



"Inspiring a Healthy Environment"

January 27, 2023

Corporation of the County of Middlesex County Building 399 Ridout Street North London, Ontario N6A 2P1

Attention: Marion-Francis Cabral, Planner (Via e-mail)

Re: Application for Vacant Land Condominium, Official Plan Amendment, Zoning By-law

Amendment and Site Plan.

File No. 39T-MC-CDM2103, OPA 57, ZBA-16-2021 and SP05-2021

Agent: LDS Consultants Inc. & Knutson Development Consultants Inc.

Owner: Sweid Holdings Inc.

6, 10 & 12 Elmhurst St (Elmhurst Development), Village of Kilworth, Municipality of

Middlesex Centre, County of Middlesex

The Upper Thames River Conservation Authority (UTRCA) has reviewed this application with regard for the policies within the Environmental Planning Policy Manual for the Upper Thames River Conservation Authority (June 2006), Section 28 of the *Conservation Authorities Act*, the *Planning* Act, the Provincial Policy Statement (2020), and the Upper Thames River Source Protection Area Assessment Report.

BACKGROUND AND PROPOSAL

The approximately 2 ha subject lands are comprised of three, large residential properties containing single-detached dwellings with frontage on Elmhurst Street. The *County of Middlesex Official Plan (consolidated, 2006)* identifies the subject lands within the Kilworth 'Settlement Area'. The subject lands are designated 'Low Density Residential' and 'Natural Environment' on *Schedule A-2 Komoka-Kilworth Urban Settlement Area & Secondary Plan* of the *Middlesex Centre Official Plan (2022)* and zoned 'Urban Residential First Density Exception 3 (UR1-3)' in the *Municipality of Middlesex Centre Zoning By-law (No. 2005-005)*. The woodland within and adjacent to the subject lands has been identified as Significant Ecologically Important in the Middlesex Natural Heritage Systems Study (2014). Accordingly the woodland has been designated as 'Significant Woodlands' on Schedule C Natural Heritage Features of the County Official Plan and on Schedule 'B' Greenland System of the Municipal Official Plan.

The Vacant Land Condominium (File No. 39T-MC-CDM2103) proposes a 15-unit single detached dwelling (Lots 1–15) and 30-unit townhouse dwelling (Lots 16-45) development. The site is proposed to be developed on full municipal services with access from Elmhurst Street. The portion of significant woodland on the subject lands is proposed to be retained.

To implement the Vacant Land Condominium the following applications are proposed:

- Official Plan Amendment (File No. OPA 57) to delineate the significant woodland.
- **Zoning By-law Amendment** (File No. ZBA-16-2021) to rezone the lands to a "site specific" zone to achieve an Exception Residential (UR1-x and UR3-x) Zone. For the single detached dwellings and townhouse dwellings respectively.
- Site Plan (SP05-2021)

DELEGATED RESPONSIBILITY & STATUTORY ROLE

Provincial Policy Statement 2020

The UTRCA has the provincially delegated responsibility for the natural hazard policies of the PPS, as established under the "Provincial One Window Planning System for Natural Hazards" Memorandum of Understanding between Conservation Ontario, the Ministry of Natural Resources and Forestry (MNRF) and the Ministry of Municipal Affairs and Housing. Accordingly, the Conservation Authority represents the provincial interest in commenting on development applications with respect to natural hazards and ensures that applications are consistent with the PPS.

The UTRCA's role in the development process is comprehensive and coordinates our planning and permitting interests. Through the plan review process, we ensure that development applications meet the tests of the *Planning Act*, are consistent with the PPS, conform to municipal planning documents, and with the policies in the UTRCA's Environmental Planning Policy Manual (2006). Permit applications must meet the requirements of Section 28 of the *Conservation Authorities Act* and the policies of the UTRCA's Environmental Planning Policy Manual (2006). This approach ensures that the principle of development is established through the *Planning Act* approval process and that a permit application can be issued under Section 28 of the *Conservation Authorities Act* once all of the planning matters have been addressed.

UTRCA ENVIRONMENTAL PLANNING POLICY MANUAL (2006)

The UTRCA's Environmental Planning Policy Manual is available online at: http://thamesriver.on.ca/wp-content/uploads/PlanningRegulations/EnvPlanningPolicyManual-update2017.pdf

NATURAL HAZARDS

The UTRCA represents the provincial interest in commenting on *Planning Act* applications with respect to natural hazards. Based on best available information there are no natural hazards on the subject lands.

