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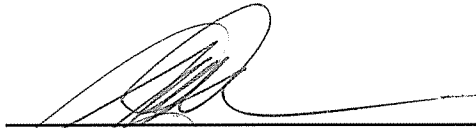


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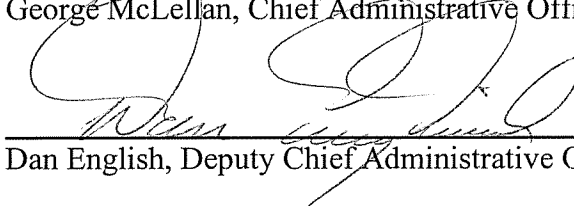
Halifax Regional Council
December 16, 2003

TO: Mayor Kelly and Members of Halifax Regional Council

SUBMITTED BY:



George McLellan, Chief Administrative Officer



Dan English, Deputy Chief Administrative Officer

DATE: November 21, 2003

SUBJECT: Case 00625 - Service Boundary Amendments for Sackville

ORIGIN

Request by Halifax Regional Water Commission and HRM Environmental Management Services to amend to the Municipal Planning Strategy for Sackville to amend the Service Boundary.

RECOMMENDATION

It is recommended that :

1. **Regional Council authorize staff to initiate a process to amend the Municipal Planning Strategy for Sackville, and the Subdivision By-law, to amend the Service Boundary for Sackville as shown on Map 1 pursuant to the public participation program approved by Council in February, 1997.**

SUMMARY

- There is a stand alone water treatment plant in the Lively Subdivision which is owned and operated by the Halifax Regional Water Commission (HRWC). The plant is not capable of providing drinking water that meets national standards.
- The Nova Scotia Utility and Review Board (NSURB) has ordered the HRWC to explore service options and submit a report, outlining how it proposes to provide reasonable quantity and quality of water to the Lively Subdivision.
- The HRWC would like to provide water from the Pockwock Water System to residents of Lively Subdivision. This would require a significant and costly extension of services along Sackville Drive.
- HRM Environmental Management Services would also like to decommission the existing Lively Sewage Treatment Plant and provide treatment at Mill Cove.
- Significant cost savings can be realized if the Service Boundary is amended to include an adjacent parcel of land that is being proposed for development through a servicing agreement. The owner of this land has agreed in principle to withdraw a similar sized property from the Service Boundary. With this removal there would be no net impact on the Service Boundary. The swapping of land in or out of the Service Boundary requires approval of Regional Council.
- Significant cost savings can be realized if water and sewer are constructed at the same time. Additionally disruption to residents is minimized if both services are constructed concurrently.

BACKGROUND

The Lively Subdivision is located in Middle Sackville and comprises approximately 65 single family homes, a school and one commercial business. The water system which serves the subdivision was constructed as a private system in 1960. From the beginning the system did not produce good quality water. The aquifer below the subdivision contains a very high concentration of manganese which is difficult to remove through treatment. The former Halifax County took over operation of the system in 1982. In 1996, as a result of amalgamation, operation of the system was assumed by HRWC.

Limited improvements in water quantity and quality have been experienced since the system came under municipal control, however current water quality does not meet the manganese objectives of the Canadian Drinking Water Quality Guidelines (CDWQG). The CDWQG manganese objective for treated water is < 0.05 mg/l. The 2002 HRWC water quality results indicated a raw water with 1.8 mg/l of manganese and treated water with 1.04 mg/l. Since improvements were carried out in 2003, the treated water manganese concentration is in the order of 0.3 mg/l but can be higher if there is a sudden demand in the system. In addition to taste and odour problems the high manganese content results in the staining of plumbing fixtures and laundry.

In 2003, the HRWC made an application to the NSURB to increase water rates for the Lively Subdivision to cover increased operating and capital costs. The NSURB held a public hearing to discuss the application on April 24, 2003. HRWC has indicated the meeting was well attended by

residents of the Lively subdivision who expressed concern over the proposed rate increases in light of water quality which fails to meet national guidelines.

During the public hearing, the general manager of HRWC discussed the option of extending the Pockwock system to the Lively Subdivision with the understanding that residents would directly contribute to the capital costs. As documented by the NSURB, residents expressed a desire to pursue the Pockwock option including a willingness to contribute to the costs.

After hearing these presentations and upon further deliberation, the NSURB denied the rate increases and ordered, *"that HRWC explore options and submit a report no later than one year after the date of this decision, outlining how it proposes to provide a reasonable quantity and quality of water and establish long term viability of the utility"*.

