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Item No. 8.3

Halifax Regional Council
June 17, 2008

TO: Mayor Kelly and Members of Halifax Regional Council

SUBMITTED BY: 
Wayne Anstey, Acting Chief Administrative Officer

DATE: May 17, 2008

SUBJECT: Case 01148 - Amendments to the Bedford West Secondary Planning Strategy and Regional Subdivision By-law

SUPPLEMENTARY REPORT

ORIGIN

On May 13, 2008 Regional Council deferred a recommendation to initiate the process to:

- a) consider amendments to the Bedford West Secondary Planning Strategy sanitary sewer servicing policies; and
- b) consider amendments to the Regional Subdivision Bylaw regarding adoption of capital cost contribution charges.

Additional information was requested regarding the impacts of diverting approximately 235 acres from the Mill Cove Wastewater Treatment Plant to the Halifax Wastewater Treatment Plant.

RECOMMENDATION

It is recommended that Council:

1. Initiate the process to consider amendments to the Bedford West Secondary Planning Strategy sanitary sewer servicing policies and to consider amendments to the Regional Subdivision Bylaw regarding adoption of capital cost contribution charges; and
2. Adopt the public participation program outlined in Attachment C.

EXECUTIVE SUMMARY

Bedford West has an approved master plan and development is subject to an amendment of the service boundary and the approval of a Capital Cost Contribution (CCC) from developers. The approved plan directs approximately 1,200 acres of undeveloped land toward the Halifax Wastewater Treatment Plant (WWTP) and approximately 500 acres towards Mill Cove.

Staff have identified another option for providing wastewater services that directs an additional 235 acres towards the Halifax WWTP, that requires an amendment to the approved master plan.

On May 13, 2008 Regional Council deferred a recommendation to consider amendments to the approved master plan, and requested additional information on the impacts of the new wastewater plan.

The capital cost of the new wastewater plan is approximately \$2.0M less than what was previously being studied. It is in the public interest to support the least cost servicing option for the following reasons:

- Most of the cost of providing infrastructure will be paid for by the developer, and recovered from lot sales which directly impacts housing affordability.
- The CCC reserve is funded by developers, but administered by Halifax Water and the state of the reserve will influence water and wastewater rates.
- Life cycle cost savings are substantially more, and infrastructure that will be owned, operated and eventually replaced is funded from water and wastewater rates.
- There is less remaining capacity at Mill Cove WWTP, it is more costly to expand Mill Cove, and an expansion will be required sooner at Mill Cove than at Halifax WWTP. Consequently, wastewater that can be directed to Halifax WWTP will delay the more costly upgrade at Mill Cove.

A recent study was carried out on the Bedford Basin which suggests that treated wastewater should be directed towards the outer harbour where the opportunity exists because of the higher flushing capacity of the outer harbour.

In addition to Bedford West, there are other areas that may be considered for development over the life of the Regional Plan subject to the cost of providing municipal services, and subject to available capacity in water, wastewater and street systems. With regards to wastewater treatment capacity, it is expected that there will be remaining capacity beyond 25 years for approximately 16,900 persons at the Halifax WWTP, and for approximately 14,700 persons at the Mill Cove WWTP.

BACKGROUND

Council requested additional information relating to the impact of adding an additional 235 acres of undeveloped land to the Halifax Wastewater Treatment Plant (WWTP) relative to:

- a) other undeveloped lands that are designated both Urban Settlement and Urban Reserve to be directed to the Mill Cove and Halifax WWTP's, and
- b) the earlier decision to direct flow from Beechville/Lakeside/Timberlea (BLT) to the Halifax WWTP.

The original secondary plan for Bedford West was approved in 2006 and was initiated by Annapolis Group. Under this Plan, approximately 1,200 acres are approved to flow towards Halifax, and approximately 500 acres are approved to flow towards Mill Cove. Since that time *the majority of the* land within the plan area has been sold to West Bedford Holdings, and a more cost effective servicing plan has been developed.

The original report to Council recommended initiating an amendment to the Bedford West Secondary Planning Strategy to recognize the revised servicing plan. The amendments are in support of an infrastructure and funding plan to establish a Capital Cost Contribution (CCC) from developers in Bedford West, and such a plan is required before development can proceed.

The process to establish a CCC is being carried out jointly with the Halifax Regional Water Commission (Halifax Water). The CCC for water and wastewater must be adopted by Halifax Water and requires approval by the Nova Scotia Utility and Review Board .

The CCC for collector roads as well as amendments to the service boundary must be approved by HRM.

DISCUSSION

This report is structured in two parts to address Council's questions. The first part reviews the planning designations of serviced and serviceable lands that would flow to the Halifax and Mill Cove WWTP's. The second part provides the technical details of allocating wastewater treatment capacity.

Planning Designations

The Regional Plan created a designation known as "Urban Settlement" that encompasses both developed and undeveloped lands where urban forms of development should occur on piped water and sewer services. It was anticipated that approximately 75% of the population growth would occur within this designation; 50% in "suburban" growth centres and 25% in the Regional Centre on infill development or "opportunity" sites (Refer to Attachment "A").

The following six undeveloped areas were designated Urban Settlement, and identified as areas for new mixed use, transit friendly urban growth:

1. Bedford South
2. Morris-Russell Lake
3. Bedford West
4. Port Wallis
5. Sandy Lake and
6. Highway 102 west corridor adjacent to Blue Mountain - Birch Cove Lakes Park (Suzie Lake).

Master Plans and Secondary Planning Strategies must be completed in these areas prior to developing.

Of these areas Bedford South, Morris-Russell Lake, and Bedford West have secondary planning strategies completed and are in various stages of development as described below.

- 1) Bedford South: In 2003 Council approved a master plan and a CCC over the entire plan area, and the area is currently under development.
- 2) Morris/Russell Lake and Bedford West: In 2004 Council directed staff to continue developing master plans in these areas (see Attachment “B”). Morris/Russell Lake has a CCC established over portions of the plan area, and these areas are also currently being developed. Bedford West has an approved secondary plan, and development is subject to an amendment of the service boundary and the approval of a CCC.