NATURAL HERITAGE

3.3.3 Woodland Policies

The woodland within and adjacent to the subject lands has been identified as Significant Ecologically Important in the Middlesex Natural Heritage Systems Study (2014). Accordingly the woodland has been designated as 'Significant Woodlands' on Schedule C Natural Heritage Features of the County Official Plan and on Schedule 'B' Greenland System of the Municipal Official Plan. New development and site alteration is not permitted in woodlands considered to be significant. Furthermore, new development and site alteration is not permitted on adjacent lands to significant woodland unless an EIS has been completed to the satisfaction of the UTRCA which demonstrates that there will be no negative impact on the feature or its ecological function.

CONSERVATION AUTHORITIES ACT

The subject lands **are not** affected by any regulations (Ontario Regulation 157/06) made pursuant to Section 28 of the *Conservation Authorities Act*.

DRINKING WATER SOURCE PROTECTION - Clean Water Act

The subject lands **are** located within a vulnerable area. For more information pertaining to drinking water source protection, please refer to the approved Source Protection Plan at: https://www.sourcewaterprotection.on.ca/approved-source-protection-plan/

TECHNICAL REVIEW COMMENTS

Alongside the applications the UTRCA received and review the following submissions:

- Stormwater Servicing Brief, prepared by LDS, dated November 22, 2022
- Geotechnical Investigation & Hydrogeological Assessment, prepared by LDS, dated November 3, 2022
- **Scoped Development Assessment Report,** prepared by Natural Resource Solutions Inc., dated July 16, 2021
- Planning Justification Report, prepared by LDS, dated November 2022
- Site Plan (Drawing SP1), prepared by LDS, stamped/sealed October 19, 2022
- Sheet No. 1 of 5 to 5 of 5, prepared by LDS, stamped/sealed November 24, 2022
- Landscape Details (Drawing L-2), prepared by Ron Koudys Landscape Architects Inc., dated October 26, 2022

STORMWATER MANAGEMENT BRIEF

Please provide a response letter and Final SWM Report addressing the following comments:

- 1. The Brief states that it is proposed to develop the site as a mixed-use residential development consisting of 15 single-family lots and 45 medium-density residential units. The draft plan proposes 15 single detached dwelling lots and 30 townhouse units. Please revise the report to reflect the proposed draft plan.
- 2. The Geotechnical Investigation & Hydrogeological Assessment states in Section 5.2 that it is prudent to ensure that where low impact development (LID) features are proposed for use onsite, that they be strategically located to ensure that clean water (from rooftops and landscaped areas) be the primary source of stormwater run-off, and to ensure that stormwater run-off which has the potential to contain contaminants (from roadways, etc.) be directed to a suitable location for water quality treatments.

The Brief states that the SWM runoff will be conveyed to the internal storm sewer system and will be infiltrated through subsurface infiltration galleries. Further the Brief states that quantity control will be achieved though surface storage, perforated storm sewer network and multiple subsurface infiltration trenches and galleries. Aligned with the recommendations in the Geotechnical Investigation & Hydrogeological Assessment:

- a) The UTRCA strongly recommends infiltrating only clean runoff as the site is within the designated vulnerable area, highly vulnerable aquafer, and significant groundwater recharge area.
- b) The UTRCA does not recommend perforated storm sewers due to runoff quality concerns.
- 3. For Catchment Area 201 and 202 the Brief states that a perforated storm sewer network will convey minor and major flows to the subsurface trench from the rear yard of lots 12-15 and 1-9 respectively. Infiltration occurs slower than the conveyance of runoff which may cause local flooding and ponding. Please consider the effects of the proposed SWM strategy on the neighboring properties, and confirm that the proposed SWM will not result in local flooding and ponding.

- 4. The infiltration capacity decreases over passage of time due to operation and maintenance issues. The performance of the proposed infiltration based SWM infrastructures will depend on the operation and maintenance of the proposed infiltration system/galleries.
 - a) As discussed in comment 2, the UTRCA recommends that the runoff is collected and cleaned before it is infiltrated.
 - b) The UTRCA recommends that an Operation and Maintenance Plan is in place to ensure the long term function of the infiltration based SWM infrastructure.
- 5. The Brief notes that there is no physical outlet for this site. All flow will be contained within the site boundaries to mitigate potential adverse effects on the surrounding environment. The UTRCA recommends providing an emergency overland flow routes in case the proposed infiltration system fails due to operation and maintenance or other issues to avoid local flooding.
 - a) Please provide details of how runoff will be conveyed safely during major storm or an emergency situation.
 - b) Please consider the effects of the proposed SWM strategy on the neighboring properties, and confirm that the proposed SWM will not result in local flooding and ponding.
- 6. Please provide supporting calculations for the proposed 632 m³ volume being proposed for infiltration on the subject lands
- 7. Table 2 and 3 reported volumes under the pre- and post-development conditions. However the report notes pre- and post-development peak flow rates and claims that the flow rates are less than the pre-development condition as the entire volume of the 250-year storm is infiltrated without overflowing the proposed storage system. Please report the pre- and post-development flows.
- 8. Please provide drawings showing the pre- and post-development catchments areas supported by local contours and grading information, not the limits of the subject lands and proposed development. Please show any external drainage areas that may be flowing on to the site and revise the figure and SWM calculations if required.
- 9. Please provide justification for the Curve Number (CN) of 41 and 25 used for the area 101 and area EX-1 under the existing conditions.
- 10. Please revise Figure 3 to include maximum depths and extent of ponding during the 250-year storm.
- 11. Please revise Figure 4 to identify the drainage areas to each infiltration trench and gallery under the post-development conditions and include cross sections for the trenches and galleries which identify the elevation during the 250-year storm.

