



Administration and Operations Committee Report

To: The Chair and Members of the Administration and Operations Committee
From: Rob Walton, General Manager of Operations
Alysha Dyjach, General Manager of Development Services
Date: February 18, 2025
Report #: RPT-0017-25
Subject: Phase One (1) Scotland-Oakland Master Environmental Servicing Plan (MESP)
Purpose: For Approval

Recommendation

Whereas Council previously approved Report RPT-0110-24 to complete a Master Environmental Servicing Plan (MESP) for the communities of Scotland and Oakland;

And Whereas the completion of the MESP be done in two (2) phases to allow for expedient information transfer to the community;

And Whereas Phase One (1) of the MESP was awarded to Stantec and Arcadis and was completed throughout 2024;

And Whereas the findings of Phase One (1) indicate that there are existing quality and quantity issues with the groundwater resource, and that further build-out of the community on private water and wastewater servicing with the current minimum lot size provisions of the Zoning By-Law would not meet the Ontario Drinking Water Quality Standard (ODWQS) and may result in further deterioration of the groundwater resource;

And Whereas the recommendations of Phase One (1) include a need to further evaluate and determine the preferred solutions for water and wastewater servicing, stormwater management and transportation infrastructure to ensure sustainable build-out for the community;

And WHEREAS a total budget of \$350,000 was approved through RPT-0110-24, with \$250,000 allocated for 2024 and \$100,000 allocated for 2025;

That Phase Two (2) of the MESP be initiated in 2025 with the remaining pre-approved budget, consisting of an integrated Master Servicing Plan to evaluate all possible servicing options, including consideration for both private (“status quo”) and municipal servicing, for the communities of Scotland and Oakland, completed in accordance with the Municipal Class Environmental Assessment process.

Executive Summary

The County initiated a combined MESP and Community Master Plan (CMP) in 2024 to ensure that proposed community growth occurs in a sustainable manner in the neighboring communities of Scotland and Oakland. Approved under RPT-0110-24, this initiative evaluates current conditions and provides preliminary recommendations to guide development while safeguarding environmental and infrastructure sustainability. Phase One (1) of the MESP focuses on assessing servicing options for water, wastewater, stormwater and transportation through an evaluation of the existing conditions and natural heritage systems via desktop studies based on currently available information.

A critical finding of Phase One (1) is the reliance of 95% of residents on a shallow, highly vulnerable aquifer (HVA) within a Significant Groundwater Recharge Area (SGRA). Existing water quality data indicates the presence of high nitrate concentrations within this existing overburden aquifer; it is anticipated that this pre-existing nitrate condition will worsen with additional development due to nitrate loadings from private septic systems. Based on this information, the applicability of the Reasonable Use Concept (B-7 guideline) is recommended to be discussed with the Ontario Ministry of the Environment, Conservation and Parks (MECP) to ensure that the pre-existing nitrate concerns are taken into consideration when assessing the ability to develop lands on private servicing. If implemented, these guidelines would place stringent nitrate loading requirements on all developments and would severely limit development density beyond what would be recommended by the D-5-4 guidelines. Furthermore, ensuring a clean and reliable water supply will require a coordinated stormwater management strategy to ensure stormwater infiltration rates remain at pre-development levels in an effort to recharge the aquifer with high quality stormwater.

Transportation studies indicate that most intersections in the community can accommodate projected traffic increases in traffic volume. However, the placement of new access roads must consider safety concerns, such as sightlines, as well as potential impacts on natural heritage features. Recommendations include constructing turning lanes at key intersections and conducting further studies on active transport and community connectivity, including additional consultation with the Ontario Ministry of Transportation (MTO), the Grand River Conservation Authority (GRCA), the MECP, indigenous communities and the public.

Based on the findings and recommendations of the Phase One (1) MESP, County of Brant (County) staff recommend that Phase Two (2) of the MESP consist of an integrated Master Servicing Plan (MSP) that evaluates all potential servicing options for water, wastewater, stormwater, and transportation through the Municipal Class Environmental Assessment (Class EA) process. Without the integrated MSP, all developments would need to comply with the recommendations of Phase One (1), including the potential implementation of the Reasonable Use Concept (B-7 guideline).

