

**Town of LaSalle
Howard Bouffard Secondary Plan**

APPENDIX 3 - Terms of Reference – Technical Studies

January, 2025

APPENDIX 5 - Terms of Reference – Technical Studies

Where the Town requires technical studies to be submitted in conjunction with a planning application, including applications for the removal of the Hold (H) Symbol, the Terms of Reference for the required studies shall be based on the following guidelines.

The Town may scope the scale of the study in terms of the study area, the duration of the study and the reporting requirements in a manner that reflects the scale and/or complexity of the development.

Archaeological Assessment

***Purpose:** The purpose of an Archaeological Assessment is to ensure archaeological resources on site are evaluated, documented, and, where appropriate, conserved prior to land disturbance/site development.*

Where an Archaeological Assessment is required, the Assessment shall be undertaken by the proponent in accordance with criteria established by the Province, and it shall be the responsibility of the proponent to carry out appropriate consultation with affected First Nations prior to undertaking the Assessment, to the satisfaction of the Town.

There are four stages of Archaeological Studies. The requirement to proceed to a higher stage of study shall be determined by Provincial Guidelines and in consultation with the Town. The following describes the study requirements by stage;

- Stage 1:** Consists of background research and is the pre-survey phase of the assessment;
- Stage 2:** Consists of actual field examination and may require either a surface or pedestrian survey or test pit surveys of the subject property;
- Stage 3:** Consists of field activities conducted when archaeological resources are encountered during a Stage 2 survey and warrant further investigation and assessment. The purpose of the Stage 3 work is to gather more detailed information which will be used to delineate and evaluate the significance of the site under examination, in order to determine appropriate mitigation measures. For all Stage 3 work, an onsite First Nations Monitor may be required; and
- Stage 4:** Involves mitigating the impacts of development on archaeological sites, through either site excavation or site avoidance. This occurs after the field assessment Stages 1-3 have been completed, and the assessment report has been reviewed by the Archaeology and Heritage Planning Branch of the Ministry of Tourism, Culture and Sport. For all Stage 4 work, an onsite First Nations Monitor may be required

No land disturbance shall be permitted until notification has been received from the Province that the property has been cleared of archaeological concerns.

***Qualifications:** An Archaeological Assessment must be completed by a professional Archaeologist, licensed in the Province of Ontario, to the satisfaction of the Town.*

Environmental Impact Study

Purpose: *The purpose of an Environmental Impact Study is to demonstrate that a proposed development or infrastructure undertaking may proceed in, or adjacent to lands identified as within or adjacent to the defined Natural Heritage System without causing negative impact on the feature or its associated ecological functions.*

Environmental Impact Studies under this Terms of Reference will be considered fulfilling the requirements of an Environmental Impact Statement as described in Provincial policy and/or guidelines. It shall be the responsibility of the proponent to carry out appropriate consultation with affected First Nations prior to undertaking the Study, to the satisfaction of the Town and, where appropriate, any agency having jurisdiction.

When an Environmental Assessment of a proposal is carried out under the Environmental Assessment Act, or other relevant Federal or Provincial legislation, that Assessment may be considered by Council as fulfilling the Environmental Impact Study required by this Plan. Where an Environmental Impact Study is required, it shall:

1. Identify current land use;
2. Describe the development proposal in detail;
3. Identify all existing natural features of the Study Area, and make a determination on their level of significance in accordance with Provincial policy and/or guidelines;
4. Scan for endangered species and species at risk and their associated habitats within the Study Area;
5. Identify the ecological function of the Study Area, including the existing and potentially enhanced role of Natural Heritage System functionality;
6. Identify those natural features, functions, appropriate restoration opportunities and linkages likely to be affected by the development proposal;
7. Carry out an analysis of the individual and cumulative environmental effects that are expected to occur as a result of the proposed development and future uses both locally and on a system-wide basis;
8. Provide recommendations for appropriate environmental buffers and/or setbacks for each environmental feature and area in consideration of the minimum buffers incorporated in the Technical Report: Natural Heritage Assessment, prepared by LGL Limited;
9. Identify, explain and recommend specific actions to be undertaken to eliminate, reduce or compensate for the expected impacts consistent with accepted ecological, planning, engineering, and resource management techniques and practices;
10. Indicate the nature and extent of agency consultation and/or input;
11. Provide a mitigation strategy, including measures for compliance and long term monitoring, and the ongoing management of measures for the protection, maintenance and enhancement of natural features, functions and linkages to achieve long term ecosystem health; and
12. Recommend appropriate planning designations and policies for the Study Area to ensure compliance with applicable Provincial and local policies, guidelines and regulations.

