



Ailsa Craig and Nairn Wastewater Servicing Project



Construction Update – May 2007 Issue No. 3

Sanitary Collection System in Nairn and the Petty Street Service Area

Construction of the new sanitary sewers and pumping stations to service the Nairn and Petty Street service area is complete and will be available for use in July 2007 after the new Ailsa Craig wastewater treatment plant (WWTP) is fully operational.

Any outstanding repairs to landscaped areas in the service area are scheduled to be completed by June 2007. Placement of surface asphalt on affected roads in Nairn will be scheduled for later this year.

Ailsa Craig Wastewater Treatment Plant

Construction of the new Ailsa Craig WWTP was completed off-line to minimize disruption to the operating facility. The new plant, including headworks, extended aeration facility, secondary clarifiers, tertiary filters and UV disinfection system, is currently being tested and commissioned. Once the new plant is placed into full operation, the previous facility will be converted to aerobic digesters to maximize the reuse of the existing infrastructure.



Cost Recovery Plan

The total project cost of the Ailsa Craig and Nairn Wastewater Servicing Project is approximately **\$14.61 million**, of which **\$7.24 million** is funded from a Federal/Provincial grant. As well, the municipality will contribute and/or recover an additional **\$1.25 million**.

- ❖ The net project cost to be recovered from existing customers in Ailsa Craig for upgrading and expanding the rated capacity of the existing WWTP from 600 m³/d to 670 m³/d, and trunk sewer upgrades on Queen Street is **\$1.45 million**.
- ❖ The net project cost to be recovered from existing property owners in the Nairn and Petty Street Service area for the sanitary collection system, pumping stations, forcemains and trunk sewers, and expansion of the WWTP from 670 m³/d to 948 m³/d is **\$2.75 million**.
- ❖ The residual **\$1.92 million** are growth related and will be recovered through a Development Charge (DC) process.

Sewage Works Charge

The final sewage works charge to be imposed on the benefiting properties in each service area has been established as follows:

- **Ailsa Craig service area: \$3,400 per residential unit equivalent**
- **Nairn and Petty Street service area: \$16,000 per residential unit equivalent**

The sewage works charge imposed for commercial and large users in the respective service area will be determined based on capacity requirements, but in no case will be less than the sewage rate charge per residential unit equivalent.

The sewage works charges indicated above does not include the connection cost from the property line to the building nor the cost of decommissioning an existing septic tank system, as these are direct costs to the property owner.

Financing Options

The Municipality of North Middlesex proposes to offer two financing options to property owners in the Ailsa Craig and Nairn Service Area for the assessed Sewage Works Charge:

Financing Option 1 – Upfront Payment in Full

Property owner agrees to pay the assessed Sewage Works Charge in full upon completion of the project. **This is the preferred payment option.** If payment is not received by the Municipality by the payment due date specified, the assessed Sewage Works Charge plus any carrying costs incurred by the Municipality from the payment due date to December 31, 2007, will be applied as a one time charge on the 2008 municipal tax bill issued by the Municipality.

Financing Option 2 – Financing through the Municipality

Prior to expiry of the payment due date, property owner must request the Municipality to arrange financing of the assessed Sewage Works Charge, and agrees to have the applicable debt recovery cost plus any carrying costs incurred by the Municipality from the payment due date to December 31, 2007, applied to their municipal tax bill each year commencing in 2008, until the full amount of the debt is recovered by the Municipality. Due to the magnitude and cost of this sewage servicing project, financing by the Municipality is limited. An administration fee for financing will also be charged by the Municipality and will be payable in Year 1.