- 12. The FlexStorm Catch-It Inlet being proposed on site for water quality may not prevent dissolved pollutants such as chlorides from entering the proposed SWM system and being infiltrated into the groundwater, specifically from the road and parking lot areas. Please provide details on how the proposed the SWM system will prevent the dissolved pollutants from entering the infiltration trenches to avoid groundwater pollution.
- 13. Please consider the effects of the groundwater recharge on the proposed SWM infrastructure.
- 14. Please submit a detailed Erosion and Sediment Control (ESC) drawing supported by notes, standards, inspection, monitoring, and reporting signed, sealed, and dated by P.Eng. The detailed ESC mentioned in the SWM brief should be provided to the contractor on the site and should be noted on the ESC drawings.

DEVELOPMENT ASSESSMENT REPORT

Please provide a response letter and Final DAR addressing the following comments:

- 15. The DAR submitted in support of the applications was prepared based on a previous draft plan of subdivision concept. There is no site plan included in the DAR, however based on specific lot number descriptions in the report, the recommendations do not match the currently submitted site plan. The UTRCA does not accept the submission of the preliminary DAR as the recommendations in the DAR are not reflective of the impacts of the proposed site plan. Please revise the DAR and provide recommended setback(s) and mitigation measures to ensure no negative impacts to the significant woodlot and its ecological functions based on the configuration of the proposed site plan.
- 16. The DAR recommends a 1 m setback from the surveyed dripline, in which grading is not permitted, in order to protect the root zone of these trees. A 2 m setback from the northern property line is recommended to protect the trees on the adjacent property. Further, as discussed in comment 15, the recommended setback is based on a previous draft plan, where the edge of the woodland buffer would be at the rear lot lines, and not the draft plan submitted with this application, where stormwater management infrastructure is proposed directly adjacent to the buffer. Please revise the DAR to provide recommended setback(s) and mitigation measures for the new proposed orientation of the site to ensure no negative impacts to the significant woodlot and its ecological functions. Please note that the buffers should also account for tree fall zones, and any impacts to the function of the proposed SWM facilities related to tree roots, branches, leaves, etc. should be considered.
- 17. The Grading Plan identifies the 'Dripline', while the Site Plan identifies the 'Tree Preservation Limit', however neither appear to incorporate the recommended buffers. Please identify the recommended buffers from the significant woodland on the development plans. As discussed in comment 15, the buffer may need to be revised based on the proposed draft plan and the recommendations in the revised DAR.
- 18. The UTRCA recommends that any landscaping plantings near the woodland use native trees and shrubs, and avoid any invasive non-native species. We recommend using species from the UTRCA's Recommended Native Trees & Shrubs for Naturalization Projects in the Upper Thames River Watershed: https://thamesriver.on.ca/wp-content/uploads/Native-trees-shrubs.pdf

- 19. A privacy fence is proposed to be installed around the perimeter of the subject lands. A portion of the privacy fence is proposed within the woodland (i.e. lot 15 on the current site plan). The DAR recommends that the fence within the woodland be installed by hand to avoid vegetation removal and impacts to the woodland.
 - a) The UTRCA does not recommend fencing through natural heritage features. The fence be located outside of the natural feature, or that markers (e.g. posts, bollards, etc.) be placed at the limit of the property boundary within the feature to limit the impacts on the trees and on connectivity within the feature for wildlife.
 - b) The DAR recommends using decorative bollards on lots 12 and 13 to mark the tree protection area, and that the tree protection area be registered on title for lots 12 and 13. This lot numbering is based on a previous version of the site plan, please revise this recommendation based on the new proposed site plan.