Timely communication of these recommendations is essential, particularly for current development proposals such as the Haley Subdivision and 245 Oakland Road, which are already advancing through the planning process. The need to design and deliver large infrastructure projects, such as developing a new wellfield and water treatment plant, would

extend the timelines to develop the community. To ensure sustainable growth, County staff recommend initiating a Master Servicing Plan (MSP) as Phase Two (2) of the MESP, in accordance with the Municipal Class EA process. This comprehensive approach will address critical servicing challenges while balancing environmental, safety, and development considerations. Community engagement will remain central to the process, ensuring transparency and incorporating valuable public input.

There is sufficient Capital Budget available to initiate Phase Two (2) of the MESP, however an additional budget of approximately \$100,000 will be required in 2026 to complete the remainder of the recommended MSP. Based on the outcome of the MSP there may be additional future financial implications of this project related to the recommended servicing solution. If the preferred solution was determined to be new municipal infrastructure the cost for design and construction could range in the tens of millions of dollars, as outlined in Table three (3): Potential Water Servicing Options. If this recommendation was reached the County would require additional government funding as well as appropriate developer contributions to finance the project.

Strategic Plan Priority

Strategic Priority 2 - Focused Growth and Infrastructure

Impacts and Mitigation

Social Impacts

The Scotland-Oakland Phase One (1) MESP provided valuable information on how the communities of Scotland and Oakland can develop sustainably, while mitigating potential negative impacts on the existing community. The completion of a Master Servicing Plan as part of Phase Two (2) will indicate the preferred solutions for water, wastewater and stormwater servicing and transportation upgrades to ensure sustainable and safe build-out of the community.

Environmental Impacts

The Scotland-Oakland Phase One (1) MESP evaluated all servicing options based on various factors including environmental impact. Findings from Phase One (1) indicate that full community build-out on private water and wastewater servicing may negatively impact the quality and supply of the primary aquifer. A Municipal Class Environmental Assessment would evaluate all potential servicing options and ensure that the preferred solution will have minimal impacts to the environment.

Economic Impacts

The Scotland-Oakland MESP and CMP have approved funds in the 2024 and 2025 Capital Budgets for Policy Planning. There are no additional economic impacts at this time, however

an additional budget of approximately \$100,000 will be required in 2026 to complete the remainder of the recommended Master Servicing Plan. Depending on the recommended servicing solution of the MSP there may be additional economic impacts related to new municipal infrastructure ranging in the tens of millions of dollars, as outlined in Table three (3): Potential Water Servicing Options, which would require additional government funding as well as appropriate developer contributions.

Report

Background

As the settlement areas of Scotland and Oakland are close in proximity and experiencing similar growth opportunities, the County initiated a combined Scotland-Oakland MESP and CMP during 2024 and 2025, as per RPT-0110-24.

All development applications processed under the new 2023 Official Plan in Oakland and Scotland will be required to implement the recommendations of the MESP. Table 1 of this report shows the status and nature of the known proposals or inquiries for development throughout Scotland and Oakland.

Table 1: Known Development Proposals in Scotland/Oakland

Address / Development Name	Status	Approximate Numbers of Lots to be Created
29 Thirteenth Concession Road / Haley's Elevator's ("Development A")	Application In Review	75-100
245 Oakland Road / Innovative Planning Solutions ("Development B")	Application In Review – OLT Appeal	35-40
125 Oakland Road	Approved	5
44-51 Church Street West	Inquiries Only - No Status	±150
4 Marcus Street	Inquiries Only - No Status	±5
Bishopsgate & Elliott Road / Scotland Estates	Inquiries Only - No Status	±50
3 King Street South	Inquiries Only - No Status	±50
16 King Street South	Inquiries Only - No Status	±20
105 Oakland Road	Inquiries Only - No Status	1
156 Oakland Road	Inquiries Only - No Status	1
202 Jenkins Road	Inquiries Only - No Status	±5
Total:		397-427

With respect to the development at 29 Thirteenth Concession Road, also referred to in this report as “Development A”, it is the furthest along in the process and has received its preliminary zoning approval through the OLT settlement dated October 24, 2023. The OLT settlement applied a holding provision to the lands which will allow the subdivision development to move forward provided the application considers the availability and ability to provide full, partial, or private servicing which will ultimately determine the appropriate phasing and design of the development.