Qualifications: *An Environmental Impact Study must be completed by a professional biologist or ecologist, certified to practice in the Province of Ontario, to the satisfaction of the Town.*

Planning Rationale Report

Purpose: *The purpose of the Planning Rationale Report is to provide a framework for an applicant seeking development approval to explain salient details of the application and provide supporting reasons why the proposal should be considered and approved. This document is also intended to assist staff with their review and processing responsibilities.*

Where a Planning Rationale Report is required, such a study should:

1. Include a description of the proposal and the approvals required;
2. Describe the site's previous development approval history;
3. Describe major physical features or attributes of the site including current land uses(s) and surrounding land uses, built form and contextual considerations;
4. Provide a professional opinion on:
 - i. How the proposal addresses the relevant requirements of the Planning Act, and how the proposal is consistent with the Provincial Policy Statement;
 - ii. Compliance with relevant Official Plan policies, including both general policies and site-specific land use designations and policies;
 - iii. How the proposal addresses any applicable Town adopted Design Guidelines;
 - iv. The suitability of the site and indicate reasons why the proposal is appropriate for this site and will function well to meet the needs of the intended future users;
5. Provide an analysis of the compatibility adjacent built forms (design, height and massing) of the proposed developments on existing or proposed built forms in the vicinity;
6. Provide an analysis and professional opinion as to why the proposal represents good planning, including the details of any methods that are used to mitigate potential undue, adverse impacts;
7. Describe the impact on the natural environment and proposed mitigation measures as a summary of the recommendations of an Environmental Impact Assessment;
8. Describe the impact on municipal service infrastructure and transportation facilities as a summary of the findings of a Stormwater Management Plan, Functional Servicing Study and Transportation Impact Study or Statement;
9. Describe how the proposal will affect the social and/or economic conditions using demographic information and current trends; and
10. Provide a professional opinion on compliance and non-compliance with the Zoning By-law.

Qualifications: *A Planning Rationale Study must be completed by a Registered Professional Planner in the Province of Ontario, to the satisfaction of the Town.*

Block Plan

Purpose: *The purpose of a Block Plan is to provide comprehensive and specific direction for areas where the existing land use designations are appropriate but more detailed guidance is required for areas experiencing transition or development pressures. in order to optimize development potential and ensure proper coordination.*

A Block Plan is a Council adopted, non-statutory document which will inform and guide the content of subsequent development approvals required under the Planning Act. The Study Area, scope and level of detail included in the Block Plan will be determined through Terms of Reference approved by the Town, and shall be supported by a number of detailed technical studies to be completed. The Study Area, scope and level of detail as well as the list of technical studies to be completed will be confirmed at the pre-consultation stage. All components of a required Block Plan shall be completed at the cost of the Proponent to the satisfaction of the Town and/or any other agency having jurisdiction.

1. Where a Block Plan is required, the background information shall:
 - i. Describe the basis or rationale for the preparation of the Block Plan;
 - ii. Describe the Study Area in detail, including a reference map, and a description of the role and relationship of the area to the Town as a whole.
 - iii. Identify the existing land uses, Official Plan designation(s) and zoning of the Study Area;
 - iv. Identify previous and current development applications in the Study Area;
 - v. Identify and assess the Study Area in terms of existing cultural, physical and environmental features, urban design attributes and other characteristics particular to the area;
 - vi. Identify any potential development constraints in the Study Area;
2. The required Block Plan shall serve as a development framework and shall outline the structural elements of the proposed development, including, at a minimum the following:
 - i. A description of the desired development concept for the Study Area;
 - ii. The articulation of the proposed land use designations/boundaries;
 - iii. Details with respect to lot patterns, development yields by land use, dwelling unit type and built form type;
 - iv. The location and means of protection of all significant natural heritage features and their associated ecological functions;
 - v. The location and means of conservation of all designated and listed cultural heritage resources;
 - vi. The location, function and scale of all public service facilities;
 - vii. The articulation of a robust public parks system and Active Transportation Network;
 - viii. All servicing and infrastructure requirements, including the identification of public roads and stormwater management facilities; and
3. Block Plans shall include a Phasing Plan that identifies the potential sequencing of phases based on the logical extension of public service facilities and municipal infrastructure, including roads, sewer, water and stormwater management facilities.

