

P.O. Box 1749 Halifax, Nova Scotia B3J 3A5 Canada

Item No. 14.1.7

Halifax Regional Council

January 24, 2017

TO: Mayor Savage and Members of Halifax Regional Council

Original Signed by

SUBMITTED BY:

Jacques Dubé Chief Administrative Officer

Original Signed by

Jane Fraser, Acting Deputy Chief Administrative Officer

DATE: December 16, 2016

SUBJECT: Case 20594: Amendments to the MPS and LUB for Planning Districts 14

and 17 for lands at Fall River Opportunity Site B

ORIGIN

Application by David Harrison, on behalf of Glenn Clark, to develop four, 5-storey multiple unit dwellings at a density of 8 units per acre for lands at Fall River Opportunity Site B, off the Fall River Road.

LEGISLATIVE AUTHORITY

Refer to Attachment C.

RECOMMENDATION

It is recommended that Halifax Regional Council:

- initiate the process to consider amending the Municipal Planning Strategy and Land Use By-law for Planning Districts 14 and 17 to enable the development four, 5-storey multiple unit dwellings at a density of 8 units per acre for lands at Fall River Opportunity Site B, off the Fall River Road as more particularly described in this report; and
- 2. that prior to proceeding with further analysis of the proposal, direct that staff engage the Fall River community on the topic of seniors housing and return to Regional Council with the results of that engagement for further direction concerning the amendment process.

BACKGROUND

An application has been submitted by David Harrison on behalf of Glenn Clark to develop an enriched living care facility consisting of a total of 400 units in four multiple unit buildings that are each five storeys in height, on Opportunity Site B, off the Fall River Road. Site B is a Residential Opportunity Site defined under the River-lakes Secondary Planning Strategy (SPS) where policies enable residential development up to maximum of 4 units per acre with a maximum of three storeys in height. The proposed development does not meet the policy criteria under the existing SPS policies, and, therefore, the applicant is seeking amendments to the Municipal Planning Strategy (MPS) for Planning Districts 14 and 17 to enable this project.

| Location | PIDs 00506501, 40707432, and 40707440 situated at 1109, 1075 and 1085 Fall River Road, respectively | | | | | |
|------------------------------------|---|-----------------|----------------------|--|--|--|
| Regional Plan Designation | Rural Commuter | | | | | |
| Community Plan Designation (Map 1) | Residential | | | | | |
| Zoning (Map 2) | R-1B (Suburban Residential) Zone PID 00506501 is identified as Residential Opportunity Site B under the River-lakes Secondary Plan | | | | | |
| PID | Site Size | Frontage | Current Land Use | | | |
| 00506501 | 19 ha (47 ac) | 172 m (564 ft.) | Single Unit Dwelling | | | |
| 40707432 | 0.46 ha (1.14 ac) | 38 m (125 ft.) | Vacant | | | |
| 40707440 | 0.47 ha (1.16 ac) | 53 m (174 ft.) | Single Unit Dwelling | | | |
| Total | 19.93 ha (49.17 ac) | 263 m (863 ft.) | | | | |
| Surrounding Use(s) | On the south side of the property there is a low density residential subdivision known as Fall River Village. To the north, the property is bounded by Fall River Road and on the opposite side of the road there are also low density residential dwellings. To the west, the property is bounded by low density residential uses and the lands to the east are forested | | | | | |

Proposal Details

The applicant wishes to develop an enriched living care facility for seniors where the buildings are designed in accordance with CMHC Flex Housing Guidelines so it can be adapted to meet the needs of senior citizens as they age. The proposal includes a contract with Northwood to provide a range of nursing, personal care and custodial services to the tenants of the buildings. Tenants can select from a menu of services such as meal assistance, foot care, general health counselling and support, grocery and housekeeping services to be provided by Northwood as needed.

The proposed development consists of four multiple unit buildings each of which are 5-storeys in height with 100 units per building for a total of 400 units. As shown on Map 3 and Attachment A, the buildings are proposed to be accessed off the Fall River Road and will occupy approximately 26% of the site. The density of the proposed development is 8 units per acre.

This application proposes to amend Policy RL-13 under the River-lakes Secondary Plan and the Land Use By-law to:

- a) Increase the permitted density from 4 units per acre to 8;
- b) Increase the maximum number of storeys per building from 3 storeys to 5:
- c) Increase the maximum number of units per multiple unit building from 40 units to 100; and
- d) Include the two smaller sites identified as PID 40707432 and 40707440 as a part of Residential Opportunity Site B where this form of development may be considered through the provisions of a development agreement.

MPS and LUB Context

The subject property is situated within the River-lakes Secondary Plan Area (SPS) under the Municipal Planning Strategy (MPS) for Planning Districts 14 and 17. It is designated Residential which is intended to support and protect the area's predominantly low density residential environment along with associated community uses such as churches, schools, community halls, and police and fire stations.

While the primary intent of the Residential Designation is to support and protect the low density residential environment, the SPS recognizes the need to allow for alternative forms of housing to support people of all ages. Alternative housing forms, including low-rise multiple unit dwellings and townhouses, may be considered through the provisions of a development agreement on a few opportunity sites that have been designated for this form of development within the River-lakes Secondary Plan Area. The larger parcel of the three subject properties has been identified as Residential Opportunity Site B where a development agreement may be considered for alternative housing development via Policy RL-13.

Policy RL-13 allows the consideration of a residential development up to 4 units per acre on Residential Opportunity Site B. This 47 acre property can ultimately support a maximum of 188 units at 4 units per acre. In order to prevent the concentration of multiple unit buildings at this location, the maximum number of units that may be considered in multiple unit buildings is 120. The remainder of the units would have to be in the form of townhouses, single units or two unit dwellings. To maintain rural character and compatibility with the surrounding low density development, the number of units per building is limited to 40 units per building in a maximum of three low-rise buildings, not exceeding 3-storeys in height as required under Policy RL-13.

