

Local Planning Appeal Tribunal
Tribunal d'appel de l'aménagement
local



ISSUE DATE: August 29, 2019

CASE NO(S): PL170858

The Ontario Municipal Board (the "OMB") is continued under the name Local Planning Appeal Tribunal (the "Tribunal"), and any reference to the Ontario Municipal Board or Board in any publication of the Tribunal is deemed to be a reference to the Tribunal.

PROCEEDING COMMENCED UNDER subsection 22(7) of the *Planning Act*, R.S.O. 1990, c. P.13, as amended

Applicant and Appellant: 2417985 Ontario Inc. and 2417972 Ontario Inc.
Subject: Request to amend the Official Plan - Failure of the City of Hamilton to adopt the requested amendment
Existing Designation: Freelon Settlement Area
Proposed Designated: Site specific to allow proposed development
Purpose: To permit the construction of a 20-lot residential subdivision
Property Address/Description: 34 11th Concession Road East and 1800 Highway 6
Municipality: City of Hamilton
Approval Authority File No.: PHOPA-14-001
OMB Case No.: PL170858
OMB File No.: PL170858
OMB Case Name: 2417985 Ontario Inc. v. Hamilton (City)

PROCEEDING COMMENCED UNDER subsection 34(11) of the *Planning Act*, R.S.O. 1990, c. P.13, as amended

Applicant and Appellant: 2417985 Ontario Inc. and 2417972 Ontario Inc.
Subject: Application to amend Zoning By-law No. 90-145-Z - Neglect of the City of Hamilton to make a decision
Existing Zoning: R2 & R2-1(H)
Proposed Zoning: Site specific to allow proposed development
Purpose: To permit the construction of a 20-lot residential subdivision
Property Address/Description: 34 11th Concession Road East and 1800

Municipality: Highway 6
 City of Hamilton
 Municipality File No.: ZAR-15-002
 OMB Case No.: PL170858
 OMB File No.: PL170859

PROCEEDING COMMENCED UNDER subsection 51(34) of the *Planning Act*, R.S.O. 1990, c. P.13, as amended

Applicant and Appellant: 2417985 Ontario Inc. and 2417972 Ontario Inc.
 Subject: Proposed Plan of Subdivision - Failure of the City of Hamilton to make a decision
 Purpose: To permit the construction of a 20-lot residential subdivision
 Property Address/Description: 34 11th Concession Road East and 1800 Highway 6
 Municipality: City of Hamilton
 Municipality File No.: 25T-201403
 OMB Case No.: PL170858
 OMB File No.: PL170860

Heard: May 13-17, 2019 in Hamilton, Ontario

APPEARANCES:

Parties

2417985 Ontario Inc. and
2417972 Ontario Inc. ("Applicants")

City of Hamilton ("City")

Counsel

S. Snider/A. Toumanians

S. Chisholm

DECISION BY BLAIR S. TAYLOR AND ORDER OF THE TRIBUNAL

INTRODUCTION

[1] Section 4.4 of the Provincial Policy Statement 2014 ("PPS") provides: "This Provincial Policy Statement shall be read in its entirety and all relevant policies are to be applied to each situation." Similarly, A Place to Grow: Growth Plan for the Greater

Golden Horseshoe 2019 ("Growth Plan 2019") states in s. 1.2.3: "This Plan is to be read in its entirety, and the relevant policies are to be applied to each situation."

[2] This decision considers the balancing of alleged conflicting mandatory provisions for growth and development and public health and safety from the PPS and the Growth Plan 2019.

GROWTH PLAN 2019

[3] Section 3(5) of the *Planning Act* ("PA") states *inter alia* that decisions of the Tribunal shall conform to Provincial Plans in effect at the date of decision.

[4] This hearing commenced on May 13, 2019 and was completed on May 17, 2019.

[5] The Growth Plan 2019 came into effect on May 16, 2019.

[6] Ontario Regulation 311/06 was brought to the attention of the Tribunal. This unheralded amendment deals with conformity to the Growth Plan 2019.

[7] Section 2 of the Regulation provides that a matter is deemed to have been commenced on the day the application is made and directs that if the Tribunal has completed a hearing and reserved its final decision prior to May 16, 2019, then the matter is to be disposed of in accordance with the Growth Plan 2017.

[8] In this case, the hearing before the Tribunal was not completed until May 17, 2019 at which time the Tribunal reserved its decision.

[9] Accordingly, this decision must conform to the Growth Plan 2019.

[10] As the Tribunal heard no *viva voce* evidence with regard to the Growth Plan 2019, after the conclusion of the hearing, the Tribunal requested affidavits from the land use planners with regard to the Growth Plan 2019 and these affidavits have been filed

as additional exhibits to the hearing.

BACKGROUND

[11] The Applicants own the lands that are known municipally as 1800 Highway 6 and 34 11th Concession Road East ("Subject Lands") having 35.4 metres ("m") of frontage onto the 11th Concession and 187 m of frontage along Highway 6 and an area of 6.6 hectares ("ha"). The Subject Lands are generally located in the south east quadrant of the 11th Concession Road East and Highway 6.

[12] The Subject Lands are designated in the Rural Hamilton Official Plan as "Rural Settlement Area" and "Settlement Residential" within the Rural Settlement Area of Freelon. The Subject Lands are zoned "Settlement Residential R2 Zone" on the southern half of the lands and "Settlement Residential Holding R2-1 (H) Zone" on the northerly half of the Subject Lands.

[13] At the present time there is a single detached dwelling on the Subject Lands proposed for demolition.

