the rear. Please provide conceptual plan showing lot layout/configuration and confirmation that Block 5 is large enough to accommodate minimum performance standards in the applicable zoning category (i.e., amenity space, parking, setbacks, etc.).

Apartments

127. The proposed zoning allows for apartment buildings in various parts of the proposed development. Apartments are permitted in Low Density Residential designated area of the Official Plan subject to policies 10.1.3 (5)-(9). Apartments within the low density residential designation are directed to the periphery of the neighbourhood and near nodes and arterial and collector roads. These policies were incorporated into the District Plan, which limited apartment-style buildings mainly to the Mixed-Use Node and along Conservation Drive (3.4.21). Apartments are permitted to be up to 12 metres in height (up to 20 metres within the Node) as per policies 10.4.3(9) and 11.1.37(4) of the Official Plan respectively. The District Plan policies further require a high quality of design and that buildings be oriented toward a public road. Where apartments are proposed adjacent to townhomes, as may be the case in the Node or Block 2, Stage 2, the massing and built form should be complementary to adjacent buildings to promote visual interest, as per policy 3.4.23 of the District Plan.

Road / Trail Alignment and Open Space

128. 'Street One' is located at the western end of the Mixed-Use Node. This road alignment has been modified from that shown in the District Plan. This road was planned to align with the potential road connection on the north side of Conservation Drive, in Neighbourhood 2. The alignment of 'Street One' must be determined/reviewed in connection with the planned road network in Neighbourhood 2.

129. The submitted "active transportation network" does not show the trail extending to the southern edge of the development area. It is recommended that this trail be extended to the southern edge of the District Plan boundary, as shown on Map 5 of the District Plan.

Engineering:

130. Section 4.1 (page 7) of the Functional Servicing Report (FSR), lists constraints that influenced the grading design of the Northgate/Kartway Lands. Based on the March 2019 resubmission, it appears that the grading has been changed significantly in the area southwest of the Conservation Drive roundabout (Blocks 2 and 3, Stage 2). It is noted that the proposed private pumping station in Block 2, Stage 2 is no longer required and instead this area can be serviced by a gravity sewer. The City agrees that this is a preferred servicing strategy for this area; however, further details will be required by the applicants before Staff can provide a fulsome review of the proposed grading/servicing strategy.

131. Figure 2: Sanitary Servicing Plan (MTE Memo, March 28, 2019) should include proposed contours for both the subdivision and the adjacent roads and reference the City's road design drawings accordingly. The developer should continue to work with the City to ensure the grading of the subdivision matches the road grades for Conservation Drive and Beaver Creek Road. For future submissions, please reference the revision and date of the corresponding proposed Plan and Profile Design Drawings for Conservation Drive and Beaver Creek Road to ensure the most current designs are being referenced.

132. Section 1.2 of the Stormwater Management Report indicates the east side of the subdivision is located within subwatershed area 310 and is proposed to utilize a communal stormwater management facility adjacent to Beaver Creek Road. As such, it is stated that a separate Preliminary SWM Report will be prepared in support of this facility. Draft Plan Approval of the subdivisions cannot be granted without the approval of the Communal Stormwater Management Facility Preliminary Design Report. Further, it is understood that this facility is primarily meant to provide water quality control only. However, details on the water balance requirements and infiltration measures for subwatershed 310 will also be required.

133. Although a stormwater management facility (SWMF 5915) is proposed within Block 2, Stage 2 (Multiple Residential), it is not included in the list of land uses provided in Table 1 of the Planning Justification Report nor is this shown on the Draft Plan. Please confirm that this stormwater management facility will remain in private ownership.

Landscape:

134. Block 6, Stage 1 (Park) should be dedicated as a wider walkway block to accommodate the desire to be a 'terminating' view. It is too close to Block 4, Stage 2 and therefore should not be dedicated or developed as a park block.

135. Block 7, Stage 1 (Walkway) should be expanded and designed to become a park block for this single family neighbourhood and additionally can serve as an access point into the buffer trail system. This spreads out the park block locations in this phase more democratically. Block 7, Stage 1 to be designed as a smaller neighbourhood block.

136. Block 4 and Block 5 (Multiple Residential) in Stage 1 are very long blocks. Consider incorporating a walkway block between Beaver Creek Road and Street Two to break up the length of Block 4 and Block 5 in Stage 1.

137. Block 4, Stage 2 (Park) should include a flat open area that can function as a neighbourhood sports field. If hard surface is proposed it is to also accommodate the potential for an ice rink. This provides two potential rink areas on either side of the creek.

138. Block 4, Stage 2 (Park), in combination with Block 5, Stage 4 (Park), if deemed acceptable could be eligible for up to $20,000 City funding for the provision of a play structure within the park block.

Transportation:

139. The Street One connection with Conservation Drive is located just west of the proposed roundabout at Beaver Creek Road. Stantec completed a turn lane analysis for all subdivision entrances onto Conservation Drive and Beaver Creek Road. There were four recommendations made from the analysis. In its current location, Street One will be limited to right-in/right-out (RIRO) movement only based on the recommendations outlined in the *Update to Transportation Forecast and Left Turn Lane Requirements Technical Memo* (Stantec, July 7, 2017). Should RIRO not be desirable for Street One please review the July 7, 2017 Turn Lane Memo for more intersection spacing options. It is noted that a shift was made in the road alignment, however additional information is required to confirm whether this road was shifted far enough west.

AREA 2: Northgate Lands – Stage 3 and Stage 4; and Kartway Lands – Stage 1

Planning:

140. The location, size, and orientation of the parks on the west side of the subject lands deviate slightly from the planned park location from the District Plan. Access is improved compared to the previous development proposal, though overall access and frontage remains limited. Policy 3.8.3 of the District Plan details that parkland is intended to maximize accessibility and visual presence of the community. Park Block 5, Stage 4 should have adequate prominence, frontage and visibility as per the direction of policies 3.8.3 and 3.8.4 of the District Plan.

Residential

141. Land uses are not shown on many blocks. Please ensure proposed land uses are noted on each block.

142. Development of the final plan shall conform to the design considerations for residential uses as detailed in policies 3.2.10 to 3.2.20 of the District Plan.

143. Lands on the west side of the proposed plan area are generally consistent with Map 3, Land Uses in the District Plan, as it relates to where the Low Density Residential 1 and Low Density Residential 2 land use designations are contemplated. However, modifications to the road network and location of the park and stormwater management block have reduced the Low Density Residential 2 land uses to a total area much lower than that contemplated in the District Plan. Please confirm that the proposed Draft Plan will develop a comparable amount of land for Low Density Residential 2 land uses to that contemplated in the District Plan. Low Density Residential 2 does not permit single detached dwellings and semi-detached dwellings. For example, the blocks on either side of 'Street Three' appear to show single detached units which is not consistent with the general intent of the District Plan.

144. Blocks 15 and 16, Stage 3 (Multiple Residential) appear to front the street, with both vehicular access and parking to the rear. Please provide conceptual plans showing lot layout/configuration and confirmation that Block 15 and Block 16 are of sufficient size to accommodate minimum performance standards in the applicable zoning category (i.e., amenity space, parking, setbacks, etc.).

Road Alignment

145. The alignment of 'Street Three' should connect to the "Potential Road Connection", as identified on Map 2 of the District Plan. This proposed road is required for the future development of the area to the northwest (outside the limits of the District Plan).

146. The relocation of 'Street Seven' does not align with the Minor Collector Road anticipated for the north side of Conservation Drive, as shown on Map 2 of the District Plan. While minor alterations to the road network may be appropriate, Planning Approvals and Engineering staff will need to be satisfied that the road alignment proposed does not negatively impact or hinder the developability or potential connections to other lands within the District Plan area. Additional information will be required to justify the realignment of this road network and to ensure the lands to the north will not be negatively impacted.

147. Further to Comment 36 and subject to the size of the block being agreed upon, Block 4, Stage 1 (Open Space) is to be conveyed to the City through the registration of Draft Plan of Subdivision 30T-17402 for the protection of the Core Environmental Features.

Environmental:

148. Block 18, Stage 3 (SWM) encroaches into the wetland buffer. The NRSI memo states the encroachment is to accommodate grading, the outlet, and part of the cooling trench. While Official Plan policy 8.2.4(9) contemplates portions of stormwater management facilities within buffers, the policy sets out criteria that need to be met. Additional information is required to confirm whether these criteria can be met.

149. Block 5, Stage 4 (Park) encroaches into the wetland buffer. Official Plan policy 8.2.4(9) states that permitted uses within buffers are to be limited to low impact uses consistent with those permitted within designated features. Active park land is not one of those uses. Further, the policy states that buffers are to remain in or be restored to a primarily natural state. Accordingly, either the park needs to be removed from the buffer or that portion of the park will need to be naturalized and not considered or used as active park land (as per Official Plan policy 8.2.4(12)). In addition, the section of the cooling trench that extends across the rear of the park is subject to the criteria of Official Plan policy 8.2.4(9). Potential areas of incompatibility include whether the vegetation over top of the trench will need to be maintained/manicured, whether tree roots will interfere with the trench's function as the buffer matures, and whether the trench will need to be maintained in the short and long term, since accessing it would disrupt the buffer and remove any habitat that has been created, the provision of which is identified as a key ecological enhancement in the NWSSS. The situation is further complicated because a trail is to be potentially built within the buffer. Through Comment 150 below staff have indicated that the cooling trench should be included within the limits of Block 18, Stage 3 (SWM).

Engineering:

150. Section 5.2.1 and Figures 5.1 and 5.2 of the Preliminary Stormwater Management Report provide details on the proposed SWM Facility 5914. It is noted that this SWM Block was revised as part of the March 2019 resubmission. The following comments refer to the March 28, 2019 MTE Memo:
    a. The cooling trench should be included as part of the SWM Block.
    b. An access road to the cooling trench to facilitate operations and maintenance activities is required.
    c. Please provide more detail on the cooling trench; specifically a cross-section depicting pipe slopes, cover and groundwater elevations.
    d. Figure 3.0 provides details on access roads to the forebay and main pond cell for future maintenance; however, there are no details provided related to operation, maintenance access and sediment storage areas. The SWM design calculations in Appendix A of the FSR identify a nine-year cleanout frequency for the forebay to ensure adequate TSS removal efficiency. Please provide details on the approximate sediment volume and subsequent storage area requirements related to these regular routine maintenance operations; and, identify locations where these operations can be facilitated within the SWM Block. The maintenance of the stormwater management pond is not to be accommodated within the park and/or pedestrian trail system.

e. The 6.0 m wide, 0.018 ha Block 6, Stage 4 (Walkway) to access the SWM Block should be included as part of the SWM Block (i.e., Block 18, Stage 3). Please provide additional information to confirm that 6.0 metres is sufficient width to conduct routine maintenance activities. Additional width may be required.
f. To facilitate future maintenance and cleanout of the pond, a drain outlet pipe with a valve shall be provided to avoid bypass pumping.

151. The design of the access road around the stormwater management pond must consider the pedestrian trail connections within that block and how it connects into the park and the larger community trail system.

152. Figure 4.0 (Sanitary Servicing Plan) of the Functional Servicing Report notes that the trunk sanitary sewer goes through the west edge of SWM Pond Block 23 (i.e. SWMF 5914) under the berm area. The City does not support this configuration / alignment as it provides future maintenance and operations issues for both the SWM pond and sanitary sewer. The Technical Memo prepared by MTE (March 28, 2019), shows that Block 18, Stage 3 (SWM) has shifted further to the south. Based on this information, it is not clear where the proposed trunk sanitary sewer is in relation to the new SWM (Block 18, Stage 3) and Park (Block 5, Stage 4) and how it connects to the Sanitary Pumping Station (Block 17, Stage 3). Easements through the park block and multiple residential block are not recommended. Further details are required to understand how the sanitary and storm infrastructure are located within this area.

Landscape:

153. Block 5, Stage 4 (Park) is located in a better location and more visible from a safety viewpoint. All items designed and accepted in the block are the responsibility of the developer to construct. The hard surface area is to be used in the winter for an ice rink providing neighbourhood volunteers are available.

154. Block 5, Stage 4 (Park), in combination with Block 4, Stage 2 (Park), if deemed acceptable could be eligible for up to $20,000 City funding for the provision of a play structure within the park block.

155. Block 3, Stage 1 (Park) of the Kartway Lands is too small to satisfy active and passive uses in a functional way. Increase the size of this block so it becomes a relevant park block. Provide a concept plan showing how active and passive components can be included in this Block.

156. The original plan indicated two park blocks, 20 and 21. The Design Summary states that they have been amalgamated into one block that is larger. In fact, it is smaller in area than the two original blocks. This statement should be revised.

157. The Neighbourhood Design Summary provided some visuals for park design elements. While fun looking we have concern with vandalism concerning the slides with the tree-house unit on top. We do not use the rubberized surface for splash pad facilities. These and other items can be discussed further during detail design.

158. Block 5, Stage 4 (Park) should be conveyed to the City through the registration of Phase 3. Please revise the phasing plan to including this park block within the limits of in Stage 3, rather than Stage 4.

AREA 3: Northgate Lands – Stage 5 (part); and Kartway Lands – Stage 2

Planning:

159. The low density residential land uses proposed appear to be generally consistent with the District Plan.

160. The overall density of these lands appears to be lower than that anticipated in the District Plan, and therefore densities of the remaining areas are encouraged to be on the higher end of the range to account for the shortfall.

161. These lands are proposed as a vacant land condominium, meaning that public access may be restricted. Policy 3.9.10 of the District Plan states that "trails shall be publically accessible". Further, policy 3.9.6 states that "active transportation routes are intended to encourage free circulation of the public throughout the Beaver Creek Meadows community and to adjacent areas of the community by means of publicly-owned and maintained trails, sidewalks, bikeways, roadways, etc". Further, policy 4.3.9 h) states the network shall "be intended for full public access and be designed to reflect safe passage and restrict access to neighbourhood properties". If portions of the subject lands are proposed under private condominium ownership, the intent of the District Plan policies should be maintained, and public access through the area must be ensured. As a result, trails and open space areas should be shown as separate blocks within the plan of subdivision, to be conveyed to the City through the registration of the plan, rather than forming part of the condominium plan.

162. The submitted Active Transportation Network does not show the trail extending to the southern edge of the development area. It is recommended that this trail be extended to the southern edge of the District Plan boundary, as shown on Map 5 of the District Plan.

163. For the Kartway Lands, though not explicitly stated, staff understand that the environmental lands and buffer areas are to be dedicated to the City through Block 4, Stage 1 (Open Space), but that the environmental lands and buffer areas within Block 1, Vacant Land Condominium 30CDM-17410 are to remain in private ownership. Please confirm. If this is the case, staff do not support this approach (please refer to Comment 36). The open space lands should be shown as separate blocks within the plan of subdivision, to be conveyed to the City through the registration of the plan of subdivision, rather than forming part of the condominium plan.

164. Condominium Plan 30CDM-17409 as proposed is not supported by staff (refer to Area 5 comments). As a result, the street network contained within Condominium Plan 30CDM-17409 should be modified to terminate in a cul-de-sac in proximity to the boundary between the two Vacant Land Condominium Limits or consideration could be given to modifying the existing crescent.

165. Please ensure the limits of the condominium reflect the proposed condominium limits rather than the limits of the Plan of Subdivision. There should not be more than one 'Unit 1' (for example) within Condominium 30DCM-17410, and condominium units are not required to be 'split' over existing or future property/block boundaries (i.e., "Block 31 to 34" and "Block 23 to 26"). Please also remove any "Block" references within the Condominium Plan. Condominium Plans typically include Units, Streets, or areas of Common Element.

166. The natural area on the west side of 30DCM-17410 should be removed from the limits of the Condominium Plan and instead be included as an Open Space Block within Draft Plan 30T-17410 and conveyed to the City for open space purposes as a condition of approval.

Environmental:

167. For the Kartway Lands, portions of Condominium Units 6, 7 and 8 are within the floodplain. All lots/units must be outside the floodplain. Please revise.

168. Section 5.5 of the EIS addresses Stage 5. It notes that it includes the 15 unit vacant land condominium and access road but does not discuss the remaining lots (those between Stage 3 and the proposed access road). There are a number of lots in that portion that back onto the natural system that are not discussed.

Engineering:

169. Street Three and the private roads in Condominium Plan 30CDM-17410 intersect at a tight radius. Demonstrate on a plan that the roads and turning radii are satisfactory to accommodate the largest City of Waterloo fire truck dimensions. Also, please confirm if daylight triangles should be incorporated into the design of the private road where it intersects Street Three.

170. For any proposed condominium block, only one sanitary service is permitted.

AREA 4: Northgate Lands – Core Environmental Features

Planning:

171. Further to Comment 36 all environmental lands and their associated buffers should be included within the limits of the Draft Plan. Please revise the Draft Plan limits to include all environmental lands. Such block(s) will be zoned Conservation (OS3) zone and will be conveyed to the City of Waterloo for Open Space purposes through the registration of the Plan(s). This will be included as a condition of Draft Plan Approval. After Open Space lands are included within the limits of the Draft Plan, please update density calculations.

172. Further to Comment 36, and subject to the sizes of the blocks being agreed upon, Block 8, Stage 1 (Open Space), Block 9, Stage 1 (Open Space) and Block 5, Stage 2 (Open Space) are to be conveyed to the City through the registration of Draft Plan of Subdivision 30T-17401 for the protection of the natural Core Environmental feature.

Environmental:

173. Consistent with the NWSSS, Map 8 of the EIS shows a 5 metre buffer for the hedgerow in the southeast corner of the site (Block 9, Stage1). However, no other management recommendations are put forward, despite the hedgerow being identified as a linkage. Additional information is required.

174. While the Draft Plan Consolidation includes dripline and wetland setbacks, it does not include a setback for Beaver Creek. As per Official Plan policy 8.2.5(7)(c) and the NWSSS, a setback of 30 metres is required. A 30 metre setback from Beaver Creek needs to be shown on the Draft Plan to ensure it is accounted for in the block layout.

AREA 5: Northgate Lands – Core Environmental Feature and Stage 5 (part)

Planning:

175. The lands identified as Block 1, Stage 5, specifically condominium units 5 to 19 in Plan 30CDM-17409, are located within SPA 2 of the District Plan. SPA 2 requires the completion of an EIS to support the consideration of development, the extension of supporting infrastructure, and access to the lands for development, within this area. Based on information submitted to date, staff do not support development of the access into the agricultural clearing nor development within the agricultural cleaning (i.e., SPA 2).

176. Please revise the Draft Plans to remove the 7.3 metre access road and the proposed lots within the area identified as SPA 2 in the District Plan. This area, in conjunction with Area 4, shall be included as an Open Space Block to be conveyed to the City through the registration of the Draft Plans and zoned accordingly.

177. At the south limit of the road in Stage 5 in front of condominium units 14 & 15 (Northgate), a turning circle is required. The turning circle is required to accommodate public and utility maintenance vehicles.

Environmental:

178. With respect to the access into the agricultural clearing (i.e., SPA 2 of the District Plan), decisions regarding infrastructure within a Core Natural Feature need to be consistent with the policies of the Official Plan and the decision-making framework of the Regional Official Plan. To be consistent with the policies of the Official Plan, particularly 8.2.4(3), only essential infrastructure for which there is no feasible alternative can be contemplated. Staff do not consider the proposed access road or associated servicing to be essential infrastructure and are of the opinion that there is a feasible alternative (i.e., not constructing the infrastructure). With respect to the decision-making framework of the Regional Official Plan, there is potential that the infrastructure, and the approximately 15 lots it would enable, would result in adverse environmental impacts and long term damage to the Core Natural Features.

179. With respect to the agricultural clearing, the lands within the clearing are contiguous to the Core Natural Features. While Section 5.5 of the EIS discusses direct and indirect impacts as well as mitigation measures, it has not been demonstrated that there will be no adverse environmental impacts. For example, the EIS does not consider cumulative impacts related to development around both the external and internal limits of the feature, impacts related to road salt and pesticide/herbicide use by residents, impacts related to the introduction and spread of invasive species, as well as impacts related to light and noise.

Engineering:

180. The City does not support the 7.3 metre wide access road proposed through the Core Environmental Feature. City staff are concerned with potential grading impacts and encroachment into the buffer area, and has serious concerns with how the proposed development can balance best management engineering guidelines with environmental impacts through this area. In particular, the City has serious concerns with the construction of and the future operations and maintenance of the proposed road and related infrastructure (e.g., 8.34

metre deep sanitary sewer, 50 metre long and 1.2 metre high retaining wall, stormwater management, etc.).

Water Servicing

181. Further to the above comment, Section B.2.5.8 of the DGSSMS (January, 2019), indicates that the maximum allowable length for a permanent dead-end watermain is 150 m, which is exceeded within this area by at least 250 m; or potentially more. Given the extreme length of this dead-end watermain the City has serious concerns regarding fire flow, pressure, maintaining adequate chlorine residual and the potential for water quality degradation within this area. The proposed water servicing to this area is not supported by engineering staff.

PART C: SUMMARY

At this time, staff do not support approval of Draft Plan of Subdivision 30T-17401, Draft Plan of Subdivision 30T-17402, Draft Plan of Condominium (Vacant Land) 30CDM-17409, Draft Plan of Condominium (Vacant Land) 30CDM-17410, and Zone Change Applications Z-17-14 and Z-17-15 as per the comments contained herein, with specific attention to the following:

- Staff do not support the non-inclusion of the Core Environmental Feature Lands (Area 4) and associated buffers within the limits of the Draft Plan. These lands should be included within the limits of the Draft Plan and conveyed to the City of Waterloo through the registration of the plan, and zoned accordingly.

- Staff do not support infrastructure and/or development within ESPA 80 (SPA 2 of the District Plan), particularly in the form of the proposed condominium residential units/lots and the proposed access road to the lands within the ESPA 80 natural area.

Please note that City staff reserves the right to provide additional comments, or modify the above noted comments subject to further review and/or additional information as may be provided, particularly given the pending "Formal Resubmission" as noted above.

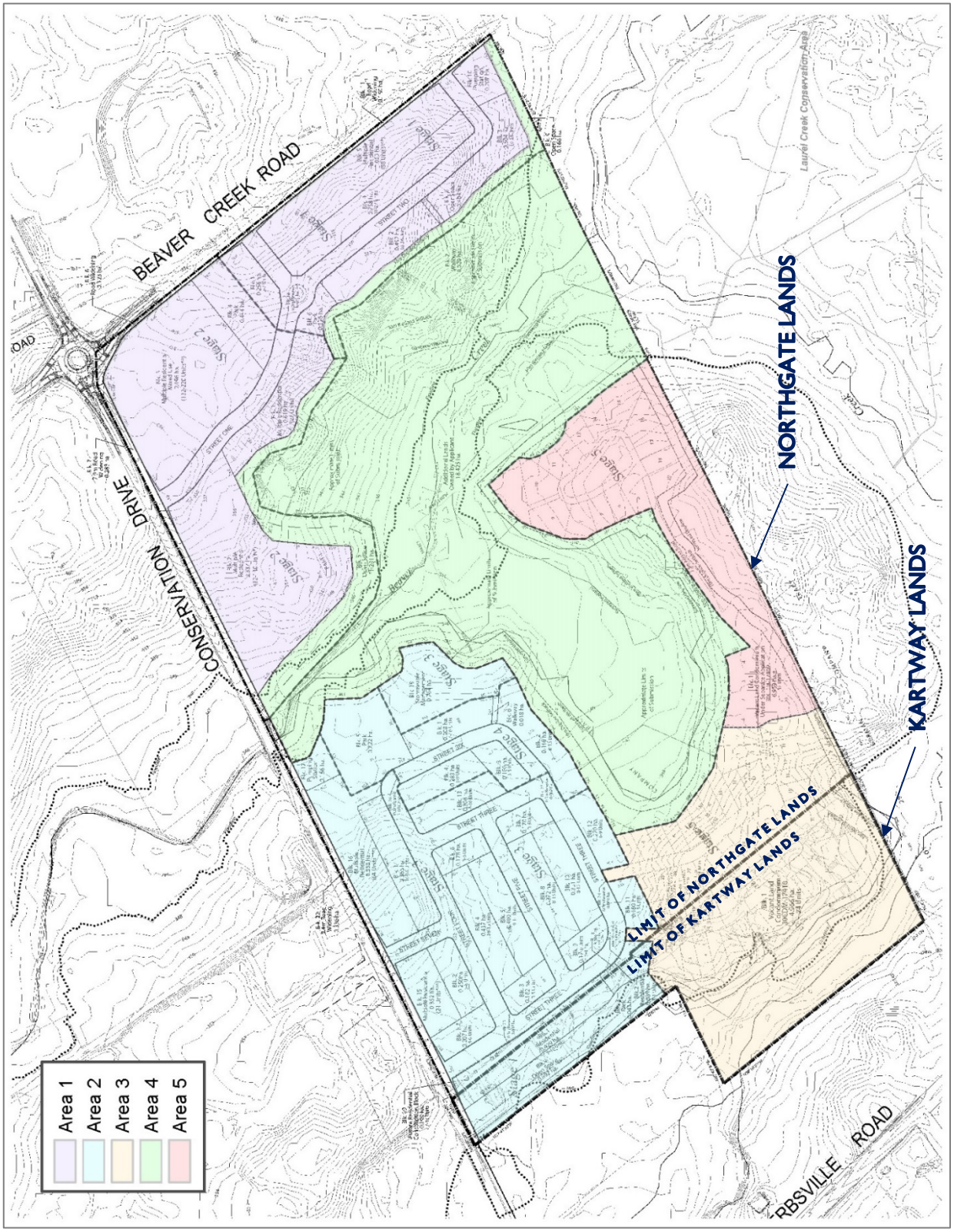
I trust the foregoing is satisfactory, however should you have any questions please do not hesitate to contact the undersigned.