The HRWC is proposing to extend water services to the Lively Subdivision from the existing Pockwock distribution system at the intersection of Lucasville Road and Sackville Drive. This extension in conjunction with rehabilitation of the distribution piping within the subdivision will alleviate water quality concerns.

In addition to the water treatment plant, HRM operates a sewage treatment plant which serves only the Lively Subdivision. The plant was built in 1968 and is operating at capacity. HRM Environmental Management Services is proposing to decommission this treatment plant and provide sewer service via the Mill Cove Treatment Plant in Bedford. It has been past practice of HRM to phase out these small treatment plants where possible. This practice results in savings from reduced operating and maintenance costs and eliminates a potential health hazard to the adjacent communities if such plants fail. It should be noted that the serviceable area for the Lively Subdivision is within the servicing boundary for the Mill Cove Treatment Plant.

In order to minimize the overall costs of extending water and sewer services, it is proposed that the existing Service Boundary be amended in order to remove approximately 50 acres of land in the Berry Hill Subdivision area and include an equivalent area in the Lower Sackville area as shown on Map 1. Significant cost savings can be achieved by the development of the newly serviceable lands as a residential subdivision. This would include a significant extension of services toward the Lively Subdivision at the developer's cost. As the proposed swap is of an equivalent acreage, the net impact on trunk municipal services and the treatment plant is minimal.

The extension of centralized water and sewer are currently supported by MPS policy as this area is within the service boundary identified in the Sackville MPS and the Subdivision By-Law.

The swapping of lands within the Service Boundary requires an amendment to the Municipal Planning Strategy and Subdivision By-law as current policy does not consider such an option.

DISCUSSION

Staff feels that there is merit to consider this proposal and look beyond the parameters of current plan policy. In this instance, Council may wish to consider the benefits to HRM, the HRWC and residents of the Lively Subdivision and initiate a detailed review of this proposal. Upon completion of such a review, a proposal to change planning documents is subject to a decision by Regional Council and a public hearing.

Occasionally such proposals to swap servicing capacity can negatively impact the owner of the land being removed and provide a benefit to another land owner. In this instance the land is owned by the same owner, Anahid Investments Limited, and thus represents an equitable trade which results in similar development rights.

The following matters will be considered through the proposed MPS amendment process:

- A new policy context for the swapping of areas in and out of the Service Boundary.
- The costs and cost-sharing arrangement of the proposal.
- Phasing and capital costs.
- Development implications of a revised Service Boundary.

Recommendation:

Planning and Development Services recommends Regional Council initiate the proposed plan amendment process to consider a change to the Service Boundary as shown on Map 1.

BUDGET IMPLICATIONS:

The initiation of the plan amendment process has no immediate budget implications. If Regional Council approves an amendment to allow this proposal to proceed, the project would be funded through several sources including:

- HRM and HRWC capital budgets;
- developer contributions; and
- frontage charges along the extension corridor and within the Lively Subdivision. HRM and HRWC have commenced the process of including capital expenditures for this project in the 2004-2005 budgets. Budget expenditures are subject to Regional Council and HRWC approval.

FINANCIAL MANAGEMENT POLICIES / BUSINESS PLAN:

This report complies with the Municipality's Multi-Year Financial Strategy, the approved Operating, Capital, and Reserve Budgets, policies and procedures regarding withdrawals from and utilization of Capital and Operating reserves, as well as any relevant legislation.

ALTERNATIVES:

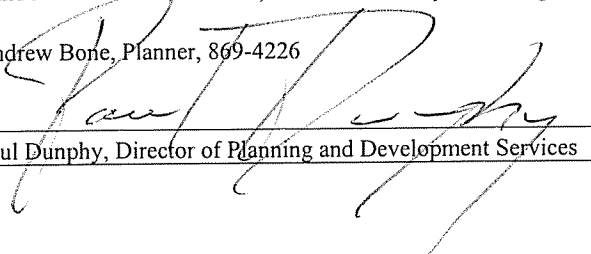
1. Authorize staff to initiate the process to amend the Municipal Planning Strategy for Sackville and the Subdivision By-law to amend the Service Boundary for Sackville. This is the staff recommendation
2. Refuse the requested amendment. A request to amend its Municipal Planning Strategy and Subdivision By-law is at Council's discretion and cannot be appealed. This is not recommended for the reasons outlined above.