The development proposed at 245 Oakland Road, also referred to in this report as “Development B” has submitted a zoning by-law amendment and subdivision application, both of which have been appealed to the OLT. Mediation between the County and the applicant is ongoing, and the outcomes of the MESP will impact upcoming mediation sessions. Private servicing has remained a concern for this development, and this report supports those concerns.

Developers have been encouraged to work concurrently with the County as we undertake this important project. However, the County appreciates that developers are wanting to proceed with their developments in a timely fashion. As such, the MESP was completed in two (2) phases, with the intent to provide information to the community during early 2025.

The objectives of the Phase One (1) MESP are to evaluate the existing conditions in the community, identify any growth-related needs, and develop a set of guidelines and recommendations to ensure sustainable growth. Both existing and proposed developments were reviewed within these studies to assess how groundwater, surface water, the transportation network and the natural environment could support the level of development expected within the two (2) settlement areas.

The Phase One (1) MESP consisted of desktop studies for water, wastewater and stormwater servicing including review of available hydrogeological and hydrology information. The traffic and transportation network and the natural heritage features were also analyzed at a desktop level. The outcomes of the existing conditions review were used to inform a servicing study that assessed the feasibility of maintaining and expanding private services while satisfying the Provincial D-5-5, D-5-4 and Reasonable Use Concept Guidelines, as well as a completing a preliminary assessment of the potential municipal servicing options.

The County hosted a Public Information Meeting on November 28, 2024, to inform the community of the purpose, methodology, preliminary findings and next steps of the MESP. This public meeting did not present final recommendations of the study.

Analysis

Existing Active Development Applications

There are two (2) active development applications in the Study Area, both of which have prepared and submitted individual hydrogeological studies. For the purposes of this report, the developments will be denoted as Development A and Development B. The intent of these hydrogeological investigations is to evaluate the hydrogeological conditions of the proposed

Site for the purpose of assessing availability of groundwater supply and evaluating groundwater quality including the impacts to groundwater from private sewage systems. Potable water supply is evaluated in accordance with the Ontario D-5-5 Guidelines and nitrate loading in relation to private onsite septic systems is assessed in accordance with the Ontario D-5-4 Guideline.

Development A is located to the northwest of the Study Area. The hydrogeological report prepared for Development A focused on an assessment of the overburden aquifer, which flows from the northwest to the southeast. The results of the water quantity analysis indicate adequate water quantity supply for the Site at standard domestic pumping rates. However, water quality results in the overburden aquifer demonstrated pre-existing high levels of groundwater contamination where background nitrate concentrations exceed the ODWQS. There are significant limitations to Development A's potential to support residential development on private water servicing.

Development B is located towards the southeast of the Study Area. In their first development application submission, the hydrogeological investigation focused on assessing the overburden aquifer. The outcomes of the initial assessment demonstrated both concerns with water quantity and water quality. A subsequent assessment was completed assessing the potential of using the bedrock aquifer. The bedrock aquifer resource demonstrated sufficient water quantity but demonstrated high elevations of chemical parameters commonly found in the Salina Formation.

The findings of these hydrogeological studies indicated that there are challenges with drinking water quality for both Development A and B. These studies were performed independently of one (1) another and did not incorporate the potential co-mingled water quality impacts, nor the impacts of other potential development lands in the study area.

Phase One (1) MESP Findings and Recommendations

The Phase One (1) MESP summarizes existing conditions in the study area of the Official Plan settlement boundaries of Scotland and Oakland including a 2-km buffer radius. Desktop studies were performed on the hydrogeological conditions (relating to water and wastewater servicing), hydrologic system (stormwater management), the transportation network and the natural heritage system within the study area to evaluate servicing options for sustainable build-out of the community. The findings and recommendations of the Phase One MESP are summarized in the table below.