Sincerely,



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APPENDIX A



Source: MHBC as modified by City of Waterloo staff

APPENDIX B

- DRAFT ZONING FOR BEAVER CREEK MEADOWS DISTRICT PLAN AREA -

BCM DISTRICT PLAN LAND USE CATEGORY *(BCMD Plan, Map 3)*	UNIT TYPE / USE	PROPOSED ZONING (By-law 2018-050)	MODIFIED / ADDITIONAL REGULATIONS
Low Density Residential 1	SINGLE DETACHED BUILDING	Residential Five (R5) Zone	Regulation 7.5.2, Table 7I • Lot Frontage (min): 9.0 metres (interior lot) • Lot Frontage (min): 12.0 metres (corner lot) • Building Height (max): 10.0 metres Regulation 7.5.5 • Shall also apply to Flankage Yard
	SEMI-DETACHED BUILDING	Residential Five (R5) Zone	Regulation 7.5.2, Table 7I • Lot Frontage (min): 6.8 metres (interior lot) • Lot Frontage (min): 9.0 metres (corner lot) • Building Height (max): 10.0 metres Regulation 7.5.5 • Shall also apply to Flankage Yard
Low Density Residential 2	FREEHOLD TOWNHOUSE BUILDING	Residential Eight (R8) Zone	Regulation 7.8.2, Table 7M • The regulations for 'Freehold Townhouse' shall apply • Lot Frontage (min): 9.5 metres (corner lot) Additional Regulations • Front Yard Setback (min): 5.0 metres where garage is setback 7.0 metres *(see 7.5.4 of By-law)* • Garage Width (max): 50% • Porch Encroachment (max): 1.8 metres *(see 7.5.5 of By-law)*, applicable to both front and flankage yards • Units per Townhouse Block (max): 6 preferred but max is 8 *(see section 3.4.19(h) of BCMD Plan)* • Lot Width (min): 6.5 metres, if 8 unit block *(see section 3.4.19(h) of BCMD Plan)*
Mixed Use Medium Density Residential **(Mixed Use Node)**	FREEHOLD TOWNHOUSE BUILDING	Residential Eight (R8) Zone	Regulation 7.8.2, Table 7M • The regulations for 'Freehold Townhouse' shall apply • Lot Frontage (min): 9.5 metres (corner lot) • Building Height (min): 9 metres • Building Height (max): 20.0 metres • Density (min): 60 units per hectare • Density (max): 100 units per hectare OR 300 bedrooms per hectare Additional Regulations • Front Yard Setback (min): 5.0 metres where garage is setback 7.0 metres *(see 7.5.4 of By-law)* • Garage Width (max): 50% • Porch Encroachment (max): 1.8 metres *(see 7.5.5 of By-law)*, applicable to front and flankage yards • Units per Townhouse Block (max): 6 preferred but max. is 8 *(see section 3.4.19(h) of BCMD Plan)* • Lot Width (min): 6.5 metres, if 8 unit block *(see section 3.4.19(h) of BCMD Plan)* • Consideration for additional commercial permissions

Mixed Use Medium Density Residential **(Mixed Use Node)** *(cont'd)*	FREEHOLD TOWNHOUSE BUILDING w/ Rear Garage	Residential Eight (R8) Zone	Regulation 7.8.2, Table 7M • The regulations for 'Freehold Townhouse' shall apply • Lot Frontage (min): 9.5 metres (corner lot) • Building Height (min): 9 metres • Building Height (max): 20.0 metres • Density (min): 60 units per hectare • Density (max): 100 units per hectare OR 300 bedrooms per hectare Additional Regulations • Garage Width (max): 50% • Porch Encroachment (max): 1.8 metres *(see 7.5.5 of By-law)*, applicable to front and flankage yards • Units per Townhouse Block (max): 6 preferred but max. is 8 *(see section 3.4.19(h) of BCMD Plan)* • Lot Width (min): 6.5 metres, if 8 unit block *(see section 3.4.19(h) of BCMD Plan)* • Consideration for additional commercial permissions • Definition of unit type to be created
	BACK-TO-BACK TOWNHOUSE DWELLING	Residential Mixed-Use (RMU) Zone	Regulation 7.10.1.1 • Include 'Back-to-Back Townhouse Building' as Primary Use Regulation 7.10.1.5 • Remove 'Commercial Recreation' as a permitted Ancillary Use • Remove 'Food Store' as a permitted Ancillary Use (except to the south east of Beaver Creek Road and Conservation Drive) Regulation 7.10.2, Table 7O • Regulations for RMU-20 shall apply • Building Height (min): 9 metres • Density (min): 60 units per hectare • Density (max): 100 units per hectare OR 300 bedrooms per hectare Additional Regulations • Garage Width (max): 50% • Street Line Setback (minimum) to a Garage: 6.0 metres • Porch Encroachment (max): 1.8 metres • Minimum distance between sidewalls of buildings, where no lot line exists = 3.0 metres • Consideration for additional commercial permissions • Definition of 'Back-to-Back Townhouse Building' to be created
	MULTI-UNIT RESIDENTIAL BUILDING	Residential Mixed-Use (RMU) Zone	Regulation 7.10.1.5 • Remove 'Commercial Recreation' as a permitted Ancillary Use • Remove 'Food Store' as a permitted Ancillary Use (except to the south east of Beaver Creek Road and Conservation Drive) Regulation 7.10.2, Table 7O • Regulations for RMU-20 shall apply • Building Height (min): 9 metres • Density (min): 60 units per hectare • Density (max): 100 units per hectare OR 300 bedrooms per hectare

- DRAFT ZONING FOR BEAVER CREEK MEADOWS DISTRICT PLAN AREA -

Elementary School	SCHOOL	School (S)	• All regulations of the School (S) zone shall apply
Open Space Land Uses - Park	PARK	Parks & Recreation (OS1)	• All regulations of the Parks & Recreation (OS1) zone shall apply
Natural System	OPEN SPACE	Conservation (OS3)	• All regulations of the Conservation (OS3) zone shall apply
Stormwater Management Facility	STORMWATER MANAGEMENT	Conservation (OS3)	• All regulations of the Conservation (OS3) zone shall apply

NOTES:

1. The following is prepared in Draft form and is based on a preliminary review of the zoning for the Beaver Creek Meadows District by City of Waterloo Planning staff.
2. The City reserves the right to add additional regulations as may be required upon further review and evaluation of the development proposal(s), and types of dwelling units proposed within the Beaver Creek Meadows District. This may include, but shall not be limited to, additional regulations relating to Back-to-back Townhouse, garage regulations, setbacks, etc.
3. All other relevant sections of Zoning By-law 2018-050 shall also apply including, but not limited to, Section 3 (General Regulations) and Section 6 (Parking, Driveways, Loading).

Appendix B

Comment Response Table

Region of Waterloo

Response to Region of Waterloo Post-Circulation Comments (dated December 29, 2017)		
COMMENT	**RESPONSE**	**ACTIONS**
DELEGATED AUTHORITY COMMENTS		
1. Township of Woolwich and Telecon Design (Telus) have no concerns regarding the applications.	Noted.	Propose standard telecommunication condition of draft plan approval.
2. Rogers Cable, Bell Canada, Ontario Power Generation Inc., Waterloo Catholic District School Board, Conseil scolaire de district catholique Centre-Sud, and Le Conseil scolaire de district du Centre-Sud-Quest have not responded to this circulation. By separate letter including a copy of these comments, these agencies are asked to respond at their earliest opportunity if they have any comments.	Noted.	The need for an elementary school site on the Northgate lands was not identified during the District planning process. Matters pertaining to telecommunications and utilities can be addressed through standard conditions of draft plan approval.
3. The City of Waterloo has provided comments dated December 22, 2017. The City of Waterloo does not support the draft approval of the applications as submitted for reasons included within the December 22, 2017 letter.	Comments have since been received from the City of Waterloo, and are dated August 29, 2019.	The City's comments are addressed separately. A Response Table was previously provided to the City on April 16, 2020.
4. In a letter dated August 25, 2017 (Appendix A), WNH has advised that the Developer will be required to comply with its requirements and/or conditions of electrical service including the establishment of necessary easements, agreement(s), and detailed engineering design and construction. Furthermore, if necessary, the Developer will be responsible for all costs associated with relocation of any existing WNH facilities as a result of this development.	Noted.	The standard WNH conditions of draft plan approval to be included as part of the Region's decision.
5. Union Gas requires the necessary easements and/or agreements for the provision of gas services for this project be provided to the satisfaction of Union Gas.	Noted.	The standard easement and servicing condition of draft plan approval to be included as part of the Region's decision.
6. In comments dated August 29, 2017 (Appendix B), Canada Post provided general requirements for the location and construction of centralized Community Mail Boxes.	Noted.	The comments from Canada Post can be addressed as a condition of draft plan approval.
7. The Grand River Conservation Authority (GRCA) has reviewed the application and supporting documentation and have identified in a letter dated November 22, 2017 (Appendix C) that a number of items need to be addressed and/or clarified by the applicant.	Noted.	The GRCA's comments are addressed through the comprehensive resubmission, including the revised Draft Plans, Studies and Report.
8. In a letter from the GRCA's Manager of Property dated December 12, 2017, the GRCA informed the Region that it will require, as conditions of draft plan approval, permanent fencing along the common boundary/property line, and, informational material for potential purchasers of the adjacent GRCA lands, specifically, that access to GRCA lands from private property is not permitted. The specific conditions that the GRCA requires are included within the December 12, 2017 letter.	The shared property line coincides, in part, with Core Natural Features. The installation of fencing may prevent the movement of wildlife between the two properties.	The GRCA's requirement for fencing along the shared property line can be addressed as a condition of approval, as appropriate.
9. The WRDSB stated in an email dated September 7, 2017 that it has no current needs for a school site within these plans, however requires conditions of draft plan approval pertaining to: a) Students being directed to schools outside the neighbourhoods within the plan; b) Sufficient accommodation may not be available for all anticipated students; and	Noted.	WRDSB'S comments can be addressed as a condition of draft plan approval.

c) Students may be accommodated in temporary facilities and/or bussed to a school outside the area, and further, that students may, in future, be transferred to another school.		
REGIONAL COMMENTS		
Water Services 10. The preferred condominium configuration was identified as potentially creating a Non-Municipal Year-Round Residential System (NMYRRS), under the Safe Drinking Water Act (SDWA), 2002. The NMYRRS was not mentioned in the subsequent reports. Whether the following parcel and servicing designs constitute a NMYRRS must be confirmed in consultation with the City of Waterloo prior to draft plan approval; additional requirements may be applicable under the SDWA if a NMYRRS is confirmed.	The revised Draft Plans of Condominium include a design detail prepared by MTE (and accepted in the City of Kitchener) that demonstrates the inclusion of the water service for the individual units within a stratified common element of the condominium.	The Region to review the revised Draft Plans and design detail and confirm that they do not consider the condominium configuration a NMYRRS.
11. In the Pre-Consultation it was stated that road elevations below 348.7 mASL 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 (see Appendix-A, pg. 4). The Preliminary Water Distribution analysis within the Functional Servicing Report dated July 5th, 2017 (FSR), and prepared by MTE Consultants indicates that node J-25 will be under this threshold at 348.00 metres and thus must be handled accordingly (and may require a condition of draft plan approval) (see table 3.1 and 3.2, pgs. 11-12)	The existing road grade of Beaver Creek Road is at 348.0 m and will be raised in the near future. Pressure reducing valves are needed for lots below elevation 348.7 mASL. MTE's preliminary design shows all building lot grades above 348.7 mASL.	The Revised FSR prepared by MTE includes a Finished Grade Contour Plan. The Region to review the Revised FSR in consideration of their comments.
12. During the Pre-consultation an overview of proposed watermain upgrades in proximity of the development and their estimated timings was provided by Regional Water Services (see Appendix A, table 1 of the Design Guidelines and Supplemental Specifications for Municipal Services for January 2016). Staff advises that these timelines have been amended; work on Conservation Drive from east of Beaver Creek Road to Erbsville Road from Regal Place to Conservation Drive is now estimated for 2018.	Acknowledged. Timings for work on Conservation Drive and Beaver Creek Road have been revised by the City.	No further action required.
13. Prior to draft plan approval, Engineering and Planning staff will require clarification on whether the development intends to proceed as a single condominium or separate condominium properties, as this will impact water servicing options and affect our recommendations.	The plans of condominium will registered in stages, but once complete, all units will be part of one condominium corporation.	The Region to provide any additional comments regarding water servicing. The Region to review the revised Draft Plans and design detail and confirm that they do not consider the condominium configuration a NMYRRS
14. On page 13, it is written that there are to be 4 connection points to the existing municipal water supply, but the water distribution plan labeled Figure 5 contains 5 connections points. Engineering and Planning staff request clarification on the number of intended connections to the municipal system prior to draft plan approval.	Page 13 of the FSR has been corrected. There are 5 connection points to the existing municipal water supply.	The Revised FSR prepared by MTE is included with this resubmission.
15. In the FSR, MTE proposes two options for providing water service to the development. Option 1 involves the condominium complex having 2 connections to the municipal water distribution system (FSR, Appendix-C, Figure 2). Option 2 involves the condominium having 1 connection to the municipal water distribution system and looping the watermain internally (FSR, Appendix-C, Figure 3). Decision on these options are up to the City of Waterloo, feasibility will also depend on whether the condominium complex intends to proceed as separate or combined properties. For Option 2, it should be noted that the 150mm looping segment must be placed on the owners property, not within the municipal road (FSR, Appendix-C, Figure 3). If the two	There will be a single plan of condominium, registered in stages. Watermain infrastructure will be located within a common element, leading to each dwelling within the land unit. A detail demonstrating the location of the watermain within the common element for the future condominium is included on each revised Draft Plan of Vacant Land Condominium.	The Region to review the revised Draft Plans and design detail and confirm that they do not consider the condominium configuration a NMYRRS.

condominium plans are deemed to create NMYRRS, the interconnection between the two plans would not be allowed between nodes J-13 and J-15. Each would receive their supply connection off Street Three. This will need to be determined prior to draft plan approval.		
16. Engineering and Planning staff wish to acknowledge that proposed draft plan 30T-17402 is dependent on services located within proposed draft plan 30T-17401.	Agreed.	Condition of Draft Plan approval to require the registration of the Kartway Plan concurrent with, or subsequent to, the Northgate Plan.
17. **Environmental Planning** Regional Environmental Planning staff and the Region's Ecological and Environmental Advisory Committee (EEAC) subcommittee members have reviewed the following plans and reports related to the proposed Northgate (as well as the Erbsville Kartway) development in the City of Waterloo: • Draft Plan of Subdivision and Draft Plan of Vacant Land Condominium, Northgate (MHBC Planning, July 4, 2017) • Draft Plan of Subdivision and Draft Plan of Vacant Land Condominium, Erbsville Kartway (MHBC Planning, July 4, 2017) • Planning Justification Report (MHBC Planning, July 2017) • Planning Justification Report Addendum (MHBC Planning, July 28, 2017) • Environmental Impact Study (NRSI, July 2017) • Preliminary Stormwater Management Report (MTE, July 5, 2017) • Functional Servicing Report (MTE, July 5, 2017) • Hydrogeological Study (MTE, July 5, 2017) • GRCA Comments, Northgate (September 22, 2017) • GRCA Comments, Erbsville Kartway (September 22, 2017) • MNRF Comments (November 3, 2017)	Noted.	No action required.
18. Based on the information provided Staff and EEAC are not in a position to support these applications at this time. Staff and EEAC offer the following comments for consideration and response.	The Draft Plans have been revised in response to City, Region and Agency comments.	Region to review revised Draft Plans, Studies and Reports.
19. Draft Plan of Subdivision and Draft Plan of Vacant Land Condominium (Northgate Lands) a) Similar to GRCA comment #8 (September 22, 2017 – Appendix C) it is standard practice to show proposed trail locations on a Draft Plan of Subdivision. Please revise to show proposed trail locations within buffers areas in addition to the proposed crossing location at Beaver Creek. b) It is noted that the buffer lands in Stages 1 and 2 are within the limits of the plan of subdivision while buffer lands are excluded from the submission in Stages 3 – 5. All buffers should be included within the draft plan. c) On the proposed Draft Plan of Subdivision, it appears that the "Approximate Limits of Submission" line is located within the Core Environmental Feature to the immediate south of Lot 15 (Stage 5). This effectively creates the lot called "Additional Lands Owned by Applicant" through a Core Environmental Feature which is not supported. Development (including lot creation) is not permitted within Core Environmental Features. Please revise the plan.	a) An Active Transportation Master Plan has been prepared that includes the locations of proposed trails within the plans of subdivision, consistent with the District Plan. The precise locations of trails is not commonly shown on Draft Plans. b) All buffers are located within the limits of the Draft Plans. c) The boundaries of the features were identified in the field, and confirmed with City, Regional and GRCA staff. The revised Draft Plans include the surveyed limits of the Core Environmental Feature. The Additional Lands Owned by Application contains the Feature. Proposed development is located outside of the Core Environmental Feature and no new Block or lots (development) are proposed within the Feature.	a) An Active Transportation Master Plan is included with this resubmission. The Region to review the Active Transportation Master Plan. b) Region to review the revised Draft Plans. c) Region to review the revised Draft Plans and the "Approximate Limits of the Submission."
20. Planning Justification Report (including Addendum) Staff understands that the applicant is proposing that Core Environmental Features be owned in the future by one or more of the proposed condominium corporations located contiguous to features and its required buffers. Both staff and EEAC are not supportive of	The approved Regional and City Official Plans confirms that lands designated for environmental protection are not necessarily available to the public. The owner intends to maintain the environmental lands in private ownership and establish a reserve fund as	Both public and private ownership and preservation of Core Environmental Features are equally appropriate. Further discussion with the City and Region of Waterloo regarding the long term protection/preservation of natural heritage features is required.

this approach. This was conveyed to the applicant at both a meeting with City and GRCA staff on September 8, 2017 and at the EEAC site visit on September 1, 2017. In accordance with ROP Policy 7.1.10, staff encourages Area Municipalities to secure ownership of Core Environmental Features. The report does not provide a planning justification for retaining Core Environmental Features in private ownership nor does it discuss the advantages and disadvantages of different ownership options (e.g. public, private, not-for-profit, land trust, etc.). In addition, there is no rationale provided for not including ESPA 80 within the limits of the plan of subdivision (identified as "Additional Lands Owned by Applicant"). As explained in pre-submission comments, both staff and EEAC recommend that Core Environmental Features be secured by public bodies/agencies. Otherwise staff will require as a condition of approval that one or more comprehensive conservation easements be registered on title in favour of the Region, the City of Waterloo, and/or the GRCA (which owns adjoining land) in order to ensure that the recommendations of the NWSSS, EIS and other requirements of relevant review agencies are implemented.	necessary to preserve and/or enhance the natural features over the long term and to minimize public access to ensure the long-term protection of these features. The Condominium process and the legislative tools associated with it affords appropriate measures to ensure the lands are protected and maintained over the long-term. Furthermore, the Owner proposes the inclusion of a Conservation easement over the Core Environmental Features, in favour of the City (or other public Agency) of ensure the long-term protection of the Feature.	
21. Environmental Impact Study a) The Region's Greenland Network Implementation Guideline (GNIG) was approved by Regional Council in 2016. Please refer to the current document (p. 2 and 9.0 References) b) Maps in the report should use the most current available aerial photography as per the GNIG (Section 2, p. 24). It appears that most maps use 2014 air photos but 2016 imagery is available from the Region. Please clarify/revise. c) Winter wildlife surveys are required in accordance with the GNIG (EIS Table 2 Field Survey Summary, p. 10). The EIS should be revised to include winter wildlife surveys. d) Please provide additional explanation of changes to the woodland dripline boundary as compared to the NWSSS (Section 2.1.6., pp. 13-14). What was the nature of tree cutting along the eastern edge of Wildlife Survey Unit (WSU) 13 observed in 2016 (Table 4, p. 37)? Staff would like to see a figure showing the NWSSS natural heritage system (Currently shown on Map 1) compared to any deviations as noted in the report and any tree cutting as noted in the EIS and 2016 pre-construction monitoring report (NRSI, March 2017). Once complete, please provide a copy suitable for input into a GIS (i.e. shapefiles). In addition, as mentioned previously in the review of monitoring reports for these lands, staff strongly recommend that the owner contact the Regional forester prior to any tree cutting to ensure compliance with the Woodland Conservation By-law. e) Please provide further details on the occurrences of Common Nighthawk within the subject lands. The EIS states that "the subject property may provide marginal nesting habitat for Common Nighthawk" (p. 59) and indicates a probable breeding status. Where in the WSUs were the birds observed and what was their behaviour? f) The second sentence (first paragraph) under Section 5.5.2 (p. 81) is not accurate and should be revised to the following: "This road and servicing will be located along the existing agricultural access to the field **which may be considered in accordance with Policies 7.C.9, 7.C.12 and 7.C.13 in the Regional Official Plan**, subject to the completion of an EIS." g) The second sentence (second paragraph) under Section 5.5.2 (p. 81) is not accurate and should be revised. All tree removals in the location of the agricultural access have not been overseen by the Region:	a) The Revised EIS refers to the updated Guideline. b) The Maps utilize aerial photography from 2019. c) Winter wildlife surveys were conducted in January/February of 2018 and 2019. d) Tree cutting along the eastern edge of WSU-13 has been for the purposes of maintaining production in the agricultural fields by removing overhanging branches and trees and shrubs expanding into the field, and to accommodate larger agricultural equipment. The current dripline boundary was flagged in 2019, and confirmed with Regional, City and GRCA staff. The flagged limits were then surveyed and included on the revised Draft Plans. A figure has been prepared comparing the current dripline with the dripline from 2009 (flagged as part of the NWSSS) and is included with the revised EIS. The requested shapefile will be provided to the Region. e) The potential presence of Common Nighthawk within the Study Area was identified based on data obtained from the MNRF, and initially circulated to NRSI by GRCA staff. Common Nighthawk was documented as flyovers (no breeding evidence) at WSU-9 and WSU-12 during targeted surveys. Aerial displays and flight patterns characteristic of territorial behavior were observed on adjacent lands only. The species was observed in 2015 and 2016 only with the highest breeding evidence documented on adjacent lands. It is expected that any local individuals are nesting on properties with permanent bare soil or flat roofs and not within the subject property.	The Region to review the Revised EIS, Revised Preliminary Stormwater Management Report, Active Transportation Master Plan, Planning Response Report and Revised Draft Plans. During and Post-Construction Monitoring can be required through conditions of Draft Plan approved, with appropriate Terms of Reference.

• The Region approved a Notice of Intent to Cut Trees pursuant to Regional By-law No. 99-45 (the former Tree By-law) on January 6, 2005 for some tree cutting under the supervision of a Registered Professional Forester (RPF) at different locations within the subject lands. Subsequently, two complaints of tree-cutting on the subject lands were received in 2005 and addressed by Regional By-law enforcement staff. • The Region received a complaint on January 5, 2009 concerning some tree cutting within the subject lands. This tree-cutting was undertaken without the Region's prior knowledge or consent. Staff were satisfied that a contravention of the Woodland Conservation By-law had taken place and By-law Enforcement staff issued an Order to Stop Destruction or Injury of Trees with force and effect for one year. Following conclusion of the investigation, staff determined that there was not enough evidence to pursue a prosecution under the By-law. • Tree cutting for the purposes of removing trees damaged by ice and wind within the agricultural clearing inside ESPA 80, the agricultural access and some other small areas along the dripline was undertaken following consultation with, and under the supervision of, the Regional Forester (circa 2014). h) EEAC and staff are of the opinion that development within the field inside ESPA 80 is not the preferred ecological outcome since the proposed development would likely result in adverse environmental impacts (as defined by the ROP) on natural features and functions. For example, the EIS appears to be missing a detailed discussion and analysis of some potential impacts including but not limited to construction of the access road in Stage 5, road salting, pesticide/herbicide use by residents, spread of invasive species and light pollution. As previously mentioned in correspondence to the consultants (email dated October 6, 2017), the subcommittee is of the opinion that the EIS (section titled "Field Restoration and ESPA 80" pp. 83-85) has not adequately addressed item h) from the recommended EEAC Terms of Reference (February 29, 2016) which reads as follows: "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." It is the opinion of staff and EEAC that restoration of the agricultural field within ESPA 80 should be considered in the context of Greenlands Network Objectives 7.1 through 7.6 and North Waterloo Scoped Subwatershed Study (NWSSS), and should: • Define goals and objectives through development of a restoration plan (e.g. goals could include increased forest cover, increased interior/deep interior habitat, protection of hydrology/groundwater); • Consider effects of area restoration at all appropriate scales (e.g. agricultural field, ESPA 80, subwatershed area, etc.); • Consider reasonable time frames for restoration outcomes (e.g. growth of mature forest may take several decades); • Identify treatments/solutions (e.g. reforestation, linkages, grassland, or a combination of habitats/solutions); • Develop alternative concepts that could achieve the defined goals and compare the positive/negative effects of each (i.e. the proposed concept is the only one that we are aware of that has been considered); and • Identify targets, criteria for success, monitoring and feedback in order to make adjustments relative to goals and objectives. Please note that staff and EEAC will not be in a position to make a final recommendation until all ToR items have been addressed.	f) The evaluation of the Indirect Impacts and Mitigation Measures as they relate to the Access Road are included in Section 5.5.2 of the Revised EIS. g) The referenced sentence has been removed. h) The development of Neighbourhood 7 (Southern Agricultural Field) and Access Road are comprehensively evaluated in the Revised EIS. i) Details of the proposed Access Road have been prepared by MTE in consultation with NRSI. The objective of the design was to minimize the need for any grading and/or retaining walls. The Access Road is located outside the limits of the identified features and their recommended buffers. A Conceptual Design of the road, including a cross section are included with this resubmission. j) Permeable pavement has been removed. The revised Preliminary Stormwater Management Report (PSWMR) and plan for the southern agricultural field includes a winter by-pass such that potential chloride laden winter runoff will not be infiltrated. A Chloride Impact Assessment has been included in the revised PSWMR and concludes that chloride impacts are below reasonable use. In addition, it is recommended that a Salt Management Plan be included as a condition of condominium approval. k) In separate correspondence, the GRCA requested that fencing be located along the shared property line to prevent trespassing. The Blandings Turtle Mitigation Strategy recommends the use of specific fencing to direct the turtles (and other wildlife) to remain within the feature, on both properties. The rear lot lines of the 14 Vacant Land Units in Stage 8/N7 will be fenced to minimize disturbance to the Core Features. The same fencing will discourage trespassing onto the adjacent GRCA lands. l) The Active Transportation Master Plan shows the location of all proposed trails, as well as the other components of the active transportation network. Trails are proposed within the outer edge of the recommended buffers, outside the limits of the Core Feature. m) The EIS notes the presence of European Buckthorn on portions of the site and monitoring of this species continues as part of the annual monitoring program.	

i) Staff and EEAC are of the opinion the access road design and associated servicing proposed by the proponent through ESPA 80 (Map 7) lacks sufficient detail to assess potential adverse environmental impacts on ecological features and functions. For example, information is not clearly shown with respect to the limits of construction or site alteration and staff is concerned with the amount of grading, filling and disturbance required adjacent to and potentially within ESPA 80. The design shows "minor filling" within the buffer and up to the dripline but this is not explained in the text of the report (Section 5.5.2). Filling up to the dripline is generally not supported and buffers are not intended to be used in this way – please clarify and provide a detailed grading and drainage plan. j) Staff and EEAC are concerned that road salt and other contaminants have the potential to create adverse environmental impacts on ESPA 80. What effect will the infiltration of road salt and other contaminants have on groundwater throughout the development? Specifically, how will infiltration through the permeable pavement access road and LID facility in Stage 5 affect local groundwater and/or other ecological features and functions (See comments 31 b) and 33 g) below)? k) The Laurel Creek Nature Centre exists contiguous to the subject lands (to the south) and school boards have been using the forest as a key educational resource for many years. EEAC is concerned with the compatibility of the proposed development with the educational use of the forest. How will the proposed development ensure that this function will be protected? In addition, the current boundary fence between the two properties appears to act as a barrier to wildlife movement. Is there another fencing option in this location that could better maintain the wildlife linkage? l) Trails do not appear to be shown on Map 2 as indicated in the text of the report (p. 91). Please show the location of trails and the Beaver Creek crossing on a map in addition to describing and assessing any potential adverse environmental impacts to Core Environmental Features as a result of trail development. m) Upon visiting the property, there appears to be locations where Buckthorn has established in areas where historical tree cutting/vegetation removal has occurred yet the report indicates that this species "is not identified as problematic at this time" (p. 95). If left unchecked, this species will spread to other areas. Please revise the EIS to include measures that can be implemented to control its spread. n) Please also include circulation of monitoring reports to the Region (p. 92 and 103). In addition, please note that the Region typically requires, as a condition of final approval, that two years of post-construction monitoring following 90% buildout of the subdivision be implemented, similar to the City of Waterloo requirement. o) What is the rationale for not including amphibian and breeding bird monitoring during the post-construction period (pp. 102-103)? This is typically included in biological monitoring programs – please include. p) The EIS states: "There are additional lands to be added to the buffers that more than off-set this encroachment" (p. 105). Please note that the Region does not have an offsetting policy for buffer areas. This sentence should be removed from the report and the buffers corrected on the revised plan. q) Please include the approved EEAC Terms of Reference and the minutes from the February 29, 2016 EEAC meeting as an appendix to the EIS.	Edge management and buffer recommendations are included in the Revised EIS. An Invasive Species Control Plan is proposed as a condition of Draft Plan approval. n) Requirements for during and post-construction monitoring can be included as a condition of Draft Plan approval. The Region will be provided with copies of all monitoring reports. o) A Terms of Reference for during and post-construction monitoring stages will be prepared and submitted for agency review at the time of transition to those stages. p) Acknowledged that the Region does not have an offsetting policy for buffer areas. q) The Terms of Reference and minutes are included in Appendix I of the revised EIS.	
22. Preliminary Stormwater Management Report a) Please note that staff will require, as a condition of draft plan approval, submission and review of the proposed communal stormwater management facility study prior to issuing final comments on the stormwater strategy for these lands.	a. The Preliminary Stormwater Management Report (PSWMR) proposes a Temporary Stormwater Management Facility to allow the Northgate	a) The timing of the final design of the Communal SWM Facility can be addressed through a condition of approval, as it relates to the Northgate Plan. A Temporary Stormwater Management Facility is proposed to allow the Northgate Lands to proceed independent of the Communal Facility. Region to review the Revised Preliminary Stormwater Management Report (PSWMR).