Master Plans and Secondary Planning Strategies have not begun in the other areas that have been designated Urban Settlement. In 2004 Council deferred development of a master plan for Port Wallis, and discontinued work on a master plan for the land assembly in Timberlea known as “Governor’s Lake North”. (see Attachment “B”)

On a go-forward basis, the Regional Plan requires that proposals to begin master plans must consider the cost of providing municipal services and in particular HRM’s capacity to meet additional financial commitments. A study is currently underway that is determining the costs of providing municipal services.

The Regional Plan also created a designation known as “Urban Reserve” for lands abutting the Urban Settlement Designation which could be considered for services beyond the next 25 years, to ensure the Municipality has a long-term supply of serviceable lands. “Governor’s Lake North” in Timberlea is designated Urban Reserve. The other areas designated as Urban Reserve are lands bounded by Highway 7, Ross Road, Highway 207 and Broom Road (Cole Harbour/Westphal), land surrounding Anderson Lake (Dartmouth/Bedford), land surrounding Ragged Lake (Halifax), land surrounding Kidston Lake (Spryfield/Herring Cove), Purcell's Cove area “back lands”, and private lands in the Blue Mountain - Birch Cove Lakes Regional Park area

Capacity Allocations

In May, 2007 Council adopted a Regional CCC for Wastewater Treatment, and the provisions of the by-law are now a regulation of Halifax Water. This charge is collected from new development and is placed in a reserve fund to help pay for regional WWTP's upgrades.

Council decided to collect a uniform charge that does not vary depending on the location of the development. A uniform charge makes it easier to direct wastewater flows between facilities as needed, to take advantage of remaining capacity in the Regional Wastewater Treatment system. Examples that were cited at the time included directing Mumford Road/Armdale to the Herring Cove Plant; directing parts of Shearwater/Woodside to either the Dartmouth or Shearwater Plant; and directing parts of Bedford West to either Mill Cove or Halifax.

The current Bedford West secondary plan allows for 1200 acres to flow to Halifax and 500 acres to flow to Mill Cove. Staff estimate that the capital cost of the revised plan is approximately \$2.0M less than what was previously being studied. Life cycle cost savings are substantially more. Although the majority of the capital costs will be paid for by the developer under the CCC program, the least cost servicing solution is in the public interest for the following reasons:

- Housing affordability - to the extent that the developers costs are recovered from lot sales, the consumer will ultimately bear the cost of providing infrastructure needed by the development; and,
- Water and wastewater rates - it is important to support servicing plans that minimize the amount of infrastructure that will be owned, operated and eventually replaced. In addition, the CCC reserve is funded by developers, but administered by the Water Commission and the state of the reserve will influence wastewater rates.

Council has previously approved a plan to divert a portion of the Lakeside/Beechville/Timberlea system to Halifax. The exact timing of the project will depend on the rate of growth in Timberlea, but Halifax Water anticipate the project will be required in approximately 7 years. This is an example of a flexible, regional wastewater treatment system and a portion of the project will be funded by the Regional CCC. Details of the capacity that Council has allocated to Timberlea are included in the "Table 1" below.

Analysis has been completed on all regional WWTP's in relation to their remaining capacity and the ability to accommodate growth. Allocations have also been considered for existing areas that may require connection in the future to either the Mill Cove or Halifax WWTP's.

Table 1 illustrates the capacity at both Halifax and Mill Cove WWTP's and the forecasted demands over the next 25 years in their respective sewer sheds.

Table 1 - Wastewater Treatment Plant Capacity Overview to 2030

	Halifax WWTP (Equivalent Persons)	Mill Cove WWTP (Equivalent Persons)
Design	139,000	57,100
Current Flows	108,000	44,000
Current Remaining Capacity	31,000	13,100
Less Transferred WWTP's ¹	10,500	4,400
Less Regional Planning Forecasts ²	18,000	6,400
Forecasted Remaining Capacity	2,500	2,300
Bedford West Forecast	9,600	6,800
Remaining Capacity/(excess allocation)	(7,100)	(4,500)
Proposed Upgrade	24,000	19,200
Overall Remaining Capacity	16,900	14,700

The upgrade for the Halifax plant is estimated at \$5 million. Combined with Remaining capacity, the Halifax WWTP is capable of serving 55,000 additional people.

The Mill Cove upgrade is estimated at \$15 million. Combined with remaining capacity, the Mill Cove WWTP is capable of serving 32,300 additional people.

There is less remaining capacity at Mill Cove and an expansion will be required sooner than at Halifax. Consequently, wastewater that can be directed to Halifax will delay a more costly upgrade at Mill Cove.

“Overall Remaining Capacity” represents another 25 years of growth if managed properly. Council,

¹“Transferred WWTP’s” refers to the portion of the Lakeside/Beechville/Timberlea which will be directed to the Halifax WWTP. As well, small WWTP’s such as Lively, Springfield Lake and Uplands Park either will be directed or are planned to be directed to Mill Cove.

²“Regional Planning Forecasts” are population growth forecasts in the growth centres that were identified under the Regional Plan, and based on the median growth forecast given in “Employment, Population and Housing Projections Halifax Regional Municipality (Revised)”, May 12, 2004, Clayton Research Assoc. Ltd. and Cantwell & Co.

in consultation with Halifax Water, will decide where and when development can occur and the next step is to conduct a Cost of Servicing Study. The study has been awarded to CBCL Engineering and is currently underway.

In direct response to the question raised by Council, the undeveloped areas of Suzie Lake and Governor's Lake North can ultimately accomodate 31,700 people at full build out³, broken down as follows:

Suzie Lake	20,900 people
Governor's Lake North	10,800 people.
Total	31,700 people

These populations include lands that are designated both Urban Settlement as well as Urban Reserve.

It is not practical to build the regional wastewater system to accommodate the full build-out of all land that is tributary to a regional treatment plant. Rather the system is over-sized to accommodate growth that is anticipated within the design life of the system under various development scenarios.

