

**WESTON
CONSULTING**

planning + urban design

Memo

To: Varun Gupta

From: Kayly Robbins

File:

Date: October 21, 2021

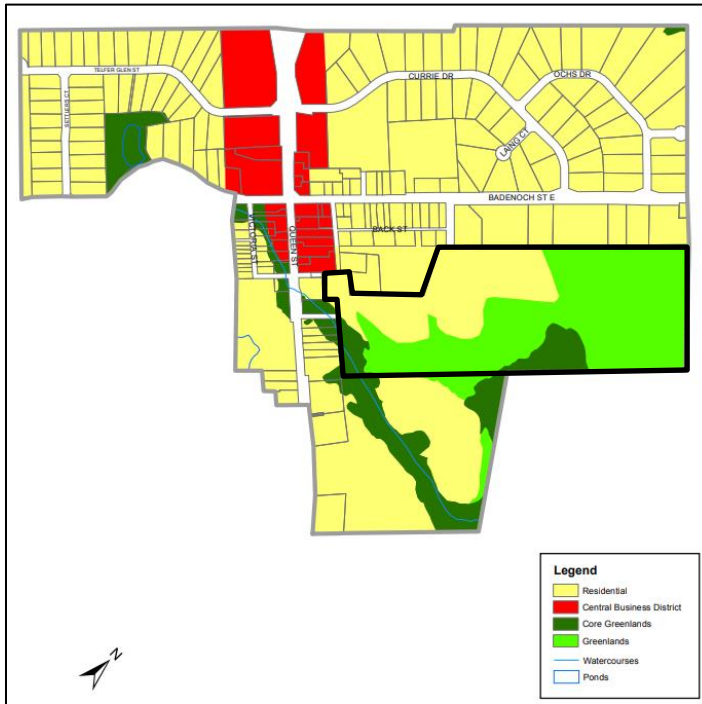
Re: *PRELIMINARY Official Plan & Zoning By-law Policies – Morriston Property*

Subject Property

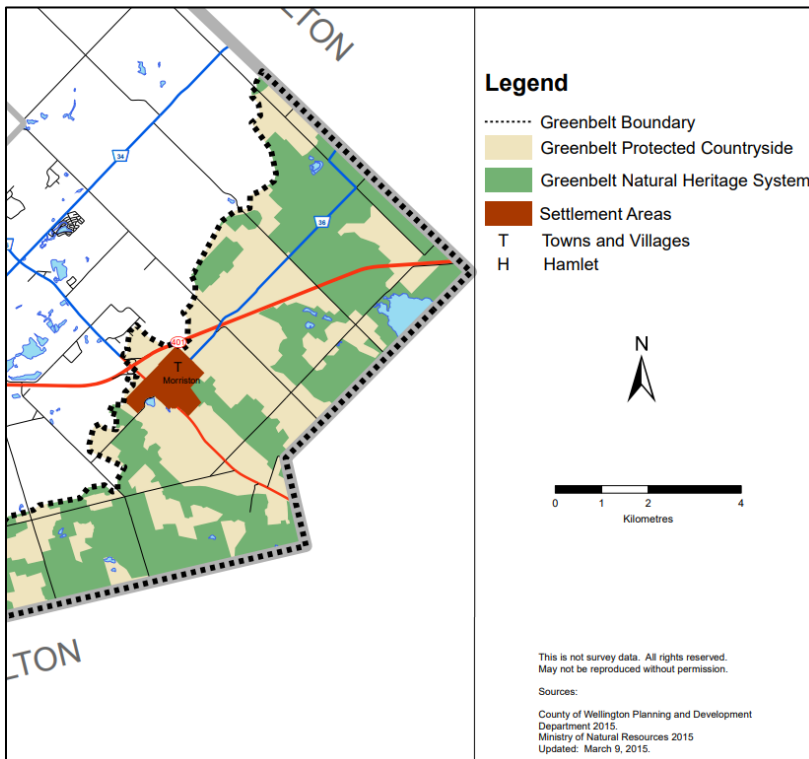
Area: 238,055.0 square metres



**County of Wellington Official Plan
Schedule A7-2**



A7-3



Residential Designation Policies:

S. 8.3.3. Permitted uses: A variety of housing types shall be allowed, but low rise and low density housing forms such as single-detached and semi-detached dwelling units shall continue to predominate. Townhouses and apartments, bed and breakfast establishments, group homes and nursing homes, may also be allowed subject to the requirements of the Zoning By-law and the applicable policies of this Plan.

In addition, non-residential uses such as schools, churches, clinics, local convenience stores, home occupations, neighbourhood parks and other public facilities may also be permitted within the RESIDENTIAL designation subject to the appropriate Zoning By-law regulations and the policies of the Official Plan

8.3.4 Low-Density Development

This plan considers single-detached, semi-detached and duplex dwellings to be low density housing forms. The Zoning By-law may provide separate zones for only single-detached, semidetached or duplex dwelling units or a combination of any of the above. The character of existing low density residential neighbourhoods should generally be protected and land uses which would cause significant loss of privacy, loss of view, or loss of sunlight due to shadowing or which would be incompatible due to their nature shall be discouraged. Section 8.3.11 provides additional consideration in this regard.