Table 2: Phase One MESP Summary of Findings and Recommendations

Study Element	Findings	Recommendations
Hydrogeology (water and wastewater)	<ul style="list-style-type: none"> • 95% of the community obtains their drinking water from a shallow overburden, highly-vulnerable aquifer (HVA) within a significant groundwater recharge area (SGRA). • Available data indicates pre-existing elevated nitrate concentrations (beyond the ODWQS) in the overburden aquifer, posing water quality concerns to existing residents and limiting capacity for additional nitrate loading through private sewage systems • The bedrock aquifer demonstrates sufficient water quantity but also has poor water quality conditions that are indicative of the geological formation • Full buildout on 1-acre lots with conventional septic systems will exceed ODWQS nitrate loadings at downgradient property lines as calculated in accordance with the Ontario D-5-4 guidelines, which does not consider background nitrate concentrations. The actual minimum lot size required to meet the ODWQS when accounting for background nitrates is expected to be much larger. 	<ul style="list-style-type: none"> • Initiate further studies in accordance with the Municipal Class Environmental Assessment (Class EA) process to evaluate and determine the preferred water and wastewater servicing alternatives, including both municipal and private servicing options, to support new development and alleviate the existing community's water quality issues. • Further consultation with the MECP on the applicability of the Reasonable Use Concept (B-7 Guideline) is recommended due to the existing water quality concerns and the Study Area's vulnerability. • All applications for future development will be required to prove they are consistent with the findings of the Phase One reports. This will help manage development until the results of the EA (if approved) are known.
Hydrology (stormwater)	<ul style="list-style-type: none"> • There are opportunities for the grading of the new developments to be coordinated such that existing stormwater infrastructure be incorporated into the proposed SWM plans of the new development areas. • Maintaining sufficient drinking water is contingent on infiltrating clean stormwater at pre-development recharge rates. 	<ul style="list-style-type: none"> • Develop a coordinated stormwater management strategy and grading plan for the community, including guidelines for low-impact development (LID) implementation.

Traffic and Transportation	<ul style="list-style-type: none"> • Most intersections within the Study Area have capacity to accommodate the projected increase in traffic volume. • Access road locations to the new development lands will need to satisfy sightline requirements and mitigate or avoid impacts to natural heritage features. • The preferred access to 245 Oakland Road was not recommended through Phase One and will need to be decided through further investigations and consultation with relevant stakeholders. 	<ul style="list-style-type: none"> • Construct turning storage lanes at the recommended intersections of King St / Oakland Rd and Vanessa Rd / Simcoe St. • Active transportation & development land access roads should be evaluated through additional studies and consultation with the MTO, MECP, GRCA, other applicable agencies, Indigenous Communities and the public through the Class EA process.
Natural Heritage	<ul style="list-style-type: none"> • There are numerous wetlands, including a Provincially Significant Wetland (PSW), watercourses and woodlands within the Study Area, which are home to potential species at risk. 	<ul style="list-style-type: none"> • Complete additional field studies to verify existing natural heritage features. Consider impacts to Natural Heritage features in all components of development applications. Ensure all proposed development and infrastructure is in accordance with applicable federal, provincial and municipal legislation and policies.

Drinking Water Servicing Assessment

The preliminary hydrogeological assessment identified that the primary overburden aquifer is designated as a highly vulnerable aquifer (HVA), within a Significant Groundwater Recharge Area (SGRA). The hydrogeological study also concluded that this water source has elevated nitrate concentrations, is highly susceptible to further anthropogenic contamination, and is reliant on sufficient surface water infiltration to maintain its supply. With this information, various water servicing alternatives were investigated as summarized below.