ATTACHMENTS:

Map 1: Existing and Proposed Service Boundary for Sackville
Attachment A: Extracts from the MPS for Sackville

Additional copies of this report, and information on its status, can be obtained by contacting the Office of the Municipal Clerk at 490-4210, or Fax 490-4208.

Report Prepared by: Andrew Bone, Planner, 869-4226

Report Approved by: 
Paul Dunphy, Director of Planning and Development Services

Attachment A: Extracts from the Sackville Municipal Planning Strategy

ENVIRONMENTAL HEALTH SERVICES

Sanitary Sewerage

In 1963, the Halifax Region Housing Survey¹ identified Sackville as an area where central services could be provided at relatively low cost, given overall topographic conditions. The Municipality began construction of a trunk sewer system for Sackville-Bedford in 1970. The design capacity of this system was based upon the serviceable area concept which identified those lands which were within the drainage area of the sanitary trunk system. Until 1984, unserved development within the serviceable area was limited to one lot per year. The intent behind this policy was to preserve lands within the serviceable area for future development with central services. With the adoption of a new Subdivision By-law in 1984 and the removal of this restriction, the need arose to re-evaluate the serviceable area boundary.

Portions of the serviceable area which are not yet served by trunk lines are identified on Map 2 - Servicing Boundaries. Until such time as trunk lines have been extended, development within these areas will be permitted with on-site sewer and water systems. Within the remaining portion of the serviceable area development may only proceed on central municipal services.

The premise that Sackville's development should be based on central services and thereby become an urban community was reaffirmed by the 1975 Halifax-Dartmouth Regional Plan which called for an urban community of 60,000 residents in the Bedford-Sackville area by 1991. Concurrent and subsequent to the Regional Plan there has been substantial capital investment in the water, sewer and transportation systems necessary to serve the area's increasing population.

There are two options related to future development in Sackville. The first option entails greater utilization of the lands within the existing serviceable area. Such an option would benefit from the sewer, water, transportation and community services which are already in place in the community.

The second option available to the community is to expand the existing sewerage system to serve areas located outside the serviceable area. Servicing these areas would necessitate the construction of new infrastructure and improvements to existing downstream facilities.

It is important to recognize that development in Sackville and subsequent related capital investment has occurred as a direct result of decisions which designated the community for urban development based upon a defined serviceable area. It shall be a policy of this planning strategy to maintain the integrity of the serviceable area concept.

¹ H. Coblentz, Sponsored by CMHC, May 1963.

The main thrust of the planning strategy will be to continue development in areas where servicing presently exists and to encourage the extension of trunk lines to those portions of the serviceable area which do not yet have these services.

To accomplish the foregoing, two servicing boundaries shall be adopted in the planning strategy. The municipal Development Boundary shall define the total area to be eventually developed on central services while the Service Boundary shall define priority lands to be developed on central services.

- E-1 It shall be the intention of Council to reaffirm existing municipal policy regarding the provision of municipal central sewer and water services, by establishing a Service Boundary as shown on Map 2 - Servicing Boundaries. In establishing the Boundary, it shall be Council's intent that a priority be placed on future serviced development in the Sackville north area and Millwood Subdivision.
- E-2 It shall be the intention of Council that within the serviceable area, development shall only proceed on municipal water and sewer services except for those areas identified on Map 2 - Service Boundaries where development may proceed with on-site sewage disposal and water systems.
- E-3 It shall be the intention of Council to closely monitor all development proposals on the basis of the amount of effluent that will be generated in order to ensure that design flow levels are not exceeded.
- E-4 Notwithstanding Policy E-1, it shall be the intention of Council to establish a municipal Development Boundary, as shown on the Map 2 - Servicing Boundaries. In establishing the Development Boundary, it shall be Council's intent to provide for serviced development within the Plan Area over the long term. The Development Boundary shall be considered as defining the area to which municipal central services may be extended in the future. Where such services are extended for the purposes of residential development, no amendment of the Service Boundary of this planning strategy shall be required.
- E-5 It shall be the intention of Council to consider any extension of existing municipal sewer and water services as provided by Policies E-1 and E-4 in respect to the following:
- (a) the financial ability of the Municipality to absorb any costs relating to the extension;
 - (b) the amount of vacant land which is serviced by existing municipal services within the Service Boundary;
 - (c) the type, density and phasing of proposed land uses to be served, relative to their effects upon existing municipal infrastructure and general municipal and community services and facilities.
- E-6 It shall be the intention of Council that the density and pace of development in Sackville be related to the capacities of future sewer and water services and pollution control

facilities as determined by the standard practices of the Municipality and other government agencies.