8.3.5 Medium Density Development

Multiple residential developments such as townhouses and apartments may be allowed in areas designated RESIDENTIAL subject to the requirements of the Zoning By-law and further provided that the following criteria are satisfactorily met:

- a) that medium density development on full municipal services should not exceed 35 units per hectare (14 units per acre) for townhouses or row houses, and 75 units per hectare (30 units per acre) for apartments, although it may not always be possible to achieve these densities on smaller sites;
- b) that the design of the proposed height, setbacks, landscaping and vehicular circulation, will ensure that it will be compatible with existing or future development on adjacent properties;
- c) that the site of the proposed development has a suitable area and shape to provide:
 - i. adequate on-site landscaping to screen outdoor amenity areas both on the site and on adjoining property, to buffer adjacent residential areas and to improve the overall appearance of the development;
 - ii. on-site amenity areas for the occupants of the residential units;
 - iii. adequate off-street parking, access and appropriate circulation for vehicular traffic, particularly emergency vehicles; and
 - iv. adequate grading to ensure that drainage from the property is directed to public storm drainage facilities and not to adjoining properties.
- d) that adequate services such as water, sewage disposal, storm water, roads and hydro are available to service the development;

- e) that within the built boundary, medium density is encouraged to locate on major roadways and arterial roads;
- f) that in greenfield areas, medium density is encouraged to locate on major roadways, and roads designed to serve an arterial or collector function, while street townhouses are allowed on local roads;
- g) that a separate zone(s) is established for multiple residential development.