[14] In this area of Freelon, there is a municipal water supply, but no municipal sewage system.

[15] To the immediate north of the Subject Lands are about nine existing single-family residential dwellings on private services, zoned R2 that front onto the 11th Concession Road East. To the north of the 11th Concession are agricultural lands and to the east of the Subject Lands are agricultural lands.

[16] South of the Subject Lands is an abutting residential subdivision consisting of single-family residential dwellings zoned R2, with municipal water and private septic facilities.

[17] To the west of the Subject Lands there is an open space area and to the north

and south of that is residential development.

DEVELOPMENT PROPOSAL

[18] The Applicants seek to develop the Subject Lands to create 20 lots on a draft plan of subdivision utilizing the municipal water supply and with private tertiary septic facilities. The lots would generally have about 30 m of frontage and a lot area of about 0.2 ha and be similar in size with the existing development to the south of the Subject Lands.

[19] If allowed the proposed development would complete the development in the south east quadrant of the 11th Concession Road East and Highway 6.

[20] To implement the development proposal, the Applicants filed and later updated a Zoning By-law Amendment ("ZBA") and a Draft Plan of Subdivision Application ("Draft Plan") with supporting documentation and a hydrogeological study.

[21] Arising out of concerns from the City, the Applicants filed an application to amend the Official Plan ("OPA") to specify lots ranging in area from 0.2 ha for the 20 lots whereas the City was of the view that lot areas of at least 0.4 ha were required.

[22] As the City had not dealt with the three applications within the statutory time periods, the OPA, the ZBA and the Draft Plan were all appealed to the Tribunal.

[23] City Planning Staff provided an Information Report to the Planning Committee of the City dated October 31, 2017 which *inter alia* set out the following comments which in essence form the critical elements to be considered in this matter:

Under existing conditions the Freelon drinking water treatment system does not provide firm capacity as defined under "Design Guidelines for Drinking-Water Systems 2008", Ministry of the Environment. As a result new subdivisions are not permitted until a supplementary supply of treated water can be secured for the community...

The developer is proposing "tertiary" private on-site sewage treatment systems to reduce nitrate levels in the sewage effluent in an effort to

create lots smaller than prescribed under the Hamilton Rural Official Plan policies. Nitrate is a key pollutant originating from sewage disposal systems that can increase the risk to ground water quality and public health. Given that the nitrate-reducing technologies have not been approved under the Ontario Building Code, and after consulting with Hamilton Water Staff, City Staff do not endorse the use of these nitrate-reducing advance treatment systems as it relates to the approval of under-sized lots and this subdivision falls within the Well Head Protection Area of one of the municipal wells (FDL01). Therefore, and in the absence of satisfactory information demonstrated otherwise, an application which proposes a high density of lots that would pose increased water quality risk to the Freelon drinking water system and its users cannot be supported.

DECISION

[24] Having considered all the oral evidence, the affidavit evidence of the land use planners, and the submissions of counsel, and having considered the matters of Provincial Interest as set out in s. 2 of the PA, having considered consistency with the PPS, having considered conformity with the Growth Plan 2019, having considered conformity with the Rural Hamilton Official Plan, and having considered the information and materials that were before City Council and the position of Council pursuant to s. 2.1 of the PA, the Tribunal will allow the appeals in part and:

- a. approve the OPA as found in Exhibit 2, Tab 1 pages 36-41 inclusive as corrected by Jeff Kenney to amended to reference Volume 1, Section C.5.1.1 (c),
- b. approve the ZBA as found in Exhibit 2, Tab 1 at pages 42-47 inclusive,
- c. approve the Draft Plan as found at Exhibit 7,
- d. and approve the amended Conditions of Draft Plan Approval as found in Exhibit 6B, but further amended by the Tribunal to amend condition 33 to reference "blanket" access easements.

PUBLIC POLICY REGIME

[25] The Tribunal will outline the relevant policy provisions of the PPS, Growth Plan 2019, and the City's Rural Official Plan with regard to the issues raised in this hearing.

PPS

[26] With regard to the planning, development, and intensification policies which are well known and oft cited, the Tribunal would highlight the following:

- a. healthy, livable 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; c) avoiding development and land use patterns which may cause environmental or public health and safety concerns; e) promoting cost-effective development patterns and standards to minimize land consumption and servicing costs. (s.1.1)
- b. settlement areas sufficient land shall be made available through intensification and redevelopment. (s. 1.1.2)
- c. settlement areas shall be the focus of growth and development and the vitality and regeneration shall be promoted. (s. 1.1.3.1)
- d. land use patterns within settlement areas shall be based upon: a) densities and a mix of land uses which 1) efficiently use land and resources; 2) are appropriate for and efficiently used, the infrastructure and public services which are planned or available and avoid the need for their unjustified and/or economical expansion...; b) enable a range of uses and opportunities for intensification and redevelopment. (s. 1.1.3.2)
- e. appropriate development standards should be promoted which facilitate

intensification and redevelopment in compact form while avoiding or mitigating risks to public health and safety. (s. 1.1.3.4)

[27] With regard to servicing the PPS directs:

- a. before consideration is given to developing new infrastructure and public service facilities: a) the use of existing infrastructure and public service facilities should be optimized. (s.1.6.3)
- b. planning for sewage and water services shall: a) direct and accommodate expected growth or development in the manner that promotes the efficient use and optimization of existing 1) municipal services and municipal water services ...; b) ensure that these systems are provided in a manner that: 1) can be sustained by the water resources upon which such surfaces rely; 2) is feasible, financially viable and complies with all regulatory requirements; and 3) protects human health and the natural environment; c) promote water conservation and water use efficiency. (s.1.6.6.1)
- c. municipal sewage services and municipal water services are the preferred form of servicing for settlement areas. (s.1.6.6.2)
- d. where municipal sewage services and municipal water services are not provided, municipalities may allow the use of private communal sewage services and private communal water services. (s.1.6.6.3)
- e. partial services shall only be permitted in the following circumstances ... b) within settlement areas, to allow for infilling and minor rounding out of the existing development on partial services provided that site conditions are suitable for the long-term provision and that such services have no negative impacts. (s. 1.6.6.)