Qualifications: *A Block Plan is a comprehensive undertaking that will require the involvement of a number of professional disciplines. However, it is expected that the Block Plan will be supported, at a minimum by a Registered Professional Planner in the Province of Ontario in consultation with professional civil engineers and professional biologists/ecologists, certified to practice in Ontario, to the satisfaction of the Town.*

Urban Design Study

Purpose: *The purpose of an Urban Design Study is twofold:*

- > *First, to provide direction for the protection and enhancement of the character of a planning district, neighbourhood, corridor or any other identified area, and the thoughtful implementation of good urban design principles based on an assessment of the characteristics and opportunities of the surrounding community; and*
- > *Second, to evaluate how the proposed development will alter the climate by altering the wind, shadow and sunlight penetration, and heat island effects and to determine the appropriate design measures to reduce or mitigate the contribution to climate change that may arise from the development.*

The following should be read in conjunction with Sub-section 8.6.2.3 of the Official Plan. During the pre-application process the Town will determine the components of the Urban Design Study are required.

Character/Compatibility Study - Where a Character/Compatibility Study is required, such a study should:

1. Define the surrounding community, or the area of impact of the proposed development (study area), based on the scale of the proposed development;
2. Document the character of the surrounding community on a street and block pattern (both sides) basis showing the size, orientation and lotting of each block;
3. Identify the existing urban design elements, such as built form, massing, setbacks, rooflines, street cross sections, landscape quality and architectural styles/details, which contribute to the character of the area surrounding community and to its physical form and development pattern;
4. Provide an analysis of the design rationale for the building, landscape, and site design elements of the proposed development and explain why the proposed development represents the optimum design solution and is compatible with the surrounding community. The analysis should consider the following:
 - i. How the design of the proposed development is consistent with the Town's applicable Design Guidelines and is in conformity with any relevant design policies;
 - ii. How the design addresses existing site conditions and constraints such as lot size, grading, and/or natural heritage features;
 - iii. How the design of the proposed development integrates with the existing surrounding community and enhances its character and function without causing any undue, adverse impacts on adjacent properties;
 - iv. How the design of the proposed development will influence and integrate with future development in the surrounding community;
5. The Character/Compatibility Study should include a written description, three dimensional plans, elevations, diagrams, and/or photographs to illustrate the design choices of the proposed development. Depending on the scale and complexity of the development proposal, explain how the following design considerations have been addressed:
 - i. Street and block pattern;
 - ii. Building orientation and site layout;
 - iii. Built form, height, scale and massing;
 - iv. Setbacks from adjacent properties and the street;
 - v. Building step back (if applicable);
 - vi. Building transition to adjacent communities;
 - vii. Location of parking (surface or underground), driveways, ramps, drop-off areas;

- viii. Access to transit;
- ix. Bicycle parking/storage;
- x. Location of servicing, garbage, organics, and recycling storage and collection, and loading areas;
- xi. Streetscape elements (e.g, boulevard design, landscaping, street furniture, public art, signage, lighting, etc.) as well as on-site landscaping and buffering; and
- xii. The mitigation of undue, adverse impacts on adjacent properties.

Lighting Study - Where a Lighting Study is required, such study should:

1. Identify the location and specifications of all lighting fixtures proposed on the exterior of the buildings and site of the proposed development;
2. Include a photometric plan of projected illumination (lumens) in connection with the proposed development and demonstrate the illumination levels at all property lines and 6.0 metres beyond those property lines;
3. Identify the Light Pollution Index (LPI) and analyze the LPI and cumulative effects of lighting in the context of existing and planned future conditions;
4. Recommend measures to mitigate the impact of light pollution in connection with the proposed development; and
5. Provide evidence that sufficient lighting is provided to ensure lighting improves visibility and safety.

Shadow Study - Where a Shadow Study is required, such study should:

1. Include diagrams showing extent of shadows at different intervals over different months;
2. Include a digital copy of the 3-D model used by the consultant to generate the shadow diagrams;
3. Include architectural elevation indicating building height at rooftop, mechanical equipment and average grade around building foundation; and
4. Include diagrams showing the vertical extent of shadows upon adjacent high-rise buildings.

