



February 15, 2023  
File: LD-00203

VIA EMAIL

The Municipality of Middlesex Centre  
10227 Ilderton Road  
Ilderton, ON N0M 2A0

**Attention:** Ms. Marion-Frances Cabral, Planner

**Reference:** Site Plan Review Comments  
Elmhurst Street, Kilworth  
Sweid Holdings Inc.

We are pleased to provide the following series of responses to comments received to date arising from the municipality's review of our submission of the site plan, associated servicing drawings and supporting reports. Responses to comments received have been embedded below in blue text.

- Unit 15 and potentially 16, 27, 28, 39 and 40 will be required to have a Homeowner's Guide to educate on woodland preservation and encroachment concerns. [As a demonstration of our client's commitment to responsible development, all future Unit purchasers will receive a copy of the Homeowner's Guide.](#)
- Staff suggest increasing the side yard setback to prevent the expansion / erection of accessory buildings / structures in this area. [As an alternative to increasing the side yard setback to prevent the expansion / erection of accessory buildings / structures in the tree preservation zone affecting Units 15, 16 and 17, we recommend this matter be addressed via the use of an appropriate restrictive covenant.](#)
- Confirm if the landscaped corridor between Units 18/25 and 19/24, 30/37 and 31/36, and 42/43 will be common area or fenced off and area divided by the two end units. [The landscaped corridor between Units 18/25 and 19/24, 30/37 and 31/36, and 42/43 represents an unfenced common area.](#)
- Is "Tree Preservation Limit" the dripline limit or the setback / buffer. [The tree preservation limit is based on the dripline limit plus the buffer.](#)
- Confirm if snow-storage locations in proximity to significant woodland are appropriate and do not negatively impact the vegetation. [Given the positive gradient of surface water drainage away from the tree preservation zone, snow storage in the locations proposed is not anticipated to be problematic from a vegetation impact perspective.](#)
- Is the Tree Preservation area fenced off for preservation or is it a common area. [The tree preservation area affecting Unit 15 will remain with Unit 15 whereas the areas adjacent to Unit 16 and 27 will be included in the common element area of the medium density portion of the site plan.](#)
- Confirm the projection of the deck / porch in compliance with Zoning by-law. [The projection shown on the site plan represents a ground level patio, setbacks for which are not dictated by the Zoning by-law.](#)
- OP Policy 5.7.4 – Private garages for residential development shall not be located closer to the street than the habitable portion or porch on the main floor of the building. [Contrary to that shown on the site plan, porches are to extend to the front of the garage.](#)

- This will need to be in the site-specific zone. Please show how this was calculated on the site plan by showing the dimensions and area calculations for an interior unit. [LDS to provide with next submission.](#)
- Please advise if there would be fencing between units that front onto Elmhurst. Please include in the notes. It is suggested that the fencing should not compromise street line visibility and not extend to the property line. However, a shorter fence that projects from the wall 1-2 m may be supported by the municipality. [Fencing between Units that front, or reverse front, onto Elmhurst Street are not anticipated to be fenced.](#)
- Confirm if Units 40-45 will have an enhanced “rear-yard” elevations and if the wrought iron fence will have gates for each unit. [Units 40-45 are to be reverse fronted onto Elmhurst Street, and be provided with architectural enhancements. As there are no sidewalks on Elmhurst Street, fencing will be provided without gates.](#)
- Is any signage for the development proposed? [The only signage envisioned to be provided at this time is the 911 addressing of the property.](#)
- Confirm if Unit 1 will have an enhanced elevation, special architectural details or wrap-around porch for the side that will face Elmhurst Street. [Architectural enhancements are planned for the side elevation facing Elmhurst Street.](#)
- Comments from BRA provided to the proponent. Please ensure this note is updated to include their recommendation (if necessary). [Please clarify who BRA is and provide a copy of their comments in order that we may consider and respond to same.](#)
- Considering increasing the exterior side yard. Can be done by shifting the lots so that Unit 9 has a setback of 3-4m from the internal roadway. [The proposed 4.5m exterior side yard associated with Unit 1 is considered appropriate for this setting.](#)
- Consider adding a sidewalk along the north side of the private road to the mailbox or directly to Elmhurst Street. [As there are no sidewalks in the neighbourhood, and no sidewalk to connect to on Elmhurst Street, why are sidewalks being imposed within the limits of this private development?](#)
- Show all overland flow arrows (i.e., within property, entering & leaving property). Even though flows are contained on the site up to the 250-year storm event, the post-development overland flow path should be shown leaving the property (in case of plugging / failure of infiltration system). A comparison should be made for pre- and post-development flow route areas and comment on the downstream effects if this occurs. Label contours on Figure 2. [LDS to provide with next submission.](#)
- The brief notes that the predominant soil on site is a sandy loam with a hydrologic soil Group A. This soil type is generally noted to be Hydrologic Soil Group B. Please provide justification / backup for this as well as the CN values used. [The Geotechnical Report prepared by LDS \(GE-00285, November 2022\) included a series of boreholes which were drilled throughout the site, and characterize the near-surface soils as sand with trace to some gravel, and extending to depths of about 3.8 m below existing grade. Gradation analysis on select sand samples confirm the composition of these soils and estimated soil permeability. Hydrologic Soil Group A was used for hydrologic modelling, based on the information provided in the Geotechnical Report. A CN value of 39 was used for pervious surfaces and 98 was used for the impervious surfaces in the proposed development condition modelling.](#)
- Quality Control: We note that a goss trap type of device (24R Snout) is proposed as pre-treatment for the larger infiltration galleries. We have no further comment on these. The smaller infiltration trenches have a silt sac type of protection (FlexStorm Catch-It inlet protection) in the CB's leading to them. These silt sac devices