Consultation with the City and the GRCA may be required prior to the issuance of comments (see comment under 42. b. below). b) The limits of Catchment 3917 (Stage 5) appears to be different on Figure 5.3 and 5.5. Please clarify. c) What implementation tool is proposed to ensure that permeable pavement on a private road is maintained in perpetuity and not re-paved in asphalt should a condominium corporation choose to do so in the future? Further, there may be implications if it is determined that there will be impacts from salt as per comment nos. 22J), 32b) and 34g). d) The hydrogeological study indicates that only some groundwater is supporting the central wetland at certain times of the year (p. 13). Similar to GRCA comment #17, please provide further details on the effect of infiltration as an ecological enhancement and the extent of changes to the hydroperiod in wetlands.	lands to proceed independent of the Communal Facility, should circumstances warrant. b. Catchment 3917 limits have been updated on Figure 5.3 within the Revised FSR. c. The condominium process allows the Region to impose conditions, require agreements and approve the Declaration. A Chloride Impact Assessment has been included in the Revised PSWMR. d. Seasonal water balance to the wetlands has been provided in the Revised PSWMR.	b) The Revised FSR prepared by MTE is included with this resubmission. c) Further discussion with Regional staff is required regarding opportunities for securing continued use of permeable pavers within the condominium. d) The Revised Preliminary Stormwater Management Report (PSWMR) is included with this resubmission.
23. Hydrogeology Study a. Groundwater elevation maps did not include any data to support the contours that were drawn. The level of the water table at each well location should be indicated on the figures. Please revise. b. The cross sections contained in the report included unsupported stratigraphy. The investigations completed at the site were relatively shallow, yet the cross sections depicted geology well below the depths investigated. The source (wells/boreholes) should be included on the cross sections, or the cross sections should be revised to only show the stratigraphy to the actual depths investigated.	a. The high composite groundwater levels have been shown at each monitoring well location. b. The Hydrogeological Report has been updated to document the source of information of stratigraphy below the onsite boreholes.	a. The Revised FSR and Hydrogeological Study include the updated groundwater contour plans and are provided with this resubmission b. The Revised Hydrogeological Study is included with this resubmission
Road Traffic Noise Study 24. Regional Corridor Planning staff have reviewed the Preliminary Environmental Noise Assessment authored by MTE, dated 5 July 2017, and generally concur with the conclusions. The study indicated that with noise mitigation (provision for air conditioning, noise warning clauses) the proposed development location is appropriate. 25. As a condition of draft plan approval, the applicant will be required to complete a detailed noise study prior to registration and once the finished grades, house locations and OLA's are established.	Noted.	a. Noise mitigation measures (e.g. warning clauses) can be addressed as a condition of draft plan approval and secured through a Regional Subdivision Agreement. b. The requirement for a detailed noise study can be addressed through a condition of draft plan approval.
Transit Planning 26. Future GRT routing in this area would be along Conservation Drive. GRT will require the developer to fund the installation of three concrete landing pads for these stops along Conservation Drive. The price for each pad is currently $2,700 each, for a total of $8,100 for all three pads. 27. Based on the current information, general stop locations would be required along Conservation Drive. Depending on the ultimate development of the lots/blocks where stop locations will be required, the developer should be advised that GRT may require easements and/or shelters in addition to the concrete lands pads along Conservation Drive.	Noted	The requirements for the installation of concreate landing pads and any associated easements can be addressed through conditions of draft approval.
Source Water Protection. 28. Regional Hydrogeology and Source Water (HSW) staff have reviewed the applicable technical reports applications for draft plans of subdivisions 30T-17401 and 30T-17402, and draft plans of condominiums30CDM-17409 and 30CDM-17410 and the supporting technical information. HSW reviewed the following documents:	Acknowledged	No further action required.

• 30T-17401 and 30T-17402 Plan of Subdivision application forms • 30CDM-17-409 and 30CDM-17410 Plan of Condominium application forms • Planning Justification Report (MHBC, 2017a) • Zoning By-law Amendment Applications letter report (MHBC, 2017b) • Hydrogeology Study (MTE, 2017a) • Preliminary Stormwater Management Report (MTE, 2017b) • Functional Servicing Report (MTE, 2017c)		
29. Following review of the technical reports, HSW cannot support the proposed developments at this time due to the unknowns surrounding the proposed consolidated stormwater management (SWM) facility that will handle runoff from a portion of the Northgate Lands. HSW offers the following comments and requirements regarding the technical information contained within the above-noted documents:	The Communal Stormwater Management Facility Preliminary Design Report is being prepared for submission to Agencies, including the Region of Waterloo. The Revised PSWMR proposes a Temporary stormwater management facility, should circumstances warrant. The temporary facility would allow Northgate to proceed independent of the Communal facility, until such time as the Communal facility is built with sufficient capacity to accommodate the Northgate lands.	The timing of the construction of the communal facility and the servicing of the subdivision can be appropriately dealt with through conditions of draft approval and the subdivision agreement. Region to review the Revised PSWMR.
30. Plan of Subdivision application form; Planning Justification Report (MHBC, 2017a); Zoning By-law Amendment Applications letter report (MHBC, 2017b); and Functional Servicing Report (MTE, 2017c) a. No comments b. (Does not apply to the subject applications)	Noted.	No further action required.
31. Plan of Condominium application form: a. A Salt Management Plan (SMP) will need to be prepared for private roads and/or parking lots created as part of the Plan of Condominium. It will be a condition of draft plan approval that the SMP is submitted at Site Plan Control. b. The proponent has indicated that permeable pavement will be used as a means for stormwater management within this condominium block (MTE, 2017b). HSW would like to see a post-construction monitoring program implemented to assess the effectiveness of permeable pavement to infiltrate road runoff. This will be required as a future condition of draft plan approval.	The requirement for a Salt Management Plan to be submitted as part of future Site Plan applications. A Chloride Impact Assessment has been included in the Revised PSWMR.	The requirement for the submission of a SMP as part of future Site Plan Control applications can be addressed as a condition of Draft Plan approval. The requirement for a Post-Construction Monitoring Plan can be addressed through conditions of Draft Plan approval.
32. Hydrogeology Study (MTE, 2017a): a. HSW agrees with MTE's recommendation to complete in-situ infiltration testing at all End-Of-Pipe (EOP), conveyance and communal Low-Impact Development Infiltration facilities. This testing should be completed and as part of a future condition of draft plan approval, presented in a Final SWM report for each of the above-noted infiltration features. b. HSW agrees that the recommendations presented in Section 7.0 of the report should be implemented. Post-construction monitoring shall continue for a minimum of two years following 90% build-out. The proponent should complete these recommendations through a future condition of draft plan approval. c. HSW requires clarification on the timing and frequency of groundwater elevation and groundwater quality monitoring, as well as the groundwater qualify parameters being considered. This should be completed prior to draft plan approval.	a. Noted b. Monitoring requirements have been updated and coordinated between the Hydrogeology Report, Preliminary SWM Report and EIS Report. c. The timing and frequency of groundwater elevation and groundwater quality monitoring, as well as the groundwater quality parameters being considered have now been included in the Hydrogeology Report, Preliminary SWM Report and EIS Report	Approval of communal SWM facility preliminary design report to be included as a condition of draft plan approval. The completion of in-situ infiltration testing at all End-Of-Pipe (EOP), conveyance and communal Low-Impact Development Infiltration facilities can be addressed through a condition of draft plan approval, and required as part of a Final SWM report for each of the infiltration features. The requirement for post-construction monitoring for a minimum of two years following 90% build-out can be addressed through a condition of draft plan approval. The Revised PSWMR includes the updated water balance values.

		The requirement for the oversizing of all lot level infiltration galleries can be addressed through a condition of draft plan approval.
33. Preliminary Stormwater Management Report (MTE, 2017b) a. Water balance values need to be expressed in both mm/a and m^3/a in an updated Preliminary SWM Report. A more detailed breakdown of infiltration sources should also be provided (i.e. volume from roads vs. rooftops vs. pervious areas etc.) and should be broken down by lot-level, conveyance and EOP infiltration features. Please revise and resubmit the Preliminary SWM Report. b. A relatively large component of infiltration in subcatchments 3915 and 3917 appears to be from roads and/or parking lots; however, without a detailed breakdown of the water balance in terms of m^3/a this could not be determined. Infiltration of salty runoff should only be implemented to make up for infiltration shortfalls from clean sources. This will be evaluated following re-submission of the Preliminary SWM Report. c. A Salt Impact Assessment (SIA) was not submitted as part of this application. This needs to be included in an updated Preliminary SWM Report. d. HSW agrees that Oil-Grit Separator (OGS) units should be installed upstream of any conveyance infiltration facility, and is to be secured as part of a future condition of draft plan approval. e. Based on the contours of the composite high groundwater table and the proposed grading contours for SWMF 5914, it appears that the bottom of the pond will intersect the water table. How does the developer propose to maintain hydraulic separation between the bottom and sides of SWMF 5914 and groundwater to prevent the pond from passively dewatering shallow groundwater? Please confirm/clarify through re-submission of the Preliminary SWM Report. f. The proponent should confirm that the bottom and sides of SWMF 3915 will not intersect the water table. Please confirm through re-submission of the Preliminary SWM Report. g. Permeable pavement is proposed for the private condominium road within Catchment 3917. Based on the results of the updated Preliminary SWM Report, HSW may or may not support this proposed approach to stormwater management because most or all salt applied to the road will be infiltrated. This will be evaluated following re-submission of the Preliminary SWM Report. h. LID infiltration is proposed for runoff from both pervious and impervious surfaces for LID 5917. Based on the results of the updated Preliminary SWM Report, HSW may or may not support this proposed approach to stormwater management because the LID feature will infiltrate salty runoff. This will be evaluated following re-submission of the Preliminary SWM Report. i. Conveyance infiltration facilities are proposed within the development. Based on the results of the updated Preliminary SWM Report, HSW may or may not support this proposed approach to stormwater management because this will infiltrate salty runoff. This will be evaluated following re-submission of the Preliminary SWM Report.	a. Noted. Revised PSWMR is included with the resubmission b. Noted. c. A Chloride Impact Assessment has been completed and included in the updated PSWMR. d. Noted. This requirement can be addressed as a condition of Draft Plan approval. e. SWM facility 5914 will be constructed with a liner and no permanent dewatering will occur. f. The permanent pool water elevation will be located above the average groundwater elevation. The SWM Facility will be 'lined', either with a clay or synthetic liner system. A small diameter tile system will be implemented such that the local groundwater can be pumped down during clean-out. g. A Chloride Impact Assessment has been completed and included in the updated PSWMR h. Noted. The Revised PSWMR includes a Chloride Impact Assessment. i. A Chloride Impact Assessment has been completed and included in the updated PSWMR j. Noted. This requirement can be addressed as a condition of Draft Plan approval. k. Sump pumps will pump groundwater from within each dwelling, over the foundation wall and then down into the standard storm service. A detail has been provided in the revised FSR. l. Noted. The Revised PSWMR proposes a Temporary stormwater management facility, should circumstances warrant. The temporary facility would allow Northgate to proceed independent of the Communal facility, until such time as the Communal facility is built with sufficient capacity to accommodate the Northgate lands. m. The requirement for SMW reports at site plan approval is a standard requirement in the City of Waterloo.	The Region to review the Revised PSWMR and Revised Draft Plans.

j. HSW agrees with the recommendation that all lot-level infiltration galleries should be oversized by 15%. This will be secured as part of a future condition of draft plan approval. k. Sump pumps should not be connected to storm sewers. Please revise the Preliminary SWM Report. l. A consolidated SWM Facility has been proposed by multiple land developers within the Subwatershed. This consolidated SWMF will manage runoff generated for Catchment 3102. The consolidated SWMF will need to be approved by the Region, City, GRCA, development group, and other stakeholders prior to draft plan approval of these Draft Plan of Subdivision and Draft Plan of Condominium applications. m. The proponent proposed to submit Final SWM Reports at Site Plan control for stormwater controls located on private property. This approach might be acceptable, so long as the balance of HSW's comments can be satisfactorily addressed following re-submission of the Preliminary SWM Plan.		
34. In summary HSW requires clarification and/or additional information on a number of items related to the Preliminary SWM Report. This information should be presented in an updated Preliminary SWM Report to the satisfaction of the Region, City and GRCA.	Noted	A Revised PSWMR is included with this resubmission. The Region to review the Revised PSWMR.
Archaeology 35. Staff have reviewed the Archaeological Assessment Report Entitled, "Original Report on Archaeological Assessment (Stages 1 & 2) Northgate Land Corp. & Erbsville Kartway Lands Conservation Drive, Part of Lot 28, German Company Tract Geographic Township of Waterloo, City of Waterloo, Regional Municipality of Waterloo, Ontario" dated Sept 6, 2016, as well as the Supplementary Documentation and the October 18, 2016 letter from the Ministry of Tourism, Culture and Sport, and acknowledge that a Stage 2 assessment is recommended (item no. 7 in the October 18, 2016 letter) for the woodlot because it has archaeological potential. Such assessment will need to be completed in consultation with the Region and the City prior to Draft Plan Approval.	Development is not proposed within the Core Environmental Feature. The requirement for a Stage 2 Assessment can be required as a condition of Draft Plan approval as the lands are not proposed for development.	Region to consider requiring a Stage 2 Archaeological Assessment as a condition of Draft Plan approval.
General Planning 36. Northgate/Erbsville Kartway Consolidation a. It is noted that the two properties (Northgate/Erbsville Kartway) will be consolidated. Prior to draft plan approval it will need to be determined of which stage of the Northgate plan will consolidation occur, as this may have implications for the phasing of the development. b. It will need to be determined prior to draft plan approval as to when the go-kart operation will cease, as it is considered an incompatible land-use with residential uses proposed. In the absence of a noise study, the go-kart operation will need to cease operation prior to registration of any stage of the Northgate plan. c. The 0.3 m Reserve Block (No. 26/Stage 3) will need to be extended to the north of Block 24 ("Future Res. Consolidation Block"). d. In the PJR, a counting error was also noted in the number of vacant land condominium units; 2 units appear to be missing from the final count. This would alter the total number of units from 78 to 80 (pg. 9). Please confirm and correct the count with what can be seen on Draft Plan Consolidation Figure 4. Please revise.	a. The Blocks requiring consolidation are noted on the draft plans of both Northgate and Erbsville-Kartway. b. The requirement for the closure of the Kartway as it relates to Stages 4-8 of the Northgate Plan is acknowledged. Stages 1-3 are a significant distance away (>400 m at the closest point). c. A 0.3 cm reserve is now included along the north side of Block 24 (now Block 27/Stage 4). d. The revised Draft Plans of Condominium include Area Schedules with the proposed number of units.	The requirement to consolidate the Blocks can be addressed through a condition of draft approval. The timing of the closure of operations of the go-kart operation can be addressed through a condition of draft approval, as it relates to the approval of the Stages within the Northgate Plan. The Region to review the revised Draft Plans.

37. Density calculations appear to have excluded the buffer areas; please revise the density calculations to include these areas	The buffers (Open Space Blocks) have been included within the limits of the submission. The density calculation has been revised accordingly.	The density calculation has been updated, and included within the Planning Response Report. Region to review the Planning Response Report.
38. Prior to draft plan approval, confirmation from the City of Waterloo that the applications conform with the City's Official Plan, and any other applicable Secondary Plan and/or District Plan (i.e. the Beaver Creek Meadows District Plan), will be required.	Noted.	
39. A Record of Site Condition will be required by the Region prior to the approval of any zoning by-law.	Within section 4 of the Region of Waterloo's Implementation Guideline for the Review of Development Applications on or Adjacent to Known and Potentially Contaminated Sites, it is noted that: "Where a RSC is required in support of a…plan of subdivision, the approval of such applications will be subject to the following…: a) Completion of a RSC prior to registration (a condition of draft approval); or b) Where accompanied by a zoning by-law amendment, completion of a RSC prior to final approval of the zoning by-law amendment with use of holding provisions." The intended approach is to fulfill this requirement through a condition of draft plan approval, which is to be satisfied prior to registration.	The requirement for the submission of a Record of Site Condition can be addressed as a condition of draft plan approval in accordance with the Region's Implementation Guideline.
40. It is noted that the scale shown on the draft plan is not correct. Please revise.	The revised draft plans include the correct scale.	The Region to review the Revised Draft Plans.
41. Stormwater Management a. It is noted in the PJR (pg. 11, second paragraph) that a SWM facility will be located on Block 25, stage 3, however the draft plan shows a SWM block on block 23, stage 3. Please revise. b. The off-site Joint SWM facility will need to be finalized to the satisfaction of the City, GRCA, and Region in order to further evaluate the subject applications.	a. The SWM facility is located within Block 26/Stage 4 of the revised Draft Plan b. The design of the Communal SWM Facility will need to be approved by the Region, City and GRCA. The Revised PSWMR proposes a Temporary stormwater management facility, should circumstances warrant. The temporary facility would allow Northgate to proceed independent of the Communal facility, until such time as the Communal facility is built with sufficient capacity to accommodate the Northgate lands.	The Region to review the Revised Draft Plans. The approval of Communal SWM facility preliminary design can be included as a condition of Draft Plan approval, with appropriate wording to also permit the use of a temporary stormwater management facility for the Northgate lands until such time as the Communal facility is approved.
42. Parks and Open Space a. It is the opinion of Regional staff that: • The portion of lands excluded from the limits of the subdivision should be included and conveyed to a public authority as part of, or prior to registration of phase 1, as per discussions at a meeting with the proponent/applicant, and City, Region, and GRCA staff on September 8, 2017. • Environmental lands to the south of Stage 5 should also be shown as a contiguous block on a revised draft plan and conveyed to a public authority as noted above in comment no. 20 a)	a. The approved City Official Plan confirms that lands designated for environmental protection are not necessarily available to the public. The Draft Plans have been revised to include buffers within Open Space Blocks, intended to be conveyed to the City of Waterloo. b. The draft plans have been revised and Block/Stage numbered sequentially shown. c. Acknowledged.	Further discussion with the Region of Waterloo regarding the long term protection/preservation of natural heritage features is required. The Region to review the Revised Draft Plans.

b. There are duplicated of Blocks 24 and 25 within stage 3 of the draft plan of subdivision. Please revise. c. Proposed Active/Passive uses will need to be determined to the satisfaction of the City of Waterloo.		
43. Community Connectivity a. Street Three (stage 3) appears to intersect itself. A seventh street should be established to the satisfaction of, and if deemed necessary by, the City of Waterloo. b. Streets will be required to be named to the satisfaction of the City of Waterloo and should be shown on the revised draft plan. c. It should be confirmed that all proposed streets will align with planned/existing streets in neighbouring subdivisions.	a. The road network and naming within the Northgate Plan has been revised and provided to the City for review. b. Noted. c. Intersections have been located in accordance with recommendations from Paradigm. The intent is to accommodate all-turning movements at the Street One/Conservation Drive intersection. The Street One/Conservation Drive intersection location has accounted for the proposed Street on the north side of Conservation Drive within Neighbourhood 2 (N2) and discussions have been held with the landowner. The Street Seven intersection has been shifted to align with the access to Creekside Church property and to avoid conflicts with a future access contemplated for the Brohman lands on the north side of Conservation Drive (N1).	The Region to review the revised Draft Plans and Revised Transportation Network Study prepared by Paradigm.
44. Design and Development – Stage 5 a. It is noted that a temporary turning circle is proposed upon portions of units 13 and 14, Stage 1 of the Vacant Land Condominium ("VLC"); it should be confirmed if the location of this temporary turning circle will have impact for the development of units 13, 14 and 15. b. It is noted in the PJR under subsections 5.1.1 and 5.1.3 that the development includes sidewalks, trail networks, and access to transit to encourage walkability and connectivity; access through ESPA 80 to units 5 through 19 within Stage 2 of the VLC does not appear to include a sidewalk or proper street lighting, and the cross-sections shown on Map 7 of the EIS for this proposed access road provides little to suggest that the health and safety of pedestrians has been considered through this approximately 200m section. Further, the walking distance to the closest transit stop for these units will be approximately 1km. Please provide more detail with regard to Stage 2 of the VLC, specifically, how this component of the plan can be developed to address these concerns (including comment nos. 21i) and j) above) in accordance with Section 1.1.1 c) of the Provincial Policy Statement, 2.2.7.1 of the Growth Plan for the Greater Golden Horseshoe (2017), and Section 2B and 2.D.17 of the Regional Official Plan. c. Regional staff were in attendance at a Public Meeting held by the City of Waterloo on November 27, 2017 and noted that 5 separate delegations presented to City Council that evening, each providing significant concerns relating to the proposed development through ESPA 80 to units 5 through 19 of Stage 2 of the VLC. Regional staff understands that these concerns have been included as part of the public record, and will require a detailed response addressing each of the concerns raised that evening.	a. The revised plans include two temporary turning circles (in Stages 6 and 7 of the Northgate Draft Plan of Condominium). The turning circles have been located to minimize impacts on affected units. b. The private road providing access to Neighbourhood 7 (N7) includes a sidewalk on one side, providing pedestrians with access to Street Three, as well as the public trail network. A cross-section of the private road is included with this resubmission. c. The Revised Draft Plans and supporting Studies/Reports have considered all input, including concerns raised at the public meeting.	The Region to review the Revised Draft Plans and cross sections for the private road within Stage 8 of the Northgate Plan.
Regional Planning Fees 45. Regional staff acknowledges receipt of the application fees for the plan of subdivision, plan of condominium, zone change and EIS review.	Noted.	No further action required.

Appendix C

Comment Response Table

City of Waterloo

Northgate Land Corporation and Erbsville Kartway – Comment Response Table

No	City Comments	Applicants Comments	Action Required	Agree	
				Yes	No
1.	The subject lands are designated Low Density Residential and Open Space on Schedule 'A' of the Official Plan. However, as previously noted, portions of the Official Plan are under appeal including the Low Density and Open Space designations as they apply to the subject lands.	Acknowledged	The objective is to work towards a comprehensive resolution, including the Official Plan appeal.		
2.	In accordance with the Growth Plan (2017) and the Official Plan, the subject lands must achieve a density of 58 residents and jobs combined per hectare. Policy 2.2.7.3 of the Growth Plan state that density is to be measured over the entire area, excluding natural heritage features and areas/floodplains, rights of way for certain utilities, freeways and railways, employment areas, and cemeteries. Buffers around natural heritage features are not to be excluded from the calculation. Please provide calculations to confirm the density proposed, as per Policy 2.2.7.3.	The SPA related to the District Plan density of 58 residents and jobs per hectare is to be calculated across the entire District and not on an individual subdivision basis. Decisions are to be in conformity with the Growth Plan that is in effect (2019). The 2019 Growth Plan has additional takeouts as well as a lower density target. Density is measured against the entire Designated Greenfield Area (DGA). The net area density calculation will be updated to include all lands within the limits of the plan.	MHBC to prepare an updated calculation of persons and jobs per hectare.		
3.	The Low Density Residential (LDR) designation allows for consideration of a range of low-rise buildings as well as community uses and open spaces. The maximum density of any one site shall not exceed 150 bedrooms per hectare and the maximum height of building shall not exceed 10 metres. Please ensure the proposed development complies with the policies of the LDR designation in the Official Plan.	The proposed zoning is consistent with the Official Plan – additional height is permitted within the Node and for low-rise apartments along Conservation Drive.	MHBC and City of Waterloo staff to meet and review the proposed Zoning By-law with the objective of reaching agreement on the form and content.		
4.	The Official Plan identifies a future minor node at the intersection of Beaver Creek Road and Conservation Drive, identified as Special Provision Area 37 (SPA 37). SPA 37 contemplates higher density and building heights than the LDR designation, as well as a range of uses to create a mixed-use centre with a concentration of neighbourhood-oriented retail, service commercial, institutional, employment and residential uses. Please ensure the proposed development complies with the policies of the SPA 37, as it relates to the future minor node at the intersection of Beaver Creek Road and Conservation Drive.	The proposed zoning for the Minor Node permits a mix of uses, consistent with the Official Plan and District Plan.	MHBC and City of Waterloo staff to meet and review the proposed Zoning By-law with the objective of reaching agreement on the form and content.		

No	City Comments	Applicants Comments	Action Required	Agree Yes	Agree No
5.	Block 3, Stage 2 (Multiple Residential Mixed-Use) proposes a mixed-use zone. The primary uses in this zone generally aligns with the intended mix of uses and neighbourhood oriented retail contemplated in SPA 37. Given the importance of providing for daily commercial needs for the larger neighbourhood area, the provision for mixed uses is strongly encouraged.	The proposed zoning permits mixed-use buildings. The proposed Zoning By-law requires a minimum ground floor height of 4.5 metres to accommodate ground floor commercial.	MHBC and City of Waterloo staff to meet and review the proposed Zoning By-law with the objective of reaching agreement on the form and content.		
6.	The proposed development lands are within the Council-adopted Beaver Creek Meadows District Plan (hereafter the 'District Plan'), and are designated 'Low Density Residential 1' (LDR 1), 'Low Density Residential 2' (LDR 2), 'Mixed-Use Medium Density Residential' (MUMDR), 'Open Space Land Uses – Park', 'Other Green Spaces', and 'Stormwater Management Facility'. The lands designated as MUMDR also form part of the Mixed-Use Node. Please ensure the proposed development complies with the land use policies of the District Plan, as it relates to the subject lands.	We acknowledge the designations, but note that the District Plan is intended to have some flexibility particularly as it was not adopted as an amendment to the Official Plan. The proposed Zoning By-law conforms to the in effect Official plan.	MHBC and City staff to meet to review the Draft Plan and proposed ZBL relative to the District Plan. The proposed Zoning By-law will be revised to reflect the new structure of the new Zoning By-law given that the appeals to the City's Comprehensive Zoning By-law (2018-050) have now been scoped.		
7.	The proposed density ranges are generally consistent with the District Plan. However, lands identified as buffer from the edge of the natural feature should be included within the density calculation. The final planned density within each neighbourhood should be consistent with the District Plan. A wide range of potential units is proposed for several Blocks, creating uncertainty as to what the actual potential developed density may be. A more accurate range of potential uses should be provided to ensure that development falls within the density requirements.	The density calculation per net hectare will be based on the lands included within the limits of the plan of subdivision.	MHBC to prepare an updated calculation of persons and jobs per hectare.		
8.	Overall, the number and ratio of proposed lower density development to proposed higher density development is less than what is outlined in the District Plan. Deviations from the District Plan are permitted, but the overall density of the subject lands (and ratio of low to high density uses) should be maintained. A primary goal of the District Plan was to allow for a wide range of housing types, styles and densities. Specifically, Policy 3.2.10 of the District Plan requires the development to include a variety of housing types and policy 3.2.8 states "…provide a range of housing forms and densities to facilitate affordability." Please confirm compliance with the above.	The proposed zoning allows for a wide range of housing types, from single detached dwellings to apartments and mixed-use buildings.	MHBC to prepare an updated calculation of persons and jobs per hectare. MHBC and City of Waterloo staff to meet and review the proposed Zoning By-law with the objective of reaching agreement on the form and content		
9.	A Traffic Management Plan is required to be submitted with all subdivision applications, as per Policy 3.9.1(f) of the District Plan. Traffic calming measures are to be recommended, reviewed and implemented as the subdivision is built, rather than	The proposed Traffic Calming Measures have been submitted to staff and include: • Raised median islands	City of Waterloo to provide comment regarding traffic calming measures that have been proposed such that		

No	City Comments	Applicants Comments	Action Required	Agree Yes	Agree No
	installed / retrofitted after the fact. Traffic calming measures have been proposed as part of the informal resubmission. Final, approved measures will be included as conditions of Draft Approval, to be implemented as the subdivision is built out.	• Pedestrian crossings • Lane-narrowing and speed cushions • Turn circle	MHBC/Paradigm/MTE can finalize as part of the formal resubmission. Traffic calming measures to be finalized as a pre-condition to registration of the subdivision and specified as a condition of draft plan approval.		
10.	Consider adding a median to where Street Three intersects with Conservation Drive for improved traffic calming, similar to that proposed at Street Seven.	A median would interfere with driveway access for those Blocks that front onto Street Three. Alternative entry/landscape features can be considered for those blocks that flank Conservation Drive.	A draft plan condition should be included requiring a streetscape plan to be approved by the City of Waterloo prior to registration.		
11.	Consider renaming Street Three between Street Four and Street Three (east side), as it will function as a separate street from the remaining section of Street Three (i.e., the portion west and south of Street Four and Street Five).	Agreed, this section of Street has been relabelled as Street Eight.	Draft Plan condition to require Street names to be approved by the Region and shown on the final Plan (to be registered).		
12.	Show and dimension daylight triangles where streets intersect, particularly with Conservation Drive and Beaver Creek Road. Please confirm that daylight triangles are shown as per TAC guidelines.	Daylight triangles are shown on the revised draft plan of subdivision consistent with TAC Guidelines.	No further action required.		
13.	Include 0.3 metre reserves along Conservation Drive and Beaver Creek Road. Access to Conservation Drive and Beaver Creek Road will be restricted. All blocks fronting onto these roads will be accessed via streets internal to the proposed development. Further review of Block 17, Stage 3 (Pumping Station), will be required.	The Draft Plan has been updated to show 0.3 metre reserves along Beaver Creek Road and Conservation Drive, except for those portions adjacent to proposed park, pumping station or open space blocks.	No further action required.		
14.	Recognizing that the development of lots within the Kartway Lands (Draft Plan 30T-17410) is entirely dependent upon the extension of roads and services through the Northgate Lands (Draft Plan 30T-17409), any approval of Draft Plan 30T-17410 by the City of Waterloo or Region of Waterloo is dependent upon approval of Draft Plan 30T-17409.	Agreed.	Condition of Draft Plan approval to require the registration of the Kartway Plan concurrent with, or subsequent to, the Northgate Plan.		
15.	A main principle of the District Plan is to create an attractive complete community with a strong emphasis on a well-connected and comprehensive active transportation network (refer to Map 5 of the District Plan). A key component of the system includes an interconnected network both within the District Plan neighbourhoods and with external networks.	Acknowledged.			

