

Functional Servicing / Servicing Options Study

What is the purpose of this?



A *functional servicing study* determines the overall impact of a large-scale land development proposal (i.e. subdivision) on the water and wastewater service capacities. It also determines the required improvements to municipal servicing infrastructure, and any mitigation measures to minimize negative impacts. Within the settlement area boundaries, municipalities seek to inherit quality road and sewer infrastructure to maintain reliable functional infrastructure assets. Where proposed development lands are located outside of municipally serviced areas, a *servicing options study* will demonstrate the feasibility of servicing through communal, partial or private services.

Who should prepare this?



A *functional servicing study* should be prepared by a registered professional engineer qualified in municipal engineering. All drawings must be stamped, signed and dated by a professional engineer, licensed in the Province of Ontario. A *servicing options study* should be prepared by a professional engineer, and/or professional geoscientist/hydrogeologist.

When is this required?



A *functional servicing study* or *servicing options study* is required for any large-scale land development proposal (i.e. subdivision). This should be completed prior to submitting a development application with the local Municipality and County. A *functional servicing study* or *servicing options study* may also be required to address the impact of development on water resource features or functions on and off-site. Development requiring dewatering in order to install servicing components with Ministry of Environment Conservation and Parks approval or a Permit to Take Water (PTTW) may not always be supported through the Niagara Escarpment Plan (NEP). This should be identified early in the process.

Applications where the County is the approval authority that may require a *functional servicing study* or *servicing options study* include, but are not limited to:

- Official Plan Amendment
- Plan of Subdivision / Condominium

Other municipal/provincial level applications that may require a *functional servicing study* or *servicing options study* include:

- Official Plan Amendment (local)
- Zoning By-law Amendment
- Consent
- Site Plan Control
- Development Permits (Niagara Escarpment Commission Development Permits are a Provincial requirement. Study requirements must be scoped to adhere to the policies of the Niagara Escarpment Plan (NEP) (2017) and any applicable guideline which may be more restrictive than municipal standards).

Why do we need this?

The *functional servicing study* or *servicing options study* is required to:

- ensure growth and development can be adequately serviced, as it is critical for the health of our community and environment
- outline estimated consumption and current servicing capacity
- determine feasibility for connections to existing servicing
- evaluate servicing options in areas where municipal servicing is not available in accordance with provincial, county and municipal policies
- assess water capacity and quality, as well as suitability for private wastewater treatment facilities where municipal treatment is not feasible
- assist staff with their analysis and report preparation

How should this be prepared?

A *functional servicing study* should include the following:

Introduction

- location map and description of the subject property
- subject site's area (in Hectares)
- information on the magnitude of the proposed development, including preliminary site design, lots and street layouts, etc.

Water Supply and Distribution

- estimated consumption and current capacities of trunk systems
- water distribution concept plan and phasing of development
- net impact due to the proposed change in land use or development and need for expansion and upgrades

Wastewater

- estimated consumption and current capacities of trunk systems
- net impact due to the proposed change in land use or development and need for expansion and upgrades

Stormwater Management (please refer to the County's Stormwater Management technical guide)

A *servicing options study* should include the following (assuming municipal services are not feasible):

Introduction

- location map and description of the subject property
- information on the magnitude of the proposed development, including preliminary site design, lots and street layouts, etc. Include references to all phases of planned development and where known, neighbouring developments
- assess the feasibility of various servicing hierarchy options outlined under section 8.9.1(1) of the County OP and section 1.6.6 of the PPS (2020)

Water Supply and Distribution

- detail the location of the nearest municipal water system and assess the feasibility for the development to connect to that system
- estimate consumption needs for the proposed development
- provide detail on the existing ground and surface water quality and quantities in relation to the ability to service the proposed development in accordance with provincial drinking water standards
- estimate the net impact due to the proposed change in land use or development and on existing development and/or water supplies

Wastewater

- detail the location of the nearest municipal wastewater treatment system and assess the feasibility for the development to connect to that system
- assess existing nitrate levels and provide details on the ability of the lands to accommodate new private treatment systems
- assess proposed lot sizes and development type against the current requirements of Part 8 of the building code for sewage systems, including but not limited to clearing distances
- provide detail on whether any post-development monitoring is required

Stormwater Management (please refer to the County's Stormwater Management technical guide)

The list may be modified in pre-submission consultation with the review agencies. A Functional Servicing / Servicing Options Study should not be completed in isolation from other technical development studies/reports. Efforts should be made by the qualified professional(s) to integrate and interpret key findings and mitigation measures from other supporting studies/reports related to the proposed development with the Functional Servicing / Servicing Options Study.