will require continual maintenance/replacement in order to keep them functional and they are likely more suited to sediment/erosion control during construction. A more permanent type of pre-treatment should be proposed in these areas. Please provide a section in the report to address the future maintenance of the storm/infiltration system. [LDS to provide with next submission. It is anticipated the maintenance required for the catch-it inlet protection will be similar to the 24R snout, if not less, due to the nature of runoff directed towards the rear-yard infiltration trenches.](#)

- The “Existing Condition” section of the brief notes that 5 of the 6 boreholes were dry and the other BH had groundwater 4.27m below the existing ground surface. In the “Installation of Erosion Control Measures” and in the “Construction Dewatering Requirements” Sections, a high groundwater condition, and a “shallow groundwater condition” is noted. Please clarify. [Confirmed – shallow groundwater conditions are not a significant concern for the proposed development, as most of the boreholes were found to be open and dry during drilling, and minor groundwater accumulation was identified in Borehole BH2, as noted. LDS to amend statements referencing high and shallow groundwater conditions.](#)
- The “Construction Dewatering Requirements” section refers to a watercourse in a number of sentences. Please clarify what watercourse is being referred to. [LDS to revise and remove references to “watercourse”. The Geotechnical Report provides detailed discussion on construction dewatering, and notes that conventional groundwater control measures are expected to be suitable for typical excavation depths. It is noted that where excavations extend into the groundwater table, that suitable sediment and erosion controls should be incorporated into outlets and discharge locations, where water is pumped from open excavations.](#)
- For clarity, please provide a table of parameters used for each pre- and post-development area modelled (Area #, size, land use, CN (soil type /Hydrologic soil group), Tc, Ia, Timp, Ximp, slopes, etc.). Provide a schematic/flow chart showing the model layout. Provide/summarize the rainfall parameters used for each storm event, type/duration of storm used. [LDS to provide with next submission](#)
- We note that a 3 hr Chicago storm distribution was used in the model. In addition, the 24-hour storm should be modelled to ensure this condition is also covered. [This comment is considered inappropriate for this application as 24-hour storm distributions are not typically required for small urban infill developments of this nature. 24-hour distributions are more typically associated with larger rural catchment areas.](#)
- In the hydrologic model, the “Compute Volume” command was used to determine volumes. This command only provides an approximation of the volume requirement. The “Route Reservoir” command should be used to take into account the release rate provided by infiltration along with stage-storage calculations. In addition, the infiltration rate is to be based upon actual field measured rates with a suitable safety factor. The rates provided in the geotechnical report are noted to be calculated. [The “Compute Volume” command provides the maximum required storage based on the factored infiltration rate. The infiltration rate is based on in-situ field measured rates and includes suitable safety factors.](#)
- Regarding the hydrologic modelling: Since these are small areas it is noted that the time step should be shortened. [LDS to provide with next submission](#)
- Residents will likely be concerned that infiltrating all the runoff on site will negatively impact the downstream properties. We recognize that there is currently a fair amount of infiltration on the site and likely much runoff is soaked up by the topsoil and evapotranspiration. With the new development, we assume the amount to be infiltrated will increase. Please complete a water balance to compare the pre and post development conditions and provide a discussion regarding any impacts to the downstream properties. It should also be acknowledged in the assessment that the properties downstream of the site are on private wells (some will have the option of connecting to the new main but others further down will not). [Although a detailed water balance assessment has not been completed for the site, the Geotechnical Report provides discussion on options for at-source](#)