No	City Comments	Applicants Comments	Action Required	Agree Yes	Agree No
16.	Policy 3.9.10 of the District Plan states, "Trails shall be publically accessible". Further, policy 3.9.6 details that "active transportation routes are intended to encourage free circulation of the public throughout the District Plan community and to adjacent areas of the community by means of publicly-owned and maintained rails, sidewalks, bikeways roadways etc." Further, policy 4.3.9 h) Off Road Trials Network, states the network shall "be intended for full public access and be designed to reflect safe passage and restrict access to neighbourhood properties". Please ensure the intent of the District Plan policies are maintained and that public access throughout the comprehensive development is ensured.	Discussion is required with respect to City acquisition of trails located outside the limits of the draft plan of subdivision. Trails within buffers can be secured either through the dedication of land or alternatively through the conveyance of easements.	MHBC and City of Waterloo staff to meet to review the approach to securing publicly accessible trails with some options including consideration of the trails as parkland acquisition, City acquisition of trails (fee simple/ as easements/license agreements).		
17.	There is a lack of pedestrian connections between streets. Please show walkways in strategic locations throughout the Draft Plans to increase pedestrian connectivity and to reduce walking distances as per policy 3.9.4 of the District Plan.	Pedestrian connections through the larger Blocks (e.g. Block 7 Stage 1 and Block 21 Stage 4) can be considered through future site plan processes and in conjunction with more detailed design.	MHBC and City of Waterloo staff to meet to review pedestrian desire lines. Additional pedestrian connections can be considered at the Site Plan Approval stage. This can be included as a condition of draft plan approval.		
18.	The total lands provided for parkland equals only 3.86% of the total land area. Please ensure that a minimum of 5% parkland is accommodated throughout the plans, as required by the Planning Act and the City's Parkland By-law.	The two park blocks that are proposed have a total area of 1.115 hectares representing 2.75% of the total lands included within the plan of subdivision. Demonstration park plans have been prepared and confirm the parks are appropriately sized for their intended function/purpose.	MHBC and City of Waterloo staff to review the park demonstration plans and to discuss the combination of park dedication and park facilities in lieu of dedication, as well as the provision of community trails as part of parkland dedication.		
19.	As a condition of the subdivision agreement, each unit in the subdivision (residential, commercial, etc.) shall be required to install and activate a smoke alarm monitoring system. The City's Building Division will include this as a condition of every building permit issued.	Noted	This matter can be dealt with as a condition of draft plan approval.		
20.	Generally, the design of the Beaver Creek Meadows area should achieve a complete community, high quality design, and a high degree of connectivity, in addition to the urban design considerations for specific uses such as townhouses and single detached buildings. In particular, townhouses should be consistent with policies 3.4.17-19 of the District Plan which outlines several considerations including (but not	Noted. This is a shared objective. Design based information has been submitted to staff as part of the informal resubmission.	Feedback from staff with respect to the Design Brief that has been submitted would be appreciated.		

No	City Comments	Applicants Comments	Action Required	Agree Yes	Agree No
	limited to) a variety of roof designs, variation in elevation and preferred townhouse block length.		Approval of Design Guidelines to be required as a condition of draft plan approval		
21.	The development as a whole should be consistent with the City's Urban Design Manual.	Noted	Approval of Design Guidelines to be required as a condition of draft plan approval, which can specify that the guidelines are to be consistent with the City's Urban Design Manual.		
22.	All Blocks must identify the land use proposed on the Draft Plans. Please include land uses (e.g., Residential – Single Detached) on each block within the Draft Plans of Subdivision.	The Area Schedule provides further clarification with respect to residential unit types and includes a unit range that reflects the land use designations of the District Plan. The land use (generally) has been identified for each block within the plan of subdivision.	MHBC and City of Waterloo staff to review the clarity that has been provided/shown on the draft plan of subdivision. MHBC to clarify the assumptions relating to the minimum and maximum yield calculations.		
23.	Please provide conceptual plans for all 'Multiple Residential' and 'Multiple Residential Mixed-Use' Blocks, being: • Block 5, Stage 1 (Northgate) • Blocks 1, 2 and 3, Stage 2 (Northgate) • Blocks 15 and 16, Stage 3 (Northgate) The purpose of the conceptual plan is to confirm that the Block is of sufficient configuration and size to accommodate the proposed use and intended layout. All 'Multiple Residential' and 'Multiple Residential Mixed-Use' Blocks will be subject to Site Plan Review.	Conceptual Site Plans for noted Blocks have been prepared. The Plans demonstrate the Blocks are appropriately sized to accommodate multiple-residential units, consistent with the District Plan.	MHBC and City of Waterloo to meet to review the conceptual site plans with the understanding that the Blocks of concern will be subject to Site Plan approval and more detailed design in the future.		
24.	At a minimum, buildings along Conservation Drive should be designed to accommodate future main floor commercial uses (minimum ground floor heights will be recommended).	The staff comment should be clarified to relate to the blocks within the Minor Node. The proposed Zoning By-law includes a requirement for additional ground floor height to provide the option for future main floor commercial uses, within the Node.	MHBC and City of Waterloo staff to meet to review the proposed Zoning By-law with the objective of reaching agreement on the form and content.		

<table>
<tr><th>No</th><th>City Comments</th><th>Applicants Comments</th><th>Action Required</th><th colspan="2">Agree
Yes No</th></tr>
<tr><td>25.</td><td>Updated Grading Plans are required. All proposed retaining walls throughout the Draft Plans shall be removed or minimized to the extent possible.</td><td>Revised Grading Plan has been prepared and was included with the informal resubmission. The use of retaining walls has been minimized wherever possible.</td><td>Staff's comments will be considered in preparing updated preliminary Grading Plans to be included as part of a revised Functional Servicing Report to be submitted as part of a formal resubmission.

Draft plan conditions to require City approval of Grading Plans prior to area grading.</td><td></td><td></td></tr>
<tr><td>26.</td><td>Please ensure that the Draft Plan clearly shows the proposed staging of the Kartway Lands.</td><td>Acknowledged</td><td>The Draft Plan to be updated to show the staging of the Kartway Lands (two stages are now shown).

Draft Plan conditions to specify that Stage 1 can be registered concurrently with Stage 4 of the Northgate and Stage 2 can be registered concurrently with Stage 6 of the Northgate Plan.</td><td></td><td></td></tr>
<tr><td>27.</td><td>It is understood that the following Blocks will be consolidated prior to development and prior to the issuance of a building permit:
<table><tr><th>LAND USE</th><th>NORTHGATE 30T-17401</th><th>KARTWAY 30T-17410</th></tr><tr><td>Residential</td><td>Block 19, Stage 3</td><td>Block 1, Stage 1</td></tr><tr><td>Residential</td><td>Block 20, Stage 3</td><td>Block 2, Stage 1</td></tr><tr><td>Park</td><td>Block 21, Stage 3</td><td>Block 3, Stage 1</td></tr></table></td><td>Acknowledged</td><td>Condition of Draft Plan approval to be included requiring consolidation.</td><td></td><td></td></tr>
<tr><td>28.</td><td>Please resubmit individual Subdivision and Condominium Plans, in addition to the Consolidated Plan.</td><td>Acknowledged</td><td>Updated Draft Plans of Subdivision and Condominium will be included as part of the formal resubmission.</td><td></td><td></td></tr>
<tr><td>29.</td><td>Many Block dimensions are missing. Please ensure all block dimensions are shown, particularly frontage and depth, to ensure zoning compliance.</td><td>Draft Plans of Subdivision have been updated to show all block dimensions.</td><td>Block dimensions will be shown on the plans to be formally re-submitted.</td><td></td><td></td></tr>
<tr><td>30.</td><td>Confirm lot depths proposed meet minimum zoning requirements (no less than 30 metres). Some blocks appear to be smaller, such as (but not limited to) Block 1, Stage 1 of the Kartway Lands and Block 19, Stage 3 of the Northgate Lands.</td><td>The majority of the Blocks meet or exceed a minimum 30 metre depth. The proposed Zoning includes a minimum average lot depth of 30 metres, consistent with other zones in By-law 2018-050.

The depth of Blocks that are proposed are adequate for the intended land use with</td><td>Draft plan conditions to require the single/semi-detached Blocks to be lotted on the final plans to be registered.</td><td></td><td></td></tr>
</table>

No	City Comments	Applicants Comments	Action Required	Agree	
				Yes	No
		building envelopes to be confirmed at such time as the Blocks are lotted out prior to registration.			
31.	Ensure corner lots are designed to accommodate sufficient space for minimum building setbacks in the Zoning By-law. Particularly at the corners of irregularly shaped blocks, such as: • Block 1, Stage 1 (Northgate) • Blocks 3 and 9, Stage 3 (Northgate) • Block 3, Stage 4 (Northgate) • Lots/Units 12, 21 and 30, Stage 5 (Northgate) • Lot/Unit 17, Stage 2 (Kartway)	Acknowledged	Draft plan conditions to require the single/semi-detached Blocks to be lotted on the final plans to be registered. The final lotting plan is to comply with approved zoning.		
32.	Lands designated Mixed-Use Medium Density Residential within the District Plan (Map 3) shall have a density of between 35 to 60 units per hectare.	The proposed Zoning By-law provides for up to 300 bedrooms/ha in conformity with the Official Plan that is in effect.	MHBC to meet with City of Waterloo staff to review the proposed Zoning By-law with the objective of reaching agreement on the form and content.		
33.	Impervious coverage limitations may be imposed in areas of the subdivision where a certain amount of infiltration is required to be restricted. Staff will review this concurrently with the additional information requested by engineering staff.		MHBC/MTE and the City of Waterloo to consider if impervious cover limit assumptions associated with watershed targets should be incorporated as zoning regulations or alternatively addressed through the final Storm water Management Report and monitoring requirements.		
34.	To align with the vision, guidelines and policies of the District Plan, City staff intend to implement a customized, cohesive zoning approach to the Beaver Creek Meadows District, based on the zoning framework established in Zoning By-law 2018-050. A preliminary zoning matrix is included as Appendix B. Please note the information contained in Appendix B is in draft form and for discussion purposes only at this time. Please note it is subject to change and further evaluation.	The proposed Zoning is based on the framework established by the City through By-law 2018-050.	MHBC to meet with City of Waterloo staff to review the proposed Zoning By-law with the objectives of reaching agreement on the form and content.		
35.	It is the City's preference and long standing practice to secure environmental lands in public ownership. This was solidified through the Environmental Lands Acquisition and Maintenance Policy (1999). Under the policy, it was recognized that environmental lands should be publicly owned to the greatest extent possible to	The approved Official Plan confirms that lands designated for environmental protection are not necessarily available to the public.	Further discussion with the City of Waterloo regarding the long term protection/preservation of natural heritage features is required.		

No	City Comments	Applicants Comments	Action Required	Agree Yes	Agree No
	ensure the protection, preservation, monitoring, and maintenance of the lands for future generations. This approach is supported by Official Plan policy 8.2.2(15), which states land division that will have the effect of fragmenting the ownership of the Natural System, which this consolidated draft plan appears to do (e.g. south of lot 15 in Stage 5), will generally not be supported, except where such division facilitates public acquisition. In addition to the environmental lands, and as set out by Official Plan policy 8.2.4(11), the buffer areas established to help protect the environmental lands should also be secured in public ownership. For the Erbsville Kartway Lands, though not explicitly stated, staff understand that the environmental lands and buffer areas in Stage 1 are proposed to be dedicated to the City, but that the environmental lands and buffer areas in Stage 2 are proposed to remain in private ownership. This would not be acceptable to the City. For the Northgate lands, none of the environmental lands or buffer areas are included as part of the application except for the hedgerow in the southeast corner and a portion of the buffer area on the east side. Staff do not support the intent to retain the environmental lands and buffer areas in private ownership, nor do staff support the exclusion of the environmental lands and buffer areas from the application. All of the contiguous lands owned by the owner should be included in the application so that proper dedications consistent with the City's policies can take place.	The owner intends to maintain the environmental lands in private ownership and establish a reserve fund as necessary to preserve and/or enhance the natural features over the long term and to minimize public access to ensure the protection of these features.			
36.	Matters related to Species at Risk will need to be addressed to the satisfaction of the Province.	Species At Risk has been addressed by NRSI to the satisfaction of MECP.	Mitigation measures to be secured through conditions of draft plan approval that are to be consistently applied to all lands within the District as well as the City's implementation of upgrades to Conservation Drive and Beaver Creek Road.		
37.	As per the direction provided by the North Waterloo Scoped Subwatershed Study (NWSSS) and the Environmental Impact Study (EIS), a condition of approval will require the distribution of an environmental stewardship brochure. The City has a universal one available entitled "Naturally Your Waterloo". Experience has shown that requiring builders/developers to purchase and distribute paper copies of the brochure to new homeowners is challenging because of the time span over which the development occurs. Given this, opportunities to distribute digital copies of the brochure should be explored by staff and the applicants.	Agreed	Preparation, approval and distribution of the brochure to be included as a condition of approval.		
38.	The EIS recognizes that the timing of construction activities must have regard for the breeding bird season. As a condition of approval, all land clearing, earthen works, servicing works, infrastructure work and tree removal between April 1 and September	The EIS recommends a timing window of May 1 to July 31 based on the landscaped	The timing of construction activities to be dealt with as a condition of draft plan approval.		

No	City Comments	Applicants Comments	Action Required	Agree Yes	Agree No
	10 will be prohibited unless a nesting survey is undertaken that demonstrates the activities will not have the potential to disturb or destroy migratory birds or their active nests.	plantings that are to be removed around the Kartway buildings.			
39.	Section 3.3 of the EIS notes that Beaver Creek was observed to have high slopes with significant erosion and failing banks near the southeast edge of the Northgate lands. While it is stated that the stormwater management strategy has been designed to not impact the erosion sensitive banks of Beaver Creek, restorative creek works should be considered.	Restoration of the noted areas of the creek will be included in the Rehabilitation and Naturalization Plan.	Preparation, approval and implementation of the Rehabilitation and Naturalization Plan, required as a condition of draft plan approval.		
40.	For the Erbsville Kartway lands, Table 4 of the EIS refers to the thicket of European Buckthorn that is partially on the site but does not speak to the Phragmites at the southern property boundary that is described in Section 6.4. Table 4 also identifies the need to clean-up refuse material. For the Northgate lands, Table 4 identifies the need for a Phragmites Management Plan and the clean-up of refuse material. A comprehensive Invasive Species Control Plan and the clean-up of refuse material will be required as conditions of approval.	Acknowledged	Preparation, approval and implementation of an Invasive Species Control Plan to be required as a condition of draft plan approval. Clean up/removal of refuse to be included as a condition of draft plan approval.		
41.	For the Erbsville Kartway lands, Table 4 of the EIS describes the existing steel drainage pipe directing flow from a portion of the race track into the creek and notes that drainage will be rectified as development proceeds. The location of the existing pipe should be shown on the Existing Conditions Plan (EC1.1) of the Functional Servicing Report. The need to rectify this disturbance and its impacts will be required as a condition of approval.	Noted	The updated FSR to show the location of the pipe on EC1.1 Removal of pipe and restoration of disturbance to be included as a condition of draft plan approval.		
42.	Section 3.9 of the EIS states that the "detailed bat habitat assessment completed by NRSI in 2014 did not identify any habitat features or structures suitable for bat use". However, under Section 5.6.1, it is noted that "during field surveys, bats were observed exiting one of the Erbsville Kartway buildings". Clarification is required.	At the time of the bat habitat survey (2014), no trees were observed with suitable bat roosting characteristics, and the buildings were thought to not provide suitable habitat. Later in the field work program (2015), bats were observed exiting one of the buildings on the Erbsville Kartway property. Bat usage of the building can change over time, as can species status, monitoring techniques and approaches to mitigation.	NRSI to update the bat habitat assessment prior to the demolition of the building and this requirement can be included as a condition of draft plan approval.		

No	City Comments	Applicants Comments	Action Required	Agree Yes	Agree No
43.	Section 4.2 of the EIS notes that the wetlands are supported through a combination of groundwater discharge and surface water runoff as well as direct rainfall. It is also noted that groundwater inputs into Laurel Creek and Beaver Creek are occasional and minor, with groundwater not representing a significant portion of flow volumes. Based on this, it is unclear why increasing infiltration will benefit the wetlands and watercourses, as suggested by the EIS. Further explanation is required. In addition, please confirm that there are no risks associated with increasing infiltration to the extent proposed through the catchment-specific water balance changes outlined under Section 5.0 of the EIS (e.g. changes to wetland character, creek erosion, groundwater mounding, etc.).	The approach is to achieve infiltration across the landscape. Infiltration targets have been established in the Subwatershed Study and will be implemented.	MTE to update modelling as part of the comprehensive stormwater management being proposed. Draft plan conditions to ensure approval of the stormwater strategy prior to the registration of the subdivision.		
44.	As noted under Section 4.9 of the EIS, the NWSSS set out that "final setback (and buffer management recommendations) will be determined via site-specific EIS work, with further consideration of the following: • Species composition and diversity • Species sensitivity and requirements • Habitat sensitivity, including dependence on surface or groundwater inputs • Feature form and function • Enhancement opportunities (e.g. corridor widening)" Despite this direction, the EIS does not appear to give consideration to potential impacts on species composition and diversity and species sensitivity and requirements as part of its impact analysis and buffer recommendations. This information is required to further assess the adequacy of the proposed buffers.	Additional text regarding buffers has been prepared and will be included in an updated EIS. In summary, the recommended buffers of the NWSSS have been applied and adhered to, and are considered sufficient to protect the natural features on the property, when implemented in combination with a suite of mitigation measures.	NRSI to update text of EIS as part of formal resubmission. The limits of the natural heritage features have been resurveyed and agreed to by the Region of Waterloo, City of Waterloo and GRCA. The Draft Plan has been revised to reflect the updated limits and recommended buffers. Zoning to ensure recommended buffers are appropriately recognized. Draft Plan conditions to ensure implementation of naturalization measures within the recommended buffers.		
45.	Sections 5.3.2 and 5.4.2 of the EIS describe proposed encroachment into buffers. For clarity, areas of proposed encroachment should be included on a figure in the EIS.	Acknowledged	The vast majority of lots and blocks proposed for development are located outside of recommended buffers. The EIS will be revised to identify the minor grading that is proposed within the outer edge of proposed buffers. The minor grading that is proposed is required for trail construction. There is a minor reduction in the width of the buffer to the southeast of Blocks 12 and		

No	City Comments	Applicants Comments	Action Required	Agree	
				Yes	No
			13/Stage 4 (Northgate). The EIS will assess the size of the buffer and provide appropriate justification for this minor reduction.		
46.	In Section 5.4.2 of the EIS, under "Changes to Water Balance", Map 2 (the Draft Plan of Subdivision) is referred to for showing the location of stormwater management facility 5915. That facility does not appear on Map 2. Also, facility 5915 is mislabeled on Figure 5.5 of the Preliminary Stormwater Management Report. It is labelled 5917 instead of 5915.	Acknowledged.	NRSI and MTE to clarify report figures to reflect the current draft plan.		
47.	Under Section 5.6.1 of the EIS, the requirements to address the Endangered Species Act as it relates to the Barn Swallow nesting confirmed on the Erbsville Kartway lands are outlined. If nesting is confirmed closer to the date of building demolition and replacement habitat needs to be provided, preliminary thought should be given to where the replacement habitat structure(s) would be placed.	A suitable replacement habitat structure can be installed within the 30m buffer of the wetland in the southwest corner of the Erbsville Kartway property.	The location will be identified in the updated EIS. The Rehabilitation and Naturalization Plan to be approved as a condition of draft plan approval.		
48.	Section 5.7 of the EIS speaks to an oil-grit separator prior to SWMF 3915 to provide an enhanced level of quality control. Requirements for regular inspections and maintenance should be included in the Subdivision Agreement.	Acknowledged	Requirement for inspection and maintenance of the OGS to be included as a condition of draft plan approval and incorporated as a requirement in the City of Waterloo Subdivision Agreement.		
49.	Section 5.9 of the EIS speaks to indirect impacts to wildlife as the result of the stormwater management ponds. While permanent turtle barrier fencing is proposed, the inclusion of timing windows for maintenance should also be considered as part of the Subdivision Agreement.	A suitable timing window to avoid impacts to turtles during SWM pond maintenance includes the period from May 1 to August 31. It is preferable to avoid pond maintenance during this time, but if activities are required within this window, a wildlife salvage should be carried out prior to activities.	Requirement for timing windows to be included as a condition of draft plan approval and incorporated as a requirement in the City of Waterloo Subdivision Agreement		
50.	Section 5.10 of the EIS speaks to permanent fencing being installed at the development-natural area interface to prevent uncontrolled access and encroachment. Consistent with this, and with the NWSSS, City-standard black vinyl chain link fencing needs to be installed.	The details of the fencing are part of a Comprehensive Mitigation Plan for Blanding's turtle which has been approved by MECP. The fencing may be City-standard or higher. Specific wildlife fencing may be used in certain areas to prevent turtles or other	Implementation of required fencing including the approval of fencing details to be included as a condition of draft plan approval		

No	City Comments	Applicants Comments	Action Required	Agree	
				Yes	No
		wildlife from accessing infrastructure such as SWM ponds and roads.			
51.	Section 5.10 of the EIS speaks to the trail system being located within the outer 5 metres of the buffers for both wetlands and woodlands. However, the only maps showing the trail network are the Active Transportation figures in Appendix B of the Planning Justification Report and the Neighbourhood Design Summary, and they are conceptual. A plan showing trail locations, including the creek crossing, should be provided and details on the creek crossing need to be addressed in the EIS. Also, the EIS states that the details of the trail system will be determined at the Site Plan stage. As stated in the NWSSS, trails in buffers are subject to a site-specific EIS that "demonstrates need and justification in consideration of the following evaluation criteria/guidelines: • Public trails and associated grading may be suitable within portions of buffers, in consideration of broader trail link objectives and the following natural heritage considerations…: existing and potential tree root growth and potential impacts; steep slopes and erosion potential; potential interception of groundwater movement to dependent natural areas; and sensitivity and significance of adjacent vegetation communities and wildlife habitat." While some discussion is provided under Section 5.0, the EIS does not appear to undertake a full evaluation related to trails. Given that not all blocks will be subject to Site Plan and that the blocks will develop at different times, the details of the trail system should be confirmed through the design of the subdivision and fully evaluated in the EIS.	Trail locations to be consistent with the District Plan and shown on the Active Transportation Master Plan (ATMP).	An Active Transportation Plan will be prepared and the EIS updated to evaluate the trail locations including the creek crossing Discussion with City staff is required regarding the DC eligibility of trails, including the creek crossing, as well as consideration of trails as parkland dedication.		
52.	A Rehabilitation and Naturalization Plan will be required at the time of detailed design. With specific reference to the buffer areas, Section 6.1 of the EIS states that "planting of the buffer with trees and shrubs is recommended in a few key locations". As the majority of the buffer areas are disturbed or currently tilled, all of these areas will require some level of planting or seeding. This is consistent with the buffer management recommendations of the NWSSS related to native species plantings and habitat creation. Also, the areas of soil erosion adjacent to Beaver Creek are noted as some of the key locations, but the area of erosion on the south side of the central wetland/woodland complex, which was identified in the 2016 Pre-development Biological Monitoring Report, is not.	Acknowledged	Preparation, approval and implementation of a Rehabilitation and Naturalization Plan to be included as a condition of draft plan approval.		
53.	Section 6.2 of the EIS refers to the off-site knick-point as an opportunity for restoration to improve channel connectivity. While the EIS states that it is on GRCA	Acknowledged	NRSI to clarify the EIS to reflect City ownership.		