Financing for 10-Year Debenture (8% interest rate applies)		
Sewage Works Charge (excluding carrying charge incurred from the payment due date to December 31, 2007)	Ailsa Craig \$3,400 per Residential Unit Equivalent (100% Assessment)	Nairn and Petty Street \$16,000 per Residential Unit Equivalent (100% Assessment)
Debt Recovery Cost	\$506.70 per year	\$2,384 per year
Total interest paid over 10 years	\$1,667.00	\$7,845.00
Total cost for financing over 10 years	\$5,067.00	\$23,845.00
Administration Fee	\$200.00	\$200.00

Sewage Rate Charges

Operation and maintenance of the wastewater system in the Ailsa Craig and Nairn service area is predominately funded through quarterly billings. The current sewage rate charges are in effect under By-Law 329 of 2006:

- ❖ Single Family Residential Rate and Small Business: **\$30 per month;**
- ❖ Multi-Residential Units and Large Commercial: **\$1.86 m³ of water purchased.**

It is important to note that a new Provincial Bill 175, the "Sustainable Water and Sewage Systems Act, 2002", will require full cost pricing of municipal water and wastewater systems in the near future. The Municipality of North Middlesex is in the process of determining the potential impacts to water and wastewater rates to address the requirements under Bill 175. It is expected that any required reserve funds will be collected through user rates established for the entire service area.

SEWER HOOK-UP GUIDELINES FOR PROPERTY OWNERS IN THE NAIRN AND PETTY STREET SERVICE AREA

Beginning in July 2007, all property owners fronting or having access to the new sanitary collection system, will be permitted to connect to the system. There will be a deadline established at a later date, by which all properties must connect.

Sewer Service Connection Permit

Before connecting to the sanitary collection system, all property owners or their drain contractor, must obtain a Sewer Service Connection Permit from the Municipality of North Middlesex. To apply, complete and submit an application form available at the Municipal office at 229 Main Street, Parkhill (tel. 519-294-6244). **Office Hours:** 8:30 a.m. to 4:30 p.m. Monday to Friday.

A permit fee of \$50.00 will be collected at the time of the Permit to cover the cost of one (1) installation inspection by the Municipality (property owners requiring more than one inspection will be billed \$50.00 extra per inspection by the Municipality).

All building sewer connections must be inspected by the Municipality **BEFORE** backfilling the trench. The Municipality requires 48 hours notice to arrange an installation inspection.

Approved Contractors

Only pre-qualified drain contractors will be permitted to connect into the sanitary sewer system. It is the property owner's responsibility to hire an approved contractor. A list of approved contractors is available at the Municipal Office.

To select a drain contractor, it is suggested that you meet with the contractor at your property and discuss the full scope of services to be provided. You may wish to discuss and document the following:

- ✓ Who is responsible for obtaining and paying for the Sewer Service Connection Permit.
- ✓ Who is responsible for arranging the required installation inspection.
- ✓ The type of materials to be used.
- ✓ Whether the contract includes connecting the building sewer connection to the existing household plumbing.
- ✓ The alignment and depth of the building sewer connection.
- ✓ Who is responsible for arranging locates for buried utilities.
- ✓ The time required to complete the installation.
- ✓ The extent of restoration work for the site. *For example, trenches may settle over time. Is the contractor returning to level out the trench area?*
- ✓ Compliance with all Municipal standards and the Ontario Building Code.
- ✓ A requirement that the contractor provide you with a record (plan) of where the pipes were installed.
- ✓ Who is responsible for arranging and paying for the pumping out and decommissioning of the existing septic tank.
- ✓ Level of insurance for general liability & property damage.
- ✓ Costs, including all applicable taxes and payment schedule.

As with any major purchase or project, you should obtain more than one quote for the work unless you prefer to hire a particular pre-qualified drain contractor. Also ask the contractor for recent references.

Gravity Building Sewer Connection

The majority of the properties in the Nairn and Petty Street service area were provided with a 125mm (5 inch) diameter gravity sewer service connection from the sewer to the property/street line. At the property line, a sanitary cleanout riser and connection stub with a temporary plug were installed.

Each property owner may select any route to continue their 100 mm (4 inch) diameter private gravity sewer service connection on their property but must connect to the existing stub using an approved 100mm by 125mm eccentric reducer fitting. Connection to the existing plumbing can be made at a location between the building and the septic tank, or inside the building.