DISCUSSION

The MPS is a strategic policy document that sets out the goals, objectives and direction for long-term growth and development in the Fall River area. While the MPS provides broad direction, Regional Council may consider MPS amendment requests to enable proposed development that is inconsistent with its policies. Amendments to an MPS are significant undertakings and Council is under no obligation to consider such requests. Amendments should only be considered within the broader planning context and when there is reason to believe that there has been a change to the circumstances since the MPS was adopted, or last reviewed.

Applicant Rationale

The applicant has provided the following rationale in support of the proposed amendment(s):

There is an urgent need for seniors housing in Fall River, as well as more affordable accommodations (Pages 101 and 111 River Lakes Secondary Planning Strategy). The prescriptive height, density and type of housing contained in RL-13 (a) necessitate that a road be developed through Site B, which is contrary to the wishes of the community. Furthermore, the open space target is hard to meet, and environmental protection is aggravated with the prescribed development form.

Innovative solutions are required to support aging in place, align age friendly housing with graduated levels of care, meet all amenity needs, and meet or exceed environmental objectives. Given the requirement for central water services as a determinant of density at Opportunity Site A [another Residential Opportunity Site situated behind Sobeys in the Village Centre], and designation of Fall River as a Rural District Growth Centre which specifies low to medium density, then the request for 400 multiple unit dwelling units:

 Allows for a more compact form of development, having less impact than the prescriptive RL-13 (a) in terms of storm-water runoff, phosphorus loading, noise pollution and heat island effect

- Creates the capacity for the provision of care services by Northwoodcare Inc.
- Creates servicing and operating cost efficiencies
- Results in more affordable rents than would otherwise be the case
- Enables the construction of underground parking
- Enables the development of trails and cultural/heritage amenities
- Exceeds the open space target.

Staff Analysis

Staff has reviewed the submitted rationale in the context of site circumstances and surrounding land uses and provide their initial analysis in the following paragraphs for Council's consideration. As noted earlier, staff advise that amendments to an MPS should only be considered within the broader planning context and when there is reason to believe that there has been a change to the circumstances since the MPS was adopted, or last reviewed. In assessing the proposal against the quantitative aspects of existing MPS policy, the development of four, 5-storey multiple unit buildings, at double the density that the MPS contemplates, does not conform to the vision of the River-lakes Secondary Plan to maintain rural character. This, combined with a 66% increase in building height exceeds what was contemplated for this site and would allow the concentration of multiple unit buildings that the Plan seeks to avoid.

The quantitative aspects of the MPS aside, alternative forms of housing that would facilitate the aging in place of residents in rural communities such as this are identified within the Municipal Planning Strategy as being desirable. While the issue of seniors housing, and other assisted living type facilities is planned to be investigated more broadly by staff as part of a separate planning exercise, this work has not yet been completed. It is not known if eventual policies or regulations would identify a need for these types of facilities within all HRM communities, and result in policy which provides more flexibility within built form requirements. While the River-lakes Secondary Plan is one of the more current plans being adopted by Regional Council in the fall of 2012, engaging the community on the topic of seniors housing in the context of the details of this application may be warranted to assess the desire of the community to retain its rural character against the need for new forms of housing to accommodate an aging demographic.

Housing Forms and Rural Character

The vision of the 2012 SPS is to retain the rural village atmosphere and rural character of the community. The SPS currently supports the development of alternative housing forms to accommodate the needs of seniors, young adults and other sectors of the population if it can be accommodated without undermining the values for preserving rural character. The SPS acknowledges the need to allow higher density forms of development to accommodate the needs of seniors but specifies that such developments must consist of low-rise and smaller scale buildings to ensure compatibility with the surrounding low density development forms. It also places a cap on density to ensure that development does not exceed the limited environmental capacity of the lakes or exacerbate existing traffic conditions.

Density and Compatibility

In light of the need to support alternative forms of housing, the SPS was designed to allow up to a maximum of 4 units per acre to be considered on this site provided studies could be submitted to verify that the proposed development could take place without any increase in phosphorus emissions, and without any adverse impact on traffic conditions on Fall River Road, Highway 2 or the Highway 102/Highway 118 interchanges. Any proposed development also has to be compatible with the surrounding low density development in terms of height and mass and Policy RL-13 was designed to prescribe those limitations so that the development of this site would fit in with the surrounding context. Limitations were also established on the number of multiple unit dwellings that could be developed on this site to facilitate a mix of housing types and avoid concentration of multiple unit dwellings in the middle of a rural development area away from the River-lakes Village Centre. Preference was given to allow the development of higher density forms (8 units per acre) in the Village Centre, adjacent to the Sobeys Shopping Centre in proximity to services should municipal water services become available.

Traffic

A Traffic Impact Analysis prepared by WSP indicates that the proposed development will have no significant impact on Fall River Road with the generation of 80 and 100 two way trips during peak AM and PM hours, respectively. The study, however, provides no assessment of the impacts of the development further downstream on Highway 2 and at the Highway 102/Highway 118 interchanges which is an item required by policy for developments on the Residential Opportunity Sites under the River-lakes SPS. Should Council decide to initiate the full MPS amendment process following the initial community engagement exercise, the applicant would be required to provide more detailed analysis to examine both the regional and local impacts of the proposed development to meet the requirements of current MPS policy.

Environmental Impact

It is acknowledged that the proposed development will result in a smaller development foot print (26%) than presently allowed (60%) which, potentially, could reduce the environmental impact on the surrounding area. However, a study would be required to determine if the proposed development could take place without increasing the amount of phosphorus generation from the site. The applicant would be required to provide this information should Council decide to initiate the MPS amendment process.

Water Service Extension

The Fall River – Shubenacadie Lakes Watershed Study prepared by Jacques Whitford Limited on behalf of HRM in 2010 also indicates that there are groundwater shortages in the Fall River area for which either a central water supply or lower densities of development are recommended.

The subject property is located outside the Water Service Boundary and can only be serviced with a private well. At its meeting of November 8, 2016, Regional Council passed a motion to direct staff to begin the process to extend municipal water services from Windsor Junction, along the Fall River Road, to the Fall River Village Centre. This includes the initiation of a preliminary design study by Halifax Water and the initiation of an amendment to the Subdivision By-law to include this area within a Water Service Area together with the initiation of a Local Improvement Charge By-law. Site B is included within the proposed area for a municipal water service extension under this process.