The total growth and transferred flows that are anticipated for all areas that are tributary to the Halifax WWTP, including Bedford West (and Area 12) is 38,100 people over the next 25 years, and there is capacity for 55,000 people. In this context, directing area 12 to the Halifax WWTP will have a negligible impact on Council's ability to make future decisions related to areas such as Suzie Lake and Governors Lake North.

In addition, a recent assimilative capacity study⁴ was carried out on the Bedford Basin which concluded that the inner Harbour/Bedford Basin will likely reach its assimilative capacity in the next 50 years. The study also concluded that enhanced levels of treatment and locating future outfalls further seaward will be required in order to continue to meet the original objectives of the Halifax Harbour Task Force. This suggests that wastewater should be directed towards plants located in the outer harbour where the opportunity exists.

Wastewater may also be directed from the Halifax plant to Herring Cove if the need arises in the future.

BUDGET IMPLICATIONS

³Grenfeld Areas Servicing Analysis, CBCL Ltd, July 2004.

⁴Bedford Basin Assimilative Capacity, Coastal Ocean Associates, July, 2007

The Municipality will assume financial commitments for transportation related expenditures made in accordance with the capital cost contribution policy and Halifax Water will assume financial commitments made for water and wastewater infrastructure. No expenditures for stormwater services are contemplated in the Bedford West CCC.

Adoption of CCC charges is subject to developing a financial model that is acceptable to both Council and Halifax Water. Details will be made available in a report to Council after concluding the public participation program.

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 the utilization of Capital and Operating reserves, as well as any relevant legislation.

ALTERNATIVES

1. Council could agree to not initiate the amendments to the Bedford MPS as recommended in the original report. This is not recommended for the reasons outlined in this Supplemental Report.

ATTACHMENTS

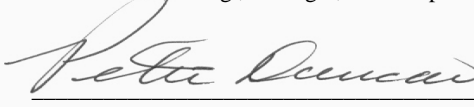
Attachment A - Map of Regional Wastewater Boundaries


Attachment B - Report to Regional Council, dated November 9, 2004, entitled "Master Plans and Greenfield Studies"

Attachment C - Proposed Public Participation Program

A copy of this report can be obtained online at <http://www.halifax.ca/council/agendasc/cagenda.html> then choose the appropriate meeting date, or by contacting the Office of the Municipal Clerk at 490-4210, or Fax 490-4208.

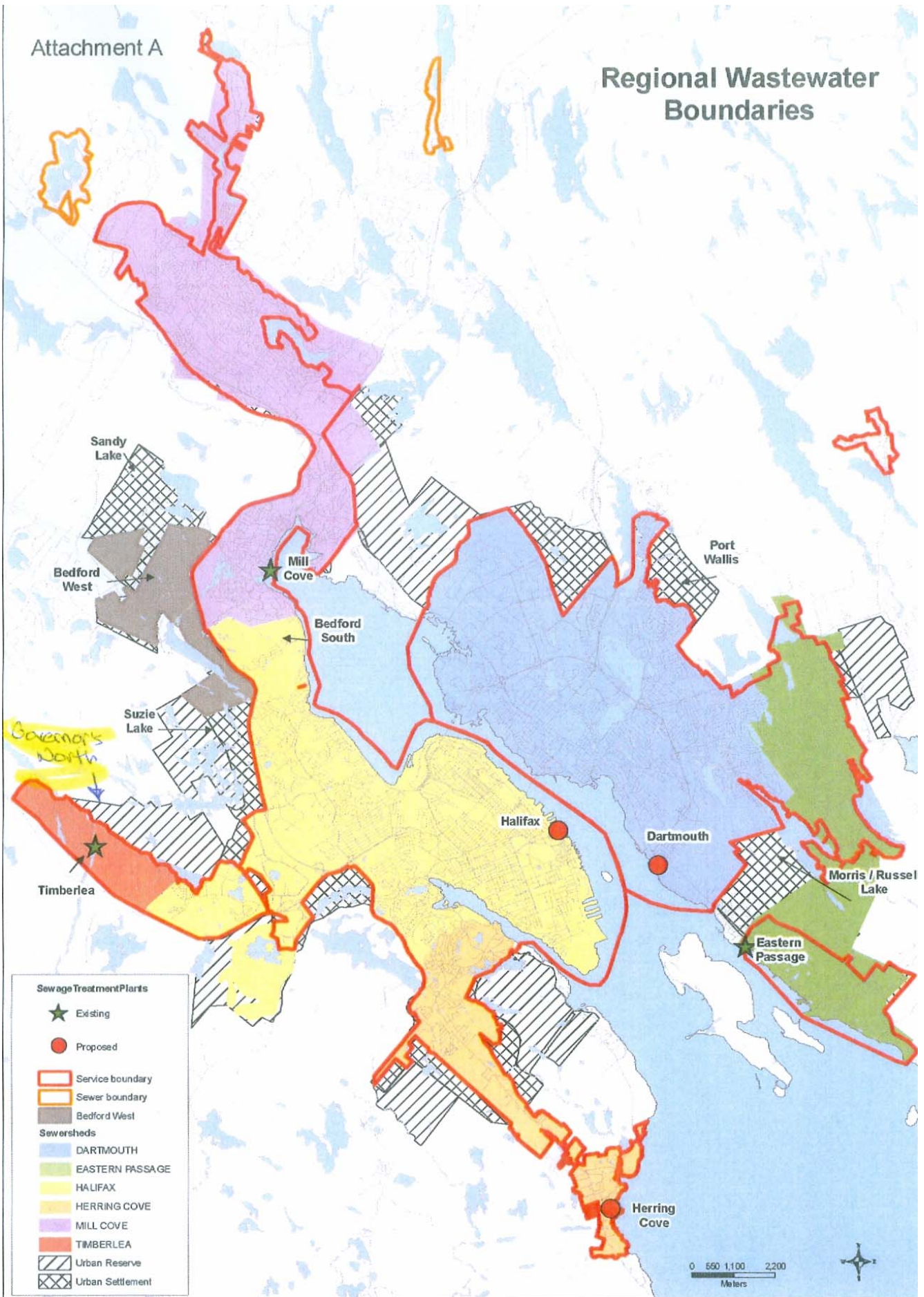
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Regional Wastewater Boundaries