Maximum Density for Townhouses per the OP: 35 units per hectare

Developable Area: 6.8 ha

6.8 ha x 25% (roads, SWM, etc.) = 1.36 ha

5.44 ha x 35 = **190 units**

Maximum Density for Apartments per the OP: 75 units per hectare

Developable Area: 6.8 ha

6.8 ha x 25% (roads, SWM, etc.) = 1.36 ha

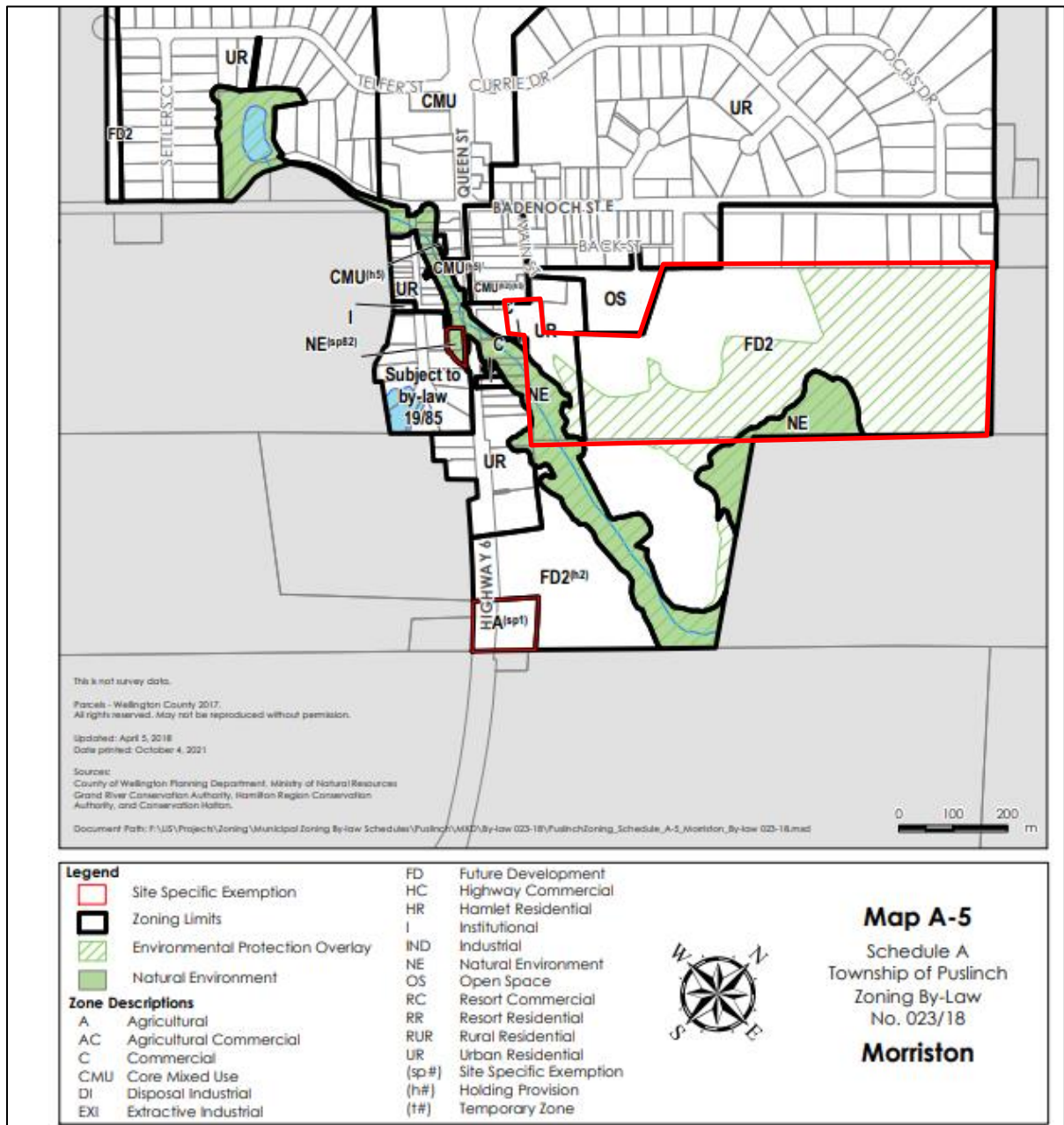
5.44 ha x 75 = **408 units**

Township of Puslinch Zoning By-law

Zone: Urban Residential and Future Development 2

Urban Residential permitted uses: accessory apartment, bed and breakfast, rooming house, community garden, duplex dwelling, semi-detached dwelling, townhouse dwelling (1), group home, home business, long term care facility, private home day care, retirement home, public park, and public school

(1) The maximum number of townhouse dwellings permitted that can be attached shall be 8.





Comment Summary – 11 Main Street

Consultant		Comments
County of Wellington		See notes attached
GM BluePlan		See letter attached
Stan Denhoed-Township Hydrogeologist		A detailed hydrogeology study will be required to determine groundwater flow directions, rate of groundwater flow, nitrate impact analysis (Similar to procedure D5-4 from MECP), impact of sewage disposal on existing individual lots downgradient, impact of existing sewage disposal in Morriston on future wells in subject area, impact of water quality and quantity of flow in Bronte Creek, water quantity impact analysis to determine if there will be interference with existing wells (similar to procedure D5-5 MECP). We suggest that the hydrogeological consultant for this development prepare a scope of work for us to review. The depth of future wells should be carefully evaluated prior to construction given the upgradient sources of contamination.
Township Consulting Ecologist – NRSI		See letter attached
Township of Puslinch Fire Department – Brent Smith		Puslinch Fire and Rescue Services reviewed the proposal for 11 Main Street and have no concerns other than having an adequate firefighting water supply provided for the development. I have attached the specs for the fire department connections etc.
Township of Puslinch Building Department – Andrew Hartholt, CBO		No comments submitted to date
Township of Puslinch Public Works – Mike Fowler		No comments submitted to date
SourceWater		Thank you for providing the above referenced application for review. Since this property is not located in a vulnerable area (wellhead protection area,



TOWNSHIP OF
PUSLINCH
1827

		issues contributing area, intake protection zone etc.), the application can be screened out and it does not require a Section 59 notice under the <i>Clean Water Act</i> .
GRCA		Check with Halton Conservation if permit is needed
Halton Conservation		<p>Should an application proceed, the proposed development shown on the pre-consultation materials will require modification based on the following preliminary comments. Further consultation with Conservation Halton (CH) staff is recommended prior to submission to discuss requirements in detail.</p> <p><u>Ontario Regulation 162/06</u> Conservation Halton (CH) regulates all watercourses, valleylands, wetlands, Lake Ontario and Hamilton Harbour shoreline and hazardous lands, as well as lands adjacent to these features. The subject property is traversed by tributaries of Bronte Creek and contains the flooding and erosion hazards associated with that watercourse. The property also contains wetlands identified by the MNRF as part of the East Morriston Swamp Wetland Complex, as well as other wetlands identified by CH. CH regulates a distance of 15 metres from the greater of the limit of the flooding or erosion hazards; 120 metres from the limit of Provincially Significant Wetlands (PSWs) and wetlands greater than 2 hectares in size, and 30 metres from other wetlands that are less than 2 hectares in size. Permission is required from CH prior to undertaking any development within CH's regulated area and development must meet CH's <i>Policies and Guidelines for the Administration of Ontario Regulation 162/06</i> (https://conservationhalton.ca/policies-and-guidelines).</p> <p><i>Hazard and Wetland Delineation</i> As part of a complete application, the development application must delineate all regulated features, hazards and allowances (development</p>



setbacks) on all plans and on a topographic survey prepared by an Ontario Land Surveyor as follows:

- **Regulatory floodplain** based on updated hydrologic and hydraulic analysis prepared by qualified professional engineer. CH may be contacted to obtain hydraulic modelling of record for this area; however, model update is required to match topographic survey and/or mapping of the study area.
- **Meander belt** based on meander belt assessment prepared by a qualified geomorphologist
- **Wetland** delineation based on a staking by CH staff in the appropriate summer season (generally June through to end of September). Please contact CH to arrange for a site visit.
- **15m regulatory allowance** from the greater of the floodplain or erosion hazard (meander belt)
- **Minimum 30m buffer** from wetlands greater than 2 hectares in size or PSWs (reduction from 120m to 30m subject to hydrologic evaluation, see regulatory development requirements below for detail)
- **Minimum 15m buffer** from wetlands less than 2 hectares in size that are not PSWs (reduction from 30m to 15m subject to hydrologic evaluation, see regulatory development requirements below for detail)

The regulated features delineated on the preconsultation material require refinement based on the above. CH should be contacted to confirm the scope of the above assessments.