Conclusion

Staff have reviewed the proposal and advise that amendments to the River-lakes SPS and LUB to allow the development of four, 5-storey multiple unit dwellings at a density of 8 units per acre at this site are contrary to the intent of the existing plan. With this noted, given the increasing need for seniors housing within HRM communities to allow for residents to age in place, consultation with the community on this topic is advisable as a first step to ensure the existing Municipal Planning Strategy direction reflects the desired vision of the community. As such, staff are recommending that community engagement be performed as a first step prior to returning to Regional Council with the engagement results and to seek further direction on the consideration of the Municipal Planning Strategy amendment for the subject site.

COMMUNITY ENGAGEMENT

Should Regional Council choose to initiate the MPS and LUB amendment process, the HRM Charter requires that Regional Council approve a public participation program. In February of 1997, Regional Council approved a public participation resolution which outlines the process to be undertaken for proposed MPS and LUB amendments which are considered to be local in nature. This requires a public meeting to be held, at a minimum, and any other measures deemed necessary to obtain public opinion.

FINANCIAL IMPLICATIONS

The HRM costs associated with processing this planning application can be accommodated within the approved 2016/2017 fiscal year operating budget for C310 Urban and Rural Planning Applications

RISK CONSIDERATION

There are no significant risks associated with the recommendations contained within this report. This application involves proposed amendments to a Municipal Planning Strategy and Land Use By-law. Such amendments are at the discretion of Regional Council and are not subject to appeal to the Nova Scotia Utility and Review Board.

ENVIRONMENTAL IMPLICATIONS

There are potential environmental implications should Council initiate the requested amendment. The River-lakes Secondary Plan requires the submission of a Phosphorus Net Loading Assessment Study together with a conceptual level Erosion and Sedimentation Control Plan and a conceptual level Stormwater Management Plan to determine if the proposed development can take place on this site without emitting any greater phosphorus levels over present emissions. Greater phosphorus emissions could adversely affect the receiving waters of Lake Thomas and lakes upstream in the Shubenacadie system. Insufficient information however, is available to determine the degree of impact at this point in time.

ALTERNATIVES

- 1. Regional Council may choose to initiate an amendment to the MPS and LUB for Planning Districts 14 and 17 to enable the development of four, 5-storey multiple unit dwellings at a density of 8 units per acre on Residential Opportunity Site B and the two additional properties as illustrated on Maps 1 and 2, subject to addressing the phosphorous generation and traffic matters referenced within the December 16th staff report. In doing so, staff is directed to follow the public participation program for municipal planning strategy amendments as approved by Regional Council on February 27, 1997.
- Regional Council may choose to refuse the request to initiate amendments to the Municipal Planning Strategy and Land Use By-law for Planning Districts 14 and 17 which would enable the development of four, 5-storey multiple unit dwellings at a density of 8 units per acre for lands at Fall River Opportunity Site B and the two additional properties as illustrated on Maps 1 and 2, off the Fall River Road.
- Regional Council may choose to initiate the consideration of potential MPS and LUB amendments that would differ from those outlined in this report. This may require a supplementary report from staff.

ATTACHMENTS

Map 1: Generalized Future Land Use Map

Map 2: Zoning Map

Map 3: Proposed Site Plan

Attachment A: Application Letter Attachment B: Relevant MPS Policy

Attachment C: Relevant Legislative Authority

A copy of this report can be obtained online at http://www.halifax.ca/council/agendasc/cagenda.php then choose the appropriate meeting date, or by contacting the Office of the Municipal Clerk at 902.490.4210, or Fax 902.490.4208.

Report Prepared by:

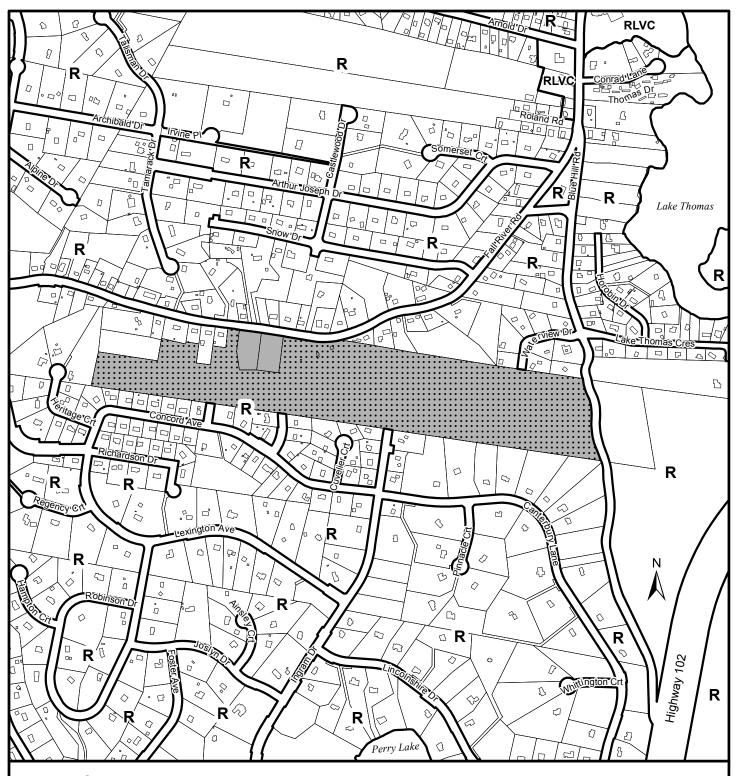
Maureen Ryan, Planner III, 902.490.4799

Report Approved by:

Kelly Denty, Manager of Corrent Planning, 902.490.4800

Report Approved by:

Bob Bjerke, Chief Planner and Director, Planning and Development, 902.490.1627



Map 1 - Generalized Future Land Use

Fall River Road Fall River



Subject Properties



Designation

Residential

RLVC River-lakes Village Centre

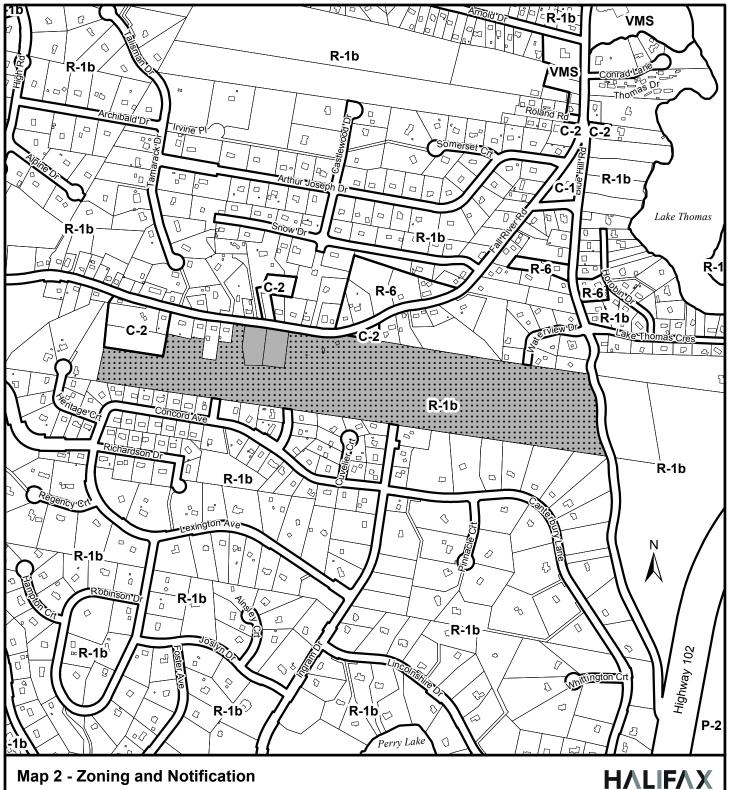




This map is an unofficial reproduction of a portion of the Generalized Future Land Use Map for the plan area indicated.

The accuracy of any representation on this plan is not guaranteed.

Planning Districts 14 & 17 (Shubenacadie Lakes) Plan Area



Fall River Road Fall River

Subject Properties

Site B

Planning Districts 14 & 17 (Shubenacadie Lakes) Land Use By-Law Area

Zone

R-1b Suburban Residential R-6 Rural Residential C-1 **Local Business** C-2 **Community Commercial** P-2 Community Facility **VMS** Village Main Street

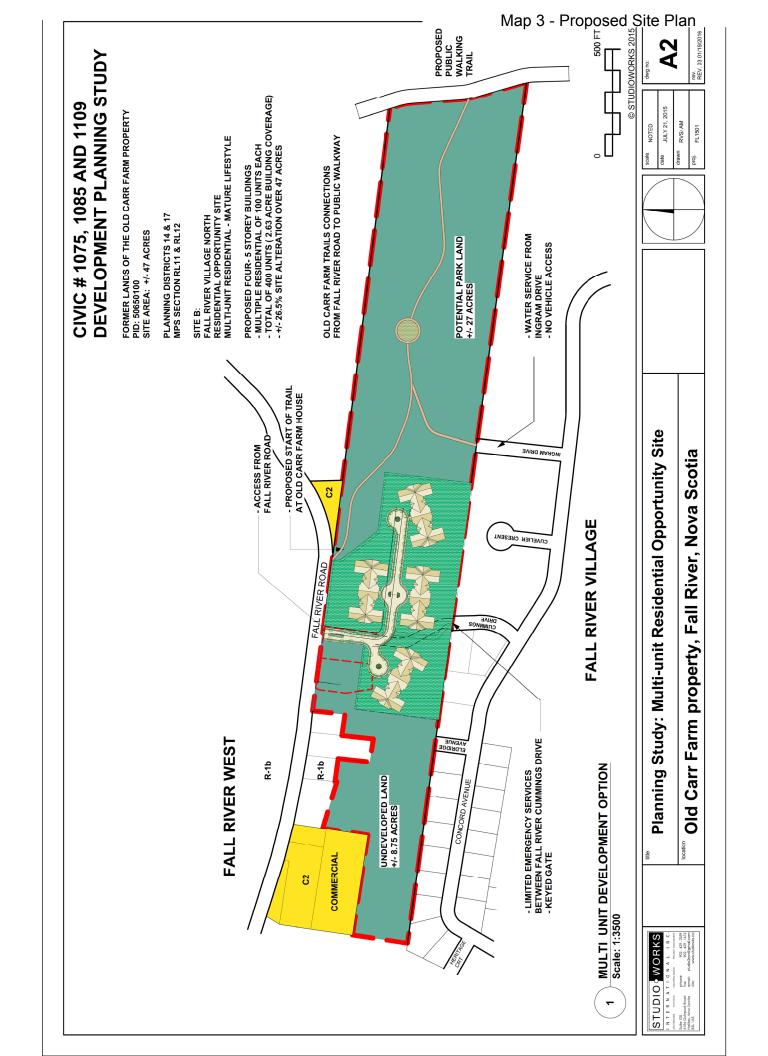
225

150

300 m

This map is an unofficial reproduction of a portion of the Zoning Map for the plan $\,$ area indicated.

The accuracy of any representation on this plan is not guaranteed.



Attachment A - Letter and Supporting Documentation from Applicant



17 Foxgrove Lane, Dartmouth NS B2Y4N8 | web: www.davidharrison.ca | email: dh@davidharrison.ca | phone: 902.404.2844

Memo to: Thea Langille and Tara Couvrette, Halifax Regional Municipality Planning

Department

From: David Harrison, MCIP

Re: Information Request #1, Plan Amendment, Case No. 20594 (Previously

Case No. 20297)

Date: *May 31, 2016*

cc. Northwest Community Council, Janet Simm, Northwood

As per the Planning Department's request made May 11, 2016 and May 19, 2016 for supplementary information to support the filed Plan Amendment for the Carr Farm property, please find the following:

1. Request for increasing the density

There is an urgent need for seniors housing in Fall River, as well as more affordable accommodations (Pages 101 and 111, River Lakes Secondary Planning Strategy). The prescriptive height, density and type of housing contained in RL-13 (a) necessitate that a road be developed through Site B, which is contrary to the wishes of the community. Furthermore, the open space target is hard to meet, and environmental protection is aggravated with the prescribed development form.