Recent studies undertaken by the Municipality's Department of Engineering and Public Works have suggested that the maximum population density for the serviceable area cannot be realized unless inflow/infiltration problems are corrected.

E-7 It shall be the intention of Council to initiate an aggressive inflow/infiltration reduction program for the municipal sewerage system in Sackville.

Another area in Sackville which will require water and sewer services is located along Sackville Drive between Jubilee Drive and Melham Drive, in the vicinity of the Millwood Subdivision. Although this area is clearly within the Service Boundary, and while the Millwood Subdivision has received municipal services, neither water nor sewer services have yet been extended to this area. This is primarily a factor of the relatively few homes along this stretch of road.

E-9 It shall be the intention of Council to extend municipal water and sewage services along Sackville Drive, from Jubilee Drive to a point approximately 1,250 feet west of Melham Drive.

The Lively Subdivision had private central systems installed in 1959 with the anticipation that the area would eventually be served by municipal water and sewer. Recurring problems with these private systems led to municipal takeover in 1983. The extension of central services remains a goal of the planning strategy since even under municipal maintenance, the existing systems are still in need of replacement.

E-10 It shall be the intention of Council, in cooperation with the provincial Department of the Environment and Department of Health, to study an extension of existing sewer and water services to serve the Lively Subdivision area.

Regional Sewage Treatment

Nearly all of the sewage wastes generated within the Plan Area are either treated by way of on-site septic disposal systems or treated at the Mill Cove treatment plant before being discharged into Halifax Harbour. Treatment capacity at the treatment plant is shared on a 65-35% basis between Sackville and the Town of Bedford, with the larger share being allocated to Sackville. Although Plan Area residents will not be directly involved in or affected by proposals to improve the quality of the harbour, there is a strong degree of community support for such a program provided that no direct costs are borne by the community. As a long-term solution to improving the quality of water in Halifax Harbour, Council shall consider the feasibility of participating in a regional approach to the treatment of sewage wastes.

E-11 It shall be the intention of Council to monitor the possibility of participating in a regional approach to the treatment of sewage wastes as a long-term solution to improving the quality of Halifax Harbour.

Water Services

A water supply and distribution system was first installed in Sackville in the late 1960s using Second Lake as the source. In the early 1970s, the system was expanded to include Bedford. Due to the limited capacity to meet the future water requirements for the Bedford-Sackville area, and plans to develop its watershed for residential purposes, Second Lake was abandoned as a source for a regional water supply system.

To supply the Bedford-Sackville area, a high pressure main was installed from the Pockwock Transmission Main, along Hammonds Plains Road and parallel to the Bicentennial highway to a reservoir in Bedford, with provisions to continue this main to Sackville at a later date. However, for a short period the two systems (Bedford and Sackville) were separated with Bedford being supplied by Pockwock and Sackville from Second Lake. This condition continued until the late 1970s during which time a new main was installed along Glendale Drive and a booster station on Cobequid Road. Following the completion of these facilities, the water flow in the main from Sackville to Bedford was reversed.

When the Municipal Development Plan for Sackville was adopted in 1982, the Sackville area was still being served by a single main leading from Bedford and following the Sackville River. The combined storage capacity of water reservoirs serving the Sackville area was limited to a twenty-four hour emergency supply. A subsequent review of Sackville's fire protection services concluded that Sackville should have either a three day emergency supply or a second line into the Pockwock system. As overall demand for water increased in the 1980s, it became necessary to seek new alternatives for long term water supply. The Regional Sewerage, Water Supply and Drainage Plan reviewed the situation and suggested three possible alternatives; a new connection with the Dartmouth water supply, a line along the Bicentennial Highway which would by-pass the Bedford System or a new line along the Lucasville Road. It was recognized that any of these alternatives would entail considerable construction time. County Council agreed, through its Department of Engineering and Works, to investigate the possibility of providing an alternative water supply for emergency purposes, such as the reopening of the Second Lake system.

In 1990, a new reservoir was constructed in Sackville and put into operation in January of 1991. This new reservoir coupled with the existing reservoirs in Sackville and Bedford currently provide the area with a balanced water supply during extended dry weather periods and three days of emergency storage.