No	City Comments	Applicants Comments	Action Required	Agree	
				Yes	No
	lands, it is actually City owned land. City staff are aware of the knick-point and will consider it in future capital project planning.				
54.	Section 6.4 of the EIS discusses the node of Phragmites at the southern property boundary that separates the Kartway and the Northgate properties and extends off site. It is noted that it will be a challenge to control unless a coordinated effort among landowners is initiated. There are two adjacent properties – one is City-owned and the other is privately owned. City staff are willing to discuss potential collective control measures.	Noted	MHBC/NSRI to initiate discussions with City staff to discuss the potential to coordinate control measures.		
55.	Section 7.0 of the EIS discusses the monitoring program. It acknowledges that Terms of Reference for the during and post-construction stages will be prepared and submitted for agency review at the time of transition to those stages but also identifies areas of future scoping. Staff are not in a position to commit to the scope of the future monitoring program at this time. The details of each stage will be determined at the transition point and will be informed by the results of the monitoring work that will have been undertaken up until that point. This comment also applies to Section 6.0 of the Preliminary Stormwater Management Report, which also discusses the monitoring program. Further, while the 2018 Pre-development Biological Monitoring Report was submitted earlier this year, recent Groundwater and Surface Water Monitoring Reports are still outstanding. These reports should be submitted together and as soon as possible following the end of the monitoring year.	Noted	NRSI to continue with pre-development biological monitoring and reporting. Preparation, approval and implementation of During and Post Construction Monitoring to be included as a condition of draft plan approval.		
56.	A peer review is currently being undertaken on the EIS. Following completion of the peer review, the City reserves the right to submit additional comment.	Request has been submitted to receive the Peer Review comments as soon as possible so that they can be considered with other City comments as part of a formal resubmission	City to provide Peer Review comments ASAP.		
57.	The Preliminary Stormwater Management Report notes that lot-level infiltration galleries are proposed for a number of the multi-residential blocks. Requirements for regular inspections and maintenance should be included in the Subdivision and/or Site Plan Agreement.	Noted	Requirement for the developer to design, implement and inspect lot-level infiltration galleries to be included as a condition of draft plan approval. Ongoing maintenance of lot-level infiltration facilities to be the owners responsibility and included as a requirement of the City's Subdivision Agreement. Blocks subject to Site Plan Approval will address the requirements through the Site Plan Approval process with		

No	City Comments	Applicants Comments	Action Required	Agree Yes	Agree No
			ongoing maintenance to be required as a condition within the Site Plan Agreement. This could be dealt with as a condition of draft plan approval.		
58.	Trail connections throughout the consolidated development shall provide convenient transportation routes to enable residents to walk and cycle, reducing automobile dependency.	Noted			
59.	Trails, bikeways and sidewalks are critical to encourage more walking and cycling, and reduce car use to connect residents in the Northgate and Kartway subdivisions to the following amenities: a. Proposed school north of Conservation Drive; b. Creekside Church on the north side of Conservation Drive; c. Trails within Laurel Creek Conservation Area; d. Future trails connecting the Kartway lands to existing bike lanes and a proposed multi-use trail on Erbsville Road; e. Other homes in the neighbourhood; f. Mixed-Use Node at the intersection at Beaver Creek Road and Conservation Drive; g. Multi-use trails and sidewalks on Conservation Drive and Beaver Creek Road; and h. Future transit stops on Conservation Drive, Beaver Creek Road, and Erbsville Road.	Further clarification is required with respect to (e)	Sidewalks will be required on both sides of all streets within the plan of subdivision. A sidewalk will be installed on the subdivision side of Beaver Creek Road and a multi-use trail will be required along the west side of Conservation Drive. Draft Plan conditions to specify the requirement to address further pedestrian connections through the Site Plan Approval process associated with multiple and mixed use blocks.		
60.	The District Plan identifies Conservation Drive as a Major Collector Road and Beaver Creek as a Minor Collector Road. The City will finalize the detailed design of Beaver Creek Road and Conservation Drive in accordance with recommendations of the Municipal Class Environmental Assessment. The developer shall consult with the City to ensure intersections, and trail connections and crossings are aligned with the final design. a. The final design for re-constructing Conservation Drive will include a single travel lane in each direction, raised bike lanes on both sides of the road, a multi-use trail on the south side and a sidewalk on the north side; b. The final design for re-constructing Beaver Creek Road will include a single travel lane in each direction, buffered bike lanes on both sides of the road, a multi-use trail on the east side and a sidewalk on the west side;	Noted Clarification is required regarding City/subdivider responsibility.	Further discussion is required with City staff and once responsibilities are clarified, an appropriate draft plan condition can be prepared.		

No	City Comments	Applicants Comments	Action Required	Agree Yes	Agree No
61.	The developer will be required to coordinate boulevard features on the south side of Conservation Drive and the west side of Beaver Creek Road to facilitate pedestrian/cyclist crossings at all intersections and trail crossings with the City designs for the respective collector roads.	Acknowledged	To be addressed as a condition of draft plan approval and resolved through the final engineering design associated with the affected streets within the subdivision.		
62.	The developer shall construct a 3.0 metre walkway to connect the Multiple Residential Block 16 to the proposed Multi-Use Trail on Conservation Drive.	Can be considered as part of the required Site Plan process for Block 21/Stage 4 (formerly Block 16). Alternatively, a connection can be established through the proposed park and pumping station.	Further discussion with City staff is required.		
63.	Transit-oriented development guidelines recommend a transit stop within 400 metres of every home and trip destination. To achieve this goal, the District Plan designates Streets Three, a portion of Street Four and Street Seven as a potential transit route to serve residents in the proposed Condominium developments. The developer shall design these roadways with geometry and pavement structure to accommodate GRT buses.	GRT has indicated that future routing in this area would be along Conservation Drive. GRT requires funding (as a condition of approval) for three (3) concrete landing pads for the 3 transit stops along Conservation Drive GRT may require easements for the transit pads and may also require shelters at the transit stops. City routing is not consistent with GRT comments	To be addressed as a Regional condition of draft plan approval		
64.	Residents on Street One and Street Two would be within 400 metres of transit stops on Beaver Creek Road and Conservation Drive.	Noted	No further action required		
65.	The developer shall consult with GRT to identify the locations of existing and proposed transit stops on the adjacent collector roads that will inform the design and construction of the transportation infrastructure.	Noted	To the extent that transit stops are known at the time, they will be shown on final plans. This can be addressed as a condition of draft plan approval.		
66.	In accordance with the District Plan, Street One, Street Two, Street Three and Street Seven are considered to be minor collector roads. A transportation study is required that includes the data and analysis to support all traffic calming features, and road crossing locations. Please provide supporting information, justification and/or rationale for the chosen, proposed traffic calming features.	A Traffic Calming Plan was submitted as part of the informal resubmission.	City response to preliminary Traffic Calming Plan to be provided. Preparation, approval and implementation of a Traffic Calming Plan to be a condition of draft plan approval		
67.	Whereas wide pavements encourage higher vehicle speeds, parked cars, painted buffers, street trees and boulevard features all have the effect of making the road feel		City response to preliminary Traffic Calming Plan to be provided.		

No	City Comments	Applicants Comments	Action Required	Agree Yes	Agree No
	narrower and encourage slower speeds. Such treatments are to be considered in developing the recommendations for the transportation study; the developer shall implement these recommendations in the construction of the public streets.		Preparation, approval and implementation of a Traffic Calming Plan to be a condition of draft plan approval		
68.	The preferred width of a pedestrian island is 3.0 metres to accommodate a bike and trailer combination. The minimum pavement width from the curb to the island is 4.2 metres. A widened road allowance at specific locations may be necessary to accommodate the island and crossing.	The pedestrian crossings of Conservation Drive and Beaver Creek Road should form part of that capital project and the related detailed designs of each street.	City to provide a design detail. Further discussion is required.		
69.	The developer shall prepare an Active Transportation Master Plan (ATMP) in compliance with Map 5 of the District Plan. The ATMP shall include all trails, sidewalks, bikeways, walkways, creek crossings, collector road crossings and related facilities within the proposed development. The ATMP will assist City Staff to coordinate trails, sidewalks and bikeways connectivity to adjacent developments, and collector road crossings beyond the limits of the development.	The conceptual Active Transportation Master Plan (ATMP) will show the locations of trails, multi-use trails and sidewalks consistent with City comments and the District Plan. Collector Road crossings (Beaver Creek Road and Conservation Drive) should form part of that capital project and should be included within the related detailed design.	MHBC to coordinate the preparation of a conceptual Active Transportation Master Plan		
70.	The ATMP shall include the proposed staging of construction, and indicate any easements over private roads in the proposed condominium developments for sidewalks, and/or multi-use trails, crossings and connections to the trails in buffers. Such easements shall be conveyed to the City through the subdivision approvals process.	Staging of registration is as shown on the draft plan. The components of the ATMP that are the subdividers responsibility are to be coordinated with subdivision staging. The ATMP Plan will show the proposed staging of active transportation infrastructure.	Discussions are required with the City of Waterloo to clarify the obligations of the City and the obligations of the subdivider. Implementation of the ATMP relating to those blocks that are subject to Site Plan Approval to be addressed through the Site Plan Approval process. This requirement is to be specified as a condition of draft plan approval.		
71.	The longitudinal grades on all trails and walkways shall not exceed 5%, except where cut and fill is constrained adjacent to the environmentally-sensitive lands.	There may be the need to identify primary and secondary trails in areas of steep slopes with sidewalks supplementing the trail system as necessary	MTE to review proposed trail locations and advise if any do not meet City standard		
72.	On-road and off-road multi-use trails will be 3.0 metres wide and paved to City standards.		City to review the proposed on-road cross section and confirm acceptability.		
73.	The developer shall construct paved 3.0 metre wide Multi-Use Trails on the following streets: a. On the west and south sides of Street One;	The desire for multi-use trails should be balanced with need and the overall aesthetics of the community.	City to review the proposed on-road cross section and confirm acceptability.		

No	City Comments	Applicants Comments	Action Required	Agree Yes	Agree No
	b. On the west and south sides of Street Two from Block 7 to Beaver Creek Road; c. On the outside of the crescent on Street Three from Conservation Drive to Street Six; and d. On the outside of the crescent on Street Six from Street Three to Park Block 5.	Streets One, Two and Three have a 20 metre road allowance and can accommodate a 3.0 m multi-use trail on the south side (or "outside"). Hydro infrastructure would need to be located on the north side of the street. Street Six has an 18 m road allowance and can accommodate the 3.0 multi-use trail with a revised cross-section. Similar to Street One, hydro infrastructure would need to be located on the north/east side of the Street. Traffic calming measures can be used to reduce the width of the travelled portion of the road and increase the boulevard area for additional landscaping. Although the ATMP will show the 3.0 metre multi-use trails in the City's desired locations, for the multi-use trail on Streets One and Two, the City will need to understand there will be multiple driveways (for example, the street fronting towns in Block 1/Stage 3 and Block 2/Stage 1) that will cross the proposed multi-use trail.			
74.	The developer shall construct sidewalks in accordance with the City's Sidewalk Policy and as follows: a. On one side of Street One (on side opposite to multi-use trail); b. On both sides of Street Two, except where the multi-use trail is constructed; c. On one side of Street Three (on side opposite to multi-use trail); d. On both sides of Streets Four, Five and Seven; and e. On both sides of Street Six, except where the multi-use trail is constructed.	Noted	To be included as a condition of draft plan approval.		

No	City Comments	Applicants Comments	Action Required	Agree Yes	Agree No
75.	The multi-use trail crossing of Street Three should be re-located to the island adjacent to Park Block 6, as opposed to the skewed crossing shown outside the island and too close to the intersection.	The multi-use trail is located on the south side of Street Three – a crossing is not proposed or required. This comment requires clarification.	City staff to clarify the intent of the comment.		
76.	The ATMP shall include, subject to Comment 52 being addressed, the following Off-road Multi-Use Trails: i. Within all buffer areas, as per Map 5 of the District Plan, to the limits of the Northgate Lands and Kartway Lands to connect to the sidewalks, trails and bike lanes on Beaver Creek Road and Conservation Drive; j. Across Block 3, Stage 1 (Park) of the Kartway Lands and Block 21, Stage 3 (Park) of the Northgate Lands, from Street Three to the trail in the buffer; k. Across Block 5, Stage 4 (Park) from Street Six to the trail in the buffer; l. On Block 6, Stage 4 (Walkway) from Street Six to the trail in the buffer and SWM; m. Across Block 6, Stage 1 (Park) from Street One to the trail in the buffer; n. On Block 7, Stage 1 (Walkway) from Street Two to the trail in the buffer; o. On Block 9, Stage 1 (Open Space) to connect the trail in the buffer to Beaver Creek Road; p. Along Northgate condominium units 14 and 15, Plan 30CDM-17410 to connect the trail in the buffer to the south property boundary; q. On the walkway block between Kartway condominium units 11 and 12, from the trail in the buffer to the on-street trail; and r. Extend the trail in the buffer at the south west corner of the Kartway condominium plan to the creek crossing.	The conceptual Active Transportation Master Plan will identify the trail locations and connections.	MHBC to prepare Active Transportation Master Plan to address staff comments. Further discussion is required with City staff regarding the inclusion of trails as part of parkland dedication.		
77.	The ATMP shall include, subject to Comment 52 being addressed, the following creek crossings (pedestrian and cyclist bridges): a. Crossing Beaver Creek as per Map 5 in the District Plan, from the trail in the buffer adjacent to Block 5, Stage 4 (Park) to the trail in the buffer in Block 5, Stage 2 (Open Space). b. Crossing Laurel Creek as per Map 5 of the District Plan, from the trail in the buffer at the rear of Kartway condominium unit 14 to the opposite side of the creek. c. The bridges shall be designed with a full clear width of 3.0 metres, and with a live load capacity of 10 tonnes to accommodate large city maintenance vehicles.	The crossing of Beaver Creek from Block 4/Stage 3 to Block 23/Stage 4 is conceptually shown on the Active Transportation Master Plan. Although the District Plan shows crossing of Laurel Creek in southwest portion of Kartway lands, the appropriateness of constructing this crossing requires further evaluation, with regard to the sensitive natural features in the area.	The design of the trail/pedestrian bridges can be included as a condition of approval. The EIS will evaluate the proposed (in the District Plan) crossing of Laurel Creek to the southwest of the Kartway lands. The bridge crossings should be considered a DC expense or alternatively, part of the required parkland dedication.		

No	City Comments	Applicants Comments	Action Required	Agree	
				Yes	No
78.	Prior to Draft Approval, the developer shall prepare preliminary grading plans to sufficient detail to demonstrate constructability of the trails and bridges within the ATMP.	There may be a need to distinguish primary and secondary trails and utilize the sidewalk to supplement the trail network where necessary.	MTE to update the preliminary Grading Plan as part of the revised FSR.		
79.	Prior to any site grading, preliminary area grading plans (including limits of grading within the buffers to accommodate the trails) shall be submitted to the City Engineer to support a Site Alteration Permit application.	A Site Alteration Permit should not be required if grading is proceeding in accordance with an approved Grading Plan.	Approval of an Area Grading Plan to be required as a condition of draft plan approval.		
80.	Prior to construction of the ATMP infrastructure, the developer shall be responsible for the preparation of detailed engineering drawings, and obtaining all approvals and permits.	Engineering Plans will be submitted for approval prior to commencement of any ATMP related works.	City and GRCA approval of Engineering Plans to be required as condition of draft plan approval.		
81.	The required 5% parkland is to be distributed equally and logically throughout the plans.	Parks have been located in accordance with the approved the District Plan.	City staff to confirm the acceptability of the parks as proposed. Further discussion is required with City staff regarding the inclusion of trails as part of parkland dedication		
82.	Park blocks shall be developed at 80% at a 2% grade and the remainder could be up to 6%, must be sized to accommodate both active and passive facilities, and in alignment with Official Plan criteria.	The District Plan permits grades up to 5% across the site with landscaped berms permitted up to 20%. Park Block 1/Stage 5 has been relocated to an area where grading is more gradual. Conceptual Park Plans were included with the informal resubmission.	Conceptual park grades to be shown in the preliminary Grading Plan to be prepared by MTE.		
83.	Park frontage must meet the intent of the Park Frontage Policy.	Parks have been designed with minimum 40 metre frontage in accordance with the Official Plan.	No further action required.		
84.	Parkland programming to include both active (play equipment, soccer and baseball, basketball courts, winter ice rinks, etc.) and passive. Passive components are covered more generally in the Landscape Design Manual but would include benches, appropriate landscaping, etc.	Parkland programming to be determined by the City of Waterloo. Conceptual park plans were prepared as part of the informal resubmission	City to review the preliminary park plans that were prepared and provide their comments. Park improvements that may be required of the developer should be as considered as DC eligible infrastructure or as part of the parkland dedication requirement.		

No	City Comments	Applicants Comments	Action Required	Agree Yes	Agree No
85.	AODA compliance is mandatory for all equipment and trail situations.	Noted There may be a need to distinguish primary and secondary trails and utilize the sidewalk to supplement the trail network where necessary			
86.	Dog waste units to be provided to divert from the Molok system. Details can be provided at detail design stage.	Responsibility for implementation subject to discussion, particularly if dog waste is a source of revenue for the City.	Further discussion with City staff required.		
87.	Infiltration galleries should not be located within any Park Blocks. It encumbers the parkland and reduces the developable area. If it must be located within park blocks then the area should not be calculated as parkland dedication and the park should be enlarged accordingly.	It should first be determined if infiltration galleries will reduce the developable area of parks.	MTE to confirm the extent of any infiltration galleries within park blocks.		
88.	Further information is required on the Butternut status.	A genetic test was completed in 2017 by the Ontario Forest Research Institute (OFRI) to determine if the individual was a pure Butternut species. The results showed that the tree was a hybrid and therefore not protected under the ESA. Due to the confirmed hybridity of the Butternut, this individual is not considered significant.	NRSI to update the text of the EIS to confirm the hybridity of the tree of concern.		
89.	Will barn swallow relocation enclosures be built ahead of any work on site?	As per the Ontario Endangered Species Act, a replacement nest structure must be provided before the active season (generally May-August) in the year that the existing nest structure is removed.	Implementation of any replacement barn swallow structure to be included as a condition of draft plan approval		
90.	Invasive species control plans are required.	Noted	To be included as a condition of draft plan approval.		
91.	Naturalization of buffer plans including trail locations, are required.	Previously noted	To be included as a condition of draft plan approval.		
92.	Black vinyl chain-link for permanent fencing is the city standard as opposed to galvanized fencing. All public/private interfaces should be fenced to prevent encroachments. If trails are installed within the buffer then consideration will be given to not fence these locations.	Previously noted	To be included as a condition of draft plan approval.		
93.	Subject to Comment 52 being addressed, it is strongly recommended that trails are established in all buffers and that all buffers be within City ownership. A community trail system will connect the consolidated development both internally and to the	The ATMP will identify all proposed Trail connections.	Discussion with City staff is required regarding the DC eligibility of trails, including the creek crossing, as well as consideration of trails as parkland dedication.		

No	City Comments	Applicants Comments	Action Required	Agree Yes	Agree No
	larger community, and will provide defined routes of travel near environmentally sensitive lands.				
94.	If Entrance Features are proposed on public lands, the Entrance Feature Policy comes into effect.	Noted			
95.	The proposed watercourse crossing should be designed to accommodate large city vehicles and have a minimum full clearance of 3 metres wide or larger. This must be shown on future submissions.	Noted	Further discussion with City staff is required regarding DC eligibility and/or parkland dedication.		
96.	All trails shall be 3 metre wide asphalt, not stone dust, as per City standard. All trails indicated on the Active Transportation Master Plan are to be built by, and at the cost of, the Developer.	Noted	Further discussion with City staff is required regarding DC eligibility and/or parkland dedication. City to provide detail of 3 metre asphalt trail.		
97.	A full Vegetation Management Plan is required at first Engineering submission and prior to grading acceptance.	Noted	To be included as a condition of draft plan approval.		
Engineering – Roadworks and Lot Grading					
98.	Section 4.2 and Table 4.2.1 (FSR, page 8) provides a summary of the proposed roadways servicing the subdivisions. The City completed a Turn Lane Analysis (TLA) memo: *Update to Transportation Forecast and Left Turn Lane Requirements* (Stantec, July 7, 2017) to assess the proposed entrances onto Beaver Creek Road and Conservation Drive from all the active development lands (i.e. Northgate, Cook-Mattamy and Activa). The March 2019 Draft Plan resubmission has shifted two of the proposed intersections on Conservation Drive further west, in particular Street One and Street Seven (formerly Street Three). The modification to these intersections do not appear to be in-line with the comments and recommendations provided in the 2017 TLA memo, nor Map 2 of the District Plan. It is noted that that as part of the March 2019 "Informal Resubmission" package, a brief turn lane analysis memo was provided for the proposed intersections onto Conservation Drive: "*Northgate Development Conservation Drive Intersection Locations*" (Paradigm, March 25, 2019). The 2032 traffic forecast provided in the March 2019 analysis appears to be greater than the City's 2035 forecasts in the 2017 TLA memo and the memo does not provide any background on the source and assumptions made for the traffic forecasts. Further justification as to why shifting these streets is a better option is required, including assurance that access to future development of other lands within the Beaver Creek District Plan are not being hindered.	Intersections have been located in accordance with recommendations from Paradigm. The intent is to accommodate all-turning movements at the Street One/Conservation Drive intersection. The Street Seven intersection has been shifted to align with the access to Creekside Church property and to avoid conflicts with a future access contemplated for the Brohman lands on the north side of Conservation Drive.	The access locations will be supported by an updated TIS to be provided as part of the formal resubmission		

No	City Comments	Applicants Comments	Action Required	Agree Yes	Agree No
99.	Street Three in the Draft Plan Consolidation appears to be mislabeled Street Two in the Finished Grade Contour Plan (MTE Drawing 39502-104 AG1.1). Ensure all Streets are consistent with the Draft Plan of Subdivision and labeled accordingly.	Street names have been revised.	MTE to update the street labels on the Finished Grade Contour Plan.		
100	MTE Drawing 39502-104 QU6.1 (Preliminary Groundwater Separation Plan): a. The majority of the groundwater contours on the west side of Beaver Creek appear to be missing elevation labels, please ensure all contours are labeled. b. The Street numbering is not consistent with the Draft Plan Consolidation (July 4, 2017). Please ensure all Streets are consistent with the Draft Plans of Subdivision and labeled accordingly.	a. Agree: All plans to be revised such that all contours are labelled. b. Agree: All plans to be revised such that street numbering is consistent with the revised Draft Plans	MTE to update the plans.		
101	In Section 4.2 (page 8) of the FSR and MTE Drawing 39502-104 QU6.1, the minimum vertical separation from the underside of footing elevations above the composite high groundwater elevations is discussed. a. As various SWM infiltration features are proposed throughout the Northgate/Kartway Lands, confirmation must be provided that groundwater mounding has been considered in the vertical separation analysis. b. Additional grading details for the following areas is required to ensure minimum 0.6 metre separation is provided: i. Lots bordering Street Three in the following locations: • North limits of Street Three at the west intersection with Conservation Drive. • Blocks west of Street Three • Blocks on the south side of Street Three. ii. Block 2, Stage 2 (Multiple Residential) iii. Blocks 4 and 5, Stage 1 (Multiple Residential) appears to have potential groundwater separation issues within the central portion of the Block. It is not clear how homes will be situated within Blocks 4 and 5, Stage 1 and therefore additional detail is required to ensure adequate groundwater separation is maintained in this area.	a. Infiltration will be achieved through amended top soil and a distributed approach to infiltration (lot level infiltration). End-of-pipe infiltration facilities are not proposed and as a result ground water mounding is not anticipated and further analysis should not be required. b. MTE have confirmed that the minimum 0.6m separation is provided and that the calculations have considered ground water monitoring.	Discussion with staff is required to confirm they share MTE's opinion. MTE to include their opinion in the updated FSR. MTE to include a figure in their updated FSR which will confirm the minimum separation will be achieved.		
102	Section 4.3 (page 9) of the FSR discusses how the wetland and vegetation buffers were taken into consideration during the subdivision grading. Please delineate the wetland and vegetation buffers and corresponding setbacks on the AG1.1 (Finished Grade Contour Plan) Drawing.	Request acknowledged.	MTE to delineate the buffers on an updated Finished Grade Contour Plan		

No	City Comments	Applicants Comments	Action Required	Agree Yes	Agree No
Sanitary Servicing					
103	Section 5.1 of the FSR (MTE, July 2017), discusses the requirement for dual sewers. Please illustrate the extents of the proposed dual sewers on Figure 4.0 in the FSR.	Acknowledged.	The extent of the dual sewers will be shown as part of the formal resubmission in the FSR.		
104	Please provide additional details on how inflow and exfiltration will be mitigated where the sanitary sewers are located within the groundwater. This information can be provided at the detailed design stage.	Acknowledged.	Typically, concrete cut-off collars are used in the areas of the high ground water. Design details will be shown on Plans to be submitted at the detailed design stage. This is to be included as a condition of draft plan approval.		
105	The block sizes for the two proposed pumping station sites (Block 12, Stage 1 and Block 24, Stage 3) have been reviewed by the City and are deemed adequate for future operations and maintenance activities. However, additional area will be required to facilitate staging and stockpiling operations for the construction of these stations. Coordination of the construction of these stations as it relates to the proposed phasing of the development will be required.	Acknowledged.	Preliminary site plans for the two pumping stations have been prepared and will be included in the FSR. Further discussion with City Staff is required regarding the staging, construction of the pumping stations and any temporary construction easements that may be required. Temporary easement can be imposed as a condition of draft plan approval.		
106	With regards to the proposed sanitary pumping station blocks, a minimum setback requirement for sensitive land uses is necessary to ensure odour and noise from the station can be adequately mitigated. In lieu of the Ministry of the Environment not having any specific setback requirements related to noise and odour setbacks for municipal sanitary pumping stations, the City will refer to MOE Guideline D-6 (*Compatibility Between Industrial Facilities and Sensitive Land Uses*, July 1995). Per Section 4.3 in Guideline D-6, the City requires a 20 metre minimum separation distance as identified for a Class 1 Industrial Facility to a sensitive use.	Preliminary site plans have been prepared for the two pumping stations. The Site plans confirm that the buffer for pumping station one can be coordinated within the pumping station block. With respect to pumping station two, the zoning for Block 24/Stage 4 will clarify that residential units will not be located within the required buffer.	The proposed zoning by-law to incorporate a special setback for the block associated with pumping station one. The zoning for Block 24/Stage 4 to restrict the uses within the buffer to parking, landscaping and non-residential uses.		
Water Servicing					
107	The City notes that Region of Waterloo Water Services provided comments on the proposed subdivision water servicing in their Post Circulation Comments letter dated November 20, 2017. The City is in agreement with these comments and request that	Acknowledged.	MTE will respond to the Region's comments in the updated FSR to be submitted.		

No	City Comments	Applicants Comments	Action Required	Agree Yes	Agree No
	submissions made in response to these comments be circulated to City Staff as well as Regional Staff.				
Stormwater Management – Comments on Preliminary Stormwater Management Report, MTE Consultants Inc., July 5, 2017					
108	Section 3.2 (page 8) describes the quantity and erosion control criteria and references the two sensitive reaches along Beaver Creek (BC-2 and BC-4) as identified in the NWSSS erosion assessment. Staff question if the reference to BC-2 is correct (should it be BC-3?). Please label the locations of the reaches on Figures 4.1 and 4.2.	Acknowledged.	The revised SWM Report to clarify and correctly label the reaches along Beaver Creek.		
109	Section 4.2 (page 11-12) states, *"Previous studies have demonstrated that amended topsoil can significantly reduce runoff volumes by absorbing, retaining, infiltrating and evapotranspiring a greater amount of precipitation than standard landscaping practices in new developments"*. Please provide reference for these studies.	Acknowledged.	MTE to update the SWM report to include reference to other studies that support amended top soil.		
110	At the bottom of page 12, it states, "*The post-development modeling parameters and impervious calculations have been included in Appendix A*". Appendix A provides details on catchment 3914 only. Please provide a summary table for all catchments detailing the various assumptions and model parameters used for each.	Noted.	The post development modelling parameters for all catchments will be included in the revised PSWMR.		
111	Section 5.5 provides an overview of the proposed water balance for the subject lands. With regards to the surface (runoff) water balance calculations in Appendix D (both western and eastern nodes) please provide the following: a. Clarify that footnote 3 is referencing figures in the NWSSS: "*3. Refer to Figures 6.1 and 6.2*". There are no Figures 6.1 or 6.2 in the Preliminary SWM Report. b. Provide assumptions for the proposed runoff rates used in the water balance calculations. The proposed values identified for the following catchments do not match those in the NWSSS Table 11.5 (p. 242): • 3914 – Proposed (102.0) vs. Table 11.5 (234.5) • 3102 – Proposed (114.0) vs. Table 11.5 (196.3) c. In the calculation table it appears the infiltration rate (706 mm/yr) has been used for the roof areas as opposed to the runoff rate (20.5 mm/yr). Please clarify the assumptions here.	Noted.	The revised PSWMR will include updated water balance calculations.		
112	Section 5.5 outlines various SWM infiltration measures proposed. Please provide a summary table that lists each SWM infiltration measure, the corresponding area, infiltration rate, and resulting infiltration volume. As per the comments contained herein related to Area 5, City staff does not support the development of the access road or agricultural clearing and therefore the SWM strategy for these areas should	MTE have updated the Gawser model and have paid close attention to existing soils characteristics. The updated model confirms the infiltration targets of the Subwatershed study will be achieved through the	MTE's updated stormwater management report will include the updated summary table. The updated Gawser model will also be submitted for review by Staff.		