infiltration features and low impact development (LID) structures which are well suited to the site based on the soil and groundwater conditions. The size and scale of the proposed development is relatively small when compared to the broader catchment area which provides source water to potable water supply wells in the area. The hydrogeological discussion in the Geotechnical Report confirms that no water supply wells within the immediate vicinity of the site (within 250 m) are sourced from the shallow overburden aquifer. Wells which are sourced from intermediate and deep aquifers are less vulnerable to impact from surface activities, due to the relative low permeability of clay/silt till soils which act as an aquitard above these aquifers.

- Provide a stamped design / details of the retaining wall proposed. This request is premature as the selection of a retaining wall system will occur through the tendering process. LDS's Geotechnical Division is qualified to review the appropriateness of the selected retaining wall system.
- Please show the sump pump symbol in the legend. The municipality has noted that two sump pumps connections should be provided, one on each side of the building. Please revise. The sump pump symbol will be added to the Legend in our next submission. Given the geotechnical conditions, two sump pumps per building are not warranted.
- Show the dimensions between the proposed watermain and sewers. Confirm that the clearances meet MECF requirements. Dimensions will be added to our next submission.
- Confirm the geotextile requirements on the details as noted. Geotextile requirements on the details will be included in our next submission.
- Please show more grading detail at the property boundaries for clarity and to ensure that there is no trapped drainage on adjacent properties (i.e., direction of flow, swales, etc.). An unprecedented amount of detail, including existing ground elevations, proposed grades, drainage swales and direction of flow has been provided. Additional information is not warranted.
- Show the maximum ponding areas on CB's/CBMH's. Some of these areas appear to be deeper than the maximum allowable 0.45m within grassed areas. Show the areas of surface volume accounted for in the SWM brief. These should be labelled with ponding elevation/depth and volume. The requested information will be provided with our next submission.
- Show overland flow arrows. See comments above on SWM brief. Refer to response to preceding comment.
- The SWM report notes heavy duty / robust silt fence on the E & S sides and light duty on the other 2 sides. Please incorporate. Only 1 type of silt fence shown here. The requested information will be provided with our next submission.
- A traffic management plan is required for the proposed construction. A TMP will be provided with our next submission.
- In the profiles, show the restored centerline profile and elevations. An ultimate profile will be added to the profile drawing.
- The road restoration thicknesses need to coordinate with the General Notes drawing. Noted.
- Typical cross-sections for each street and restoration details / notes are required. Typical cross-sections and restoration details / notes will be added to our next submission.