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8.1

Regional Council
Committee of the Whole
October 19, 2004

November 9, 2004

TO: Mayor Kelly and Members of Halifax Regional Council

SUBMITTED BY:


George McLellan, Chief Administrative Officer


Dan English, Deputy Chief Administrative Officer

DATE: October 4, 2004

SUBJECT: Master Plans and Greenfield Studies

ORIGIN

- December 1, 1998 motion of Regional Council to initiate four master plan studies (Morris/Russell Lake, Port Wallace, Wentworth/Bedford South and Governor Lake North);
- July 2, 2002 motion of Regional Council to initiate a master plan study for Bedford West;
- Information Report to Regional Council, dated 29 June, 2004 regarding the status of the master plan studies.

RECOMMENDATIONS:

It is recommended that Council accept the staff presentation of this report and defer consideration of the Recommendations until the next regular Regional Council meeting (October 26, 2004).

1. Direct staff to continue to negotiate policy and regulatory amendments needed to allow for the development of the Morris-Russell Lake and Bedford West master plans;
2. Defer further work on the Port Wallace master plan pending extension of sewer and water services, by the private sector, to the nearby Dartmouth East lands; and
3. Discontinue further work on the Governor Lake North study.

Executive Summary

Council authorized five master plan studies around the metro area. The studies were initiated to determine the feasibility of developing new areas for development serviced with central sewer and water. Emphasis was placed on determining what infrastructure would be needed to maintain satisfactory service levels for new residents and existing residents in the surrounding communities, along with the associated fiscal impacts to the Municipality. If costs were reasonable, staff was to negotiate cost sharing with the proponents and the overall community design elements to achieve "smart growth" principles. One study has been completed to date in the Bedford South/Wentworth area and development has commenced. Four studies remain outstanding.

A "greenfield" servicing study has been prepared under the auspices of the Regional Planning Program. This study examined development opportunities and constraints and the cost of extending services to ten greenfield sites around the metro area. The outstanding four master plan study areas were encompassed within these ten greenfield sites.

Based on the information gathered, staff feel that the Municipality is now in a position to make decisions as to whether to continue evaluating the outstanding master plan areas. Decisions on these master plan studies will allow staff resources to be focussed on those areas which have the greatest potential. The significant findings in support of the staff recommendations are summarized as follows:

- The ten greenfield sites are more than sufficient to satisfy suburban growth needs over a twenty-five year period. Even under a high growth scenario for the region, these lands represent a supply of 4.5 to 5.5 times the region's needs.*
- The scale of development within each greenfield area is of such magnitude that approval of one implies that others cannot be developed due to capacity constraints - particularly for sewage treatment. The potential for infill development within the Municipality's established service boundaries may also be restricted if too much capacity is allocated to new greenfield sites.*
- The Morris-Russell Lake and Bedford West master plan study areas provide strong opportunities for new community developments that can be integrated with regional services at relatively low financial investment and risk to the Municipality.*
- The viability of developing the Port Wallace master plan area does not appear promising due to the cost of extending sewer and water services to this area. However, there is a possibility these services will be extended to nearby land on the west side of Micmac Lake by the developer of "Countryview Estates", which is an as-of-right development. If this occurred, the economics of developing the Port Wallace area may be more favourable.*
- The Governor Lake North master plan area requires substantial improvements to the transportation network and a major extension to the sanitary sewer system. The scale of these improvements presents a substantial financial risk to the Municipality even with a capital cost charge levied against the development.*

There is a limit to how many master plan infrastructure investments the Municipality can participate in before there is an undue impact upon capital budget capacity for other important projects. Contributing Municipal infrastructure investment to all of the master plan sites also increases the Municipality's financial risk since not all of this land is required in order to meet the region's growth projections.

Council's decision to continue or discontinue any of the master plans studies cannot be appealed to the Nova Scotia Utility and Review Board since they require amendments to HRM's municipal planning strategies. Such decisions are at Council's discretion. In addition, a public hearing is not required in order to discontinue a master plan. A public hearing however is required prior to ultimately approving a master plan.

BACKGROUND

Master Plan and Greenfield Studies

- Prior to initiating the Regional Planning process, Regional Council initiated master plan studies to determine the feasibility of developing serviced communities on four greenfield sites around the urban core (i.e. Wentworth/Bedford South, Morris-Russell Lake, Port Wallace, and Governor Lake North).
- Regional Council later added a fifth master plan study in the Bedford West area.
- After initiating the Regional Planning process, Regional Council commissioned a Greenfield Servicing Study of ten areas. These areas included the five master plan areas.
- The Greenfield Servicing Study has a fundamental bearing on the master plan studies. Both processes attempt to determine the feasibility of servicing new areas for development. The specific and comparative information contained in the Greenfield Servicing Study therefore has direct relevance to decision making on the master plan areas.
- The potential scale of development within each study area is of such a magnitude that approval of one implies that other sites may not be developed due to service capacity constraints, particularly for sanitary sewage treatment.
- There is a limit to how many infrastructure investments the Municipality can participate in and these investment decisions need to be very strategic in order to avoid having an undue impact upon the Municipality's capital budget capacity for other important projects. Spreading the Municipality's investment to more development sites than are required to meet future growth increases the Municipality's financial risk and limits capital budget capacity.
- Development approvals within the master plan areas may also limit the Municipality's capacity for infill development within established urban service boundaries.
- The key issue to be addressed for each study area is whether to undertake policy and regulatory amendments concurrently with the regional planning program or to postpone further action until the regional plan has been completed.

Status of Wentworth/Bedford South Master Plan

- The Wentworth/Bedford South master plan study has been completed and Council has amended the two relevant municipal planning strategies for this area. Development has begun on the site and homes in the first phase are occupied.