While additional emergency water supply now exists, the fact remains that Sackville still relies on available pressure and flow through the Bedford distribution system. It is expected that as demand for water on the Bedford service system continues to increase, the available pressure and flow capacity to Sackville will decrease, at which time it will become impossible to supply Sackville through the Bedford distribution system with any degree of reliability.

To eliminate this problem and increase the capacity to Sackville, it will be necessary to construct a watermain, to by-pass the Town of Bedford and provide a direct connection to the Sackville system. In a study prepared by CBCL Limited in July 1991, three alternative routes to supply water to

Sackville were investigated. Two routes were eliminated due to local topographic conditions and routing problems; however, a third alternative suggests extending an existing main along the Bicentennial Highway as the Bedford Watermain By-pass. The provincial Department of Transportation and Communications has recommended that any new mains be routed around the Bedford-Sackville-102 Interchange so as not to interfere with future transportation improvements. To resolve the water supply problem in Sackville, the immediate design and construction of the Bedford By-Pass is recommended.

E-12 It shall be the intention of Council, through its Department of Engineering and Works, to continue to investigate the construction of the Bedford By-Pass as an alternative to supply water to Sackville and to investigate funding arrangements between Halifax County Municipality, the Town of Bedford and the Halifax Water Commission.

In early 1993, municipal staff expressed concern to Council about the lack of clear policy direction with respect to development accessing only central municipal water services. Central water service from the Pockwock water system had been extended to a number of areas located outside of designated serviceable areas where both municipal water and sewer services are required. The primary motivation in extending central water to these areas was to resolve identified water quality or quantity problems. However, the extension of trunk services to these areas also resulted in new development being able to access central water. The rapid rate of growth which central water seemed to encourage and the potential scale of development which could occur, coupled with the general lack of policy direction, caused staff to bring the matter before Council. Engineering concerns related to overall water system capacity and the adequacy of internal system design were significant issues as were planning considerations related to development patterns and the adequacy and demand placed on other services.

In the fall of 1993, following public input concerning the issue of central water, Council approved the designation of several Water Service Districts in areas served by the Pockwock water system. These Water Service Districts included areas to which central water only had already been extended or committed as well as areas where it was anticipated that central water would be required to resolve a community based water quality or quantity problem. Within the Sackville plan area, Water Service Districts include lands adjacent to the Cobequid Road, north of the Sackville Business Park.

It is the intent of Council that central municipal water services will only be permitted within designated Water Service Districts. Council may, however, consider the expansion of existing Water Service Districts or the establishment of new ones when satisfied that all engineering, financial, and planning concerns have been properly addressed.

E-12A It shall be the intention of Council to establish Water Service Districts for those areas to which central municipal water services only have or may be extended in the future, as shown on the Sackville Service Boundaries Map (Map 2). It shall be the policy of Council that the extension of central municipal water services shall not be permitted outside of designated Water Service Districts. It shall further be the policy of Council that within the Water Service Districts, central municipal water services shall be provided

to all subdivisions adjacent to existing municipal water services and which propose to provide a new or extended public street or highway.

E-12B Notwithstanding Policy E-12A, Council may consider amending this planning strategy and the Municipal Subdivision By-law to permit the expansion of existing or the establishment of new Water Service Districts. When considering new or expanded Water Service Districts, priority shall be given to:





- (1) areas identified as experiencing problems related to insufficient quality and/or poor quality of existing sources of water supply;
- (2) existing communities within a reasonable distance of the central water supply system where there is a demonstrated need and conditional upon the availability of water supply capacity; and
- (3) areas which would provide looping of existing infrastructure thereby enhancing reliability of the water system in the local area.

In addition to the priority criteria outlined above, it shall also be the policy of Council when considering the establishment of new or expanded Water Service Districts, to have regard to the following:

- (a) the engineering and financial implications of such extensions as identified by the Master Infrastructure Plan, Implementation Plan, and Financial Plan carried out pursuant to Municipal Services General Specifications;
- (b) the potential scale of such development and the effects which this may have on existing and future levels of services, as well as the development pattern which is desired and deemed appropriate within this plan area as well as the larger Municipality; and
- (c) environmental considerations related to the long term integrity of on-site sewage disposal systems as well as natural water drainage systems.



Map 1

-  Existing Sackville Service Boundary
-  Unserved land within the Serviceable Boundary
-  Area to be removed from the Sackville Service Boundary
-  Area to be added to the Sackville Service Boundary

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