Regulatory Development Requirements

As per CH Policies, all new development (structures, fill, grading, etc.), including roads, must be located outside of the natural hazards and wetlands, and their associated buffers and allowances, as listed above.



TOWNSHIP OF
PUSLINCH
1827 1840

New lot creation should be located outside of the flooding hazards, erosion hazards and wetlands. CH recommends a minimum lot line setback of 15 metres from the greater of the meander belt or flood plain limit, a minimum 30 metre lot line setback from the limit of wetlands greater than 2 hectares and/or PSWs, and a minimum 15 metre lot line setback from wetlands less than 2 hectares in size.

A hydrologic evaluation including feature-based water balance is required to demonstrate that any development (including new lots) proposed within 30-120m of PSWs or wetlands greater than 2 hectares in size, or within 15-30m of all other wetlands, will have no hydrological or ecological impacts on the wetland form and functions.

If stormwater is proposed to outlet to the regulated area, please contact CH in advance of an application to confirm if an outlet can be supported and related submission requirements. Any development within the regulated area will require a CH Permit.

Memorandum of Understanding (MOU)

As per the MOU with the County of Wellington, CH provides technical advisory comments on matters pertaining to the natural heritage system (Core Greenlands and Greenlands) and stormwater management (SWM).

Staff recommends that site water balance be maintained and that Low Impact Development measures be implemented if possible.

Staff recommends that an Environmental Impact Assessment (EIA) be completed to demonstrate the development will have no negative impacts on the natural heritage system, including the ecological form and function of features. An EIA Terms of Reference in accordance with the County of



TOWNSHIP OF
PUSLINCH
1827 1840

Wellington's Official Plan should be submitted to the agencies for review and approval prior to the initiation of the study.

In addition to the regulatory development setbacks listed above, CH will recommend that lots and development maintain appropriate setbacks from natural heritage features (significant woodlands, significant wildlife habitat, fish habitat, endangered/threatened species habitat, etc.), to be determined through the EIA. Requirements for delineation of Core Greenlands/Greenlands should be confirmed through the County.

As per CH Policy 2.6.1, any development will maintain a minimum setback of 30 metres from the bankfull channel of any coldwater/coolwater watercourse and warmwater sportfish watercourse and 15 metres from the bankfull channel of any warmwater baitfish watercourse. Bronte Creek, located within the south west portion of the lands, is considered a cold/coolwater system. Therefore, a recommended minimum setback of 30 m from bankfull should be applied and shown on all associated drawings and plans.

Further to the above, a hydrogeological assessment should be completed to demonstrate that groundwater recharge and discharge will be maintained. The study should follow CH's *Requirements for completion of hydrogeological studies to facilitate Conservation Halton's reviews, November 2014*.

Please ensure that all technical studies (i.e. hydrologic and hydraulic analysis, meander belt assessment, hydrologic evaluation, hydrogeological evaluation, functional servicing/SWM report, environmental impact assessment) are comprehensive and are coordinated and integrated with one another.

General Recommendations



TOWNSHIP OF
PUSLINCH
1850

CH will recommend that lands within the regulated area and/or natural heritage system be restored and enhanced based on CH's Landscaping and Tree Preservation Guidelines; that they be designated and zoned for protection; and, that they be placed into public ownership.

Submission Requirements

CH should be circulated digitally on the complete application, which at a minimum should include:

- Delineation of all regulated features and hazards on a topographic survey prepared by an Ontario Land Surveyor, to the satisfaction of CH
- Hydrologic and Hydraulic analysis prepared by qualified professional engineer
- Meander belt assessment prepared by qualified geomorphologist
- Hydrologic evaluation including feature-based water balance considering surface and groundwater
- Hydrogeological evaluation based on CH's *Requirements for completion of hydrogeological studies to facilitate Conservation Halton's reviews, November 2014*
- Functional Servicing and Stormwater Management Report
- Environmental Impact Assessment is recommended (to be confirmed by municipality)
- Site / Concept Plans and Engineering Drawings (Grading, Erosion & Sediment Control, Site Staging and Phasing, SWM/Drainage, etc.)
- Landscaping and Restoration Plans
- Tree Inventory and Preservation Plans

Note that CH's policies and guidelines can be referenced online:
<https://conservationhalton.ca/policies-and-guidelines>.

Fees will apply based on the applicable fee schedule at the time of submission. CH's 2022 fee schedule is available online:



TOWNSHIP OF
PUSLINCH
1827 1850

		<p>https://conservationhalton.ca/plan-review-fees. The applicant should contact CH staff regarding the fee calculation prior to submission.</p>
MTO		<p>No comments receive yet, but due to the location of the property within the MTO offsets, these comments will be need prior to proceeding further. Follow up emails have been sent to the MTO but no comments to date. I would suggest that you contact them for their comments and forward them to my attention for our file.</p>

Pre-consultation Notes

11 Main St (Morrison)

Proposal:

Plan of Subdivision for 18 lots in Morrison Urban Area

- The subject property is approximately 22.8 ha (56.3 ac).
- Plan of Subdivision (applied to the County of Wellington) and Zoning By-law Amendment (applied to the Township of Puslinch) are required.