No	City Comments	Applicants Comments	Action Required	Agree Yes	Agree No
	be updated accordingly. The following provides additional comments on the infiltration measures proposed: a. <u>Amended Topsoil:</u> i. Amended topsoil is proposed in the single detached lots within Area 73914 representing a total area of the roof and yards of 4.506 ha. Please identify the portion of the 4.506 ha that is made up of the grassed/landscaped area and what volume of infiltration this area represents. ii. The report proposes, "*…directing roof downspouts to gently sloping landscaped areas that contain topsoil of sufficient permeability, depth … and quality to infiltrate and evaporate*". Please provide more details on the "*sufficient permeability*" requirement of the amended soil and expand on what is meant by the term "*quality*". iii. As proposed, the amended topsoil would be on private land. The City would therefore have little control over maintaining this infiltration feature. Please provide details/best management practices on how homeowners should maintain this feature. b. <u>Infiltration Facilities Connected to Roof Areas:</u> Figure 5.5 indicates three infiltration facilities proposed within Area 88914 (Catchment 3914 - conveyance gallery within the Park Block) and Area 7914 (Catchment 3914 - likely two commercial subsurface storage systems, within multi-residential blocks) and on in Catchment 3915. i. SWMF 5915 is mislabeled 5917 ii. The City does not support infiltration galleries within parks. iii. Please provide details on the proposed invert and base elevation of the respective infiltration facilities in relation to the composite high groundwater level and groundwater mounding. iv. Please provide details on the lifespan, performance and maintenance requirements for these facilities. Requirements for regular inspections and maintenance should be included within the Subdivision and/or Site Plan Agreements, as may be required. c. <u>End-of-Pipe Controls:</u> A volume reduction pond is proposed for the sub-catchment 3915 with an upstream OGS. Although the OGS will provide pretreatment it will not treat chlorides. City staff have concerns relating to winter maintenance/road salting practices within a condominium area and the infiltration of chlorides to the groundwater.	implementation of the stormwater management infiltration strategy.			

No	City Comments	Applicants Comments	Action Required	Agree	
				Yes	No
113	Table 5.3 provides a comparison of the existing infiltration values, NWSSS infiltration targets, and the proposed infiltration values for each catchment. While proposed conditions are greater than the NWSSS targets, these infiltration targets are being met through various SWM practices that will be challenging for the City to enforce and/or maintain, such as amended topsoil, condominium features and end of pipe controls within condominium areas. Please provide an estimate on the typical life span/performance of the various infiltration features and details on inspection and maintenance recommendations.	Acknowledged.	Draft plan conditions to require that the subdivider will be responsible for the design, implementation, and inspection of lot level facilities. The lot level infiltration facilities associated with the vacant land condominiums, and blocks subject to site plan approval will be maintained by the condominium corporation and/or owner of the blocks. Maintenance obligations can be specified as a condition of condominium/site plan approval and assured through the condominium declaration and/or site plan agreements that may be required. Maintenance of lot level infiltration facilities will be the owner's responsibility. Draft plan conditions will ensure appropriate design, installation and inspection. The City's subdivision agreement can ensure that the lot level infiltration facilities are maintained. The overall infiltration strategy to include contingency and infiltration measures to address any shortcomings associated with ongoing maintenance. Any end-of-pipe infiltration facilities associated with Block 25/Stage 4 will ultimately be a City responsibility following City acceptance of this facility. MTE's updated FSR to confirm life span/performance estimates. The condominium and required reserve fund provide a higher level of assurance regarding long-term maintenance compared to a typical plan of subdivision.		

No	City Comments	Applicants Comments	Action Required	Agree Yes	Agree No
114	Section 5.8 provides a high level overview of the Block level SWM approach that will be developed through a Site Plan Review process. The following provides comments on this section: a. It is stated that *"the subject property contains a number of Blocks that will be developed through a Site Plan Approval process".* Please include a figure that delineates which blocks are proposed to go through Site Plan Review. Further, provide a corresponding table that specifies the specific SWM criteria for quantity, quality and water balance for each block that is subject to Site Plan Review. By identifying specific design criteria for each Block the table provides valuable guidance and will facilitate both the future design and approval process for these blocks. At a minimum, the table shall include the respective area for each block, any relative assumptions (i.e. percent impervious, etc.) and details for the following SWM design criteria: • Water quality control (i.e. *Enhanced*, 80% TSS removal and compliance with the Canadian Environmental Technology Verification (ETV) Program) • Water quantity control for each design storm • Surface water balance • Groundwater balance. b. Conceptual SWM controls were provided for two Block areas, specifically areas 3915 and 3917. As per the comments contained herein related to Area 5, City staff does not support the development of the access road or agricultural clearing and therefore the SWM strategy for that area should be revised accordingly. <u>Water Quality:</u> • SWM 3915 – Proposes a STC6000 to meet 80% TSS removal. The City has concerns that the "City of Toronto" particle size distribution (PSD) used in the PCSWMM model for sizing the unit is not representative of urban runoff. The City would prefer the "CA ETV" PSD be used for future OGS sizing. The following study prepared by the Toronto and Region Conservation Authority provides a good reference for representative particle size distribution in urban areas: *"Characterization of Particle Size Distributions of Runoff from High Impervious Urban Catchments in the Greater Toronto Area"* (TRCA, September 2012). <u>Water Quantity:</u> • SWMF 3915 – Volume Reduction Pond. Please provide an analysis to show the evapotranspiration / infiltration rates combine to ensure the pond empties within a 72 hour period. Also, provide a cross-section for	a) Acknowledged. b) The in effect Official Plan, as well as the approved District Plan provide for the development of these lands. The City position in advance of all relevant information, including recent comments from the Ministry of Natural Resources, Conservation and Parks is premature.	a) The Stormwater Management Report is to be updated to include a table that summarizes the area of each block subject to site plan approval and the related assumptions associated with stormwater management design criteria. Draft plan conditions to ensure implementation of the design criteria for those blocks that will have their own stormwater management facility. b) The developer's consulting team to further discuss the City's position with City staff.		

No	City Comments	Applicants Comments	Action Required	Agree Yes	Agree No
	the pond that details the soil type, thickness and porosity of the base of the pond and the groundwater location.				
115	With regards to the Monitoring Program discussed in Section 6.0, please provide details on what monitoring wells are proposed to be maintained during and post construction for the groundwater monitoring component. Additional comments on specific details of this program are not required until the final SWM approach for the subdivision is confirmed.	Acknowledged.	The updated PSWMR to include details with respect to the monitoring wells to be maintained. The details of the 'during' and 'post' construction monitoring to be approved as a pre-condition to registration. The approval and monitoring program to be included as a condition of draft plan approval.		
116	The City's Development Engineering Manual is currently under review which will likely include updates related to the implementation of LID SWM design features. Additionally, the development of a citywide Stormwater Management Master Plan is currently underway with completion planned for the end of 2019. Updates to both of these guiding documents could impact the SWM approach for this subdivision including monitoring requirements.	Acknowledged that BMP are appropriate to consider. At the same time, the application should not be subject to the uncertainty of master plans and guiding documents which have yet to be approved or reviewed by the broader development industry.	City of Waterloo staff to confirm the status of the Stormwater Management Master Plan and Engineering Manual. The easterly portion of the Northgate land is proposed to be attenuated by a proposed stormwater management facility which is currently under review and has received extensive input from review agencies, including the City. Stage 8 proposes LID design features and we look forward to receiving the City's comments with respect to same. The balance of the subdivision will be attenuated by either private stormwater management facilities associated with blocks subject to site plan approval or the stormwater management facilities proposed within Block 25/Stage 4. We look forward to working with City Staff with respect to the stormwater management designs that are proposed.		

No	City Comments	Applicants Comments	Action Required	Agree Yes	Agree No
Part B: AREA SPECIFIC COMMENTS The comments outlined in Part B reference five (5) areas of the plan, as depicted on Figure 1, Appendix 'A' attached hereto. Area 1: Northgate Lands – Stage 1 and Stage 2 Planning *Mixed Use Node*					
117	The proposed updated plan as submitted partially addresses previous concerns regarding the provision for commercial uses. Policy 3.4.14 of the District Plan outlines the range of commercial uses that are permitted and encouraged for the Mixed-Use Node. Policy 3.4.12 identifies that the ground floor of buildings along Conservation Drive and Beaver Creek Road should be designed to allow for convertible frontage. Buildings along Conservation Drive and Beaver Creek Road should be designed to allow future commercial uses on the ground floor.	The proposed zoning requires a minimum ground floor height of 4.5 metres within the Node adjacent to Conservation Drive and Beaver Creek Road.	MHBC and City of Waterloo staff to meet and review the proposed Zoning By-law with the objective of reaching agreement on the form and content.		
118	Considerations for commercial uses are strongly encouraged. There appears to be limited opportunities for commercial or live/work uses as currently shown. The provision for commercial uses within the Mixed-Use Node is an important component of the overall vision and structure of the District Plan. The District Plan contemplates a range of uses within the Mixed-Use Node, and a high degree of pedestrian orientation. Building heights within the Mixed-Use Node should be a minimum of 9 metres but should not exceed six storeys.	The proposed zoning permits both mixed-use and live-work units and includes the minimum and maximum height consistent with the District Plan.	MHBC and City of Waterloo staff to meet and review the proposed Zoning By-law with the objective of reaching agreement on the form and content.		
119	In the District Plan, a proposed new road was shown connecting land uses on the north side of Conservation Drive with the uses on the south side. This road also marked the western boundary for the Mixed-Use Node. In the current development proposal, the alignment of this road differs from that shown on the District Plan. Minor modifications to the road network are acceptable and anticipated as part of the District Plan, however the boundary of the Mixed-Use Node should not be altered. As a result, the proposed plan shows a node that is smaller than the Node in the District Plan. The Mixed-Use Node should not be reduced without sufficient justification for doing so, as it is intended to provide for a range of housing and employment opportunities that will contribute to creating a complete community in the Beaver Creek Meadows area. Consider revising the location of the Node to reflect the size as shown in the District Plan by adding a mixed-use block west of Street One where it intersects with Conservation Drive. This will also assist in achieving minimum density targets.	The boundary of the Node, as identified through the proposed zoning was not reduced. The Node zoning is included on the west side of Street One, within a portion of Block 2/ Stage 3. The District Plan was adopted by Council resolution and interpretation of the District Plan is appropriate. The District Plan did not address the full range of planning considerations associated with the aligning of Street One. Some relevant considerations include grades, site visibility, setback/stacking distance from the Beaver Creek Road/Conservation Road intersection and ensuring the efficient utilization of land,	MHBC and City of Waterloo staff to meet and review the proposed Zoning By-law with the objective of reaching agreement on the form and content.		

No	City Comments	Applicants Comments	Action Required	Agree Yes	Agree No
		having regard to setbacks and the depth of blocks adjacent to natural heritage features. The proposed draft plan of subdivision takes the planning considerations noted above into consideration and represents a reasonable interpretation of the boundaries of the District Plan.			
120	The Mixed-Use Node should be utilized to the extent possible to allow for a variety of uses and higher density as planned for by the District Plan, to ensure the goals of the District Plan are achieved, and to make up for any density shortfalls in lower density residential areas. The proposed density of 60-100 units per hectare is consistent with the District Plan.	Noted.	No further action required.		
121	Policy 3.6.2 of the District Plan encourages a range of residential development in the Mixed-Use Node. The plans submitted do not specify the types and layout of proposed residential uses. The proposed development should be consistent with policies 3.6.3 and 3.6.4 which require a high quality of urban design and visually interesting spaces that consider pedestrian movement and streetscapes.	The proposed zoning indicates the land uses permitted within the Node, consistent with the District Plan, and the performance standards that direct built form and building location.	MHBC and City of Waterloo Staff to meet and review the proposed Zoning By-law with the objective of reaching agreement on the form and content.		
122	Block 1, Stage 1 is identified as Low Density Residential 2 on Map 3 of the Beaver Creek Meadows District Plan. No land use is noted on this block. Please confirm that this Blocks is proposed for uses contemplated within the Low Density Residential 2 land use designation in the District Plan.	Block 1, Stage 1 is proposed to be zoned Residential Eight (R8) which permits townhouse, stacked townhouse, freehold townhouse and triplex building types, consistent with the District Plan.	Now that the new Zoning By-law is substantially in effect, MHBC have updated the implementing Zoning By-law to amend the City's new comprehensive Zoning By-law, related zoning categories and zoning regulations. A zoning schedule will be provided with the resubmission.		
123	Policy 3.2.1 of the District Plan discourages back-lotting and private driveways onto Beaver Creek Road and Conservation Drive. It is noted that priority lots are identified in the design summary as per the District Plan. Development of the final plan shall be consistent with the design considerations for residential uses as set out in policies 3.2.10 to 3.2.20 of the District Plan.	Back-lotting onto Conservation Drive and Beaver Creek Road is not proposed. The conceptual plans prepared for Block 7/Stage 1, Blocks 20 and 21/Stage 4 demonstrate that the buildings address the public street.	City to review the conceptual plans that have been submitted. These plans should be considered as "demonstration plans" only. The blocks will be subject to site plan approval and design guidelines that have been approved can be considered in the		

No	City Comments	Applicants Comments	Action Required	Agree Yes	Agree No
			development and review of site plan submissions at that time.		
124	Based on the lotting concept provided, Block 2, Stage 2 appears to be underutilized (detailed lotting is not shown). It is strongly encouraged that higher densities are achieved on this block, within the range of that which is permitted, both to allow for a range of housing types and to make up for any lower density areas located elsewhere in the plan area.	The majority of Block 2/Stage 3 is outside of the Node, which limits height to 10 metres and density to 150 bedrooms/ha. The portion of Block 2 that is within the Node is proposed to be zoned RMU-20 to permit greater height and density, consistent with the Node policies. The remainder of Block 2/Stage 3 is proposed to be zoned Residential Nine (R9), which is consistent with the District Plan. The Zoning By-law has been revised to amend the City's new comprehensive Zoning By-law. The proposed R9 zone permits apartment, stacked townhouse and townhouse buildings, which are intended to achieve densities envisioned in the District Plan.	MHBC and City of Waterloo staff to meet and review the proposed Zoning By-law with the objective of reaching agreement on the form and content. Block 2/Stage 3 will be subject to site plan approval and design guidelines that have been approved can be considered in the development and review of site plan submissions at that time.		
125	Block 5, Stage 1 (Multiple Residential) appears to front the street, with both vehicular access and parking to the rear. Please provide conceptual plan showing lot layout/configuration and confirmation that Block 5 is large enough to accommodate minimum performance standards in the applicable zoning category (i.e., amenity space, parking, setbacks, etc.).	A conceptual plan was prepared and included as part of the informal resubmission. The conceptual plan demonstrates appropriate massing and confirms the multiple residential units will be accessed from internal streets (i.e. not Beaver Creek Road) with sufficient space for parking.	City to review and provide comments on conceptual plans. Block 7/Stage 1 (formerly Block 5, Stage 1) will be subject to site plan approval and related considerations. Further action is not required at this time as the concept plan demonstrates that the dimensions and shape of the proposed block are appropriate and adequate for the land uses that are proposed.		
126	The proposed zoning allows for apartment buildings in various parts of the proposed development. Apartments are permitted in Low Density Residential designated area of the Official Plan subject to policies 10.1.3 (5)-(9). Apartments within the low density residential designation are directed to the periphery of the neighbourhood and near nodes and arterial and collector roads. These policies were incorporated into the District Plan, which limited apartment-style buildings mainly to the Mixed-Use Node and along Conservation Drive (3.4.21). Apartments are permitted to be up to 12 metres in height (up to 20 metres within the Node) as per policies 10.4.3(9) and	Noted	The proposed Zoning will permit apartment buildings within the Mixed-Use Node (Block 3/Stage 3) and along Conservation Drive (Block 2/Stage 3).		

No	City Comments	Applicants Comments	Action Required	Agree Yes	Agree No
	11.1.37(4) of the Official Plan respectively. The District Plan policies further require a high quality of design and that buildings be oriented toward a public road. Where apartments are proposed adjacent to townhomes, as may be the case in the Node or Block 2, Stage 2, the massing and built form should be complementary to adjacent buildings to promote visual interest, as per policy 3.4.23 of the District Plan.				
127	'Street One' is located at the western end of the Mixed-Use Node. This road alignment has been modified from that shown in the District Plan. This road was planned to align with the potential road connection on the north side of Conservation Drive, in Neighbourhood 2. The alignment of 'Street One' must be determined/reviewed in connection with the planned road network in Neighbourhood 2.	The Street One intersection has been located in consideration of input from Paradigm and to ensure appropriate distance from the intersection of Beaver Creek Road and Conservation Drive. We have reviewed the preliminary plans prepared for Neighbourhood 2 and confirm our understanding that there should be no issue with aligning streets. The location of the Street One intersection with Conservation Drive provides for all turning movements. This will provide more direct movements to those lots adjacent to Street One and will assist in minimizing turning movements within and through the proposed roundabout in order to access the blocks of concern. This will assist in preserving the capacity of the Conservation Drive/Beaver Creek Road roundabout for movements within and through the community rather than accommodating turning movements relating to adjacent blocks.	Paradigm to confirm the road alignment with the lands to the north.		
128	The submitted "active transportation network" does not show the trail extending to the southern edge of the development area. It is recommended that this trail be extended to the southern edge of the District Plan boundary, as shown on Map 5 of the District Plan.	Acknowledged.	The Active Transportation Master Plan will be updated to show a trail as requested. Discussion is required regarding DC eligibility of trails, including the creek crossing, as well as consideration of trails as parkland dedication.		

No	City Comments	Applicants Comments	Action Required	Agree Yes	Agree No
			The developer should not be responsible of the implementation of trails that are not located within the limits of the plan of subdivision.		
Engineering					
129	Section 4.1 (page 7) of the Functional Servicing Report (FSR), lists constraints that influenced the grading design of the Northgate/Kartway Lands. Based on the March 2019 resubmission, it appears that the grading has been changed significantly in the area southwest of the Conservation Drive roundabout (Blocks 2 and 3, Stage 2). It is noted that the proposed private pumping station in Block 2, Stage 2 is no longer required and instead this area can be serviced by a gravity sewer. The City agrees that this is a preferred servicing strategy for this area; however, further details will be required by the applicants before Staff can provide a fulsome review of the proposed grading/servicing strategy.	It would be helpful if the City could confirm the further details that may be required. It should be remembered that the FSR is a "preliminary" report and that the Report could be finalized in the context of detailed servicing plans to be approved by the City prior to servicing or registration of the plan of subdivision.	Updated FSR will be included as part of the formal resubmission and will include additional details if clarified by the City of Waterloo.		
130	Figure 2: Sanitary Servicing Plan (MTE Memo, March 28, 2019) should include proposed contours for both the subdivision and the adjacent roads and reference the City's road design drawings accordingly. The developer should continue to work with the City to ensure the grading of the subdivision matches the road grades for Conservation Drive and Beaver Creek Road. For future submissions, please reference the revision and date of the corresponding proposed Plan and Profile Design Drawings for Conservation Drive and Beaver Creek Road to ensure the most current designs are being referenced.	Acknowledged.	Further submissions to include the required references to the City's drawings.		
131	Section 1.2 of the Stormwater Management Report indicates the east side of the subdivision is located within subwatershed area 310 and is proposed to utilize a communal stormwater management facility adjacent to Beaver Creek Road. As such, it is stated that a separate Preliminary SWM Report will be prepared in support of this facility. Draft Plan Approval of the subdivisions cannot be granted without the approval of the Communal Stormwater Management Facility Preliminary Design Report. Further, it is understood that this facility is primarily meant to provide water quality control only. However, details on the water balance requirements and infiltration measures for subwatershed 310 will also be required.	Noted.	Approval of communal SWM facility preliminary design report to be included as a condition of draft plan approval.		
132	Although a stormwater management facility (SWMF 5915) is proposed within Block 2, Stage 2 (Multiple Residential), it is not included in the list of land uses provided in	This SWM facility is intended to remain in private ownership.	Requirements relating to the approval, implementation and maintenance of the stormwater management facilities can be		

No	City Comments	Applicants Comments	Action Required	Agree Yes	Agree No
	Table 1 of the Planning Justification Report nor is this shown on the Draft Plan. Please confirm that this stormwater management facility will remain in private ownership.		specified as a condition of draft plan approval. Draft plan conditions can provide this direction.		
Landscape					
133	Block 6, Stage 1 (Park) should be dedicated as a wider walkway block to accommodate the desire to be a 'terminating' view. It is too close to Block 4, Stage 2 and therefore should not be dedicated or developed as a park block.	The Draft Plan has been revised to remove the Park in Block 6, Stage 1 in response to staff comments. A walkway Block (Block 8/Stage 1) has been included in the revised plan to provide access from Streets One and Two to the proposed trail within Block 10.	The revised draft plan of subdivision to be reviewed by City Staff to confirm the revisions adequately address the comments received.		
134	Block 7, Stage 1 (Walkway) should be expanded and designed to become a park block for this single family neighbourhood and additionally can serve as an access point into the buffer trail system. This spreads out the park block locations in this phase more democratically. Block 7, Stage 1 to be designed as a smaller neighbourhood block.	The District Plan does not show a park in the location of Block 7. Block 7 (now Block 9) has been retained as a walkway block to connect Street Two to the proposed trail within Block 10. Block 1/Stage 2 will serve as a neighbourhood park for Stages 1 and 3.	Discussion with City staff is required regarding the DC eligibility of trails, including the creek crossing, as well as consideration of trails as parkland dedication.		
135	Block 4 and Block 5 (Multiple Residential) in Stage 1 are very long blocks. Consider incorporating a walkway block between Beaver Creek Road and Street Two to break up the length of Block 4 and Block 5 in Stage 1.	Blocks 4/5 (now 6/7) are subject to Site Plan Approval.	Pedestrian access for Blocks 4/5 (now 6/7) can be considered through the site plan process to provide access to Street Two. This direction can be provided as a condition of draft plan approval.		
136	Block 4, Stage 2 (Park) should include a flat open area that can function as a neighbourhood sports field. If hard surface is proposed it is to also accommodate the potential for an ice rink. This provides two potential rink areas on either side of the creek.	Noted.	Discussion with City staff is required to confirm acceptability of the Park blocks and conceptual park plans, such that city funding eligibility can be confirmed.		
137	Block 4, Stage 2 (Park), in combination with Block 5, Stage 4 (Park), if deemed acceptable could be eligible for up to $20,000 City funding for the provision of a play structure within the park block.	Noted.			
Transportation					
138	The Street One connection with Conservation Drive is located just west of the proposed roundabout at Beaver Creek Road. Stantec completed a turn lane analysis for all subdivision entrances onto Conservation Drive and Beaver Creek Road. There were four recommendations made from the analysis. In its current location, Street One will be limited to right-in/right-out (RIRO) movement only based on the recommendations outlined in the *Update to Transportation Forecast and Left Turn Lane Requirements Technical Memo* (Stantec, July 7, 2017). Should RIRO not be	Intersections have been located in accordance with recommendations from Paradigm. The intent is to accommodate all-turning movements at the Street One/Conservation Drive intersection.	The intersection location is to be supported by an updated TIS. City of Waterloo Staff to confirm the acceptability of the Street One/ Conservation Drive intersection.		

No	City Comments	Applicants Comments	Action Required	Agree Yes	Agree No
	desirable for Street One please review the July 7, 2017 Turn Lane Memo for more intersection spacing options. It is noted that a shift was made in the road alignment, however additional information is required to confirm whether this road was shifted far enough west.				
AREA 2: Northgate Lands – Stage 3 and Stage 4; and Kartway Lands- Stage 1 Planning					
139	The location, size, and orientation of the parks on the west side of the subject lands deviate slightly from the planned park location from the District Plan. Access is improved compared to the previous development proposal, though overall access and frontage remains limited. Policy 3.8.3 of the District Plan details that parkland is intended to maximize accessibility and visual presence of the community. Park Block 5, Stage 4 should have adequate prominence, frontage and visibility as per the direction of policies 3.8.3 and 3.8.4 of the District Plan.	Park Block 1 (Stage 5) has 41 m of frontage on Street Six and the location is generally consistent with the District Plan. The park block was moved further north, as compared with the District Plan, to take advantage of preferred natural grades that are more appropriate for a public park. The location of the park provides for a terminating view from Street Four. The park is considered to be highly accessible considering walkways are proposed on all sides of streets, the adjacent community trail that is planned, the location of the trail relative to the potential pedestrian bridge contemplated by the District Plan, and the potential access through the stormwater management and pumping station blocks.	MHBC to meet with City staff to review parks that are proposed, the comments herein, and the demonstration park plans that were previously submitted.		
Residential					
140	Land uses are not shown on many blocks. Please ensure proposed land uses are noted on each block.	The draft plan has been revised to note land uses for each block (where they are not planned for single or semi-detached dwellings).	MHBC to meet with Staff to review the revisions to the draft plan that have been made.		
141	Development of the final plan shall conform to the design considerations for residential uses as detailed in policies 3.2.10 to 3.2.20 of the District Plan.	Noted.	MHBC to meet with City of Waterloo Staff to review the City's comments with respect to the draft plan design. Neighbourhood Design Guidelines will consider the policies in Sections 3.2.10 to 3.2.20 of the District Plan.		

No	City Comments	Applicants Comments	Action Required	Agree Yes	Agree No
142	Lands on the west side of the proposed plan area are generally consistent with Map 3, Land Uses in the District Plan, as it relates to where the Low Density Residential 1 and Low Density Residential 2 land use designations are contemplated. However, modifications to the road network and location of the park and stormwater management block have reduced the Low Density Residential 2 land uses to a total area much lower than that contemplated in the District Plan. Please confirm that the proposed Draft Plan will develop a comparable amount of land for Low Density Residential 2 land uses to that contemplated in the District Plan. Low Density Residential 2 does not permit single detached dwellings and semi-detached dwellings. For example, the blocks on either side of 'Street Three' appear to show single detached units which is not consistent with the general intent of the District Plan.	The District Plan was prepared at a general scale and it was acknowledged through the process that refinements would be required once plans were developed. It is both relevant and appropriate to consider the efficiency of the subdivision design. From a design perspective, the tiering of streets is fixed to the south by environmental features and related setbacks and to the north by Conservation Drive as widened and improved. The overall design achieves efficiency and is considered to implement the District Plan, which was adopted by a Council Resolution only.	MHBC to meet with City staff to review design related considerations.		
143	Blocks 15 and 16, Stage 3 (Multiple Residential) appear to front the street, with both vehicular access and parking to the rear. Please provide conceptual plans showing lot layout/configuration and confirmation that Block 15 and Block 16 are of sufficient size to accommodate minimum performance standards in the applicable zoning category (i.e., amenity space, parking, setbacks, etc.).	Conceptual plans have been prepared for each of Blocks 20 and 21, Stage 4 (formerly blocks 15 and 16).	The conceptual plans that have been prepared confirm the acceptability of the dimensions and shapes of the identified blocks. The blocks will be subject to site plan approval and detailed design considerations can be considered through these future processes.		
Road Alignment					
144	The alignment of 'Street Three' should connect to the "Potential Road Connection", as identified on Map 2 of the District Plan. This proposed road is required for the future development of the area to the northwest (outside the limits of the District Plan).	Streets Three and Seven contemplate connections to the lands to the north. Street Three is in a location consistent with the District Plan. Street Seven provides an additional north/south connection across Conservation Drive – a conceptual connection is shown on the Draft Plan.	The updated TIS will assess the location of Streets Three and Seven and their alignment with the minor collector road on the north side of Conservation Drive.		
145	The relocation of 'Street Seven' does not align with the Minor Collector Road anticipated for the north side of Conservation Drive, as shown on Map 2 of the District Plan. While minor alterations to the road network may be appropriate, Planning Approvals and Engineering staff will need to be satisfied that the road alignment proposed does not negatively impact or hinder the developability or	The Street Seven intersection has been shifted to align with the access to Creekside Church property and to avoid conflicts with a future access contemplated for the Brohman	The updated TIS will assess the location of Street Seven and its alignment with the minor collector road on the north side of Conservation Drive.		