Innovative solutions are required to support aging in place, align age friendly housing with graduated levels of care, meet all amenity needs, and meet or exceed environmental objectives. Given the requirement for central water services as a determinant of density at Opportunity Site A, and designation of Fall River as a Rural District Growth Centre which specifies low to medium density, then the request for 400 multiple dwelling units:

- Allows for a more compact form of development, having less impact than the
 prescriptive RL-13 (a) policy in terms of storm-water runoff, phosphorous loading,
 noise pollution and heat island effect
- Creates the capacity for the provision of care services by Northwoodcare Inc.
- Eliminates the need for a road through the site
- Creates servicing and operating cost efficiencies
- Results in more affordable rents than would otherwise be the case
- Enables the construction of underground parking

- Enables the development of trails and cultural / heritage amenities
- Exceeds the open space target.

2. Statement concerning the extension of central water services to the site

Information was presented verbally during our meeting of 11/05/16, by Councilor Barry Dalrymple. Should more information be required, please contact him.

3. Phosphorous loading statement

See attached.

4. Stormwater management statement

See attached.

5. **Traffic impact statement**

See attached.



May 27, 2016

Mr. Glenn Clark 45 Horobin Drive Fall River, NS B3T 1E6

Subject: Phosphorus Impact Statement

Carr Farm Property, Fall River Road, Fall River, NS

HRM Case No. 20594

Plan Amendment Application Submitted by David W. Harrison Ltd.

Our ref.: 21693

Dear Mr. Clark,

We understand that you are currently in the process of preliminary planning in support of obtaining a plan amendment with the Halifax Regional Municipality (HRM) for the above-noted property, which is identified as one of the opportunity sites situated in the Secondary Planning Strategy Area.

The River-lakes Secondary Planning Strategy has established a net no increase in phosphorous as the performance standard for all large scale developments carried out through a Development Agreement (RL-22). RL-22 was recently amended to enable the use of stormwater management systems for the reduction of phosphorus.

We understand that the proposed development concept will be an arrangement of multi-unit residential buildings that will be serviced by central water (Halifax Water) and with private sewage and stormwater systems. Non-disturbance and buffer zones (proposed parkland) of greater than 150m (500ft) will be incorporated into the design at the down-gradient side to mitigate against the off-site transport of phosphorus. Advanced stormwater and sewage treatment technologies will be incorporated into the design to further satisfy the net no phosphorus increase from the site.

Once the density has been confirmed, then a study will be prepared, as per the Secondary Planning Strategy requirements, to identify the potential phosphorus loading and confirm that treatment measures are sufficient prior to detailed design.

We trust this meets your present requirements.

Sincerely Yours, **Englobe Corp.**

ORIGINAL SIGNED

Aven Cole, M.Sc.E., P.Eng.
Project Manager, Environmental Engineering



May 30, 2016

GFC Management Limited

45 Horobin Drive Fall River, Nova Scotia B2T 1E6

Attention: Glenn Clark

RE: Stormwater Impact Statement – Old Carr Farm Property, Fall River, N.S.

Introduction

At the request of Glenn Clark of GFC Management we have reviewed the 400 unit proposed residential development in Fall River, Nova Scotia as it relates to stormwater impacts for the area. Our review is based on a plan prepared by Studioworks dated July 21, 2015 (enclosed).

Site Description

The site to be developed includes three separate land parcels totaling 47 acres. The property is generally covered in mature trees. The soil in this area is a shaly loam glacial till known as "Bridgewater till" and contains fines and is erodible. Bedrock can be close to the surface in this area and is classified as goldenville quartzite or Halifax slate formation.

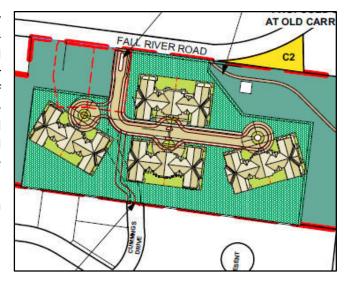
The site has no mapped watercourses or wetlands shown on provincial mapping. The natural drainage from the site drains from the highpoint on PID 40707440 to the east into Thomas Lake for approximately two thirds of the site and from the same highpoint to the west to Kinsac Lake for about one third of the site.

The site is surrounded by existing rural roads and houses, with Fall River road to the north of the site and Concord Avenue to the south of the site. Stormwater drainage on the existing roads is handled with roadside ditches, culverts, and in places catchbasins and storm sewers. See attached overall site map.

Proposed Site Modification

The current proposal includes a new road/driveway from Fall River Road and four 5-storey buildings for a total of 400 residential units. The area of disturbance is 12.5 acres or 26% of the total site. Of the 12.5 acres of disturbance, approximately 5.0 acres will be hard surfaces and approximately 7.5 acres will be landscaped surfaces. This means that at full build out, approximately 10.6% of the 47-acre parcel will be hard impermeable surface.

The developed site will be serviced with municipal water, onsite sewage treatment and stormwater drainage infrastructure as required. See attached Studioworks site map.





Stormwater Impacts

Water Quantity

Development of a forested site can increase the stormwater peak runoff rates leading to various downstream problems including erosion, flooding, and sediment deposition. This is mainly caused by replacing the forested surface that absorbs large quantities of rainwater with hard surfaces that have very little capacity to absorb and retain stormwater. The hard surfaces also allow the rainwater to runoff much faster. We have estimated a 1 in 5 year pre development peak flow of 307 L/s for the 12.5 acre developed site and the 1 in 5 year post development flow has been estimated to be 643 L/s (a 110% increase in peak flow). See hydrographs below for pre and post development flows.