County of Wellington Official Plan:

- The subject property is designated as Residential, Greenlands, Core Greenlands and within the Paris Galt Moraine Policy Area. Identified features include significant wooded areas and Wetlands regulated by Conservation Halton.
- County OP generally supports low rise development services by private wells and septic systems when there are no available municipal services.
- Access could be via Main St and Back St (applicant to confirm with Township if either or both of these accesses are available)
- There are no municipal services available, each lot will be required to be serviced on private well and septic systems.

Township Zoning By-law:

- Zoned as Future Development (FD2), Urban Residential (UR), Natural Environment (NE) and Greenlands Overlay.
- 0.4 ha (1 ac) minimum lot size in zoning By-law for residential lots, current proposal does not meet minimum lot sizes.
- The Township is currently reviewing the Additional Residential Unit (ARU) provisions in the zoning By-law to align with the County of Wellington Official Plan.

Submission Requirements

The following should be included in the zoning and plan of subdivision applications:

- Planning justification report addressing Provincial Policy and the following sections of the County Official Plan;
 - Section 4.4 – Housing
 - A mix of housing should be incorporated into the plan – it is noted singles and townhouses are proposed.
 - A minimum of 25% of new housing units in the County will be affordable
 - Section 4.6.2 – Planning Impact Assessment
 - The Planning Justification report should consider and address this section.
 - 4.11 Public Spaces, Parks and Open Spaces
 - Trails, and trail connections should be provided to the satisfaction of the Township.

February 1st, 2022

Prepared by: Zach Prince, Senior Planner, County of Wellington

- Section 4.6.3- Environmental Impact Assessment & Part 5 – Greenlands System – The EIS for the applications should address this Section of the plan. A tree preservation/compensation and enhancement plan should also be submitted in support of the application.
- Section 4.6.4 - Traffic Impacts Assessment & Part 12 Transportation – The TOR for the Traffic Study should be circulated to County of Wellington Engineering/Roads for review and comment related to potential impacts to nearby County of Wellington roads and intersections, including but not limited to – Trafalgar Road, County Road 124, and County Rd 23.
- Draft Zoning by-law amendment
- Confirmation of adequate servicing for each unit (as determined by the Township CBO and/or Engineer)
- Traffic Impact Study (TIS)
 - Please contact Pasquale Costanzo at the County of Wellington regarding Terms of Reference and study requirements
- Environmental Impact Study (EIS) – Setbacks from the woodlot can be assessed via the EIS
- Hydrogeological and Geotechnical Study to assess soil capability for private septic systems and to justify a reduced lot size
- Grading and Servicing Plan
- Stormwater Management Brief
- Record of Site Condition
 - May require an MOE impact assessment due to proximity to prior landfill site.
- Archaeological Report

Additional Notes:

- Staff preference would be for the zoning by-law amendment and plan of subdivision to be submitted at the same time to allow the applications to be reviewed concurrently.
- The County has released an Attainable Housing strategy, it is recommended that this report be included in the applicants planning justification report, details regarding this report can be found at the link below:
[Attainable Housing Strategy](#)
- The lot located on Highway 6 will require approval from the MTO regarding access, this lot is also located in a Floodplain area (regulated by Conservation Halton) and may not be appropriate for development.
- Stormwater management (Ponds or LIDs) should be shown in subsequent site plans.
- Applicant should discuss any Parkland or trail requirements with the Township.

These comments are non-comprehensive and as more material is submitted more comments should be expected.

I trust these comments will be of assistance, if you have questions please contact the County of Wellington Planning and Development Department.

Regards,



Zach Prince MCIP RPP



January 25, 2022
Our File: 122006-002

Township of Puslinch
7404 Wellington Road 34
Guelph, ON N0B 2J0

Attention: Ms. Lynne Banks

Re: Pre-Submission Consultation
11 Main Street, Morriston
Township of Puslinch

Dear Ms. Banks,

A Pre-Submission Consultation application was received from the Township on December 20, 2021 regarding a proposed residential subdivision on the subject lands at 11 Main Street in Morriston. The Development Concept submitted shows 18 residential lots, ranging from 0.14 to 0.33 hectares. Seventeen of the lots front a new right of way, connected to an extension of Main Street and an extension of Ochs Street. One lot appears to front Highway 6. The Township requested the identification of the engineering requirements for the future development applications.

In support of the identification of the engineering requirements, the following documents and drawings were received and reviewed:

- Preliminary Official Plan and Zoning Bylaw Policies, prepared by Weston Consulting, dated October 21, 2021.
- Development Concept Drawing, Drawing C2, prepared by Weston Consulting, dated December 16, 2021.
- Development Review Meeting Request, dated December 20, 2021.

Based on our review of the site and associated documents, we provide the following engineering requirements should this application be deemed feasible to proceed by the County of Wellington Planning and Development Department.