PLANNING COMMENTS

- 20. As noted in comment 14, the DAR submitted alongside the application was prepared based on a previous draft plan concept. The UTRCA does not accept the use of the preliminary DAR as the recommendations in the DAR are not reflective of the impacts of the proposed draft plan configuration. Please revise the DAR based on the proposed draft plan. The recommended buffers(s) and mitigation measures in the Final DAR must ensure no negative impacts to the significant woodlot and its ecological functions based on the final configuration of the draft plan.
- 21. The infiltration trenches (Trench 'A', Trench 'B' and Trench 'C') are proposed along the north property line, potentially within the development setback associated with the significant woodlot. UTRCA does not support stormwater management infrastructure within the setbacks required for natural heritage features. Please clearly identify the setback on all plans and ensure that all SWM infrastructure is located outside of the setback, and provide comments on any expected impacts on the function of the proposed SWM facilities built in close proximity to the woodland.
- 22. The UTRCA does not recommend snow storage areas next to natural heritage features, as contaminants within the snow may negatively impact the features when snow melts. Continuous use of these areas for snow storage has the potential for buildup of contaminants adjacent to the features, which could then impact the vegetation within the buffer, and eventually be transported into the woodland. The UTRCA recommends moving the proposed snow storage along lot 15 (across from lots 16 and 17), between lots 27 & 28, and between lots 39 & 40 away from the significant woodland.
- 23. The Grading Plan identifies a Light Duty Silt Fence along the development boundary. The Light Duty Silt Fence should be installed at the outer limit of the woodland buffer recommended in the final DAR prior to any site grading, not within the woodland. Please revise.
- 24. Please include the following details on the proposed site plan:
 - The dripline of the significant woodland;
 - The recommended buffer from the significant woodland, as per the revised DAR;
 - The location of privacy fencing and markers (e.g. posts, bollards, etc);
 - The location of snow storage areas; and
 - The location of stormwater management infrastructure.

UTRCA REVIEW FEES

Consistent with UTRCA Board of Directors approved policy, Authority Staff are authorized to collect fees for the review of Planning Act applications and the peer review of technical reports. Fees for the review of the outstanding technical reports requested above will be invoice once UTRCA technical review comments are provided to the applicant. Our fee to review this submission is as follows and will be invoiced under separate cover.

Draft Plan of Condominium (\$160 per unit)	\$ 4,800.00
Official Plan Amendment (Minor)	\$ 550.00
Zoning By-law Amendment (Minor)	\$ 550.00
Stormwater Management (SWM) Studies – Preliminary	\$ 1,200.00
Development Assessment Report (EIS – Minor)	\$ 750.00
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TOTAL \$7,850.00

RECOMMENDATION

The DAR submitted in support of the application was prepared based on a previous draft plan concept. The UTRCA does not accept the use of the preliminary DAR as the recommendations in the DAR are not reflective of the impacts of the proposed draft plan configuration. Please note, revisions to the configuration of the draft plan may be required to allow for sufficient setbacks between the significant woodlot, stormwater management infrastructure and the residential units.

Given the outstanding concerns the UTRCA recommends that this application be <u>deferred</u> to provide the applicant with the opportunity to respond to the comments. We are not in a position to offer conditions of draft plan approval at this time.

Thank you for the opportunity to comment. Please contact the undersigned if there are any questions.

Yours truly,

UPPER THAMES RIVER CONSERVATION AUTHORITY

Laura Biancolin Land Use Planner II

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IS/SH/LB/lb

c.c. UTRCA - Sarah Hodgkiss, Imtiaz Shah, Cari Ramsey & Deb Kirk



Regulation Limit

Regulation under s.28 of the Conservation Authorities Act

Development, interference with wetlands, and alterations to shorelines and watercourses. O.Reg 157/06, 97/04.

Legend

■ UTRCA Watershed (1:10K)

Assessment Parcel (MPAC)

Watercourse (UTRCA)

Open

_ - Til

Middlesex NHSS Woodland (2014)

Candidate for Ecologically Important

Ecologically Important

Significant Ecologicallly Important

Middlesex NHSS Vegetation Patch (2

No Patch Criteria Met

1+ Patch Criteria Met

Wetlands (MNRF)

Evaluated-Provincial

Evaluated-Other

Not Evaluated

Wetland Hazard

Flooding Hazard

Erosion Hazard

Regulation Limit 2018

The Regulation Limit depicted on this map schedule is a representation of O.Reg 157/06 under O.Reg 97/04.

The Regulation Limit is a conservative estimation of the hazard lands within the UTRCA watershed. In the case of discrepancies between the mapping and the actual features on a property, the text of Ontario Regulation 157/06 prevails and the jurisdiction of the UTRCA may extend beyond areas shown on the maps.

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This document is not a Plan of Survey.

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