[28] Under s. 2 of the PPS with regard to Water, s. 2.2.2 states that “development and

site alteration shall be restricted in or near sensitive service water features and sensitive ground water features such that these features and related hydrologic functions will be protected, improved or restored,” and that mitigation measures and/or alternative development approaches may be required in order to protect, improve or restore sensitive service water features, sensitive ground water features and hydrologic functions.

[29] From the Implementation Interpretation provisions of the PPS, s. 4.4 noted above states that “this provincial policy statement shall be read in its entirety and all relevant policies are to be applied to each situation.”

[30] Section 4.7 provides that “the official plan is the most important vehicle for the implementation of this provincial policy statement. Comprehensive, integrated and long-term planning is best achieved through official plans.”

GROWTH PLAN 2019

[31] Similar to the PPS, the Tribunal will highlight the relevant policies:

- a. growth will be limited in settlement areas that 1) are undelineated built-up areas; 2) are not serviced or planned municipal water and waste water systems; 3) are in ... d) development will be directed to settlement areas except where the policies of this plan permit otherwise. (s. 2.2.12)
- b. municipalities should generate sufficient revenue to recover the full cost of providing and maintaining municipal water and sewage systems. (s. 3.2.6.1)
- c. municipal water and waste water systems and private communal water and waste water systems will be planned, designed, constructed or expanded in accordance with the following: a) opportunities for optimization and improved efficiency within existing systems will be prioritized and supported by strategies for energy and water conservation and water demand management. (emphasis added)

[32] Section 4.2.9 is entitled “A Culture of Conservation” and with regard to water servicing it states in s. 4.2.9.1:

Municipalities will develop and implement in official plan policies and other strategies in support of the following conservation objectives:

- a) Water conservation, including through:
 - i) Water demand management for efficient use of water, and
 - ii) Water recycling to maximize the reuse and recycling of water...

[33] Finally come directives with regard to Climate Change: in s. 4.2.10.1 upper and single tier municipalities (such as the City) are directed to develop policies in their official plans to identify actions to reduce greenhouse gas emissions and address climate adaptation goals, aligned with other provincial plans and policies for environmental protection that will include the following:

- c) assessing infrastructure risks and vulnerabilities and identifying actions and investments to address these challenges, ...
- h) providing direction that supports a culture of conservation in accordance with the policies in subsection 4.2.9

CITY'S RURAL OFFICIAL PLAN

[34] C.5.0 is entitled "Infrastructure" and C.5.1 deals with "Private Water and Waste Water Services" (OPA 5) and it is the objective of this plan to ensure all rural development establishes, and maintains in perpetuity, sustainable private services in accordance with the following policies.

[35] C 5.5.1 states that:

... no draft, conditional or final approval of development proposals shall be granted by the City for any development in the rural area that could impact existing private services or involve proposed private services until the development proposal has complied with all of the following:

... c) the minimum size for a new lot proposed in an application for a severance or a lot addition, with an existing or proposed private water system and/or existing or proposed private sewage disposal system shall be the size required to accommodate the water system and the sewage disposal system with no on-site and off-site impacts, and shall include sufficient land for a reserve discharge site or a leaching bed, as determined by the requirements and policies C 5.1.1.a) and b). In no case shall a proposed lot be less than one acre. The maximum size shall be in accordance with policy F.1.14.2.1(g). (Emphasis added)

[36] C. 5.1.3 provides that the landowner shall be responsible for the maintenance and repair of all private water supply and sewage disposal systems in accordance with all applicable legislation.

[37] In this regard the Tribunal notes that the applications before the Tribunal are not severances but rather a Draft Plan and that the rural area is a defined term in the glossary as meaning lands outside a settlement area.

[38] Volume 2, Chapter A in s. 3.4 deals with the Freelton Rural Settlement Area Plan whose purpose is to provide a policy framework to guide and direct future development and redevelopment in the Freelton Settlement Area.

[39] The land use designations include the Settlement Residential designation that is on the Subject Lands and the Freelton Rural Settlement Area provides that any development or redevelopment must conform to the relevant policies of Volume 1 of the Official Plan.

[40] Section 3.4.4.1 provides that “development in Freelton shall proceed on the basis of a communal water system in part of the Carriage Heights subdivision and by individual wells or otherwise approved by the City and the Province”.

[41] Under the heading “Hydrogeological Studies” s. F. 3.2.5.1 states that the City shall prepare and adopt guidelines for hydrogeological studies and technical standards for private services to provide direction regarding the technical assumptions and methodologies to be followed in the preparation of hydrogeological study reports.

[42] Section 3.2.5.4 then provides the following:

Provided a proposed use on a proposed site can be sustainably serviced in accordance with F.3.2.2.3 [no such section in the Rural Hamilton Official Plan] the required hydrogeological study shall, in the case of a permitted severance in the Rural Area or of the lots in a multi-unit site plan development in a Rural Settlement Area:

- a) Determine the appropriate lot size that i) meets lot boundary

conditions as defined in provincial guidelines; and ii) include sufficient land for a reserve discharge site, leaching bed and/or other sewage disposal treatment system as referenced in the Building Code as amended from time to time; ...