- **Geotechnical and Hydrogeological Studies**, prepared by qualified individuals (professional geoscientist, professional engineer and/or professional hydrogeologist) providing information on site setting, desktop review of geologic and hydrogeologic information, results of field investigation programs, and recommendations related to design and construction of structures and buildings, including foundations; stormwater management systems; septic system design; and availability of potable groundwater. The scope of work for the hydrogeological study should be approved by the Township Hydrogeologist before commencement of the study.
- **Functional Servicing and Stormwater Management Report**, prepared by a licenced engineer and detailing:
 - The original (pre-development) conditions of the site and the nature of the proposed development.
 - How the lots are to be serviced by potable water, fire water and wastewater servicing.
 - How stormwater management is to be provided for the development including water quality, water quantity and water balance, as required by the Township Development Standards and Conservation Halton.
 - Grading and drainage considerations for the development.
 - How geotechnical and hydrogeological considerations will be accounted for.
 - Storm sewer design sheet in Microsoft Excel format.
- **Environmental Impact Assessment**- draft terms of reference to be reviewed by the Township and Conservation Halton prior to commencement of the study. A portion of the site is located within the Conservation Halton regulated area, and there are natural features onsite including woodland and wetland. A

General Vegetation Overview is also required, this may be combined with the Environmental Impact Assessment.

- **Traffic Impact Assessment**, due to the proximity and potential impacts to Highway 6, a traffic impact study is required to support the development. The Ministry of Transportation (MTO) should be consulted.
- **Legal Survey of the Property**, undertaken by a licenced Ontario Land Surveyor.
- **General Arrangement Plan**, showing proposed layout of subdivision, including number and size of residential lots, road allowance, stormwater management block(s) and greenspace to remain.
- **Site Grading and Servicing Plans**, developed to illustrate the site topography and drainage under existing and proposed conditions. The plan(s) should also show potable water and wastewater servicing infrastructure. Detailed drawings of proposed stormwater management facilities should be provided.
- **Sediment and Erosion Control Plan**, detailing measures to limit the effect of the proposed construction on the surrounding area and infrastructure.
- **Landscaping Plan and Tree Preservation/Enhancement Plan**, adhering to requirements determined by the Township Ecologist and in keeping with the Environmental Impact Assessment.
- **Plan and Profile Drawings for all Roads and Services.**
- **Composite Utility Plan (CUP)**, indicating the location of all underground and aboveground services, utilities driveways, street lighting, traffic and street signs, community mailbox(es) and landscaping to be installed within the municipal right of way. Sign-off of the CUP by each utility company represented by the plan is to be provided with the submission.
- **Street Lighting and Photometric Plans**, prepared by a professional engineer and including street lighting layout and design, electrical drawings showing the location of poles, load centres and luminaires, standard drawings and specifications for materials and installation, and a photometric distribution diagram indicating the average maintained illumination levels and uniformity rating in comparison to IESNA minimum requirements.
- **Itemized Construction Cost Estimate**, including 15% for engineering and contingencies.

A Planning Impact Assessment will be required by the County of Wellington Planning and Development Department. The Township Fire Department should comment on their requirements regarding fire protection and access.

If you have any questions or require additional information, please do not hesitate to contact us.

Yours truly,

GM BLUEPLAN ENGINEERING
Per:



Andrea Reed, P. Eng.
Project Engineer

January 17, 2022

2765

Township of Puslinch
7404 Wellington County Rd 34
Puslinch, ON
N0B 2J0

Attention: Mr. Jeff Bunn,
Deputy Clerk

**RE: Proposed Morriston Property Development, Township of Puslinch
Peer Review of Pre-Consultation**

As requested, we have reviewed the Preliminary Overview: Official Plan & Zoning By-law Policies, and Development Concept submitted by Weston Consulting (“the proponent”), for the proposed residential development (“proposed development”) in the Town of Morriston. Our comments are set out below.

Background

The property intended for development is located in the Town of Morriston, southeast of Badenoch Street and northeast of Highway 6/Queen Street in the Township of Puslinch (“subject property”). The above-described pre-consultation documents were submitted to the Township of Puslinch in December 2021, identifying the proposed development and outlining the relevant policies within the County of Wellington Official Plan (OP) (2021) and the Township of Puslinch Zoning By-law (2018).

Reviewed Materials

In order to complete this assignment, NRSI has reviewed the following materials:

- Preliminary Overview: Official Plan & Zoning By-law Policies - Morriston Property, Township of Puslinch. Prepared by Weston Consulting. (October 21, 2021),
- Development Concept, Town of Morrison, Township of Puslinch. Prepared by Weston Consulting. (December 16, 2021),
- “Make a Map: Natural Heritage Areas”, Ministry of Northern Development, Mines, Natural Resources and Forestry (2022),
- Natural Heritage Information Centre (NHIC) database (2022),
- “Planning and Permits Mapping”, Conservation Halton (2022).

Comments on Reviewed Materials

Through our review of the Preliminary Overview and Development Concept, the following comments have been developed:

- The subject property contains woodlands, which are considered Greenlands under the Wellington County OP (2021). The subject property also contains a portion of the East Morriston Swamp, which is considered Core Greenlands under the OP and a Natural Environment Zone by the Township of Puslinch. Two unevaluated wetlands are also located on the southwest portion of the property (NHIC 2022).