What else should we know?



A *functional servicing study* should be based on established municipal engineering design principles, applicable guidelines (e.g. Ministry of the Environment, Conservation and Parks D-5 Series Guidelines), regulations and by-laws and infrastructure information available from the local Municipality and County.

The level of detail required depends on the type of application and the size of proposed development. For example, a report in support of an application for an official plan and/or zoning by-law amendment will be more conceptual than a report in support of an application for a draft plan of subdivision, which will include more details, such as where lot, block or right-of-way dimensions are approved in principle. In some instances, a preliminary servicing study may be required at the initial submission stage (e.g. draft plan of subdivision), and a final detailed study may then be required as a condition of approval (e.g. condition of draft plan approval). Development limits (i.e. constraints) are determined at the functional servicing review (FSR) stage (i.e. draft plan approval). For example, karst topography may influence the location of proposed services or the requirement of additional fill. Further geotechnical investigations may be required in these circumstances. The applicant is encouraged to discuss the scope of the study with municipal staff prior to study commencement.

Where new development requires servicing extensions within a road allowance, early consultation should occur with the road authority (i.e. provincial, county or municipal) to ensure such extensions are feasible.

Further details can be found under section 8.9.2 of the County Official Plan and section 1.6.6 of the Provincial Policy Statement (2020). The County's source water protection policies (section 8.11) should also be consulted. A local *Risk Management Official* affiliated through the relevant conservation authority may provide further direction on these policies.

Most of the new development within the County is serviced via municipal services. Some new development in smaller settlement areas or in rural areas is permitted to be serviced by private individual systems subject to the completion of a Servicing Options Study. Where a new communal servicing system is being proposed as part of a new development, there may be requirements for responsibility agreements with the municipality. If non-municipal communal servicing is the recommended approach, early consultation is strongly encouraged with the municipality to see if they are willing to accept a responsibility agreement.

Where servicing investigations as part of the preparation of this study would require any tree removal, please be aware of municipal and county tree-cutting or forest management by-laws. Prior to any tree removal on-site there may be a need for municipal or county permits.

Development permits from the local conservation authority (CA) and the Niagara Escarpment Commission (NEC) may be required for servicing infrastructure within a regulated area (CA) and a development control area (NEC).

What other resources are available?



Drinking Water Source Protection:

- South Georgian Bay Lake Simcoe Region - <https://ourwatershed.ca/>
- Saugeen, Grey Sauble, Northern Bruce Peninsula - <http://home.waterprotection.ca/>
- Lake Erie - <https://www.sourcewater.ca/en/source-protection-areas/Grand-River-Source-Protection-Plan.aspx>

Grey County Forest Management By-law - <https://www.grey.ca/forests-trails>

Grey County Planning and Development - <https://www.grey.ca/planning-development>

Ministry of the Environment, Conservation and Parks – D-5 Planning for Sewage and Water Services - <https://www.ontario.ca/page/d-5-planning-sewage-and-water-services>

Ministry of the Environment, Conservation and Parks – D-5-1 Calculating and Reporting Uncommitted Reserve Capacity at Sewage and Water Treatment Plants - <https://www.ontario.ca/page/d-5-1-calculating-and-reporting-uncommitted-reserve-capacity-sewage-and-water-treatment-plants>

Ministry of the Environment, Conservation and Parks – D-5-2 Application of Municipal Responsibility for Communal Water and Sewage Services - <https://www.ontario.ca/page/d-5-2-application-municipal-responsibility-communal-water-and-sewage-services>

Ministry of the Environment, Conservation and Parks – D-5-3 Servicing Options Statement - <https://www.ontario.ca/page/d-5-3-servicing-options-statement>

Ministry of the Environment, Conservation and Parks – D-5-4 Individual On-Site Sewage Systems: Water Quality Impact Risk Assessment - <https://www.ontario.ca/page/d-5-4-individual-site-sewage-systems-water-quality-impact-risk-assessment>

Ministry of the Environment, Conservation and Parks – D-5-5 Private Wells: Water Supply Assessment - <https://www.ontario.ca/page/d-5-5-private-wells-water-supply-assessment>

*This document is intended to be used for guideline purposes only. It will not be applied as a means of approving or rejecting development proposals, but rather it will be used to provide technical direction throughout the planning and development process.