- d) assess the potential on-site and off-site ground water and surface water resource impacts of sewage disposal system effluent from the proposed use on the proposed site; and
- e) recommend conditions of approval which may be required to be met by the proponent prior to final approval of the application, which ensure the long-term suitability of private water and sewage disposal services on the site.

THE HEARING

[43] In the lead up to the hearing, the parties had prepared a Procedural Order and Issues List. Witness Statements were provided and, in some cases, Reply Witness Statements as well.

[44] In the proceeding before the Tribunal, the parties agreed that the hearing would focus on the two outstanding issues: the firm capacity for water treatment, and the proposed use of tertiary systems for the sewage treatment.

[45] All the other issues with regard to for instance, the design of the subdivision, access to the 11th Concession etc., had been resolved.

[46] At the hearing only the Applicants and the City were in attendance. None of the Participants who had been recognized by the Tribunal at the Pre-Hearing Conferences were in attendance nor had they submitted Participant Statements.

[47] On behalf of the Applicant the Tribunal heard expert witness evidence from Ward Wilson, qualified as an expert in civil/water resource engineering, from Dave Marks, qualified as an expert in hydrogeology, Anne Egan, qualified as a professional engineer and an on-site waste water specialist, and finally Mr. Kenney, qualified as an expert in land use planning.

[48] On behalf of the City, factual evidence was heard from Mike Christie, a project

manager at the City of Hamilton for Source Water Protection, Water and Waste Water Systems Planning, expert opinion evidence from Mike Bingham, qualified as an expert in hydrogeology, (and the senior hydrologist at Cambium Inc. in Peterborough, Ontario), and finally expert opinion evidence from Nick McDonald, a land use planner with Meridian Planning Consultants. The Tribunal notes that the City did not call its Chief Building Official nor the author of the WSP Canada Inc. Report ("WSP Study") study referenced below.

SERVICING CONTEXT

[49] The Subject Lands generally drain overland in a north easterly direction to the adjacent property and ultimately to a water course about 100 m north and east of the site.

[50] The City has a municipal water supply distribution system within the Freelton Settlement Area. It consists of two wells and an elevated storage tank which currently serves a population of about 780. There are existing water mains on the abutting residential subdivision south of the Subject Lands.

[51] In 2016 the City retained WSP Canada Inc. to complete a Capacity Study for the Freelton Water Supply System.

[52] From that study the following is noted:

1. The permissible water taking rates for the two existing wells FDF01 and FDF03 are 10.2 litres per second and 18.6 litres per second respectively;
2. The firm capacity of the system (i.e. the capacity with the largest well out of service) is 10.2 litres per second;
3. The required storage capacity as per the Ministry of the Environment, Conservation and Parks ("Ministry") Guidelines is 1,985 cubic metres

whereas the available storage in the elevated storage tank is 2,965 cubic metres an excess of 980 cubic metres; and

4. The expectation of non-revenue water volumes for a system such as Freelton would be in the range of 10% to 20% of total well production whereas the actual non-revenue water volume experienced over the past three years is 30% to 36% of the total well production.

FIRM CAPACITY

[53] The Ministry in 2008 published the Design Guidelines for Drinking – Water Systems. There in s. 7.3 General Design Considerations it provides a definition for firm capacity:

Firm Capacity and Station Capacity.

Raw water pumping stations should be provided with firm capacity, which is defined as:

Capacity of the raw water pumping station able to supply the water treatment design capacity with the largest unit out of service.

[54] As noted above, with the largest well (FDF03) out of service, the firm capacity is based on the capacity of FDF01: 10.2 litres per second.

[55] The existing connected lots in Freelton, plus the proposed new 20 lots on the Draft Plan of Subdivision would result in 11.9 litres per second which would be above the firm capacity of 10.2 litres per second.

[56] Due to the quantity of “non-revenue water” reported in the WSP Study, the City did a water loss investigation. Unfortunately, it did not reveal any answers as to why the City was losing so much water from their distribution system, but the City did install anti-tamper bands on all hydrants in the event that water loss was due to some unauthorized water taking.

[57] The City is proposing to expand existing well FDF01 and they expect that the

earliest that the City would have the “development freeze” lifted in Freerton would be in 2021 (see Exhibit 2, Tab 7, Page 202).

[58] While the Applicants are somewhat encouraged by the City undertaking to expand the capacity of FDF01, they submit that the Tribunal should approve the development application for a number of reasons.

[59] Firstly, the preamble to the Ministry Design Guidelines for Drinking – Water Systems states:

It is intended that this Design Guidelines document be used with professional judgement and experience in the design of drinking – water systems and in the engineering review of applications for approval of such systems. The Ministry recognizes that the choice of drinking – water systems designs may be influenced during the planning stages by sustainability issues, such as the cost of design and build drinking – water systems as well as the ongoing cost to operate, maintain, rehabilitate and replace infrastructure. (emphasis added)

[60] While the Applicants acknowledge that the City may expand well number 1 by 2021, they point to the following factors as being relevant to the Tribunal's deliberation with regard to firm capacity: reducing the loss of unmetered water and reducing a maximum day demand through water conservation measures.

[61] They submit that if the City were able to reduce the unmetered water by 50% (i.e. no longer at the 30% to 36% rate but more in the range of 15% to 18%), this alone would result in a maximum daily demand of 10.1 litres per second which is within the firm capacity of 10.2 litres per second.