Wind Study - Where a Wind Study is required, such Study shall include:

1. The height of the proposed development in relation to the height of surrounding structures;
2. The orientation and general massing of the development with respect to the primary wind directions;
3. The location and shape of specific design features that induce wind activity;
4. The orientation of the development with respect to sun angles;
5. The potential impact of wind speed increases created by the development on the surroundings, pedestrians and birds in all four seasons; and
6. An outline of mitigation features to be included in development design including base and podium conditions, canopies, tower orientation and landscaping.

Heat Island Reduction Study - Where a Heat Island Reduction Study is required, such study shall include:

1. Changes to permeable surfaces resulting from the development and associated impacts on heat retention and reflection;
2. Changes to vegetation cover and canopy and impact on heat island affects;

3. Changes to retention of storm water on the site and the associated impacts on-site and downstream; and
4. Measures taken to reduce the heat island effects including but not limited to:
 - i. Maintaining or restoring tree canopy;
 - ii. Provisions for shading;
 - iii. Maintaining vegetative surfaces such as green roofs; and
 - iv. Use of retained stormwater for watering vegetation or water features.

Sustainability Brief - It is the intent of the Sustainability Brief to understand any development's contribution to the overall sustainability objectives of the Town. Where a Sustainability Brief is required, it shall include:

1. Does the proposed development promote:
 - i. A compact urban form that encourages walking, cycling and the use of public transit;
 - ii. A development pattern where public parks, small-scale convenience retail and other appropriate neighbourhood serving uses are provided within an approximate 5 minute walk from all residents;
2. What building and landscaping approaches or technologies are being implemented to reduce the development's environmental impact, including initiatives related to:
 - i. Water conservation, energy conservation, air quality protection and integrated waste management opportunities;
 - ii. Alternative energy systems, renewable energy systems, district energy systems and distribution and demand management plans to accommodate current and projected needs of the community;
 - iii. Innovative residential and public building designs that contribute to low carbon design, energy use reduction and natural resource conservation; and
 - iv. Green infrastructure to complement existing infrastructure, including the requirement for innovative low impact development opportunities and best practices that minimize the risks associated with natural hazards.

Qualifications: *An Urban Design Study or Brief must be completed by a Registered Professional Planner in the Province of Ontario, in collaboration with a host of other professionals with a variety of areas of expertise. All elements of an Urban Design Study shall be carried out by qualified professionals with expertise in the appropriate area of study, to the satisfaction of the Town.*

Stormwater Management Plan

Purpose: *The purpose of a Stormwater Management Plan is to identify measures required to control the quantity, quality and velocity of runoff associated with the development of a specific area and to ensure no negative impacts to upstream and downstream areas within the drainage scheme.*

Where a Stormwater Management Plan is required, such a study should:

1. Be consistent with approved watershed/sub-watershed plan recommendations;
2. Provide all of the technical information on which the recommendations have been made, including but not limited to:
 - i. All water resources and functions;
 - ii. Existing and proposed overland flow routes;
 - iii. Existing and proposed surface features and associated pre and post development infiltration rates;
 - iv. Topographic features including top of bank and flood elevations; and
 - v. A cut/fill balance.
3. Assess the impacts of development on receiving waters, both before and after construction, with respect to quantity control, and the potential for flooding, erosion and sedimentation;
4. Identify the effect of development on water quality and describe and recommend measures to limit any negative impact and, if possible improve water quality;
5. Describe mitigation measures which would, if necessary, prevent adverse impacts on the receiving water, flora and fauna and recreational uses;
6. Identify the effects of development on aquatic habitats and describe and recommend water management practices to ensure they remain sustainable;
7. Identify long-term costs on managing and maintaining the function of the stormwater management system;
8. Identify how the stormwater management system can integrate with the Natural Heritage System, trail network and overall urban design;
9. Identify the Federal, Provincial and Conservation Authority approvals required for the project and be consistent with the requirements of the appropriate agencies; and
10. Other requirements as determined through consultation with the Town, in consultation with the Conservation Authority.