Table 3: Potential Water Servicing Options

Servicing Options	Community Impacts	Cost and Schedule Estimates
Lot-by-Lot Private Water Wells	<p>The Study Area has an existing background nitrate concentration of 10 mg/L. The nitrate loading assessment prepared in accordance with the D-5-4 guidelines, wherein background nitrate is not accounted for, projects that concentrations at the property boundaries of the new development lands would be between 8 – 12 mg/L with 1-acre lots, which exceeds the ODWQS.</p> <p>Based on the preliminary D-5-4 calculations, as well as the consideration of elevated background nitrate concentrations exceeding the ODWQS for health-related parameters, extensive development on private servicing cannot be supported.</p> <p>Further consultation with the MECP on the applicability of the MECP Reasonable Use Concept must be considered to ensure protection of the aquifer and the existing community on private servicing.</p>	<p>Most expedient solution to support community development but does not alleviate existing water quality issues.</p> <p>Minimal upfront capital costs (~\$100,000) for completion of detailed Hydrogeological Studies for the Study Area to confirm minimum lot size requirements leading to a Zoning By-Law Amendment.</p>
Municipal Servicing via Existing Source	<p>A transmission watermain of up to 19 kilometers would be required, which could cross existing natural heritage features.</p> <p>Water quality concerns would be alleviated for existing residents and future developments, regardless of development density.</p>	<p>Design, construction and approvals (ex. MTO, MECP, GRCA) process may result in a timeline of 3 - 5 years, depending on location of municipal water source.</p> <p>Costs for similar projects range from \$5-10M.</p>
Municipal Servicing via New Wellfield	<p>Siting of a new wellfield must meet the water demand with adequate water quality and not impact existing natural heritage features.</p> <p>Water quality concerns would be alleviated for existing residents and future developments, regardless of development density.</p>	<p>Estimated timeline for completion of 5 - 10 years, accounting for Class EA process and required land acquisition.</p> <p>Approximately \$15-20M based on previous project experience. Federal or Provincial funding as well as developer contributions would be required.</p>

A Municipal Class Environmental Assessment process is required to fully evaluate these alternatives and develop a recommendation for the preferred alternative. As per the 2023 Addendum to the Municipal Comprehensive Review (MCR), the communities of Scotland and Oakland are expected to grow from a population of 1,360 in 2021 to 2,630 in 2051. These

projections were developed under the assumption that these communities would remain privately serviced. If municipal servicing were to be implemented in the community, the population growth estimates would increase due to the ability to decrease minimum lot sizes to Ontario Building Code standards and therefore increase the community's density.

Community Engagement

The County held a public meeting on November 28, 2024, to present the MESP study approach and initial findings to the community. The meeting was an Inform and Consult format. Staff explained the objectives of the MESP, the preliminary findings, next steps and how the residents could stay informed of next steps. Community members were encouraged to provide feedback to be implemented as the study proceeds.

With Council's approval to initiate a Master Servicing Plan for Scotland and Oakland, there will be several opportunities for public engagement throughout the Class EA process. Staff will also consult with external government agencies, Indigenous Communities and other stakeholders through the Class EA process.

Planning Process & Considerations

The following planning considerations outlines and analyzes the existing land use directions and discusses the impacts on current and future development of the area.

Development Status

29 Thirteenth Concession Road: Currently advancing through the subdivision process, with key reviews ongoing, including the hydrogeological report and traffic study. Zoning has been applied with a holding provision that permits development on private services. A Council recommendation is expected in early 2025, which will need to address the directions of this report.

245 Oakland Road: Under appeal at the Ontario Land Tribunal (OLT-24-000167) following Council's refusal. Reviews are ongoing, particularly regarding environmental impacts, private servicing, and access under the jurisdiction of the Ministry of Transportation (MTO). This report provides more detailed directions on private servicing and will impact the ongoing mediation between the County and the applicant, which are being facilitated by the OLT Board Member.

These two (2) developments, 29 Thirteenth Concession Road and 245 Oakland Road, have submitted applications, with 29 Thirteenth Concession already receiving an OLT decision permitting development on private services. This aligns with the County's Official Plan, which supports private servicing as the primary form of servicing in rural settlement areas. The 2012 Official Plan, under which these applications were submitted and reviewed, provides a similar direction. Both plans reference water quality and hazards to public health and safety as key factors to be addressed in development applications, noting that the County can implement changes to direction or necessary restrictions on development that will protect water quality

and benefit the community. (OP 2012, S. 5.2.3.4 and OP 2023, Part 5, S. 2.11.1). The findings from Phase One (1) of the MESP provide valuable insight to ensure development is sustainable and safe, regardless of the servicing solution. It is important that the County communicate these findings and recommendations as soon as possible.

Both developments must align with the MESP findings to demonstrate their conformity with the County's Official Plan. In many cases, developers typically conduct their own studies, which has been the case with these two (2) developments, and they are reviewed to ensure their directions align with the Official Plan and support the development being proposed. With Scotland and Oakland, the County has chosen to take a broader approach that ensures the cumulative impact of full build-out is considered, supporting long-term growth management and responsible community planning that aligns with the County's strategic priorities.