A connection under the basement floor will allow a gravity connection (without pumping) to any existing or future washroom or washing facilities in the basement, while an external connection may require pumping of wastes generated at the basement elevation.

As each building and property is different, this should be negotiated between the property owner and their licensed contractor where the scope of work and costs can be determined.

Low Pressure Building Sewer Connection

For properties in the service area that could not be serviced by a gravity sewer service connection, a grinder pump station was pre-installed and will be connected to the existing plumbing between the septic tank and the building under the Municipality's Sewer Contract.

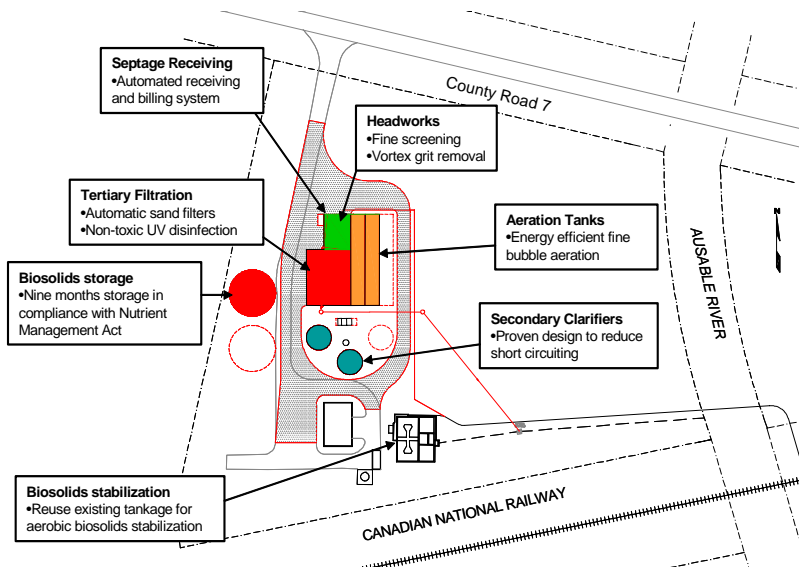
Decommissioning Septic Systems and Holding Tanks

All existing septic tanks and holding tanks must be properly decommissioned. Each property owner must arrange to have their tank pumped dry by a licensed sewage hauler and have the receipt or copy of the receipt to give the Municipality's Inspector at the time of inspection.

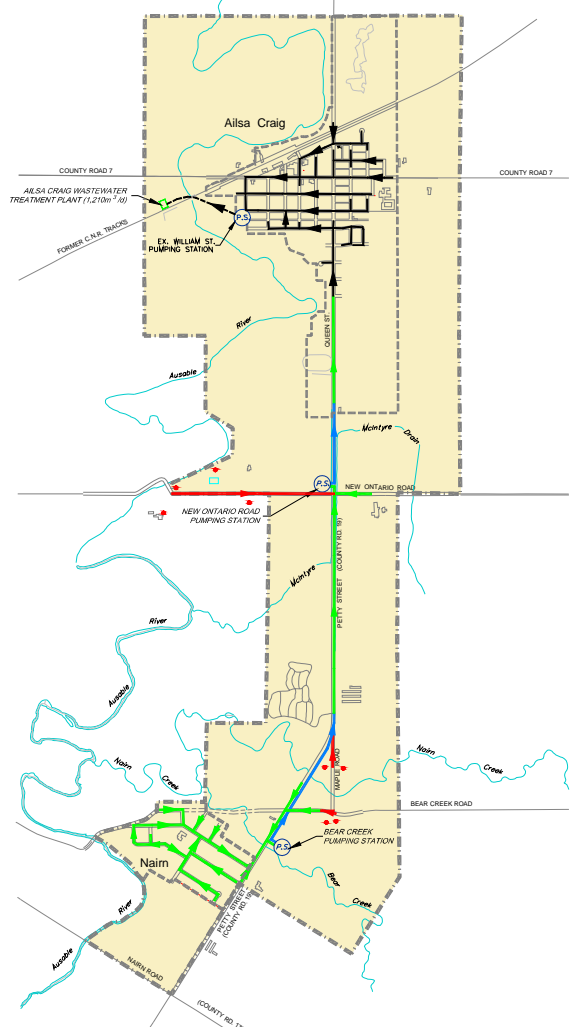
The existing tank must be filled with acceptable granular material such as sand through the inspection openings or by crushing the lid. All abandoned pipes entering or leaving the tank are to be disconnected and sealed. Failure to properly abandon a septic or holding tank will create a hazard to the health of local residents and the public.