Status of Morris-Russell Lake Master Plan

- The Morris-Russell Lake master plan study is nearly complete. Regional Council amended three municipal planning strategies to allow for serviced development in the area pending confirmation of funding for a new interchange on the Circumferential Highway (Highway 111). Federal and Provincial funding through the Canada-Nova Scotia Infrastructure program has been confirmed and the Municipality has also approved funding in its capital budget. Staff are currently working with a public participation committee to finalize design guidelines for development of the site. These will be presented to Regional Council for approval.

Status of Port Wallace, Governor Lake North and Bedford West Master Plans

- Over the summer, staff met with the property owners within each of these master plan study areas to try to review the findings of the various servicing studies undertaken to date, particularly the Greenfield Servicing Study. The purpose of these meetings was to determine if there were any discrepancies in infrastructure needs, associated costs and the application of capital cost charges. This process has been completed. As noted in the following discussion, there has not been agreement with all developers on the staff assessment.
- An executive summary of the Regional Greenfield Servicing Study, prepared by CBCL Ltd., is presented as attachment II¹. Written submissions in response to the study were received from the proponents of the Governor Lake North and Port Wallace study areas which are reproduced as attachments III and IV.

DISCUSSION:

The key issues arising from the Greenfield Servicing Study and master plan studies which have led to the recommendations contained in this report are summarized as follows:

Is development in all of the greenfield study areas required to satisfy the region's projected growth?

Development of all of the greenfield study areas is not required in order to accommodate the region's projected growth. Between 2001 and 2026, the region's population is forecasted to grow by 52,000 persons under a low growth scenario and 125,000 under a high growth scenario². Under the high growth scenario, it is estimated that 50,000 to 60,000 people would be accommodated within greenfield sites. The remainder would locate within established service boundaries or developments with on-site sewer and water services.

¹ The full report can be found in PDF format on the HRM website at www.halifax.ca/regionalplanning/publications/Research.html

² *Employment, Population and Housing Projections; Halifax Regional Municipality.*
Prepared by Clayton Research Associates Ltd. in partnership with Cantwell & Company Consulting. August 2004.

The Greenfield Servicing Study estimates that full build out of all ten greenfield sites under a typical suburban density of 18 persons per acre could accommodate approximately 273,000 people, which represents a supply of 4.5 to 5.5 times expected needs under a high growth scenario for the next twenty years.

Can the Municipality service all of the greenfield study areas?

A recent review of the Region's proposed and existing regional sewage treatment facilities has estimated that, if all future expansions contemplated are constructed, the sewage flow from the equivalent of an additional 261,200 persons could be accommodated. Even if relatively generous sewage generation from businesses and industries are assumed, future capacity should be more than sufficient to accommodate growth over a twenty-five year planning period.

When deciding which greenfield/master plan areas can be serviced, the most significant issue is not the Region's total sewage plant capacity, but rather the proper assignment of population growth to each plant. For example, if all the greenfield/master plan areas within the catchment areas of the Halifax and Dartmouth sewage treatment plants were developed, the capacity of each plant would be exceeded by a substantial amount.

Taking the capacity of the Halifax and Dartmouth sewage treatment plants into consideration, the following conclusions were reached³:

- The Bedford West, Birch Cove Lakes - Governor Lake and Ragged Lake greenfield areas can accommodate a combined population of 75,000 people. These greenfields are all within the Halifax treatment plant's catchment area and their combined population represents almost 1.4 times the plant's ultimate capacity after expansion.
- If only the Bedford West and Governor Lake North master plan areas are taken into consideration, they could have a combined population of 35,000. This represents over 64% of the ultimate available treatment capacity for the Halifax plant. However, at least 65% of the plant's capacity has to be reserved for potential infilling and greenfield development within Halifax' established service boundary.
- Similarly, the three greenfield sites within the Dartmouth sewage treatment plant's catchment area (Shearwater - Eastern Passage, Dartmouth East - Port Wallace and Dartmouth North - Anderson Lake) would exceed the plant's ultimate capacity by 28%.

The Municipality cannot service all the greenfield areas which potentially flow to the Halifax and Dartmouth sewage treatment plants while also servicing the lands already within the service boundaries for these plants. Decisions about how to allocate sewage treatment plant capacity will therefore have to be made. The anticipated population under current municipal servicing policies and regulations and potential future demands on the Halifax and Dartmouth treatment plants are summarized on attachments V and VI respectively.

³The Halifax and Dartmouth facilities are estimated to have available capacities of 55,000 and 64,000 persons after second planned expansions.

Which study areas have the most potential for future development?

The greenfield study addressed this question by placing each of the ten sites in one of three categories: not recommended as having development potential; sites with some constraints to development; and sites with minimal constraints. The findings and supporting rationale are summarized on pages X to XII of the executive summary, attachment II.

Staff also undertook an opportunities and risk analysis for each master plan study area and evaluated each against the seven regional planning principles which have been adopted by Regional Council. A summary of these analyses is found in attachments VII and VIII.

The rationale for the staff recommendations are summarized as follows:

1. Continue negotiations for development of the Morris-Russell Lake and Bedford West master plan study areas.

Both these areas offer the opportunity to accommodate new suburban communities at relatively low financial risk to the Municipality. Bedford West requires no significant municipal expenditures for infrastructure improvements to allow development to commence and, upon completion, would have a low cost per developable acre. The Greenfield Servicing Study estimated that this area would have the lowest cost per developable acre of the ten greenfield sites studied (the cost estimates for servicing each of the ten greenfield sites are found in Tables 7 to 9, pages at the end of attachment II to this report).

Bedford West is also expected to benefit from the new interchange which was approved in conjunction with the Wentworth/Bedford South master plan study. Under the Municipality's capital cost contribution policy, Bedford West would therefore contribute to the cost of the interchange and the Municipality's committed share would decline.