Servicing Considerations and Land Use Directions

If Council proceeds with the Municipal Class EA, it would be preferable to delay new development proposals until a servicing solution is determined. However, this delay can only apply if the Official Plan is updated to reflect such a direction, and only when that direction is implemented through zoning.

Currently, the Official Plan supports rural settlement development on private servicing, meaning there is no mechanism to delay applications to wait for municipal services. As the County evaluates potential changes to that servicing direction, ongoing uncertainty may result in delays, appeals, and added costs for both developers and the County.

Under the existing policies, development must be consistent with the Phase One (1) study findings to confirm the development will ensure the protection of groundwater resources (OP 2023, Part 5, Section 2.13.7). As outlined in Table three (3) above and based on the details of the Phase One (1) studies, the current lot-by-lot water servicing solution will result in large-lot development, with lot size restrictions likely to be determined in accordance with the Reasonable Use Concept (B-7 Guideline), pending consultation with the MECP. For reference, the current minimum lot size set out by the Suburban Residential (SR) Zoning is 0.7 acres (0.3 hectares). It is important to recognize that these represent a minimum and developments are still required to conform to the direction of the Official Plan, which in the case of Scotland and Oakland will require larger lots.

If Council does not proceed with the Municipal Class EA, the Zoning By-law would be updated to reflect appropriate minimum lot sizes. While this approach has minimal upfront costs to the municipality and would provide fewer delays to developers, it ultimately impacts the development potential and return on investment for individual developments. There is also the risk that property owners may choose to appeal the zoning change, however it will be in the best interest of the community to amend the minimum lot sizes for transparency and clearer direction, and there is sufficient support in the Official Plan and supporting studies to move this direction forward.

Conversely, if the Municipal Class EA moves forward and municipal water is deemed necessary, the Official Plan must be amended to reflect the preferred servicing solution. A holding provision could then be applied to ensure development proceeds only when adequate servicing is available and will be properly phased (OP 2023, Part 6, Section 4.3). This approach would restrict development until servicing is available. Large infrastructure projects, such as siting and constructing a new wellfield and treatment plant, or constructing transmission watermain from an existing water source, can have timelines of up to 10 years, which would extend development timelines until a municipal servicing solution is implemented.

In the meantime, the two (2) active applications can continue through the development review process and will be expected to demonstrate how they are consistent with all applicable municipal and provincial policies. The Phase One (1) studies provide important information to assess these applications and move them forward.

Phase Two (2) MESP Recommendation

Based on the findings and recommendations of the Phase One (1) MESP, County staff recommend that Phase Two (2) of the MESP consist of an integrated Master Servicing Plan (MSP), at an approximate cost of \$200,000, wherein all options for water and wastewater servicing will be evaluated, including both private and municipal options to determine a preferred solution. Through the MSP, the County will also evaluate options for improvements to the transportation network, including connectivity of new development lands, and strategies for a coordinated stormwater management system. These analyses would be done in accordance with the Municipal Class Environmental Assessment (Class EA) process. The completion of the integrated MSP will address the critical servicing challenges as uncovered through Phase One (1), while ensuring that the buildout of Scotland and Oakland balances environmental, safety, and development considerations. The outcome of the MSP may result in future costs associated with new municipal infrastructure. These costs could range in the tens of millions of dollars, as outlined in Table three (3): Potential Water Servicing Options, which would require subsidies from Federal or Provincial funding as well as appropriate developer contributions.

If Council choose not to approve this recommendation, the communities of Scotland and Oakland would proceed with build-out on private water and wastewater services. Any additional hydrogeological analyses would be on a site-by-site basis, limiting the opportunity for an integrated approach to manage the groundwater resource. However, as per the findings of the Phase One (1) MESP, lot size restrictions would be placed on all new developments limiting development density in these communities. The County would proceed with all other recommendations of Phase One (1), including consultation with the MECP regarding the nitrate sensitivity of the aquifer and applicability of the Reasonable Use Concept (B-7 Guideline), which would aim to protect the groundwater resource for the existing community and further restrict development density in the Study Area. The County would also proceed with an evaluation of stormwater and transportation improvements, done as individual Class EAs.