- The subject property falls within the Greenbelt Area and is specifically identified as a Settlement Area (Greenbelt Plan 2017).
- The 30m woodland buffer that has been identified by the proponent is overlapped by the proposed development footprint in two areas. It appears the proponent recognizes this proposed encroachment and has identified these two areas within the Development Concept. The proposed development footprint also overlaps a small portion of the southern woodland.
- Information available from the NHIC indicates that the subject property may contain potential habitat for herpetofauna species of special concern including the Snapping Turtle (*Chelydra serpentina*) (NHIC 2022).
- Information available from the NHIC indicates that suitable habitat for Butternut (*Juglans cinerea*), an endangered species in Ontario, may be present within the subject property (NHIC 2022).
- Existing woodlands, hedgerows, and individual trees on the subject property may contain trees that have the potential to provide suitable roosting habitat for Species at Risk (SAR) bats, including, Little Brown Myotis (*Myotis lucifugus*), Northern Myotis (*Myotis septentrionalis*) and Tri-colored Bat (*Perimyotis subflavus*).
- Based on the Development Concept, it appears trees within and adjacent to the subject property have the potential to be adversely affected by impacts associated with typical development construction activities, such as compacted soils, grading, runoff, and/or mechanical injuries. Specifically, a small portion of trees within the existing woodland, as well as trees within the hedgerow found along the northwestern perimeter of the subject property, are likely to be impacted, based on the current Development Concept, should appropriate tree protection measures not be applied prior to construction.
- Information available from the NHIC indicates that the subject property may contain potential habitat for threatened bird species including the Eastern Meadowlark (*Sturnella magna*) (NHIC 2022). Based on the available aerial imagery, it appears that suitable open country habitat is present within the subject property.
- Portions of the proposed development area overlap with lands regulated by Conservation Halton, specifically in the southeast and southwest (Conservation Halton 2022). This includes lands identified by Conservation Halton Floodplains Hazard lands, Wetland Hazard lands, and Meander Belt Hazard lands associated with a watercourse that is part of the Bronte Creek Watershed.

Recommendations

Based on our review of the Preliminary Overview and Development Concept, it is our opinion that the following requirements should be incorporated and met through the Site Plan Approval process for the proposed residential development.

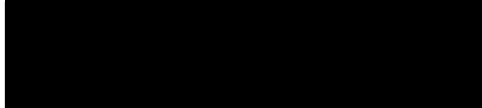
- Accurately delineate natural feature boundaries, including the dripline of the southern woodland and each wetland within the subject property.
- Provide confirmation that the proposed development and associated construction activities conform to the requirements of Conservation Halton including Ontario Regulation 162/06,

with particular regard to Conservation Halton's regulated areas within and adjacent to the subject property. The proponent is to confirm if the proposed development will require the approval of a Conservation Halton permit, however this requirement is subject to the discretion of Conservation Halton.

- It is recommended that the two unevaluated wetlands in the southwest of the subject property be evaluated by a qualified assessor in order to determine whether or not these features may be considered Core Greenlands under the County of Wellington OP and Natural Environment Zones under the Township of Puslinch Zoning By-law.
- Confirm the delineation of wetland boundaries with Conservation Halton.
- Complete a pre-construction tree inventory including all trees >10cm Diameter at Breast Height (DBH), as well as SAR vegetation of any size, with the potential to be impacted by the proposed development. The findings of this inventory should be used to create a Tree Preservation Plan (TPP) that contains suitable tree protection recommendations, such as tree protection fencing in combination with Erosion and Sedimentation Control (ESC) measures, or other measures to ensure that trees not be negatively impacted by the proposed development and associated construction. Should existing trees require removal as a result of changes in existing grade, conflicts with the development footprint, or other impacts associated with the proposed development, these trees should be identified within an Arborist Report that characterizes the findings of the tree inventory. Impacts to associated wildlife habitat, as well as the replacement of trees through compensation should also be considered.
- Identify ESC measures to be applied during construction to mitigate negative impacts on existing terrestrial and aquatic natural features on and adjacent to the subject property, including wetlands, watercourses and woodlands.
- The proponent is to assess if proposed development may impact existing trees on or adjacent to the subject property, including those within the southern woodland and northern hedgerow that exists along the perimeter of the subject property. It is recommended that any tree removals be completed outside of the active bat season (April 1 to September 30) in order to ensure compliance with the Ministry of Environment, Conservation and Parks (MECP). This would also serve to limit the potential for the destruction of migratory birds and their nests within the treed communities during the active nesting season (April 1 – August 31), which is prohibited under the federal *Migratory Birds Convention Act* (1994).
- Confirm that the proposed site alteration adequately conforms to the natural environment policies outlined within the County of Wellington OP and Township of Puslinch Zoning By-law, including but not limited to approved activities with Core Greenlands/Natural Environment Zones and Greenland areas, as well as their adjacent areas (30m).
- Provide an impact assessment identifying whether the proposed development will impact natural features on and adjacent to the subject property, including the southern woodland, wetlands and additional features regulated by Conservation Halton, and confirm the proposed development will have no negative impacts on these features. This assessment should also include confirmation of no negative impacts to potential SAR species, SAR habitat, or Significant Wildlife Habitat within the subject property. Should potential impacts to SAR species or SAR habitat be identified, the proponent should consult with MECP.