The Morris-Russell Lake area requires a new interchange on the Circumferential Hwy. with a connection to Baker Drive for development to commence. Subject to a positive environmental assessment, senior levels of government have committed 2.5 million dollars of financial support for the interchange under the Canada/Nova Scotia infrastructure program. Clayton Developments has committed to financing the road connection to Baker Drive. The interchange will also provide access to the Woodside Industrial Park by an extension of Mount Hope Avenue which may enhance the opportunities for attracting new businesses.

Upon completion of the interchange, considerable development can proceed with minimal municipal expenditures for infrastructure. Over the long term, Mount Hope Ave. is proposed to extend eastward from the interchange and across the Shearwater lands to the Caldwell Road. This project is expected to draw traffic from Eastern Passage and the Cole Harbour communities which would relieve congestion on Portland Street (the interchange and connector roads are illustrated on the conceptual land use and transportation plan, presented as attachment IX to this report).

The interchange and road improvements proposed for the Morris-Russell Lake area will allow for new transit routes which would link the surrounding community to the Woodside Ferry Terminal. With new ridership from this community and the new community college proposed at Woodside,

improved ferry service may be justified, resulting in further ridership and better utilization of an under utilized resource.

Similarly, the Bedford West study area is well situated to take advantage of a regional transit system proposed for the surrounding community whether it be a high speed ferry service between the Bedford waterfront area and downtown Halifax, rail transit along the Bedford basin or high speed bus service on the Bicentennial Hwy. An internal collector road system proposed within Bedford West would be supportive of any of these proposals. The conceptual transportation plan for Bedford West is presented as attachment X.

While it is recommended that both of these areas be approved for serviced development, the final boundaries of each area still have to be confirmed. To allow for flexibility, phasing plans will also be developed.

2. Defer further work on the Port Wallace study area.

The Greenfield Servicing Study suggests there is considerable financial investment associated with developing this area due to deficiencies in the sanitary sewer system. The Port Wallace area is currently serviced by a trunk system that extends southward along the Waverley Rd. toward the harbour and includes several pumping stations and force mains. Despite recent upgrades, this system has no reserve capacity for new development.

The Greenfield Servicing Study concluded that servicing this area would require an extension to the North Dartmouth trunk sewer northward along the western shoreline of Lake Micmac toward Lake Charles. Sewage from the Port Wallace area would then be pumped into this sewer through a new main at the southern tip of Lake Charles. Schematics are illustrated on attachment XI.

Staff had concluded that the \$15 million cost of extending services posed too much financial risk to the Municipality, especially since the expenditure would be required before any development could occur. In addition, further upgrades are needed in the downstream trunk sanitary sewer system running through the older areas of Dartmouth.

A recent as-of-right proposal to develop land in the Dartmouth East area between Hwy. 118 and Burnside Business Campus might improve the economics of developing the Port Wallace area. When land for Hwy. 118 was acquired by the Province in the 1970s, the Province committed to provide "reasonable access" to one of the abutting property owners. The current owner of this property, North American Properties Ltd. has requested that the Province fulfill this commitment by building an interchange. A variety of as-of-right retail uses are proposed for the area.

If North American proceeds with this project, the cost of servicing the Port Wallace area would decline significantly since North American would pay to extend services to their property. Most significantly for master planning, this includes the Dartmouth North Trunk Sewer. At this time it is recommended that the Port Wallace study area be deferred until construction of services to the North American Properties site (i.e. Dartmouth East).

With regard to the submission received (attachment IV), staff met with Tom Swanson, Wayne Whebbby, a major property owner in the Port Wallace area, and a representative of CBCL to discuss the discrepancies in cost estimates. While agreeing that some cost savings suggested may

be possible, staff remain of the opinion that they are not likely to be of the magnitude suggested by Mr. Swanson.

3. Discontinue Work on the Governor Lake North Master Plan Study.

Staff and the developer of the Governor Lake North lands have examined several development scenarios and infrastructure solutions. While the site design of this master plan community is reasonable and it has good proximity to a regional employment centre at Bayers Lake, there are unfortunately also significant sanitary sewage and transportation issues associated with development of this site. Staff and the developer have been unable to agree on the extent and significance of these capacity issues; the design of the appropriate infrastructure solutions; or apportionment of costs between the Municipality and developer for these infrastructure solutions.

Sanitary Sewer Services:

Alternative one:

Originally, a development designed for 11,800 people over 655 acres was proposed with sanitary sewage discharged to the Nine Mile River treatment plant in Timberlea (Parkdale Developments owns 523 acres, Kimberly Lloyd owns 100 acres and John Lordly owns 32 acres). The plant currently serves under 9,000 people its current capacity is estimated to be 10,000.

When the master plan study for this area commenced, the plant was assumed to have an ultimate capacity of 30,000 persons, if two upgrades were undertaken. However, an assimilative capacity study undertaken on the Nine Mile River, concluded that, under current provincial guidelines, it is unlikely that approvals would be granted for treatment of more than 20,000 people and possibly less⁴. It is estimated that the population growth within the plant's existing approved service boundary will exceed 20,000 people at full build-out. Therefore, the Nine Mile River service boundary cannot be expanded to accommodate Governor Lake without removing development rights from properties already inside the current service boundary. The plant limitation may require that the existing boundary be reduced in size through the regional planning process.

Alternative two:

The developer subsequently proposed to discharge the sewage to the proposed Halifax treatment system by pumping to the collection system in Bayers Lake Business Campus. They also proposed to redirect flows from a portion of the existing Timberlea service boundary to the Halifax treatment system via a pumping station and forcemain. The developer argued that this proposal could result in considerable cost savings to the Municipality by eliminating the need for the last planned upgrade to the Nine Mile River treatment plant. In total, flows from 20,800 persons would be redirected to the Halifax system (11,800 from the study area and 9,000 from the existing service boundary for Timberlea).