Summary and Recommendations

The Phase One (1) MESP reports have been received and reviewed by County staff. Communicating the recommendations from these reports in a timely manner to the development community is of utmost importance.

A single overburden aquifer supplies potable drinking water to 95% of the existing residents in Scotland and Oakland. This aquifer is a Highly Vulnerable Aquifer and it is within a Significant Groundwater Recharge Area. This primary drinking water source is highly susceptible to both quality and quantity concerns. Clean and plentiful drinking water supply for the community is reliant on maintaining sufficient clean stormwater infiltration post-development.

Existing water quality data indicates the presence of high nitrate concentrations within the existing overburden aquifer drinking water supply that approach or exceed the ODWQS for nitrates. It is expected that this pre-existing condition will worsen with additional development being permitted on private servicing due to nitrate loadings from private septic systems.

The vulnerability of the aquifer and the high background nitrate concentrations may denote the Study Area as highly sensitive to nitrate and subject to the requirements of the Reasonable Use Concept (B-7 Guideline). Implementation of the B-7 Guideline would further restrict lot sizing, and thus development density, in order to satisfy the nitrate loading requirements and protect the vulnerable groundwater resource. Further consultation with the MECP is recommended to assess the applicability of the B-7 Guideline.

Most intersections in the community have capacity to accommodate the projected traffic volume. However, additional studies regarding the transportation network and additional consultation with the Ontario Ministry of Transportation, GRCA, MECP, Indigenous Communities and the public through the Class EA process are required to ensure all new developments proceed in a way that promotes both safety and connectivity throughout the community.

County staff recommend that Council approve the initiation of an integrated Master Servicing Plan as Phase Two (2) of the MESP. The purpose of the Master Servicing Plan (MSP) is to evaluate and determine the preferred servicing options for water, wastewater, stormwater and transportation in accordance with the Municipal Class Environmental Assessment process. There is sufficient Capital Budget available to initiate Phase Two (2), however an additional budget of approximately \$100,000 will be required in 2026 to complete the remainder of the recommended MSP. The preferred servicing solution of the MSP may result in a recommendation for new municipal infrastructure that could range in the tens of millions of dollars for design and construction, as outlined in Table three (3): Potential Water Servicing Options. If this recommendation was reached the County would require additional government funding as well as appropriate developer contributions to finance the project.

If the recommendation is not supported to move forward with a Municipal Class EA to assess servicing options, Council must instruct staff to update the Zoning By-law through a Zoning By-law Amendment that would set the minimum lots sizes required for sustainable private servicing and groundwater protection as identified in the Phase One (1) Servicing Study. If we do not move forward with a comprehensive approach through a Municipal Class EA process, this will result in the County working individually with property owners to determine how development can occur on a lot by lot or subdivision by subdivision basis. Past practice has shown that this approach can lead to multiple iterations of planning and servicing studies, which can be costly and time-consuming for both the County and developers and may result in further development decisions being made through the OLT process.

Attachments

- 1. Map of Proposed Development Locations
- 2. [Scotland-Oakland MESP – Natural Heritage Report](#)
- 3. [Scotland-Oakland MESP – Hydrogeological Report](#)
- 4. [Scotland-Oakland MESP – Stormwater Management Report](#)
- 5. [Scotland-Oakland MESP – Servicing and Grading Report](#)
- 6. [Scotland-Oakland MESP – Traffic and Transportation Study](#)