- The existing culvert crossing Parkland Place just southwest of Elmhurst Street is to be shown along with restoration details / insulation if required. [The existing culvert crossing will be added to our next submission.](#)
- Beechnut Street is to be labelled on Drawing No. 3. [Labelling will be added to our next submission.](#)
- Provide sizing calculations for the proposed culvert across the development site driveway. As per MC standard 1.1.18, the driveway culvert is to be HDPE. [Sizing calculations for the proposed culvert across the development site driveway will be added to our next submission.](#)
- At the watermain / culvert crossing at the development site driveway, it appears as though insulation may be required as per MC standard 5.4.3. Please confirm. [Insulation at the watermain / culvert crossing at the development site driveway will be addressed in our next submission.](#)
- Please label the horizontal distance between the proposed sanitary and watermain. Confirm that MECF separation requirements have been met. [Dimensioning will be included in our next submission.](#)
- Existing curb across Parkland Place at Kilworth Park Drive is to be shown. Discussions with the municipality confirm that this should be removed and replaced with asphalt. [Noted.](#)
- Please show fire hydrants to be installed along the new external watermain in accordance with standards. [Fire hydrants can be added to the water distribution system. Please confirm sources of funding for this increased level of service.](#)
- The drawings are to also include proposed sanitary and water services from existing lots to the proposed external sanitary and watermain. Please include these in the servicing brief calculations. [Sanitary PDC's and WSC's can be provided. Please confirm sources of funding for the provision of these services.](#)
- Adequate separation between the watermain and sanitary in profile is required to allow for future sanitary PDC's to be installed without conflicts. Some locations along Parkland Place appear to need adjustment. [Noted.](#)
- The road restoration thicknesses need to coordinate with the External Servicing drawings. [Noted.](#)
- Please refer to the Municipality of Middlesex Centre standards. [Noted.](#)
- We have reviewed the parameters used and they appear to meet the requirements of the Municipality. [Noted.](#)
- The water modelling should account for the fact that existing lots will be connecting to this watermain. Please include in the modelling. [Noted.](#)
- The modelling should account for the new fire hydrants proposed along the external watermain as noted above. Please revise. [Noted.](#)
- Please provide a sanitary servicing brief reviewing the downstream sanitary capacity and confirm that adequate capacity exists for this development. [A sanitary servicing brief reviewing the downstream sanitary capacity will be included in our next submission.](#)
- Discuss existing and future transit, pedestrian and cycling facilities. [LDS is unaware of the municipality having transit services within the planning horizon associated with this application. Similarly, the local community is](#)

void of sidewalks and bike lanes. As such, we cannot comment on the provision of these facilities within the planning horizon associated with this application.

- Confirm whether there is sufficient parking to meet Zoning By-law requirements and the projected parking demand. [Please refer to the Site Data Table provided on the face of the Site Plan.](#)
- Confirm whether the internal drive aisles, parking spaces and driveway meet Zoning By-law requirements. [Please refer to dimensions provided on the face of the Site Plan.](#)
- Confirm whether sufficient corner clearances are provided for the proposed driveway. [Please refer to the Site Plan.](#)
- Confirm whether sightlines at the site access are adequate. [Please refer to the Site Plan.](#)
- Will fire trucks and waste collection vehicles need to enter the site? [Only if there is a fire and a need to pick up household waste.](#) If so, provide swept path analysis demonstrating that these vehicles can enter and exit the site. [Please refer to the fire route and turning radii provided on the face of the Site Plan.](#)
- Update the trip generation estimates using the latest version of the ITE Trip Generation Manual. [What is the purpose or objective or expected change in outcome of the analysis in using the latest version of the ITE Trip Generation Manual?](#)
- A review of the traffic volumes at the Kilworth Park Drive intersection from the Glendon Drive EA Study suggests that a higher volume of site-generated traffic should be headed to / from the east. Please revise the trip distribution and take this into account. [Traffic volumes are based on survey results conducted by the traffic consultant. There is no basis to use alternate, and perhaps overstated volumes from other sources.](#)
- Insufficient reasoning has been provided for the use of a 3% annual growth rate. Please clarify how this value was determined. [The use of a 3% growth rate is based on the consultant's experience.](#)
- Clarify what is an acceptable Level of Service. [Please refer to the TIS.](#)
- For the Total 2035 conditions, recommend mitigation measures to address the failing Level of Service on the northbound approach and demonstrate that the intersection can operate at an acceptable Level of Service. [This matter should be addressed by the County of Middlesex as the Road Authority.](#)
- Evaluate whether left-turn and/or right-turn lanes are warranted at the Glendon Dr & Elmhurst St intersection under both 2024 and 2035 conditions. [Refer to response to the preceding comment.](#)
- If auxiliary lanes are recommended, indicate how much storage capacity would be required based on projected queues and/or auxiliary lane warrants. [Refer to response to the preceding comment.](#)
- Potential mitigation measures for the sight distance deficiency should be investigated. Historical collision records should be reviewed, if applicable, to provide evidence on the safety of the intersection under existing conditions. [This matter should be addressed by the County of Middlesex as the Road Authority.](#)
- The report recommends maintaining the left-turn prohibition in the interim until Glendon Drive is widened. Discuss the impact this will have on the Glendon Drive & Kilworth Park Drive intersection. [This matter should be addressed by the County of Middlesex as the Road Authority.](#)

We trust this submission to meet with your acceptance. Should you have any questions or require any further information, please do not hesitate to contact the undersigned.

Respectfully,

**LDS CONSULTANTS INC.**

*Anthony Gubbels*

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