[62] Alternatively, if the City were to implement a 15% reduction in the maximum day demand through conservation measures, the maximum day demand would drop to 10.1 litres per second for all the existing connected lots and the new subdivision, thus putting it within the 10.2 litres per second of the firm capacity.

[63] Moreover using the data obtained from the WSP Study, the Applicants note that

for the years 2009 through to 2014, the maximum day demand occurred in 2011 with 1,210 litres per cap/per day (or 10.9 litres per second) and that a review of the well production records in the WSP Study confirmed that the water consumption peaks were in the summer months and that the major contributing factor to the increased demand was lawn watering.

[64] Additionally, Mr. Wilson testified that firm capacity is based on the calculation where well FDF03 is out of service. In that regard he recommended that if the City were not to address the 30-36% loss of water, or if the City were not to implement water conservation measures, then the Applicants would pay for a new replacement pump for the main well (FDF03) and that this replacement pump would be stored at the site, so that it would immediately be available to be installed if there were a pump failure at that well and this would minimize the amount of time required to replace the pump and bring the well back on line (Exhibit 6B conditions 20-25).

[65] In this regard, Mr. Wilson testified that the existing water storage capacity as required by the Ministry is 1,985 cubic metres but the available storage is actually 2,965 cubic metres. He opined that this additional storage of 980 cubic metres would provide six or seven days of water to Freelton, during which period of time if there were a pump failure, the failed pump in FDF03 could be taken out of service and replaced with the new stand-by pump provided by the Applicants.

[66] The City takes the position that the applications are premature, that increased drinking water capacity is coming and likely in 2021 and until the firm capacity is increased the development should be denied.

[67] The City also submits that with regard to the suggestions that the City impose water conservation measures to accommodate the proposed new development, that such conservation measures are policy decisions to be made by City Council in a municipal by-law and that the Tribunal should not and may not impose such policy decisions of this sort on City Council.

[68] This is the first issue to be decided by the Tribunal.

TERTIARY SEPTIC SYSTEMS

[69] The second issue before the Tribunal concerns the proposed use of tertiary septic systems.

[70] In 2013 the City of Hamilton Public Works Department and Hamilton Water Division developed the guidelines to provide information to persons proposing to develop lands that will be serviced with private ground water supplies and/or private on-site sewage disposal systems (septic systems). The introduction states that it is the responsibility of proponents of all development applications to show to the satisfaction of the City, that the proposed development will not adversely impact the existing environment through the use of private on-site servicing, and that there is sufficient ground water to provide an adequate water supply.

[71] The guidelines note that they follow the methodology and procedure indicated in the Technical Guideline D-5-4 from the Ministry in 1996 and the Ontario Building Code of 2011 as amended.

[72] Of interest is the fact that the Applicants are proposing to develop 20 residential lots for single family dwellings with lot sizes ranging from 0.2 ha and each lot will be serviced by individual an on-site tertiary sewage treatment system (Waterloo Biofilter).

[73] Guidance for such on-site sewage treatment systems comes from the Ministry Guideline D-5-4 ("Guideline"). The Guideline provides the following:

The purpose of this guideline is to protect the environment and public health by ensuring that development utilizing individual on-site sewage systems proceeds at a density and scale which will not result in, or cause degradation of, ground water resources in exceedance of acceptable limits. Compliance with acceptable limits shall be demonstrated through a prediction of the developments nitrate impact on the ground water at the development boundary. The guideline is intended to encourage the assessment of the potential for degradation on the basis of a technically based and technically defensible evaluation of the proposal.

[74] The Guideline notes:

This guideline may not apply to non-standard individual on-site systems which are specifically designed to reduce nitrate loading. It should be emphasized that MOEE encourages the development of new technologies for the treatment of domestic sewage waste. The Ministry will entertain proposals for development which incorporate new technologies. Contact your regional MOEE office for information on these types of systems. (emphasis added)

[75] The Guideline then proposes a three-step assessment process. The first step being to consider the lot size which generally accepts a lot of 1 ha to be sufficient to reduce the nitrate-nitrogen to an acceptable concentration at the ground water.

[76] Step 2 involves proposed lots being less than 1 ha where the potential risk to the ground water must be assessed.

[77] Step 3 requires a hydrogeological study to assess the development risk.

[78] For residential development the Ministry considers total nitrogen converted to nitrate-nitrogen as being the critical contaminant.

[79] The City has prepared its own guidelines for hydrogeological studies and technical standards for private services which was issued in November of 2013 and the City guideline follows the methodology and procedures used in the Guideline.

[80] In s. 3.2.2 under the heading "Sewage Disposal" the City guidelines note that all proposed development on private services will be reviewed on the basis of the capability to support a primary sewage disposal system and to accommodate a reserve discharge site or leaching bed for the system effluent by maintaining an area of vacant and suitable land in the appropriate location. This is to ensure that the development proceeds at a density and scale which will not result in exceedance of acceptable limits or cause degradation of ground water resources.

[81] The City guidelines provide that the Ontario Drinking-Water Quality standard of

10 milligrams/per litre of nitrate-nitrogen is used as the maximum allowable boundary condition respecting ground water impact as per the Ministry procedure in D-5-4.

[82] While the City guidelines relate to conventional systems, reference to tertiary treatment is made. The City guidelines in Appendix B-4 provide an example of tertiary treatment for a privately serviced residential subdivision. This example the City guidelines states is provided for "demonstration purposes only", as tertiary treatment units designed for reduction of nitrate in the effluent are said to be not recognized by the Ontario Building Code.