The Stormwater Management Plan shall be coordinated with the Environmental Impact Study to ensure a consistent approach to maintaining or improving the ecological conditions of the Study Area. For large scale development proposals the Stormwater Management Plan may be done in two stages to avoid significant revisions to technical reports as detailed design evolves. The stages include:

Qualifications: *A Stormwater Management Plan must be completed by a professional engineer competent in the water resources field and certified to practice in Ontario, to the satisfaction of the Town.*

Functional Servicing Report

Purpose: *The purpose of a Functional Servicing Report is to determine how an area proposed for development will be serviced taking into consideration the future sanitary, water and storm sewer servicing needs.*

Where a Functional Servicing Report is required, such a report should:

1. Identify servicing capacity requirements with respect to the Town's master servicing strategies and the Wastewater Plant Capacity Allocation Protocol;
2. Identify stormwater management strategy, property size requirements and release rates;
3. Identify preliminary grading;
4. Identify the routing of water, wastewater and stormwater services;
5. Identify the sizing of services including accommodation for external service areas, as may be required;
6. Identify the requirements for fire-fighting capacity;
7. Identify the cost sharing responsibilities of developing the services;
8. Identify the timing of services;
9. Describe development phasing including any interim servicing measures and how those services shall be decommissioned or modified;
10. Describe existing utility infrastructure and preliminary utility servicing requirements for the development; and
11. Detail any implementation requirements, including how the disturbed areas will be rehabilitated.

Qualifications: *A Functional Servicing Report must be completed by a professional civil engineer certified to practice in Ontario, to the satisfaction of the Town.*

Financial Impact Study

Purpose: *A Financial Impact Study is used to evaluate the growth-related financial impact of proposed development, including impacts to the Town's capital and operating budgets triggered by the proposed development. It is also used to estimate the cost and timing of local municipal capital infrastructure required to service the new development.*

A Financial Impact Study ensures that the proposed new development is consistent with and supported by, the necessary local municipal infrastructure, and that it is not premature. Where required, a Financial Impact Study should include:

1. The projected incremental assessment, together with the estimated tax and non-tax revenues that would be generated;
2. The projected incremental local municipal operating costs;
3. The expected marginal net revenue or deficit; and
4. A projection of each of the planned phases of development, if applicable, for both operating and capital components to show that the approvals being requested are in the public interest and not premature pursuant to the Planning Act.

Qualifications: *A Financial Impact Study should be prepared by a qualified municipal financial consultant, to the satisfaction of the Town.*

Transportation Impact Study

Purpose: *The purpose of a Transportation Impact Study is to evaluate the impact of development on the transportation network and identify improvements and on-site design elements necessary to accommodate additional vehicle, cyclist, pedestrian and transit traffic to ensure the impact is acceptable.*

Where a Transportation Impact Study is required, such study should:

1. Where appropriate, coordinate the assessment and recommendations with the County and/or the Ministry of Transportation Ontario;
2. Include the collection and projection of traffic related data from the nearby and adjacent road network based on existing and future conditions;
3. Assess trip generation, assignment and distribution from the proposed development as well as existing, permitted and proposed developments within the Study Area to a horizon year directed by the Town during the pre-application process;
4. Assess street and intersection capacity and queuing including current and projected operational deficiencies that may arise as a result of growth from background traffic, future conditions and traffic generated by the proposed development;
5. Assess the need for vehicular and bicycle parking as it relates to the proposed land use, or mixture of land uses. The assessment may include a discussion of transit supportive parking standards, Transportation Demand Management initiatives, the role of on-street and/or off-site parking opportunities;
6. Describe and recommend measures required to achieve the transportation goals, objectives and policies set out in the Transportation Chapter of this Plan and the Town's capital projections included in the Development Charges By-law;
7. Describe and recommend specific site design practices, including Transportation Demand Management measures, to ensure priority is given to sustainable modes of transportation over vehicle use;
8. Employ Transportation Association of Canada guidelines regarding driveway access design, location, throat length and function;
9. Describe the traffic related outcomes/impacts on the transportation network that will result from the proposed development and associated improvements to the network to the defined planning horizon;
10. Describe how the proposal will promote development patterns that will generate positive impacts on transportation, including any appropriate opportunities for enhanced active transportation facilities, traffic calming and/or transportation demand management.
11. Ensure that driveway, loading and vehicular and bicycle parking requirements are provided and suitably located in the development;
12. Ensure that facilities are provided for ease and safety of pedestrian movement through the development including, but not limited to, walkways, pedestrian crossings, and overpasses/underpasses; and
13. Evaluate the proportion of development that is in proximity to existing, planned or potential transit stops along transit routes.

Qualifications: *A Transportation Impact Study must be completed by a professional transportation engineer certified to practice in Ontario, to the satisfaction of the Town.*