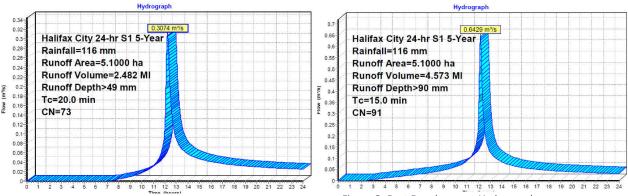


Figure 1: Pre Development Hydrograph

Figure 2: Post Development Hydrograph

Water Quality

When rainwater falls onto a forested area the water soaks through the forest root matt as it flows towards the downstream receiving bodies of water. The process of rainwater falling onto and travelling through a forested area keeps the water very clean, and runoff from forested areas is of very high quality.

When forested land is converted to urban surfaces such as buildings, roads, parking areas and landscaped areas, the runoff from these surfaces comes into contact with many pollutants. These pollutants are washed off the urban surfaces and become suspended or dissolved in the runoff water and will be transported to the receiving stream, lake, river, or ocean.

Because such a high percentage of this land parcel will remain as forested, the overall quality of storm runoff from the site will be very good with limited pollutants. The runoff from the 12.5 acre developed portion will contain normal urban stormwater runoff pollutants. Also, during construction, large areas of soil will be exposed, which has the potential to allow large quantities of sediment to be washed from the construction area and transported downstream.



Figure 3: Typical Storm Water Treatment Unit



Potential Mitigating Measures

To reduce the negative impacts as described above, the following best management practices (BMP) could be implemented on this project:

- Design and implement a robust sedimentation and erosion control plan.
- Reduce hard surfaces, use more landscaping features;
- Construct stormwater detention ponds to balance peak flows, such that the post development peak flow is matched with the pre-development flow;
- Incorporate new trees into landscaped areas; and
- Install stormwater treatment devices at storm sewer outfalls to remove most of the suspended solids (SS) out of the stormwater before it is discharged into the environment. Note that many pollutants in urban stormwater are attached to the suspended solids and if a high percent of the solids are removed then this will also remove a high percentage of the pollutants.

Conclusions

This proposed development can be constructed and operated with minimal to no impact on the receiving watercourses provided that the total percentage of the disturbed site remains low and that the necessary BMP's similar to those outlined above are properly designed and constructed as part of this project.

Thank you,

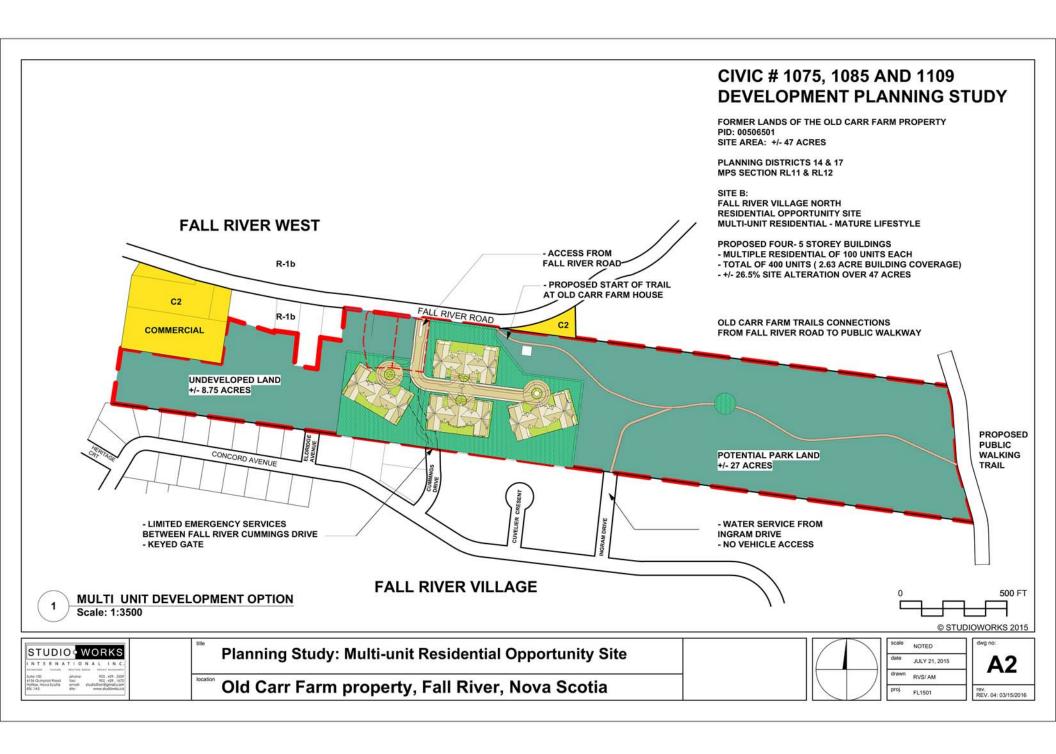
DesignPoint Engineering & Surveying Ltd.

ORIGINAL SIGNED

Glenn Woodford, P.Eng. Senior Engineer & Principal

attachments







Ref. Number 161-07362

May 20, 2016

Mr. Ron Smith, MRAIC Studio Works International Inc. 6156 Quinpool Road, Suite 100 HALIFAX NS B3L 1A3

Sent via Email to

Traffic Impact Analysis for a Multi-Unit Mature Lifestyle Residential Development, Old RE: Carr Farm Property, Fall River Road, Halifax County

Dear Mr. Smith:

Studio Works International Inc. is preparing plans for a Multi-Unit Mature Lifestyle Residential Development on Fall River Road. This is the Traffic Impact Analysis that you require to include with applications to Halifax Regional Municipality (HRM). The project is expected to start during 2017 with anticipated full development by 2021.

Fall River Road is a two-lane suburban street with curb, gutter, and sidewalk on the north side and gravel shoulder with open ditch on the south side (Photos 1 and 2). The street has a posted speed limit of 60 km/h, is approximately 3.5 kilometers long, and connects Highway 2 to the east with Windsor Junction Road to the west.