[83] In the appeals before the Tribunal, the City submits that the 20 lots (ranging in size from 0.2 ha) are simply too many, that the Ontario Building Code, while noting the existence of tertiary treatment systems, does not enable the municipal enforcement of the Ontario Building Code with regard to substandard results for tertiary systems and that the mandatory public health and safety provisions of the PPS must be given priority over the mandatory development policies of the PPS.

[84] Accordingly, in the City's submission the Subject Lands may be developed (in the future), but only with conventional sewage septic systems which would reduce the number of lots by at least 50% depending on the final subdivision layout.

[85] The Applicants submit that they will be using the Waterloo Biofilter system which results in a higher nitrogen removal in contrast to a conventional septic system.

[86] The evidence for the Applicants was given by Ms. Egan, a professional engineer, and a specialist in on-site and decentralized waste water treatment and disposal systems whose clients include both private sector and municipal clients. She is the current president of the Ontario On-Site Waste Water Association.

[87] Her evidence was that the Waterloo Biofilter treatment will achieve the Ontario Drinking-Water standard at the property boundary, or better. The Waterloo Biofilter treatment requires a maintenance contract between the owner and a maintenance

provider and there is regular effluent sampling and testing to confirm ongoing performance of the unit and to ensure that effluent quality is being met. This she testified is superior to the conventional septic system that simply relies on the soil and leaching bed to complete treatment. She notes the current regulatory system in Ontario provides for conventional septic systems and if they are built according to those standards, it is assumed that they will work unchecked indefinitely. In contrast the Waterloo Biofilter treatment process allows the treatment to be performed within the treatment unit itself and not in the soil and while the Rural Hamilton Official Plan requires the establishment of a reserve leaching bed, that would be applicable only to a conventional septic system and not to the Waterloo Biofilter as the treatment is being performed within the unit and not within the soil. Her opinion was that if a replacement leaching bed were required it would be best located at the site of the original leaching bed simply by removing the sand material and replacing it with new sand material on the same footprint.

[88] With regard to the submission by the City that it was the Chief Building Official's opinion that there are insufficient mechanisms under the Ontario Building Code to enforce the long-term performance of the tertiary systems in perpetuity, she disagreed. She relied on s. 8.9 of the *Building Code Act* 1992 ("Act") which sets out the operation and maintenance of all sewage systems. She pointed out that in s. 8.9.2.2 every sewage system shall be operated in accordance with the basis upon which the construction of the use of the sewage system was approved or required under the Act and the requirements of the manufacturer of the sewage system. For Class 4 sewage systems they are to be operated in accordance with s. 6.2.2 dealing with the levels of treatment described in Can/Bnq 3680-600 that no one should use a treatment unit other than a septic tank unless the person has entered into an agreement whereby servicing and maintenance of the treatment unit is carried out by a person who is authorized by the manufacturer to service and maintain that type of treatment unit and the person providing the service and maintenance shall notify the Chief Building Official if the agreement is terminated or if access for maintenance is denied. Section 8.9.2.4 provides for the sampling of the treatment units and the service provider is required to

promptly submit the results of the sampling to the Chief Building Official. Under the heading "Maintenance" "every sewage system shall be maintained so that ... all components of the sewage system function in their intended manner." This, Ms. Egan states, is the provision that provides for enforceability in her opinion by the Chief Building Official because the Waterloo Biofilter tertiary systems are intended to reduce the nitrogen levels.

[89] Based on the reduced nitrogen levels which the Waterloo Biofilter will achieve, she testified that the Ontario Drinking-Water Quality standards will be met at the property boundary for the 20 lots.

[90] Mr. McDonald, testifying on the land use planning considerations on behalf of the City, opined that the Tribunal should place a higher priority on the "shall" clauses in the PPS with regard to public health and safety in preference over the "shall" clauses for intensification and redevelopment. He admitted that there was no direct policy in the PPS that informed his opinion, but he testified that his opinion was based on his years of experience in the planning sector.

[91] Mr. Kenney the land use planner testifying on behalf of the Applicants, opined that s. 4.4 of the PPS required the Tribunal to apply all of the mandatory policies to the application and consider them equally.

[92] It was Mr. Kenney's opinion that the issues of public health and safety had been appropriately addressed through the proposed conditions of approval which had been revised based on the Witness Statement provided by Mr. Christie from the City. All Mr. Christie's proposed conditions had been implemented into the revised Exhibit 6B save and except Mr. Christie's suggestion that there be a holding provision on the water until the well number 1 had been expanded.

[93] Mr. Kenney testified also that he had been involved in a project for the City in 2014-2015 with regard to upgrades to the Field and Community Sports Park, a site immediately west of the Subject Lands on the other side of Highway 6 where the City

itself had used a tertiary waste water facility.

COMMENTARY

[94] The Tribunal would first note that the Subject Lands are within a settlement area and are designated and zoned for residential development.

[95] The Tribunal observes that the development of the Subject Lands would intensify an underdeveloped parcel of land, in a compact and efficient form, complete the south east quadrant of the 11th Concession Road East and Highway 6 area of Freerton, and provide continuity of development and access from the subdivision to the south to the 11th Concession Road East to the north consistent with the PPS and in conformity with the Growth Plan 2019.

[96] The position of the City is that it has taken a “conservative approach” with regard to firm capacity and lot size and that the City should not be compelled to abandon that conservative approach. The City submits that development will be allowed but not until the expansion of the municipal water system is complete, and then on 0.4 ha lots, and not with tertiary septic systems and that until then the development is premature.

[97] As there are only two outstanding issues, the Tribunal will first deal with the proposed tertiary treatment septic systems.