No	City Comments	Applicants Comments	Action Required	Agree Yes	Agree No
	potential connections to other lands within the District Plan area. Additional information will be required to justify the realignment of this road network and to ensure the lands to the north will not be negatively impacted.	lands on the north side of Conservation Drive.			
146	Further to Comment 36 and subject to the size of the block being agreed upon, Block 4, Stage 1 (Open Space) is to be conveyed to the City through the registration of Draft Plan of Subdivision 30T-17402 for the protection of the Core Environmental Features.	Block 4, Stage 1 is proposed as an Open Space Block.	MHBC to review the revised draft plan with City of Waterloo staff.		
Environmental					
147	Block 18, Stage 3 (SWM) encroaches into the wetland buffer. The NRSI memo states the encroachment is to accommodate grading, the outlet, and part of the cooling trench. While Official Plan policy 8.2.4(9) contemplates portions of stormwater management facilities within buffers, the policy sets out criteria that need to be met. Additional information is required to confirm whether these criteria can be met.	The location of the stormwater management block has been shifted southerly and is now referred to as Block 25/Stage 4. The easterly and southerly limits of Block 25 are coincident with the setbacks that are proposed. The revised stormwater management pond is located outside recommended buffers.	MHBC to review the revised draft plan with City of Waterloo staff. The stormwater management details including the location of the stormwater pond relative to the buffers will be shown in the updated stormwater management report.		
148	Block 5, Stage 4 (Park) encroaches into the wetland buffer. Official Plan policy 8.2.4(9) states that permitted uses within buffers are to be limited to low impact uses consistent with those permitted within designated features. Active park land is not one of those uses. Further, the policy states that buffers are to remain in or be restored to a primarily natural state. Accordingly, either the park needs to be removed from the buffer or that portion of the park will need to be naturalized and not considered or used as active park land (as per Official Plan policy 8.2.4(12)). In addition, the section of the cooling trench that extends across the rear of the park is subject to the criteria of Official Plan policy 8.2.4(9). Potential areas of incompatibility include whether the vegetation over top of the trench will need to be maintained/manicured, whether tree roots will interfere with the trench's function as the buffer matures, and whether the trench will need to be maintained in the short and long term, since accessing it would disrupt the buffer and remove any habitat that has been created, the provision of which is identified as a key ecological enhancement in the NWSSS. The situation is further complicated because a trail is to be potentially built within the buffer. Through Comment 150 below staff have indicated that the cooling trench should be included within the limits of Block 18, Stage 3 (SWM).	The location of Block 1, Stage 5 (formerly Block 5, Stage 4) has been shifted northerly in order to provide for enhanced access, frontage, as well as a terminating vista/view of the park. The park location also coincides with a flatter area of the property. The easterly limit of the park is coincident with the regional flood line and/or recommended setbacks and does not encroach into the recommended wetland buffer.	MHBC to review the revised draft plan with City of Waterloo staff.		

No	City Comments	Applicants Comments	Action Required	Agree Yes	Agree No
Engineering					
149	Section 5.2.1 and Figures 5.1 and 5.2 of the Preliminary Stormwater Management Report provide details on the proposed SWM Facility 5914. It is noted that this SWM Block was revised as part of the March 2019 resubmission. The following comments refer to the March 28, 2019 MTE Memo: a. The cooling trench should be included as part of the SWM Block. b. An access road to the cooling trench to facilitate operations and maintenance activities is required. c. Please provide more detail on the cooling trench; specifically a cross-section depicting pipe slopes, cover and groundwater elevations. d. Figure 3.0 provides details on access roads to the forebay and main pond cell for future maintenance; however, there are no details provided related to operation, maintenance access and sediment storage areas. The SWM design calculations in Appendix A of the FSR identify a nine-year cleanout frequency for the forebay to ensure adequate TSS removal efficiency. Please provide details on the approximate sediment volume and subsequent storage area requirements related to these regular routine maintenance operations; and, identify locations where these operations can be facilitated within the SWM Block. The maintenance of the stormwater management pond is not to be accommodated within the park and/or pedestrian trail system. e. The 6.0 m wide, 0.018 ha Block 6, Stage 4 (Walkway) to access the SWM Block should be included as part of the SWM Block (i.e., Block 18, Stage 3). Please provide additional information to confirm that 6.0 metres is sufficient width to conduct routine maintenance activities. Additional width may be required. f. To facilitate future maintenance and cleanout of the pond, a drain outlet pipe with a valve shall be provided to avoid bypass pumping.	Noted.	The PSWMR and related figures to be revised to consider the engineering comments. Detailed design considerations are to be addressed as a condition of draft plan approval that can specify the design of the stormwater management facility prior to the registration of the plan of subdivision. Block 22, Stage 4 (formerly Block 6, Stage 4) is proposed as a walkway Block providing access to the stormwater management facility. The staging of the Draft Plan has been revised to include both the stormwater management facility and the walkway Block within the same Stage (Stage 4).		
150	The design of the access road around the stormwater management pond must consider the pedestrian trail connections within that block and how it connects into the park and the larger community trail system.	Noted.	The PSWMR and related figures to be revised to consider the engineering comments. Detailed design considerations are to be addressed as a condition of draft plan approval that can specify the design of the stormwater management facility prior to the registration of the plan of subdivision.		

No	City Comments	Applicants Comments	Action Required	Agree Yes	Agree No
			The ATMP will include all proposed trail connections, including those related to the stormwater management facility.		
151	Figure 4.0 (Sanitary Servicing Plan) of the Functional Servicing Report notes that the trunk sanitary sewer goes through the west edge of SWM Pond Block 23 (i.e. SWMF 5914) under the berm area. The City does not support this configuration / alignment as it provides future maintenance and operations issues for both the SWM pond and sanitary sewer. The Technical Memo prepared by MTE (March 28, 2019), shows that Block 18, Stage 3 (SWM) has shifted further to the south. Based on this information, it is not clear where the proposed trunk sanitary sewer is in relation to the new SWM (Block 18, Stage 3) and Park (Block 5, Stage 4) and how it connects to the Sanitary Pumping Station (Block 17, Stage 3). Easements through the park block and multiple residential block are not recommended. Further details are required to understand how the sanitary and storm infrastructure are located within this area.	The sanitary sewer can be routed through the access road associated with the multiple block (Block 21, Stage 4), which would be subject to an easement. There are two other options to route the trunk sanitary sewer: 1. Through the park; 2. To the sanitary sewer within Conservation Drive via Street 7. This option requires deepening the sewer in Conservation Drive.	All three options are acceptable to the developer. Discussions are required with the City to determine a preferred approach. A decision is required prior to the City finalizing the design for Conservation Drive. The design of the sanitary sewer internal to the subdivision is a detailed engineering consideration and can otherwise be dealt with as a condition of draft plan approval.		
Landscape					
152	Block 5, Stage 4 (Park) is located in a better location and more visible from a safety viewpoint. All items designed and accepted in the block are the responsibility of the developer to construct. The hard surface area is to be used in the winter for an ice rink providing neighbourhood volunteers are available.	Parkland dedication requirements are to be in accordance with applicable legislation. Parkland dedication can be satisfied through the dedication of land, the provision of facilities or combination of both.	MHBC to meet with City Staff to review parkland dedication requirements, the construction of park facilities, as well as community trails and related responsibilities.		
153	Block 5, Stage 4 (Park), in combination with Block 4, Stage 2 (Park), if deemed acceptable could be eligible for up to $20,000 City funding for the provision of a play structure within the park block.	Noted	MHBC to meet with City Staff to review the acceptability of the parks that are proposed and the eligibility of funding.		
154	Block 3, Stage 1 (Park) of the Kartway Lands is too small to satisfy active and passive uses in a functional way. Increase the size of this block so it becomes a relevant park block. Provide a concept plan showing how active and passive components can be included in this Block.	The District Plan does not show a park in this location. The intent of the Block is to provide a larger entryway into the trail system, while offering space for passive recreation and seating for trail users.	The ATMP will identify walkway connections as part of the overall active transportation network, consistent with their intended function.		
155	The original plan indicated two park blocks, 20 and 21. The Design Summary states that they have been amalgamated into one block that is larger. In fact, it is smaller in area than the two original blocks. This statement should be revised.	Noted.	The Neighbourhood Design Summary to be updated.		

No	City Comments	Applicants Comments	Action Required	Agree Yes	Agree No
156	The Neighbourhood Design Summary provided some visuals for park design elements. While fun looking we have concern with vandalism concerning the slides with the tree-house unit on top. We do not use the rubberized surface for splash pad facilities. These and other items can be discussed further during detail design.	Noted.	Approval of a park design to be included as a condition of draft plan approval. Discussion with City staff is required regarding park dedication requirements and responsibility with respect to implementation of the park design.		
157	Block 5, Stage 4 (Park) should be conveyed to the City through the registration of Phase 3. Please revise the phasing plan to including this park block within the limits of Stage 3, rather than Stage 4.	Noted.	The draft plan of subdivision will be revised such that the park can be built at the same time as Stage 4, or independently.		
AREA 3: Northgate Lands – Stage 5 (part) and Kartway Lands – Stage 2 *Planning*					
158	The low density residential land uses proposed appear to be generally consistent with the District Plan.	Noted	No further action required.		
159	The overall density of these lands appears to be lower than that anticipated in the District Plan, and therefore densities of the remaining areas are encouraged to be on the higher end of the range to account for the shortfall.	Noted.	MHBC to prepare a density calculation to demonstrate conformity with a Place to Grow- Growth Plan, the Regional Official Plan, the City of Waterloo Official Plan and the District Plan.		
160	These lands are proposed as a vacant land condominium, meaning that public access may be restricted. Policy 3.9.10 of the District Plan states that "trails shall be publically accessible". Further, policy 3.9.6 states that "active transportation routes are intended to encourage free circulation of the public throughout the Beaver Creek Meadows community and to adjacent areas of the community by means of publicly-owned and maintained trails, sidewalks, bikeways, roadways, etc". Further, policy 4.3.9 h) states the network shall "be intended for full public access and be designed to reflect safe passage and restrict access to neighbourhood properties". If portions of the subject lands are proposed under private condominium ownership, the intent of the District Plan policies should be maintained, and public access through the area must be ensured. As a result, trails and open space areas should be shown as separate blocks within the plan of subdivision, to be conveyed to the City through the registration of the plan, rather than forming part of the condominium plan.	The Active Transportation Master Plan will identify trail locations that would be publicly accessible through the provision of an easement in favour of the City (and public), as needed, consistent with the trail locations identified in the District Plan. The draft plan of subdivision and plan of condominium have been revised to include buffers within the limits of the plans to provide the ability to implement the active transportation network.	MHBC to meet with City staff to review the revised plans, discuss parkland dedication requirements and obligations with respect to implementation of the active transportation network.		
161	The submitted Active Transportation Network does not show the trail extending to the southern edge of the development area. It is recommended that this trail be extended to the southern edge of the District Plan boundary, as shown on Map 5 of the District Plan.	This trail connection should be included as part of the Subdivision Agreement through a condition of approval, to ensure cost is shared with abutting owners and that the trail	The design of the trail/pedestrian bridges can be included as a condition of approval, with appropriate wording to reflect the		

No	City Comments	Applicants Comments	Action Required	Agree Yes	Agree No
		is not prematurely constructed with no connection to abutting lands (owned by others).	location of the works on lands owned by others. City to clarify if bridge crossings are considered a DC expense and/or considered part of the required parkland dedication.		
162	For the Kartway Lands, though not explicitly stated, staff understand that the environmental lands and buffer areas are to be dedicated to the City through Block 4, Stage 1 (Open Space), but that the environmental lands and buffer areas within Block 1, Vacant Land Condominium 30CDM-17410 are to remain in private ownership. Please confirm. If this is the case, staff do not support this approach (please refer to Comment 36). The open space lands should be shown as separate blocks within the plan of subdivision, to be conveyed to the City through the registration of the plan of subdivision, rather than forming part of the condominium plan.	The draft plan and plan of condominium will be revised to include open space buffer lands within the limits (including Block 4, Stage 1). Open space lands have been identified as separate blocks on the draft plans of subdivision or as a common element on the draft plan of condominium.	MHBC to meet with City staff to review the revised plans, discuss parkland and open space dedication requirements and obligations with respect to implementation of the active transportation network.		
163	Condominium Plan 30CDM-17409 as proposed is not supported by staff (refer to Area 5 comments). As a result, the street network contained within Condominium Plan 30CDM-17409 should be modified to terminate in a cul-de-sac in proximity to the boundary between the two Vacant Land Condominium Limits or consideration could be given to modifying the existing crescent.	The in effect Official Plan, as well as the approved District Plan provide for the development of these lands. The City position in advance of all relevant information, including recent comments from the Ministry of Natural Resources, Conservation and Parks is premature.	The developer's consulting team to further discuss the City's position with City staff.		
164	Please ensure the limits of the condominium reflect the proposed condominium limits rather than the limits of the Plan of Subdivision. There should not be more than one 'Unit 1' (for example) within Condominium 30DCM-17410, and condominium units are not required to be 'split' over existing or future property/block boundaries (i.e., "Block 31 to 34" and "Block 23 to 26"). Please also remove any "Block" references within the Condominium Plan. Condominium Plans typically include Units, Streets, or areas of Common Element.	The draft plan of condominium shows stages of registration. Our understanding of registry act requirements is each stage to be registered is to be numbered starting at one. References to "Blocks" will be removed.	MHBC to meet with City staff to review the numbering of units. MHBC have clarified that those blocks to be conveyed to the City are shown in the proposed draft plan of subdivision such that those blocks will be conveyed as a condition of registering a plan of subdivision. In this way, the plan of condominium can identify units and common elements and does not require any reference to Blocks.		
165	The natural area on the west side of 30DCM-17410 should be removed from the limits of the Condominium Plan and instead be included as an Open Space Block within Draft Plan 30T-17410 and conveyed to the City for open space purposes as a condition of approval.	The draft plan and plan of condominium have been revised to include the open space block within the limits of the plan of subdivision. The open space lands have been identified as a separate block on the draft plan.	MHBC to meet with City staff to review the revised plans, discuss parkland dedication requirements and obligations with respect to implementation of the active transportation network.		

No	City Comments	Applicants Comments	Action Required	Agree Yes	Agree No
Environmental					
166	For the Kartway Lands, portions of Condominium Units 6, 7 and 8 are within the floodplain. All lots/units must be outside the floodplain. Please revise.	A portion of the existing Kartway race track is located within the area identified as the floodplain. The extent of the floodplain in this location was created through the development of the race track, and its low-lying elevation, which is less than 0.5 metres in depth. As the lands are redeveloped, the race track will be removed, and the lands regraded to direct drainage towards the open space area. The proposed grading will match the exiting grades at the rear of units 6 and 7 and the floodplain will align with the rear unit boundaries.	Floodline to be reconfigured to align with proposed grading and drainage.		
167	Section 5.5 of the EIS addresses Stage 5. It notes that it includes the 15 unit vacant land condominium and access road but does not discuss the remaining lots (those between Stage 3 and the proposed access road). There are a number of lots in that portion that back onto the natural system that are not discussed.	Discussion of the lots to be added to the EIS. There may be some limited grading within the wetland buffer at the rear of the proposed lots. Surface drainage associated with rear yards will drain into the wetland to maintain a water balance.	NRSI to update EIS as part of formal resubmission.		
Engineering					
168	Street Three and the private roads in Condominium Plan 30CDM-17410 intersect at a tight radius. Demonstrate on a plan that the roads and turning radii are satisfactory to accommodate the largest City of Waterloo fire truck dimensions. Also, please confirm if daylight triangles should be incorporated into the design of the private road where it intersects Street Three.	A turning radius analysis has been completed.	The turning radius analysis to be included as part of the formal resubmission.		
169	For any proposed condominium block, only one sanitary service is permitted.	Noted.	No further action is required.		
AREA 4: Northgate Lands – Core Environmental Features					

No	City Comments	Applicants Comments	Action Required	Agree Yes	Agree No
Planning					
170	Further to Comment 36 all environmental lands and their associated buffers should be included within the limits of the Draft Plan. Please revise the Draft Plan limits to include all environmental lands. Such block(s) will be zoned Conservation (OS3) zone and will be conveyed to the City of Waterloo for Open Space purposes through the registration of the Plan(s). This will be included as a condition of Draft Plan Approval. After Open Space lands are included within the limits of the Draft Plan, please update density calculations.	The approved Official Plan confirms that lands designated for environmental protection are not necessarily available to the public.	MHBC to meet with City of Waterloo staff to further discuss.		
171	Further to Comment 36, and subject to the sizes of the blocks being agreed upon, Block 8, Stage 1 (Open Space), Block 9, Stage 1 (Open Space) and Block 5, Stage 2 (Open Space) are to be conveyed to the City through the registration of Draft Plan of Subdivision 30T-17401 for the protection of the natural Core Environmental feature.	Blocks 10 and 11/Stage 1 and Block 4/Stage 3 are proposed to be dedicated to the City, through the registration of the Draft Plan of Subdivision. To be included as a condition of approval.	The dedication of open space blocks identified on the revised draft plan of subdivision to be dedicated to the City of Waterloo as a condition of draft plan approval. Discussion with City staff is required with respect to parkland dedication requirements and the dedication of open space blocks.		
Environmental					
172	Consistent with the NWSSS, Map 8 of the EIS shows a 5 metre buffer for the hedgerow in the southeast corner of the site (Block 9, Stage1). However, no other management recommendations are put forward, despite the hedgerow being identified as a linkage. Additional information is required.	The hedgerow is identified as a linkage to be enhanced. The 5m buffer is recommended in the NWSSS as sufficient to retain existing trees and to expand the width of this feature. The EIS has been updated to include this information and to recommend plantings along with natural succession to further enhance this linkage.	Preparation, approval and implementation of the Rehabilitation and Naturalization Plan, required as a condition of draft plan approval.		
173	While the Draft Plan Consolidation includes dripline and wetland setbacks, it does not include a setback for Beaver Creek. As per Official Plan policy 8.2.5(7)(c) and the NWSSS, a setback of 30 metres is required. A 30 metre setback from Beaver Creek needs to be shown on the Draft Plan to ensure it is accounted for in the block layout.	A 30m setback from Beaver Creek and Laurel Creek is within the other setbacks.	The Draft Plan includes the most restrictive setback from the natural features (wetland, creek or dripline).		
AREA 5: Northgate Lands – Core Environmental Features and Stage 5 (part) *Planning*					
174	The lands identified as Block 1, Stage 5, specifically condominium units 5 to 19 in Plan 30CDM-17409, are located within SPA 2 of the District Plan. SPA 2 requires the completion of an EIS to support the consideration of development, the extension of supporting infrastructure, and access to the lands for development, within this area. Based on information submitted to date, staff do not support development of the	The in effect Official Plan, as well as the approved District Plan provide for the development of these lands. The City position in advance of all relevant information, including recent comments from the Ministry	The developer's consulting team to further discuss the City's position with City staff.		

No	City Comments	Applicants Comments	Action Required	Agree Yes	Agree No
	access into the agricultural clearing nor development within the agricultural cleaning (i.e., SPA 2).	of Natural Resources, Conservation and Parks is premature.			
175	Please revise the Draft Plans to remove the 7.3 metre access road and the proposed lots within the area identified as SPA 2 in the District Plan. This area, in conjunction with Area 4, shall be included as an Open Space Block to be conveyed to the City through the registration of the Draft Plans and zoned accordingly.	The in effect Official Plan, as well as the approved District Plan provide for the development of these lands. The City position in advance of all relevant information, including recent comments from the Ministry of Natural Resources, Conservation and Parks is premature.	The developer's consulting team to further discuss the City's position with City staff.		
176	At the south limit of the road in Stage 5 in front of condominium units 14 & 15 (Northgate), a turning circle is required. The turning circle is required to accommodate public and utility maintenance vehicles.	The in effect Official Plan, as well as the approved District Plan provide for the development of these lands. The City position in advance of all relevant information, including recent comments from the Ministry of Natural Resources, Conservation and Parks is premature.	The developer's consulting team to further discuss the City's position with City staff.		
Environmental					
177	With respect to the access into the agricultural clearing (i.e., SPA 2 of the District Plan), decisions regarding infrastructure within a Core Natural Feature need to be consistent with the policies of the Official Plan and the decision-making framework of the Regional Official Plan. To be consistent with the policies of the Official Plan, particularly 8.2.4(3), only essential infrastructure for which there is no feasible alternative can be contemplated. Staff do not consider the proposed access road or associated servicing to be essential infrastructure and are of the opinion that there is a feasible alternative (i.e., not constructing the infrastructure). With respect to the decision-making framework of the Regional Official Plan, there is potential that the infrastructure, and the approximately 15 lots it would enable, would result in adverse environmental impacts and long term damage to the Core Natural Features.	The in effect Official Plan, as well as the approved District Plan provide for the development of these lands. The City position in advance of all relevant information, including recent comments from the Ministry of Natural Resources, Conservation and Parks is premature.	The developer's consulting team to further discuss the City's position with City staff.		
178	With respect to the agricultural clearing, the lands within the clearing are contiguous to the Core Natural Features. While Section 5.5 of the EIS discusses direct and indirect impacts as well as mitigation measures, it has not been demonstrated that there will be no adverse environmental impacts. For example, the EIS does not consider cumulative impacts related to development around both the external and internal limits of the feature, impacts related to road salt and pesticide/herbicide use by residents, impacts related to the introduction and spread of invasive species, as well as impacts related to light and noise.	The revised EIS will be reviewed and updated to incorporate the mitigation measures as needed.	The developer's consulting team to further discuss the City's position with City staff.		

No	City Comments	Applicants Comments	Action Required	Agree Yes	Agree No
Engineering					
179	The City does not support the 7.3 metre wide access road proposed through the Core Environmental Feature. City staff are concerned with potential grading impacts and encroachment into the buffer area, and has serious concerns with how the proposed development can balance best management engineering guidelines with environmental impacts through this area. In particular, the City has serious concerns with the construction of and the future operations and maintenance of the proposed road and related infrastructure (e.g., 8.34 metre deep sanitary sewer, 50 metre long and 1.2 metre high retaining wall, stormwater management, etc.).	More detailed consideration has been given to grading and encroachments into buffer areas and the overall design concept has been revised to take the City's comments into consideration.	The FSR, EIS, and Planning reports will be updated to include an assessment of the revised design for the access road including grading impacts, locations of any retaining walls and related infrastructure.		
180	Further to the above comment, Section B.2.5.8 of the DGSSMS (January, 2019), indicates that the maximum allowable length for a permanent dead-end watermain is 150 m, which is exceeded within this area by at least 250 m; or potentially more. Given the extreme length of this dead-end watermain the City has serious concerns regarding fire flow, pressure, maintaining adequate chlorine residual and the potential for water quality degradation within this area. The proposed water servicing to this area is not supported by engineering staff.	MTE are satisfied that there is an engineering solution to resolve the City's concerns with respect to the length of the watermain. The solution includes the construction of a monitoring system and ensuring that water circulation is provided.	The revised FSR will include the design details which can be finalized through the City's review and approval of engineering drawings which can be secured as a condition of draft plan approval.		

Appendix D

Proposed Zoning By-law Amendment and Schedule

RESIDENTIAL FIVE (R5)

Zone

7.5 Residential Five (R5) – Northgate-Kartway

Permitted Uses

7.5.1 No PERSON shall erect, alter, enlarge, reconstruct, locate or use any BUILDING or STRUCTURE in whole or in part, nor use any land in whole or in part, in the Residential Five (R5) zone for any purpose other than one or more of the following permitted uses:

7.5.1.1 **Primary Uses**

- SINGLE DETACHED BUILDING
- SEMI-DETACHED BUILDING
- FREEHOLD SEMI-DETACHED BUILDING

7.5.1.2 **Complementary Uses**

a) GROUP HOME (see section 3.G.2 and Table 6A)

7.5.1.2 **Ancillary Uses**, meaning the uses are subordinate and incidental to Primary Use specified in section 7.5.1.1:

- HOME OCCUPATION (see section 3.H.3 and Table 6A)

7.5.1.3 **Ancillary Uses**, meaning the uses are subordinate and incidental to a SINGLE DETACHED BUILDING or FREEHOLD SEMI-DETACHED BUILDING:

a) SECOND RESIDENTIAL UNIT (see section 3.S.1)

7.5.1.4 For the purposes of this BY-LAW, more than one main BUILDING may be permitted on a LOT subject to the other provisions of this zone.

Performance Standards

7.5.2 The following regulations in Table 7 shall apply to every LOT, BUILDING and STRUCTURE in the Residential Five (R5) Northgate-Kartway Zone:

Table 7: Regulations – RESIDENTIAL FIVE (R5) NORTHGATE-KARTWAY				
		SINGLE DETACHED	**SEMI-DETACHED**	**FREEHOLD SEMI-DETACHED**
Lot Area (min)	Interior Lot	255 m^2	450 m^2	225 m^2
	Corner Lot	330 m^2	477 m^2	252 m^2
Lot Frontage (min)	Interior Lot	8.5 m	15.0 m	6.8 m
	Corner Lot	12.0 m	16.8 m	9.0 m

Average Lot Depth (min)	30.0 metres
Front Yard Setback (min)	6.0 metres
Side Yard Setback (min)	0.6 metres on one side; 1.2 metres on the other side. In no case shall a dwelling be located closer than 1.8 metres to a dwelling on an adjacent lot*
Rear Yard Setback (min)	7.5 metres
Building Height (max)	10.0 metres
Lot Coverage (max)	55%
Parking Spaces (min)	1 per Dwelling Unit

* The minimum SIDE YARD setback for FREEHOLD SEMI-DETACHED DWELLINGS on one side of the LOT shall be 0.0 m.

7.5.3 Notwithstanding anything to the contrary, where a minimum STREET LINE setback of seven metres (7.0 m) is provided to a PRIVATE GARAGE, the minimum FRONT YARD setback to the habitable portion of the main STRUCTURE shall be five metres (5 m).

7.5.4 Notwithstanding anything to the contrary, a garage shall not be located any closer to the FRONT LOT LINE than the HABITABLE FLOOR SPACE of the dwelling. A one (1) STOREY unenclosed PORCH may encroach into the FRONT YARD and/or FLANKAGE YARD by a maximum of one-point-eight metres (1.8 m).

7.5.5 Notwithstanding anything to the contrary, the maximum width of a PRIVATE GARAGE attached to the main BUILDING and the associated DRIVEWAY shall not exceed 58% of the FRONT BUILDING FAÇADE LENGTH, provided further that the associated DRIVEWAY may extend zero-point-three (0.3) metres past either side of the PRIVATE GARAGE opening (door) provided no portion of the DRIVEWAY is located in front of any HABITABLE FLOOR SPACE on the FIRST STOREY.

7.5.6 Notwithstanding anything to the contrary, the minimum required setback from a BUILDING used as a municipal sewage pumping station shall be twenty metres (20 m).

7.5.7 Notwithstanding anything the contrary, outdoor amenity areas subject to the regulations of NPC-300, shall be subject to the following minimum setbacks from the centreline of Conservation Drive:

Block 1/Stage 4 (Northgate) – 18.63 metres

Block 27/Stage 4 (Northgate) and Block 1/Stage 1 (Erbsville-Kartway) – 16.92 metres

7.5.8 For the lands identified as "Residential Five Zone (R5) with Site Specific Provisions including permission for Freehold Townhouse Buildings" on Schedule 'A' attached hereto, a FREEHOLD TOWNHOUSE BUILDING shall also be permitted. The Regulations of the Residential Eight Zone (R8) – Northgate-Kartway that apply to a FREEHOLD TOWNHOUSE BUILDING shall apply.