Description of the Development and Site Access - The proposed development will include 400 mature lifestyle residential attached units included in four buildings with 100 units in each building (Figure 1). The development, which is designed for seniors aging in place, is not a conventional apartment development or a long term care seniors horsing project.

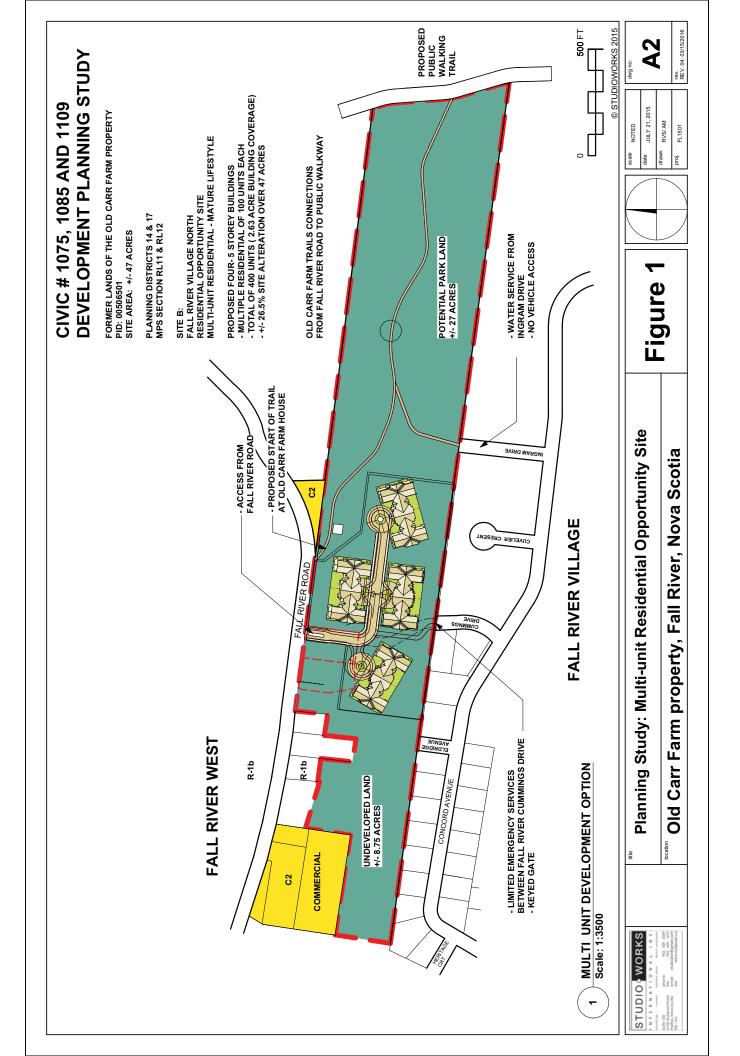
The development site on the south side of Fall River Road includes civic numbers 1075, 1085, and 1109 and is opposite an existing Kwik-Way convenience store approximately two kilometers west of Highway 2. The site will be serviced by a single driveway to Fall River Road (Photos 1 and 2) with an emergency services driveway connection to Concord Avenue by way of Cummings Drive (Figure 1).



Photo 1 - Looking east on Fall River Road towards Photo 2 - Looking west on Fall River Road towards Highway 2 from the west edge of the Kwik-Way Windsor Junction Road from the west edge of the driveway approximately opposite the proposed site Kwik-Way driveway approximately opposite the driveway.



proposed site driveway.



Stopping Sight Distance (SSD) measurements, obtained for both approaches to the proposed driveway location approximately opposite the western edge of the existing Kwik-Way driveway, are adequate for an assumed approach speed of up tp 70 km/h in the posted 60 km/h speed zone. The following SSDs were measured using a driver eye height of 1.05 meters and an object height of 150 mm:

- The SSD on the westbound approach (Photo 1) is 108 meters which is greater than the 104 meters required for a 70 km/h approach speed on a +3% (uphill) grade.
- The SSD on the eastbound approach (Photo 2) is in excess of 160 meters which is greater than the 113 meters required for a 70 km/h approach speed on a -2% (downhill) grade.

Traffic Volumes - AM and PM peak period directional counts were obtained on Fall River Road near the proposed site driveway on Wednesday, May 18, 2016 (PM peak period) and Thursday, May 19 (AM peak period). The count data are tabulated in Table A-1, Appendix A, with AM and PM peak hours indicated by shaded areas. The 2016 AM and PM peak hourly volumes are illustrated diagrammatically in Figure A-1, Boxes A and B.

Projected 2021 AM and PM peak hourly background volumes, estimated using a 1.0% annual volume growth rate considered appropriate for this area, are illustrated diagrammatically in Figure A-1, Boxes C and D.

Trip Generation estimates have been prepared using published trip generation rates for Senior Adult Housing (Detached) from *Trip Generation*, 9th Edition (Institute of Transportation Engineers, 2012). It is estimated (Table 1) that the fully developed site will generate a total of 80 two-way vehicle trips (27 entering and 53 exiting) during the AM peak hour and 100 two-way vehicle trips (54 entering and 46 exiting) during the PM peak hour.

| Table 1 - Trip Generation Estimates for Mature Lifestyle Development | | | | | | | | | |
|--|--------------|------------------------------------|-------|-------|------------------------------|----|---------|----|-----|
| Land Use ¹ U | Unite 2 | Trip Generation Rates ³ | | | Trips Generated ³ | | | | |
| | | AM Peak PM Peak | | Peak | AM Peak | | PM Peak | | |
| | | In | Out | In | Out | In | Out | ln | Out |
| Senior Adult Housing - Attached (Land Use 252) | 400 Units | 0.068 | 0.132 | 0.135 | 0.115 | 27 | 53 | 54 | 46 |

NOTES: 1. Rates are for indicated Land Use Codes, *Trip Generation*, 9th Edition, Institute of Transportation Engineers, 2012.