[98] At the outset the Tribunal observes that the Applicants have prepared and filed a Hydrogeological Assessment, which the Tribunal finds to be reasonable and appropriate and addresses all concerns related to ground water.

[99] The Ministry in 1996 issued the last revision to D-5-4: Individual On-Site Sewage Systems: Water Quality Impacts Risk Assessment.

[100] The purpose of the Guideline is to protect the environment and public health by ensuring development which utilizes on-site sewage systems proceeds at a scale and

density that will not cause or result in degradation of groundwater resources in exceedance of acceptable limits, especially through the prediction of nitrates at the property boundary.

[101] In this case the specific objective is to achieve a nitrate loading at the downgradient property line of 10mg/l, and thus be within the Ontario Drinking-Water Quality standard.

[102] Of note from the 1996 guideline itself is the fact that the Ministry itself encourages the development of new technology for the treatment of domestic waste.

[103] It is submitted by the Applicants and through the evidence of Ms. Egan that with the use of the Waterloo Biofilter advanced treatment system, the development proposal will meet the Ontario Drinking-Water Quality standard at the property lines.

[104] The Tribunal notes from Exhibit 4 at Tabs 10 and 11, there are two brochures produced by the Government of Canada in conjunction with the Province of Ontario entitled "Septic Smart". The first brochure is undated but the second Brochure Number 2 is dated as of December 2000.

[105] The first brochure specifically references new technology and states:

The research and development of alternative technologies have made it possible to produce an effluent of the same quality or even better than some large municipal treatment plants. Homeowners should not be afraid to consider new approved technologies...

[106] Brochure Number 2 dealt specifically with advanced treatment systems as an alternative to conventional septic systems. The brochure explains that with conventional septic systems 30%-50% of the treatment is done in the septic tank and 50-70% is done in the soil, whereas in advanced treatment systems 90% of the treatment is done in the pre-treatment tanks and the advanced treatment unit, and 10% is done in the soil.

[107] Under the heading "Approval of Advanced Treatment Units in Ontario" Brochure Number 2 provides:

Advanced treatment units must meet the effluent standards set out in Part 8 of the Ontario Building Code. Units listed in SB-5 of the Code are deemed to meet these standards.

[108] Immediately below this quote Brochure Number 2 provides a chart listing Approved Advanced Treatment Units Listed in Supplementary Standards SB-5, which includes the Waterloo Biofilter Treatment System.

[109] The consideration of advanced treatment systems or tertiary treatment systems is not unique to this appeal.

[110] In fact, they have been considered in a number of cases dating back about 20 years and have been used in subdivisions with conditions of approval. Below are a number of cases that have been reported.

[111] In 1999, The Ontario Municipal Board ("Board") in *Wilmot (Town) Official Plan Amendment New Lots (Re)*, [1999] O.M.B.D. 639, allowed a site-specific Official Plan Amendment and a consent application with a condition of approval that the owner install an alternative septic system such as the Waterloo Biofilter Ecslow, or equivalent to the satisfaction of the Region of Waterloo Health Unit.

[112] In 2008, the Board in *Dever v. Cavan-Millbrook-North Monaghan (Township)*, [2008] O.M.B.D. No. 222 allowed an appeal to enable two lots to utilize the Waterloo Biofilter system.

[113] In 2012, the Board in *Gauthier v. Hamilton (City)*, [2012] O.M.B.D No. 861 allowed a consent appeal on the basis of a tertiary treatment system (Waterloo Biofilter) to reduce nitrate levels.

[114] In 2014 the Board in *Cross v. Leeds and the Thousand Islands (Township)*,

[2014] O.M.B.D. 389 allowed a consent, which would be serviced by a tertiary system to reduce nitrates on a lot on an “at capacity” lake trout lake.

[115] Finally also in 2014 the Board in *Ottawa (City) v. Ottawa (City)*, [2014] O.M.B.D 943 allowed a consent utilizing tertiary treatment (Waterloo Biofilter). Dealing with the issue of enforcement, the Board said this:

There are also enforceable legal obligations on the owner, pertaining to ongoing maintenance (notably the obligations in the OBC)...

[116] The decision also notes the following:

Counsel for the City also suggested a further condition, specifying periodic monitoring, at the owner's cost, to the satisfaction of the City. The applicants expressed no objection. “We don't have a problem with any conditions. We'd want the water to be tested.”

[117] To the Tribunal it would appear that the City is attempting to rely on a 23 year old guideline that predates the PPS 2014 and the Growth Plan 2019.

[118] Moreover the Ministry in the Guideline clearly stated in 1996 that it encourages innovation; so does the Tribunal, especially when that innovation is supported by government publications specifically endorsing advanced treatment facilities and will result in nitrate levels at the property boundaries that are within the Ontario Drinking-Water Quality standard, while at the same time allowing a more compact and efficient form of development that is compatible with and at about the same scale and density of development of the abutting subdivision which apparently has only conventional septic systems.

[119] It also appears to the Tribunal that the City is acting in an inappropriately discriminatory manner, as the uncontradicted evidence before the Tribunal is that the City itself has recently utilized a tertiary system in Freelon for municipal purposes.

[120] Thus, the Tribunal clearly prefers the evidence of the Applicants' experts and finds that the proposed on-site sewage system will achieve the appropriate nitrate levels

at the property boundaries, will enable a more compact and efficient development proposal and with the proposed conditions of approval as set out in Exhibit 6B will require mandatory testing at the expense of the owner and will be enforceable.