RESIDENTIAL EIGHT (R8)

Zone

7.8 Residential Eight (R8) – Northgate-Kartway

Permitted Uses

7.8.1 No PERSON shall erect, alter, enlarge, reconstruct, locate or use any BUILDING or STRUCTURE in whole or in part, nor use any land in whole or in part, in the Residential Eight (R8) zone for any purpose other than one or more of the following permitted uses:

7.8.1.1 **Primary Uses**

- FREEHOLD TOWNHOUSE BUILDING
- TOWNHOUSE BUILDING
- STACKED TOWNHOUSE BUILDING
- TRIPLEX BUILDING

7.8.1.2 **Ancillary Uses**, meaning the uses are subordinate and incidental to Primary Use specified in section 7.8.1.1:

- HOME OCCUPATION (see section 3.H.3 and Table 6A)

7.8.1.3 **Ancillary Uses**, meaning the uses are subordinate and incidental to a FREEHOLD TOWNHOUSE BUILDING:

a) SECOND RESIDENTIAL UNIT (see section 3.S.1)

Performance Standards

7.8.2 The following regulations in Table 7 shall apply to every LOT, BUILDING and STRUCTURE in the Residential Eight (R8) Northgate-Kartway Zone:

Table 7: Regulations – RESIDENTIAL EIGHT (R8) NORTHGATE-KARTWAY

		TOWNHOUSE	STACKED TOWNHOUSE	FREEHOLD TOWNHOUSE	TRIPLEX
Lot Area (min)		(none)	(none)	165 m^2	540 m^2
Lot Frontage (min)	Interior Lot	(none)	(none)	5.5 metres	15 metres
	Corner Lot			9.5 metres	18 metres
Street Line Setback (min)		6 metres			
Side Yard Setback (min)		(none)	1.8 metres	1.8 metres	1.8 metres

Rear Yard Setback (min)	7.5 metres			
Building Height (max)	10 metres			
Density (max)	150 bedrooms/ha	150 bedrooms/ha	(none)	(none)
Lot Coverage (max)	40%	40%	55%	30%
Landscape Open Space (min)	30%			
Parking Spaces (min)	1 per Dwelling Unit			
Visitor Parking Spaces (min)	0.33 per Dwelling Unit	0.10 per Dwelling Unit	(none)	1
Number of main Buildings per Lot (max)	More than one (1) permitted	More than one (1) permitted	1	1

7.8.3 Notwithstanding anything to the contrary, the STREET LINE FLANKAGE set back for a TOWNHOUSE or FREEHOLD TOWNHOUSE shall be a minimum of 3.0 metres.

7.8.4 For a FREEHOLD TOWNHOUSE, the maximum width of a PRIVATE GARAGE attached to the main BUILDING shall not exceed 60% of the FRONT BUILDING FAÇADE LENGTH, provided further that the associated DRIVEWAY may extend zero-point-three (0.3) metres past either side of the PRIVATE GARAGE opening (door) provided that no portion of the DRIVEWAY is located in front of any HABITABLE FLOOR SPACE on the FIRST STOREY.

7.8.5 Notwithstanding anything to the contrary, a garage shall not be located any closer to the FRONT LOT LINE than the HABITABLE FLOOR SPACE of the dwelling. A one (1) STOREY unenclosed PORCH associated with a TOWNHOUSE or FREEHOLD TOWNHOUSE may encroach into the FRONT YARD and/or FLANKAGE YARD by a maximum of one-point-eight metres (1.8 m).

7.8.6 Notwithstanding anything to the contrary, stairs and landings associated with a STACKED TOWNHOUSE or TRIPLEX may encroach into the STREET LINE setback by a maximum of two-point-five metres (2.5 m).

7.8.7 The maximum number of TOWNHOUSE or FREEHOLD TOWNHOUSE BUILDINGS in a block shall be eight (8).

7.8.8 Notwithstanding anything to the contrary, the minimum required setback from a BUILDING used as a municipal sewage pumping station shall be twenty metres (20 m). For purposes of clarity, surface parking shall be permitted within the setback.

7.8.9 Notwithstanding anything the contrary, outdoor amenity areas within Blocks 1 and 7/Stage 1 (Northgate) subject to the regulations of NPC-300, shall be a minimum distance of 15 metres from the centreline of Beaver Creek Road.

7.8.10 Notwithstanding anything the contrary, outdoor amenity areas subject to the regulations of NPC-300, shall be subject to the following minimum setbacks from the centreline of Conservation Drive:

Block 20/Stage 4 (Northgate) – 18.63 metres

Block 21/Stage 4 (Northgate) – 21.22 metres

RESDIENTIAL NINE (R9)

Zone

7.9 Residential Nine (R9) – Northgate-Kartway

Permitted Uses

7.9.1 No PERSON shall erect, alter, enlarge, reconstruct, locate or use any BUILDING or STRUCTURE in whole or in part, nor use any land in whole or in part, in the Residential Nine (R9) zone for any purpose other than one or more of the following permitted uses:

7.9.1.1 **Primary Uses**

- APARTMENT BUILDING
- ASSISTED LIVING FACILITY
- LONG TERM CARE FACILITY
- STACKED TOWNHOUSE BUILDING
- TOWNHOUSE BUILDING

7.9.1.2 **Ancillary Uses**, meaning the uses are subordinate and incidental to a permitted DWELLING UNIT:

- HOME OCCUPATION (see section 3.H.3 and Table 6A)

Performance Standards

7.9.2 The following regulations in Table 7 shall apply to every LOT, BUILDING and STRUCTURE in the Residential Nine (R9) Northgate-Kartway Zone:

Table 7: Regulations – RESIDENTIAL NINE (R9) NORTHGATE-KARTWAY	
	APARTMENT BUILDING
Lot Frontage (min)	20 m
Street Line Setback (min)	5.0 m
Side Yard Setback (min)	4.0 m
Rear Yard Setback (min)	5.0 m
Low Rise Residential Lot Line Setback (min)	Half the height of the building or 4.5 m whichever is greater
Building Height (max)	12.0 m / 4 storeys
Density (max)	150 bedrooms/ha
Parking Spaces (min)	1/unit
Visitor Parking Spaces (min)	0.1/unit
Number of Main Buildings Per Lot	More than One (1)
Landscape Open Space (min)	30%
Amenity Area (min)	3 m^2 per bedroom for the first bedroom and 2 m^2 for each additional bedroom in the dwelling unit

7.9.3 A LONG TERM CARE FACILITY and an ASSISTED LIVING FACILITY shall comply with the regulations for an APARTMENT BUILDING, except for parking, which shall comply with Table 6A in By-law 2018-050.

7.9.4 Notwithstanding anything to the contrary, every BUILDING shall have an entrance to GRADE facing a public STREET.

7.9.5 Notwithstanding anything to the contrary the regulations of the Residential Eight (R8) Northgate-Kartway zone shall apply to TOWNHOUSE BUILDING and STACKED TOWNHOUSE BUILDING.

7.9.6 Notwithstanding anything to the contrary, the minimum required setback from a BUILDING used as a municipal sewage pumping station shall be twenty metres (20 m).

7.9.7 Notwithstanding the regulations in section 3.S.5 of By-law 2018-050, a ZONE BOUNDARY shall not be considered a LOT LINE for the purposes of applying zoning regulations.

7.9.8 Notwithstanding anything the contrary, outdoor amenity areas within Block 2/Stage 3 (Northgate) subject to the regulations of NPC-300, shall be a minimum distance of 21.22 metres from the centreline of Conservation Drive.

RESIDENTIAL MIXED-USE-20 (RMU-20)

Zone

7.10 Residential Mixed-Use-20 (RMU-20) – Northgate-Kartway

Permitted Uses

7.10.1 No PERSON shall erect, alter, enlarge, reconstruct, locate or use any BUILDING or STRUCTURE in whole or in part, nor use any land in whole or in part, in the Residential Mixed-Use-20 (RMU-20) – Northgate-Kartway zone for any purpose other than one or more of the following permitted uses:

7.10.1.1 **Primary Uses**

- ASSISTED LIVING FACILITY
- LIVE-WORK BUILDING
- LONG TERM CARE FACILITY
- MULTI-UNIT RESIDENTIAL BUILDING (including APARTMENT BUILDING)
- MIXED-USE BUILDING with DWELLING UNITS above the FIRST STOREY
- STACKED TOWNHOUSE BUILDING

7.10.1.1.1 A LIVE WORK BUILDING means a BUILDING that contains, or is designed to contain, non-residential uses on the FIRST STOREY and a DWELLING UNIT above the FIRST STOREY and which:

a) has the residential and non-residential component horizontally separated;

b) is separated vertically by a continuous common wall without opening from basement to roof from adjacent units on one or two sides; and

c) has its own entrance at or to GRADE.

7.10.1.2 **Ancillary Uses**, meaning the uses are subordinate and incidental to a permitted DWELLING UNIT:

- HOME OCCUPATION (see section 3.H.3 and Table 6A)

7.10.1.3 **Ancillary Uses,** meaning the uses are subordinate and incidental to a:

i. MULTI-UNIT RESIDENTIAL BUILDING

ii. MIXED-USE BUILDING with DWELLING UNITS above the FIRST STOREY

iii. LONG TERM CARE FACILITY

iv. ASSISTED LIVING FACILITY

- CAFÉ
- CHILD CARE CENTRE
- COMMERCIAL WELLNESS
- DRUG STORE
- MEDICAL CLINIC
- OFFICE
- PERSONAL SERVICE SHOP
- VARIETY STORE

Performance Standards

7.10.2 The following regulations in Table 7 shall apply to every LOT, BUILDING and STRUCTURE in the Residential Mixed-Use-20 (RMU-20) Northgate-Kartway Zone:

Table 7: Regulations – RESIDENTIAL MIXED-USE-20 (RMU-20) NORTHGATE-KARTWAY			
	MULTI-UNIT RESIDENTIAL BUILDING (including APARTMENT BUILDING)	**STACKED TOWNHOUSE BUILDING**	**LIVE WORK BUILDING**
Lot Frontage (min)	20.0 m		
Street Line Setback (min)	5.0 m		
Side Yard Setback (min)	3.0 m		
Rear Yard Setback (min)	5.0 m		
Low Rise Residential Lot Line Setback (min)	Half the height of the building or 4.5 m whichever is greater	(none)	(none)
Building Height (min)	9.0 m		
Building Height (max)	20 m/6 storeys	12.0 m	
Height of First Storey (min)	4.5 m	(none)	4.5 m
Density (max)	300 bedrooms/ha		
Parking Spaces (min)	1/unit		
Visitor Parking Spaces (min)	0.1/unit		0.2/unit[1]
Number of Main Buildings Per Lot	More than One (1)		
Amenity Area (min)	3 m^2 per bedroom for the first bedroom and 2 m^2 for each additional bedroom in the dwelling unit	None	
Landscape Open Space (min)	30%		

[1] the visitor parking spaces required for a "Live-Work Building" shall be deemed to satisfy both the visitors to the residential unit and the visitors/users of the non-residential component.

7.10.3 A LONG TERM CARE FACILITY and an ASSISTED LIVING FACILITY shall comply with the regulations for an APARTMENT BUILDING, except for parking, which shall comply with Table 6A in By-law 2018-050.

Table 7: Regulations – RESIDENTIAL MIXED-USE-20 (RMU-20) NORTHGATE-KARTWAY for MIXED-USE BUILDING	
Lot Frontage (min)	20.0 m
Street Line Setback (min)	5.0 m
Street Line Setback (max)	60% of the FRONT BUILDING FAÇADE within 7.5 m of the Street Line
Side Yard Setback (min)	3.0 m
Rear Yard Setback (min)	5.0 m
Low Rise Residential Lot Line Setback (min)	Half the height of the building or 4.5 m whichever is greater
Building Height (min)	9.0 m
Building Height (max)	20.0 m / 6 storeys
Height of First Storey (min)	4.5 m
Density (max)	300 bedrooms per hectare
Landscape Open Space (min)	30%
Number of main Buildings Per Lot	More than one (1)
Parking Spaces, Residential (min)	1 space per unit[1]
Parking Spaces, Visitor (min)	0.1 spaces per unit[1]
Parking Spaces, Non-Residential (min)	2.4 spaces per 100 m^2 Building Floor Area, except as provided for in Table 6A of By-law 2018-050
Amenity Area (min)	3 m^2 per bedroom for the first bedroom and 2 m^2 for each additional bedroom in the dwelling unit

7.10.4 Notwithstanding anything to the contrary, every BUILDING shall have a front entrance to GRADE on the FRONT BUILDING FAÇADE and/or the FLANKAGE BUILDING FAÇADE.

7.10.5 Notwithstanding anything to the contrary the following regulations shall apply to the Ancillary Uses in section 7.10.1.3:

a) Ancillary uses shall abut the FRONT BUILDING FAÇADE and/or the FLANKAGE BUILDING FAÇADE.

b) Ancillary uses shall only be permitted on the FIRST STOREY of a:

- MULTI-UNIT RESIDENTIAL BUILDING
- MIXED-USE BUILDING with DWELLING UNITS above the FIRST STOREY
- LONG TERM CARE FACILITY
- ASSISTED LIVING FACILITY

c) Ancillary uses shall not collectively exceed fifteen percent (15%) of the BUILDING FLOOR AREA of the BUILDING in which the Ancillary Uses are located, or 5,000 square metres, whichever is more restrictive.

d) The maximum floor area of each commercial use shall be 465 square metres.

7.10.6 STRUCTURED PARKING shall be permitted on the FIRST STOREY of a MIXED-USE BUILDING or an APARTMENT BUILDING or a MULTI-UNIT BUILDING, provided that:

a) A minimum of 25% of the FIRST STOREY shall be comprised of one or more of the following:

- HABITABLE FLOOR SPACE
- Circulation spaces, such as hallways, elevators and the like
- Common indoor AMENITY AREA
- DWELLING UNIT
- Commercial uses specified in section 7.10.1.3.iv)
- Entrance/foyers
- Hydro transformer room
- Management office
- Lobby, reception area, seating area and the like

b) STRUCTURED PARKING shall be located entirely behind the BUILDING FLOOR AREA devoted to the uses specific in section 7.10.6.a)

7.10.7 Notwithstanding the regulations in section 3.S.5 of By-law 2018-050, a ZONE BOUNDARY shall not be considered a LOT LINE for the purposes of applying zoning regulations.

7.10.8 Notwithstanding anything the contrary, outdoor amenity areas subject to the regulations of NPC-300, shall be a minimum distance of:

- 24.5 metres from the centreline of Conservation Drive for Block 2/Stage 3 (Northgate)
- 36.9 metres from the centreline of Conservation Drive for Block 3/Stage 3 (Northgate)
- 21.5 metres from the centreline of Beaver Creek Road for Block 3/Stage 3 (Northgate)

PARKS & RECREATION (OS1)

Zone

11.1 Parks & Recreation (OS1) Zone

Permitted Uses

11.1.1 No PERSON shall erect, alter, enlarge, reconstruct, locate or use any BUILDING or STRUCTURE in whole or in part, nor use any land in whole or in part, in the Parks & Recreation (OS1) zone for any purpose other than one or more of the following permitted uses:

- Cemetery
- Crematoria, Funeral Home, and Mausoleum ancillary to a Municipal Cemetery
- Parkland
- CITY Arboretum and Greenhouse
- Community Centre
- GOVERNMENT USE
- MUNICIPAL RECREATION FACILITY
- Private Recreation Facility
- Trails and Pathways
- Utility Corridor, including hydro transmission and distribution corridors

Performance Standards

11.1.2 The following regulations in Table 11A shall apply to every LOT, BUILDING and STRUCTURE in the Parks & Recreation (OS1) zone:

Table 11A: Regulations – PARKS & RECREATION ZONE (OS1)	
STREET LINE setback (minimum)	6.0 metres
SIDE YARD setback (minimum)	3.0 metres or half the height of the BUILDING, whichever is greater
REAR YARD setback (minimum)	7.5 metres or half the height of the BUILDING, whichever is greater
BUILDING HEIGHT (maximum)	In metres, equal to the numerical suffix as shown on the Zoning Map attached as Schedule 'A' to this BY-LAW. Where no suffix is shown on the Zoning Map, the maximum BUILDING HEIGHT shall be 10 metres.
COVERAGE (maximum)	40%
PARKING SPACES (minimum)	3 PARKING SPACES per 100 square metres of BUILDING FLOOR AREA

11.1.3 Notwithstanding anything to the contrary, the following shall be deemed to comply with this BY-LAW:

- the location and height of EXISTING BUILDINGS within a Private Recreational Facility
- the EXISTING COVERAGE of the Private Recreational Facility
- the EXISTING PARKING SPACES for the Private Recreational Facility

CONSERVATION (OS3)

Zone

11.3 Conservation (OS3) Zone

Permitted Uses

11.3.1 No PERSON shall erect, enlarge, locate or reconstruct any BUILDING or STRUCTURE in whole or in part in the Conservation (OS3) zone.

11.3.2 No PERSON shall use any land in whole or in part in the Conservation (OS3) zone for any purpose other than one or more of the following permitted uses:

- Beekeeping, subject to compliance with the Ontario Bees Act
- Conservation Lands, meaning natural resource areas including woodlots, wetlands, grasslands, water courses, and related environmental buffers
- CITY, REGIONAL, and GRCA flood and erosion control infrastructure
- Parkland, Trails, and Pathways
- Restorative, scientific, and educational uses solely related to the natural and environmental resources and systems on the LOT – includes woodland, wetland, grasslands, water course, fish, and wildlife management and conservation

Performance Standards

11.3.3 The following regulations in Table 11C shall apply to EXISTING BUILDINGS and EXISTING STRUCTURES in the Conservation (OS3) zone:

Table 11C: Regulations – CONSERVATION ZONE (OS3)	
FRONT YARD setback (minimum)	Equals the FRONT YARD existing on the effective date of this BY-LAW.
FLANKAGE YARD setback (minimum)	Equals the FLANKAGE YARD existing on the effective date of this BY-LAW.
SIDE YARD setback (minimum)	Equals the SIDE YARD existing on the effective date of this BY-LAW.
REAR YARD setback (minimum)	Equals the REAR YARD existing on the effective date of this BY-LAW.
BUILDING HEIGHT (maximum)	Equals the BUILDING HEIGHT existing on the effective date of this BY-LAW.
PARKING SPACES (minimum)	Equals the PARKING SPACES existing on the effective date of this BY-LAW.
DRIVEWAY (location and configuration)	Equals the DRIVEWAY existing on the effective date of this BY-LAW.
Parking Area (location and configuration)	Equals the Parking Area existing on the effective date of this BY-LAW.

RESIDENTIAL ONE (R1)

Zone

7.1 Residential One (R1) Zone

Permitted Uses

7.1.1 No PERSON shall erect, alter, enlarge, reconstruct, locate, or use any BUILDING or STRUCTURE in whole or in part, nor use any land in whole or in part, in the Residential One (R1) zone for any purpose other than one or more of the following permitted uses:

7.1.1.1 **Primary Uses**:

a.) SINGLE DETACHED BUILDING

7.1.1.2 **Complementary Uses**:

a.) CLASS A GROUP HOME (see section 3.G.2 and Table 6A)
b.) SPIRITUAL USE (see section 3.S.4)

7.1.1.3 **Ancillary Uses**, meaning the uses are subordinate and incidental to a Primary Use specified in section 7.1.1.1:

a.) COACH HOUSE (see section 3.C.2)
b.) HOME OCCUPATION (see section 3.H.3 and Table 6A)
c.) SECOND RESIDENTIAL UNIT (see section 3.S.1)

Performance Standards

7.1.2 The following regulations in Table 7A shall apply to every LOT, BUILDING and STRUCTURE in the Residential One (R1) zone:

Table 7A: Regulations – RESIDENTIAL ONE ZONE (R1)	
LOT AREA (minimum)	INTERIOR LOT: 405 square metres
	CORNER LOT: 540 square metres
LOT FRONTAGE (minimum)	INTERIOR LOT: 13.5 metres
	CORNER LOT: 18 metres
FRONT YARD setback (minimum)	7.5 metres
FLANKAGE YARD setback (minimum)	6.0 metres
SIDE YARD setback (minimum)	1.8 metres
REAR YARD setback (minimum)	7.5 metres
BUILDING HEIGHT (maximum)	10 metres
LOT COVERAGE, all BUILDINGS (maximum)	35%
PARKING SPACES (minimum)	1 per DWELLING UNIT
Number of BUILDINGS (maximum)	One (1) main BUILDING shall be permitted on a LOT

7.1.3 Notwithstanding anything to the contrary, the regulations in section 3.S.4 shall apply to SPIRITUAL USES.



Figure 8

Proposed Zoning

1017081 Ontario Limited, Gabriella Groff & 1455136 Ontario Inc.
Conservation Drive
Waterloo, Ontario

LEGEND

Subject Lands

BYLAW 2018-050

- R1 RESIDENTIAL ONE ZONE (R1)
- R5 RESIDENTIAL FIVE ZONE (R5) WITH SITE SPECIFIC PROVISIONS
- R5 RESIDENTIAL FIVE ZONE (R5) WITH SITE SPECIFIC PROVISIONS INCLUDING PERMISSION FOR FREEHOLD TOWNHOUSE BUILDINGS
- R8 RESIDENTIAL EIGHT ZONE (R8) WITH SITE SPECIFIC PROVISIONS
- R8 RESIDENTIAL EIGHT ZONE (R8) WITH SITE SPECIFIC PROVISIONS AND CONSERVATION ZONE (OS3) WITH SITE SPECIFIC PROVISIONS
- R9 RESIDENTIAL NINE ZONE (R9) WITH SITE SPECIFIC PROVISIONS
- RMU-20 RESIDENTIAL MIXED USE (RMU-20) ZONE WITH SITE SPECIFIC PROVISIONS
- OS1 PARKS & RECREATION (OS1) ZONE
- OS3 CONSERVATION (OS3) ZONE

DATE:	July 14, 2020
SCALE	1 : 7,500
FILE:	14148A
DRN:	LHB

north

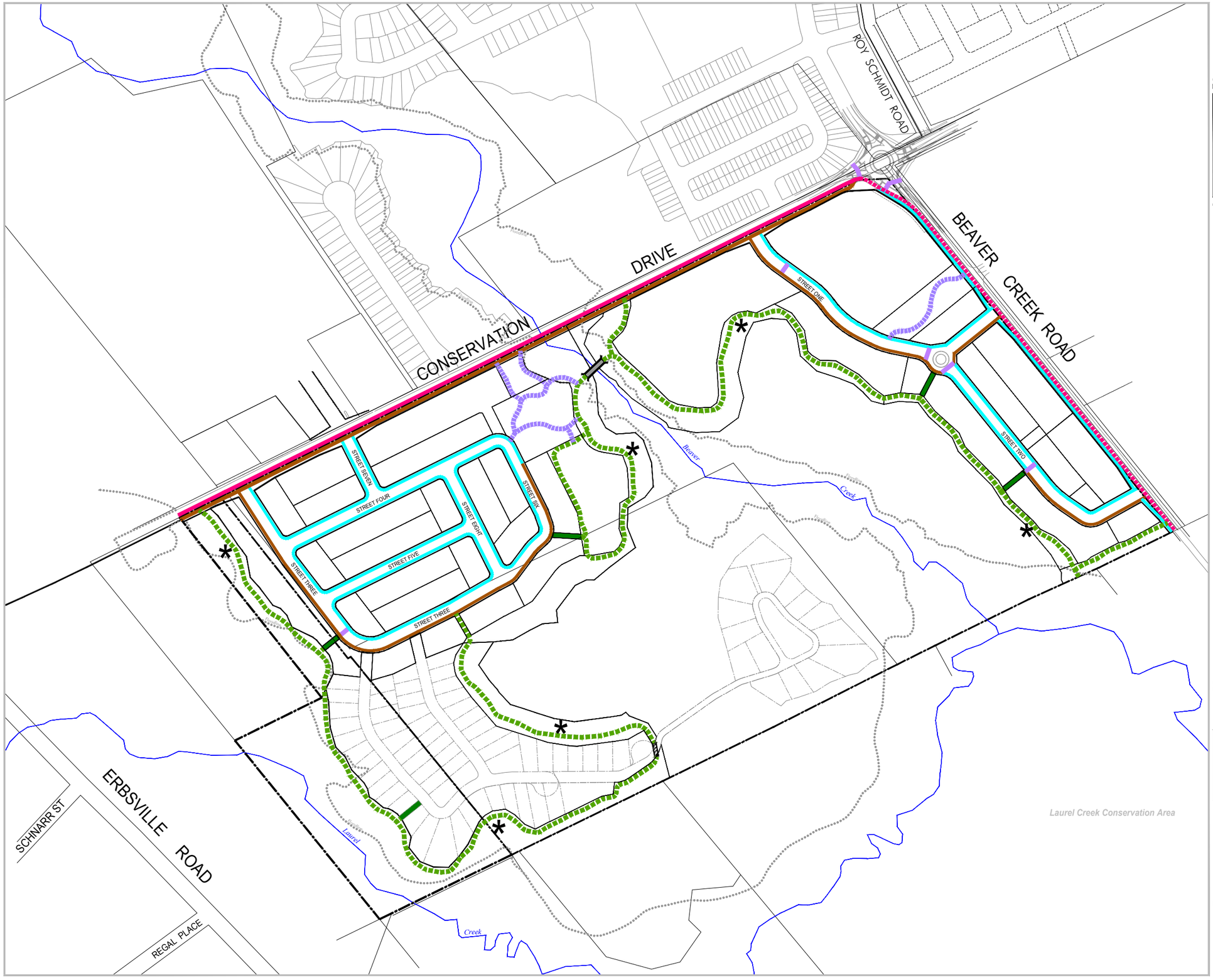
K:\14148A-NORTHGATE-WATERLOO\REPORT\FIGURE 8 - ZONING PROPOSED JULY 14 2020.DWG

MHBC PLANNING URBAN DESIGN & LANDSCAPE ARCHITECTURE
200-540 BINGEMANS CENTRE DR. KITCHENER, ON, N2B 3X9
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Appendix E

Active Transportation Master Plan

Figure 7



Northgate Active Transportation Master Plan

Key Plan



1017081 Ontario Limited & Gabriella Groff

1455136 Ontario Inc

north

Not to Scale

LEGEND

- MULTI-USE TRAIL
- SIDEWALK
- BIKE LANE - RAISED
- BIKE LANE - BUFFERED
- TRAIL
- TRAIL THRU PARK / PUMPING STATION
- WALKWAY
- PEDESTRIAN CROSSING
- PEDESTRIAN CROSSING EASEMENT
- PROPOSED BRIDGE
- * TRAILS CONCEPTUALLY SHOWN. (EXACT LOCATION DEPENDANT UPON SITE SPECIFIC LOCATION, FINAL DESIGN AND GRADING.)

No.	Date	Issued / Revision	By
2	July 14,2020	Revise Lotting and Limits of Plan.	LHB
1	June 15,2020	Input Conceptual & Proposed Developments North of Conservation Drive.	LHB

Notes:

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Approval Stamp

Date: July 14,2020

File No.: 14148A

Plan Scale: 1:2,000

Drawn By: L.H.B.

Checked By: P.B. / T.H.

Project: **1017081 Ontario Limited, Gabriella Groff & 1455136 Ontario Inc.**
Conservation Drive
Waterloo, Ontario

north

File Name: **Active Transportation Master Plan**

K:\14148A-NORTHGATE-WATERLOO\REPORT\FIGURE 7 - TRANSPORTATION PLAN JULY 14 2020.DWG