Under no circumstance shall any property owner, contractor or sewage hauler, discharge any wastes (solid or liquid) from an existing septic tank or holding tank into the municipal sewer system. Any person/contractor/hauler found guilty of the above will be charged under the provisions of the Provincial Offences Act.

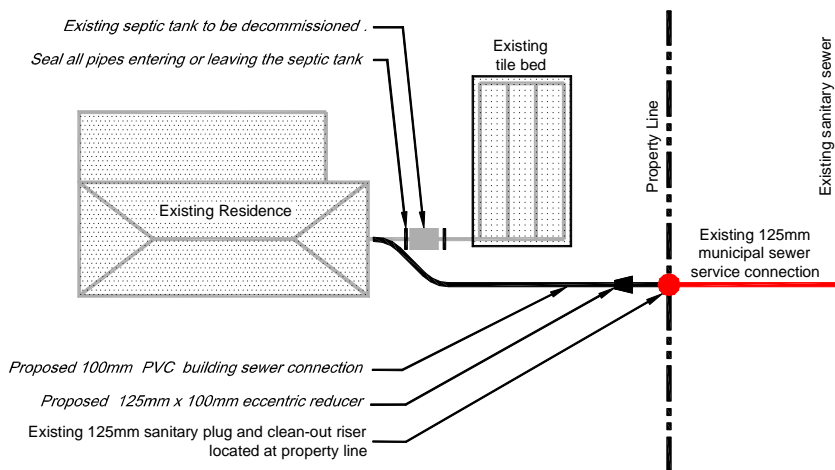
KEY FEATURES OF EXPANDED AILSA CRAIG WWTP



AILSA CRAIG AND NAIRN SERVICE AREA



Typical Layout of a New Gravity Building Sewer Installation



Finally.....

Improvements at the Ailsa Craig Wastewater Treatment Plant to meet present needs and future growth, and extension of the sanitary collection system from Ailsa Craig to Nairn, will ensure the environmentally sound and cost-effective management of wastewater generated in the service area. This project will greatly improve the health, safety, environment and the character of the area for decades to come. The costs to property owners is significant, but would not have been feasible without the \$7.24 million grant from the federal and provincial government. Thank you for your patience during the construction period.

FOR MORE INFORMATION PLEASE CONTACT EITHER:

Municipality of North Middlesex

Joe Adams, Public Works Superintendent
34665 Creamery Road
R.R.#3 Ailsa Craig, ON. N0M 1A0

Phone: 519-293-3344

Fax: 519-293-3878

Email: joea@northmiddlesex.on.ca

Municipality of North Middlesex

Administrative Centre
229 Main Street, P.O. Box 9
Parkhill, ON. N0M 2K0

Office Hours: 8:30 a.m. – 4:30 p.m.

Monday to Friday

Toll Free Phone: 1-888-793-9637

Phone: 519- 294-6244

Fax: 519- 294-0573

KMK Consultants Limited

Harrie Van Dyk, Construction Manager
509 Mill Street
Kitchener, ON. N2G 2Y5

Phone: 519-743-6111

Fax: 519-743-3330

Email: harriev@kmk.ca