[121] With regard to firm capacity, the Tribunal notes the City plan to increase the water treatment plant capacity and with that construction done, that the “development freeze” would be lifted at the earliest in 2021 and accordingly any approval before that would be premature.

[122] The City relies on the WSP Study in that regard, but the Tribunal notes that the authors of the WSP Study were never called by the City.

[123] The WSP Study recommendations in 2016 were to: provide increased well capacity; continue investigating the high non-revenue water; consider initiating water conservation methods; consider the elevated storage as part of Fire and Emergency storage to bridge short peak demands, and that future growth must only be based on available water supply and firm capacity.

[124] The Tribunal notes that the basis for the City’s position is the Ministry Design Guidelines for Drinking Water Systems 2008, supplemented by the City’s Comprehensive Development Guidelines and Financial Policies Manual of 2018.

[125] The Tribunal would note that both of these are “guidelines” to be considered as opposed to the mandatory policy directives of the PPS, and the Growth Plan 2019.

[126] In that regard the PPS provides clear direction that settlement areas shall be the focus of growth and development; that land use patterns in a settlement area shall be based on densities that efficiently use land and that are appropriate for and efficiently use the infrastructure that is planned or available; that there be opportunities for intensification and redevelopment; that appropriate development standards should be promoted that facilitate development; that infrastructure shall be provided in a co-ordinated, efficient, and cost-effective manner that considers impacts from climate

change and which accommodate projected needs (s. 1.6.1); that before consideration is given to new infrastructure that the use of existing infrastructure should be optimized (s. 1.6.3); that planning for sewage and water services shall ensure that these systems are provided in a manner that can be sustained by the water resource is feasible, financially viable and complies with all regulatory requirements, protects human health and the natural environment, and promotes water conservation and water use efficiencies (s. 1.6.6.1).

[127] Partial services such as proposed here are allowed in settlement areas providing it is for infilling and minor rounding out of existing development (s. 1.6.6.5).

[128] Finally s. 1.8.1 (Energy Conservation, Air Quality, and Climate Change) directs that municipalities shall support energy conservation and efficiency through land use and development patterns that promote compact form.

[129] The Growth Plan 2019 directs that municipalities should generate sufficient review to recover the full cost of providing and maintaining municipal water (s. 3.2.6.1); that for municipal water systems they will be planned, designed, constructed or expanded to allow for opportunities for optimization and improved efficiency and supported by strategies for energy water conservation and water demand management. (s. 3.2.6.2).

[130] The Growth Plan 2019 (and the Growth Plan 2017 before it) has an entire section entitled: A Culture of Conservation s. 4.2.9, part of which directs that municipalities will develop and implement official plan policies and other strategies in support of water conservation, including water demand management and water recycling.

[131] The Growth Plan 2019 (and the Growth Plan 2017 before it) also has a section dealing with Climate Change (4.2.10). Here municipalities are directed to develop policies in their official plans to identify actions that will address climate change adaptation goals including assessing infrastructure risks and vulnerabilities (c) and providing direction that supports a culture of conservation (h).

[132] The uncontroverted expert opinion evidence before the Tribunal is that if the City were to either resolve the loss of non-revenue water by 50%, or if the City were to implement water conservation measures, this development proposal would achieve the Ministry guideline for firm capacity.

[133] Counsel for the City submits that the Tribunal does not have the jurisdiction to order City Council to invoke such conservation measures which actions, if ordered, the Tribunal finds would ironically be consistent with the PPS and would conform to the Growth Plan 2019 as implementing a culture of conservation through resolving a significant water loss and/or implementing water conservations measures so as to optimize the capacity of the existing Freelton water system.

[134] In the face of City opposition to do so, the Tribunal finds that the mitigation measures proposed by the Applicants through the revised conditions of approval recommended by Mr. Wilson are reasonable, appropriate and will ensure the public interest is protected.

[135] The Applicants will pay for and supply a new replacement water pump to the satisfaction of the City and deliver it to the City for placement at the well site so as to have it at the ready in the event of a well pump failure.

[136] The Tribunal is satisfied by the evidence of Mr. Wilson that the surplus of water storage in the Freelton system will facilitate the necessary time to replace the pump with out impact to the community.

[137] This, the Tribunal also finds, will enable the optimization of the existing water system in the interim period leading up to the well expansion.

DECISION

[138] Accordingly, as all other technical matters with regard to the OPA, ZBA, Draft Plan and conditions of Draft Plan approval have been otherwise agreed upon between

the parties, the Tribunal will:

- a allow the appeal in part of the OPA and approve the OPA as found in Exhibit 2, Tab 1 pages 36-41 inclusive and as corrected by Mr. Kenney to reference Volume 1, Section C.5.1.1(c);
- b allow the appeal in part of the ZBA and approve the ZBA as found in Exhibit 2, Tab 1 pages 42-47 inclusive;
- c allow the appeal in part with regard to the Draft Plan and approve the Draft Plan as found at Exhibit 7;
- d allow the appeal in part with regard to the conditions of Draft Plan approval and approve the conditions of Draft Plan approval as found in Exhibit 6B, and condition 33 as amended by the Tribunal to reference “blanket” access easements.

[139] This is the Order of the Tribunal.

“Blair S. Taylor”

BLAIR S. TAYLOR
MEMBER

If there is an attachment referred to in this document,
please visit www.elto.gov.on.ca to view the attachment in PDF format.

Local Planning Appeal Tribunal

A constituent tribunal of Tribunals Ontario - Environment and Land Division
Website: www.elto.gov.on.ca Telephone: 416-212-6349 Toll Free: 1-866-448-2248