Please do not hesitate to contact us if you require further clarification on these matters.

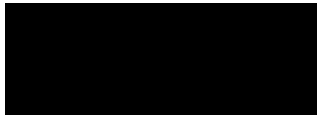
Sincerely,
Natural Resource Solutions Inc.



David E. Stephenson, M.Sc.
Certified Arborist and Senior Biologist



Jack Richard, R.P.F.
Registered Professional Forester and Biologist



Madison Postma, M.F.C.
Forestry Technician



Puslinch Fire and Rescue

7404 Wellington Rd 34, Puslinch, ON, N0B 2J0

Fire Chief Luis Gomes

Water Storage Tanks and Hydrants for Fire Protection

Water Storage Tanks

1. Water storage tanks will be sized as per the Ontario Building Code.
2. The top of the tank to be installed below the frost line. Minimum 1.3 M.
3. The bottom of the tank must not be more than 4.6 M below ground level.
4. Access manhole must have lockable heavy metal cover with no holes.
5. Access ladder to be aluminum with rungs to floor of tank.
6. Concrete to be 35 MPA at 30 days with 6% air entrainment.
7. Reinforcement to be per manufacturers specifications.
8. Install a vent pipe with rodent and insect screen.
9. Install automatic float valve system to a water source with back flow preventer.
10. Compliance with the inspection, testing and maintenance provisions of NFPA 25, "Standard for the Inspection, Testing and Maintenance of Water-Based Fire Protection Systems", for tanks is deemed to satisfy the maintenance requirements
11. The water supply source for the dry hydrant shall provide, on a year-round basis, the required quantity of water, as determined in NFPA 1142, Chapter 4, and Ontario Fire Marshal's Guidelines on Rural water Supplies for firefighting.
12. The fire department will:
 - inspect during installation of tank or tanks
 - inspect location of hydrant
 - inspect before filling
 - perform a pump test with fire pumper before final approval.

Dry Hydrant Design and Location.

- 1** Puslinch Fire and Rescue Services shall approve all aspects of the dry hydrant design and construction, including the type of materials, pipe size, and system fittings to be used.
- 2** All dry hydrant systems shall be designed and constructed to provide a minimum flow of 1000 gpm (3800 L)
- 3.** Adequate working space shall be provided around the dry hydrant to provide for a safe working environment.
- 4.** Dry hydrant systems shall be designed and constructed so that slope and piping configurations do not impede drafting operations.
- 5.** Suction hose connection(s) shall be compatible with the fire department's hard suction hose size and shall conform to NFPA 1963, *Standard for Fire Hose Connections*. The connection(s) shall include a protective cap. The cap and adapter shall be of materials that minimize rust and galvanic corrosion at draft.
- 6.** Dry hydrant to be installed a minimum of 30 M from any building and will be approximately 1.8 meters from the edge of driveway using 150 mm (6") pipe. The fire department connection fitting will be 67 cm to 90cm above the ground and facing fire truck location. The Fire Department connection must be NH (National Hose) 150mm (6") thread - female connection with a cap to seal the opening.
- 7.** The dry hydrant system and access to the site shall be developed in a manner that allows the fire department pump to connect to the hydrant using not more than 20 ft (6 m) of hard suction hose
- 8.** Dry hydrants shall be located such that they are accessible under all weather conditions. Grass, brush, and other vegetation shall be kept trimmed and neat. Vegetation shall be cleared for a minimum 3 ft (0.9 m) radius from around hydrants
- 9.** Dry hydrants shall be located a minimum of 100 ft (30 m) from any structure
- 10.** No parking or other obstacles shall be allowed within 20 ft (6 m) of the access side of the hydrant.
- 11.** Dry hydrants shall be protected from damage by vehicular and other perils, including freezing and damage from ice and other objects.
- 12.** Dry hydrants shall be inspected at least quarterly and maintained as necessary to keep them in good operating condition. The hydrants shall be flow tested at least annually with an approved pump to ensure the minimum design flow is maintained. Compliance with the inspection, testing and maintenance provisions of NFPA 25, "Standard for the Inspection, Testing and Maintenance of Water-Based Fire Protection Systems", for hydrants is deemed to satisfy the maintenance requirements
- 13.** Dry hydrant locations shall be made visible from the main roadway during emergencies by reflective marking and signage approved by Puslinch Fire and Rescue services

General Notes:

NFPA 25:

4.1 Responsibility of the Owner or Occupant.

4.1.1* The owner or occupant shall provide ready accessibility to components of waterbased fire protection systems that require inspection, testing, or maintenance.

4.1.2* The responsibility for properly maintaining a waterbased fire protection system shall be that of the owner of the property.

In accordance with the Fire Protection and Prevention Act, Puslinch Fire and Rescue Services requests that all test and inspection documentation be submitted annually to fireprevention@puslinch.ca, all work must be performed by qualified fire protection technicians.

Rev 2019.01.21