⁴ Dillon Consulting Ltd. in association with Loucks Oceanography Ltd. *Nine Mile River Assimilation Study*. February 2003. prepared for Halifax Regional Municipality.
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As discussed earlier in this report, the Halifax treatment plant cannot accommodate all of the greenfield/master plan lands within its catchment area and retain capacity for development already within the service boundary. The Bedford West development also proposes to direct sewage flows for 25,000 people to the Halifax treatment plant. The combined developments would consume about 83% of the Halifax plant's ultimate capacity⁵. As mentioned earlier, it is estimated that 65% of the plant's ultimate capacity has to be reserved to accommodate growth within the established service boundary (attachment V).

Alternative three:

The developer subsequently requested that a development of 8,000 persons be permitted to discharge from its lands to the Halifax system. They also requested that the development be allowed to discharge to the Nine Mile River treatment plant and switch to the Halifax system once treatment capacity is reached.

Staff does not support any additional discharge to the Nine Mile River treatment facility. The 20,000 population limit referenced in the assimilative capacity study is somewhat speculative as the provincial guidelines for dilution under dry weather conditions would not be met with this population. In fact it is possible that retracting the existing service boundary for the community will have to be reconsidered.

The question is therefore whether capacity should be allocated at the Halifax treatment facility for this development and the implications this would have for development elsewhere and Municipal infrastructure investment.

Transportation Planning:

Transportation Study #1:

The most significant obstacle to developing this site pertains to maintaining an adequate level of traffic service to the surrounding communities. The communities of Timberlea, Lakeside and Beechville have two primary routes of travel to the metro area - the St. Margaret's Bay Road (Hwy. 3) and Hwy. 103. The first traffic study analysed impacts at the end of a ten year planning period when 20% of the area was expected to be developed and at the end of twenty-five years when the development was assumed fully built out⁶.

The study assumed that the Municipality would expand the Timberlea Village Parkway to four lanes and would construct a new collector road from the new interchange serving the regional solid waste facility and the entrance to the Lakeside Business Campus (this road is commonly referenced as "the East Collector" in traffic studies). Included among the study findings were the following:

⁵ The Halifax treatment plant will initially be constructed to allow for an additional 31,000 people and a future expansion is estimated to allow for a further 24,000 population increase.

⁶Dephi Systems Inc. *Governor's Run Traffic Impact Study*. May 2001.

- At the end of the 10 years, although Hwy. 103 had significant capacity remaining, the St. Margaret's Bay Road was reaching capacity at a number of locations, including the section between Timberlea Village Parkway and Lakeside Park Drive. More traffic would be diverted to Timberlea Village Parkway as a consequence.
- At the end of 25 years, Hwy. 103 would still have adequate capacity. Capacity constraints on the St. Margaret's Bay Road however will be unmanageable without considerable improvements to the transportation system, particularly to accommodate the peak hour traffic in the evening.
- Even with the twinning of the Timberlea Village Parkway and the construction of the East Collector, widening of the St. Margaret's Bay Road to four lanes east of Lakeside Park Drive and west of the Timberlea Village Parkway was recommended. The consultant still concluded that the St. Margaret's Bay Road would operate at capacity in the future.

Staff were not satisfied that the recommended improvements were adequate. The Municipal Planning Strategy for this community is explicit in not supporting widening of the St. Margaret's Bay Road, east of the Lakeside Business Park. At a public meeting, residents clearly expressed an opinion that traffic from this development should be diverted away from the St. Margaret's Bay Road. Staff also feel that enhanced transit services to the community would be difficult under this scenario where the primary bus route would continue to be the St. Margaret's Bay Road.

Transportation Study #2:

The Municipality and the Province subsequently sponsored a comprehensive transportation study for the Governor Lake North area that included the potential impact of development of other lands including expansion of the Bayers Lake Business Park and development of the Ragged Lake lands on the south side of Hwy. 103⁷. Schematics of the recommended improvements and associated implementation costs are shown on attachment XII.

Long term expenditures of over \$35 million were estimated for transportation improvements to this area. Among the components was a new underpass at the Bicentennial Hwy. which would provide a road connection from Regency Park Drive in Clayton Park to Bayers Lake Park and the Governor Lake North study area. Substantial improvements to the exit 2 interchange at Hwy. 103 and the St. Margaret's Bay Road were also identified.

The study consultants were then retained by the Municipality to prepare an estimate of the costs attributable to the Governor Lake North study area in accordance with the Municipality's capital cost contribution policy. The developer did not concur with the apportioning of costs and, in particular, arguing that the Bicentennial Hwy. underpass and Hwy. 103/Exit 2 interchange improvements were regional projects that served a large area and therefore should not be funded by developer contributions.

⁷SGE Acres. *Governor Lake Area Transportation Study*. Prepared for Nova Scotia Department of Transportation and Public Works and Halifax Regional Municipality.

Staff views both the Highway 103 interchange and Washmill Court underpass projects as critical elements of connecting new development to the regional roadway network. Although staff concedes that the value of the Highway 103 interchange project is more closely tied to the possible development of the Ragged Lake Business Park, the need for the Washmill Court underpass is attributable to the Governor Lake development and expansion of the Bayers Lake Business Park. In this regard, Real Property Asset Management has advised that a strategic plan for the Bayers Lake Business Park expansion will be prepared in conjunction with the regional planning program but, until this work is completed, it has not determined whether further expansions to the park will be proposed.

Transportation Study #3:

SGE Acres was then retained by the Municipality to address two questions. First, could the proposed transportation plan, without the Hwy.103/Exit 2 interchange improvements but with the Washmill Court underpass improvements, adequately service the Governor Lake North study area and future expansion of Bayers Lake Business Campus. Secondly, if so, how should the costs be apportioned. The assessment is reproduced as attachment XIII. A staff assessment of the division of costs between the Municipality and the Governor's Lake North master plan area under this scenario is presented as attachment XIV.

Staff is not prepared to recommend that negotiations be continued based on this revised transportation plan for the following reasons:

- The consultant concluded that "this "minimum improvement approach" was never requested in the original study and for this reason we feel that the improvements noted below tend to become more "band-aid" solutions and do not support good long term regional planning" attachment XIII, pg. 2);
- The Municipality would still assume an unacceptably high financial risk of at least \$6.9 million of the estimated \$12.8 million "minimal" transportation improvements and possibly a further \$28.9 million for the Hwy. 103/Exit 2 interchange improvements and widening of St. Margarets Bay Road from the Armdale Rotary to Lakeside (refer to attachment XIV); and
- Development of this area would consume capacity at the Halifax Sewage Treatment Plant which could otherwise be made available to other greenfield sites which can be developed at a substantially lower cost.