Reviewed By

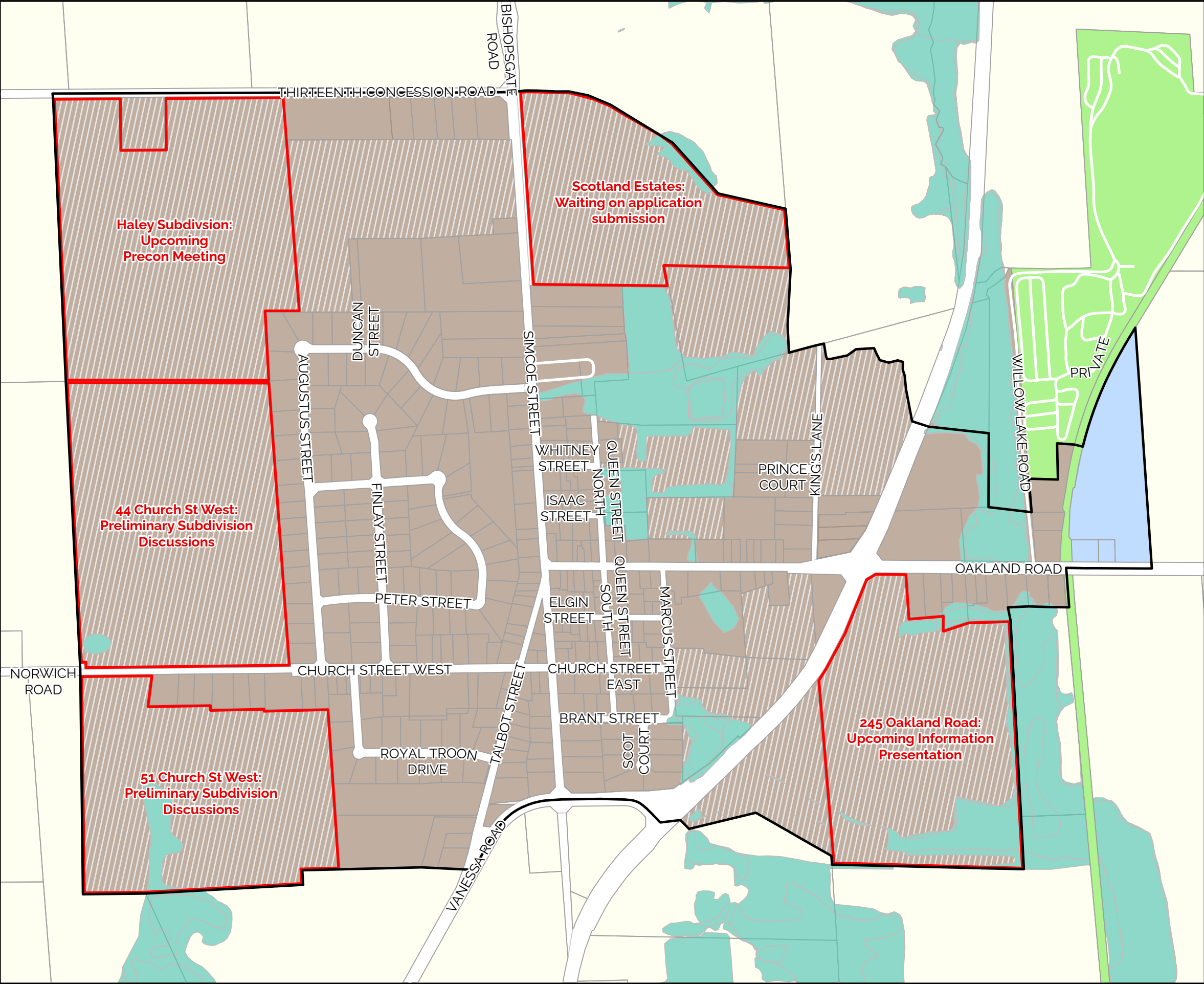
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






By-law and/or Agreement

By-law Required	No
Agreement(s) or other documents to be signed by Mayor and /or Clerk	No











Subdivision Locations

SCOTLAND

-  SUBDIVISIONS
-  GENERAL EMPLOYMENT
-  PARKS AND OPEN SPACE
-  NATURAL HERITAGE SYSTEM
-  AGRICULTURE
-  VILLAGE DEVELOPED AREA
-  VILLAGE COMMUNITY LANDS
-  SETTLEMENT AREA BOUNDARY

Subdivision Locations

OAKLAND

-  SUBDIVISIONS
-  GENERAL EMPLOYMENT
-  PARKS AND OPEN SPACE
-  NATURAL HERITAGE SYSTEM
-  AGRICULTURE
-  VILLAGE DEVELOPED AREA
-  VILLAGE COMMUNITY LANDS
-  SETTLEMENT AREA BOUNDARY