BUDGET IMPLICATIONS

None associated with this report.

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 the utilization of Capital and Operating reserves, as well as any relevant legislation.

ALTERNATIVES

1. This matter could be deferred to a future Committee of the Whole session to allow the affected property owners to make presentations and to allow decisions to be made by the new Council. If one property owner is invited to speak, other owners should also be allowed to speak since decisions regarding each site have impacts upon the others.

Staff does not object to this option, however a deferral has not been recommended since it prolongs the period of uncertainty for each project. In addition, staff does not wish to ask developers to undertake further studies and incur additional expenses while the possibility exists that Council may not authorize the continuation of the projects.

2. The Municipality could defer further consideration of all outstanding master plan studies until the growth management strategy of the regional plan is adopted by Council. The advantage of this approach is that it affords Council an opportunity to comprehensively evaluate all growth alternatives before deciding where to proceed.

Staff does not feel a deferral of the Morris-Russell Lake and Bedford West studies is warranted. There has been sufficient analyses to conclude that these lands offer the region's best potential for new community developments. Continuing negotiations on these two master plan areas allows additional serviced land to be brought to market in a timely manner, thereby furthering an objective of maintaining an affordable housing supply in the metro area.

3. Staff could be instructed to continue all four remaining master planning studies and, upon completion, submit the required policy and capital cost charges to Council regardless of the status of the regional planning program.

Staff does not support this option because it is clear that development of the Governor Lake North area will require expensive infrastructure upgrades. In addition, alternative areas are available in the region which can satisfy the Municipality's growth over the next twenty-five years at lower cost and less Municipal investment.

4. Staff and the Regional Planning Committee could be requested to consider the Governor Lake North master planning study within the context of the regional growth management strategy, while simultaneously allowing Bedford West to proceed. If Council's goal is to ensure that there is sufficient land available for the region's future growth, this option is not warranted for the reasons specified above.

This option also exposes the Municipality to additional uncertainty and risks in trying to design and fund adequate trunk sewers and manage allocation of the Halifax sewage treatment plant's finite capacity.

5. A decision regarding the Governor Lake North study area could be deferred until Real Property and Asset Management completes a study of the region's business parks. If the study concludes that a major expansion of Bayers Lake Business Park is justified and that the Washmill Court underpass is needed to support it, the business case for the Governor Lake North area might improve. The first draft of the business park study is expected to be received in the near future.

6. Staff could be directed to evaluate the impacts of the Governor Lake North master plan area under a lower population scenario. Staff does not support this option since significant time and effort has been spent already on several design options and numerous studies which to date have determined that this area has high infrastructure development costs. A pumping station and forcemain would have to be constructed to direct sewage to the Halifax treatment system and various improvements to the St. Margaret's Bay Road would still be needed. Further work on this area unreasonably perpetuates expectations that a satisfactory resolution can be reached.

ATTACHMENTS

- I Information Report from Director of Planning & Development Services, dated 29 June 2004, regarding master plan studies with attachments I to III.
- II CBCL Limited in Association with Marshall Macklin Monaghan. *Greenfield Areas Servicing Analysis: Executive Summary*. July 2004. Prepared for Halifax Regional Municipality.
- III Correspondence pertaining to Governor Lake North
 1. fax transmittal from Maurice Lloyd to Paul Morgan dated 3 August 2004 regarding the Governor Lake North Master Planning Study.
 2. fax transmittal from Maurice Lloyd to Paul Morgan dated 2 September 2004 regarding the Greenfield Study.
- IV Correspondence from Tom Swanson of Summit Rock Developments Ltd. to Paul Morgan, Planner, Halifax Regional Municipality, dated 20 September 2004, re: Greenfield Areas Servicing Study, Requested Corrections to Projected Infrastructure Charges in the Dartmouth East/Port Wallace Area
- V Potential Future Demands on the Halifax Sewage Treatment Plant
- VI Potential Future Demands on the Dartmouth Sewage Treatment Plant
- VII Opportunities and Risk Analysis
- VIII Evaluation of Regional Planning Principles by Master Plan Study Area
- IX Conceptual Land Use and Transportation Plan for the Morris/Russell Lake Master Plan Area.
- X Transportation Plan for Bedford West
- XI East Dartmouth/Port Wallace Study Area - Proposed Servicing Upgrades
- XII Proposed Transportation Improvements and Implementation Costs from the SGE Acres Study.

XIII Technical Memorandum from Robert McLure, SGE Acre Limited re: Governor's Lake
Alternative Assessment, dated April 27, 2004.

XIV Attachment XIV: Cost of Transportation Improvements Based on SGE Acres Assessment

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:

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Report Approved by:

Paul Dunphy, Director of Planning & Development Services

Proposed Public Participation Program

7. Staff to schedule a public information meeting.
8. All property owners within the Bedford West Secondary Plan Area to receive written notification of the meeting. Notification will also be placed in the newspaper and on the Community Development web site. Members of the North West Planning Advisory Committee and the three affected community councils would also receive written notification.
9. A written summary of the proposed plan amendments and infrastructure charges to be prepared by staff and distributed at the meeting. The meeting to be chaired by staff. A staff presentation to be made followed by an opportunity for public comment and questions.
10. Staff to be available to discuss individual concerns or questions following the meeting.
11. If deemed necessary, a follow up meeting to be scheduled.
12. Staff to report to Regional Council with proposed amendments to the Regional Subdivision By-law and the Bedford West Secondary Planning Strategy.
13. Council to schedule a public hearing to consider amendments to the Bedford West Secondary Planning Strategy and the Regional Subdivision By-law, including proposed capital cost contribution charges for transportation services requirements.