2. Units are 'number of senior lifestyle apartments'...

B. Rates are 'vehicles per hour per unit'; trips generated are 'vehicles per hour for peak hours'.

Trip Distribution and Assignment - Based on development patterns and knowledge of the area, site generated trips have been distributed with 60% from / to the east and 40% from / to the west. Assigned site generated trips, which are shown diagrammatically on Figure A-2, Boxes A and B, have been added to the projected 2021 background volumes (Figure A-1, Boxes C and D) to provide estimated 2021 AM and PM peak hourly volumes that include site generated trips which are shown in Figure A-2, Boxes C and D.

Left Turn Lane Warrant Analysis - Left turn movements on a two lane street may cause both operational and safety problems. Operational problems result as a vehicle stopped waiting for an opportunity to turn across 'heavy' opposing traffic causes a queue of stopped vehicles to form. Safety problems result from rear end collisions when a stopped left turning vehicle is struck by an advancing vehicle, or from head-on or right angle collisions when a left turning vehicle is struck by an opposing vehicle.

WSP Canada Inc. May 20, 2016

The Geometric Design Standards for Ontario Highways Manual contains nomographs for left turn lane analysis for two lane streets. The analysis method, which is normally used by WSP to evaluate need for left turn lanes, uses a series of nomographs that consider speed, advancing volumes, left turns as a percentage of advancing volumes, and opposing volumes. A point, based on 'opposing' and 'advancing' volumes, plotted to the right of the 'warrant line' of the appropriate '% left turns' and 'approach speed' nomograph, indicates that a left turn lane is warranted for the conditions used in the analysis. Similarly, a point that is plotted to the left of the warrant line indicates that a left turn lane is not warranted.

Evaluation of left turn warrants at the site entrance driveway has been completed using the estimated 2021 AM and PM peak hourly volumes that include site generated trips (Figures A-2, Boxes C and D). Since the posted speed is 60 km/h analyses have been completed using the 70 km/h nomographs which is assumed to be appropriate for normal operating speeds in the area. Since left turning vehicles represent 8.6% of the advancing AM peak hourly volume and 8.2% of the advancing PM peak hourly volume, analyses have been completed for both 5% and 10% left turns. The analyses results which are included on Figure A-3 indicate that a left turn lane on Fall River Road is not warranted for the estimated 2021 AM peak hourly volumes. While the PM analysis shows the 'point' to fall on the warrant line of the 10% nomograph, a left turn lane will not be warranted for the 8.2% left turns during the PM peak hour.

Summary -

- A Multi-Unit Mature Lifestyle Residential Development with 400 units is proposed on the south side of Fall River Road approximately two kilometers west of Highway 2 opposite the existing Kwik-Way convenience market.
- 2. The site will be serviced by a single driveway to Fall River Road with an emergency services driveway connection to Concord Avenue by way of Cummings Drive.
- 3. Stopping Sight Distance (SSD) measurements, obtained for both approaches to the proposed driveway location approximately opposite the western edge of the existing Kwik-Way driveway, are adequate for an assumed approach speed of up tp 70 km/h in the posted 60 km/h speed zone.
- 4. A traffic count obtained on Wednesday and Thursday (May 18 and 19, 2016) indicated 495 two-way vehicles during the AM peak hour and 605 two-way vehicles during the PM peak hour. An annual traffic volume growth rate of 1.0% was used to project 2021 background volumes without added site trips.
- 5. Trip generation estimates prepared using published trip generation rates for Senior Adult Housing (Detached) from *Trip Generation*, 9th *Edition* (Institute of Transportation Engineers, 2012) indicated that the fully developed site will generate a total of 80 two-way vehicle trips (27 entering and 53 exiting) during the AM peak hour and 100 two-way vehicle trips (54 entering and 46 exiting) during the PM peak hour.
- 6. Based on development patterns and knowledge of the area, site generated trips have been distributed with 60% from / to the east and 40% from / to the west.
- Evaluation of left turn warrants at the site entrance driveway indicate that a westbound left turn lane will not be warranted on Fall River Road for projected 2021 volumes that include site generated trips.

WSP Canada Inc. May 20, 2016

Conclusion -

8. Site generated trips from the proposed mature lifestyle development are not expected to have a significant impact on the level of performance of Fall River Road.

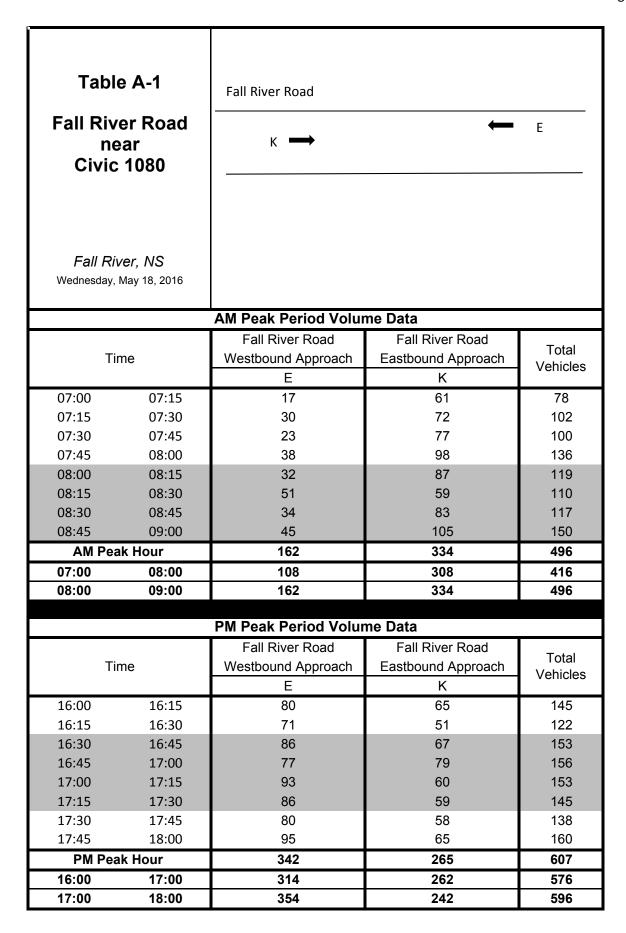
If you have any questions, or require additional information, please contact me by telephone to

Sincerely:

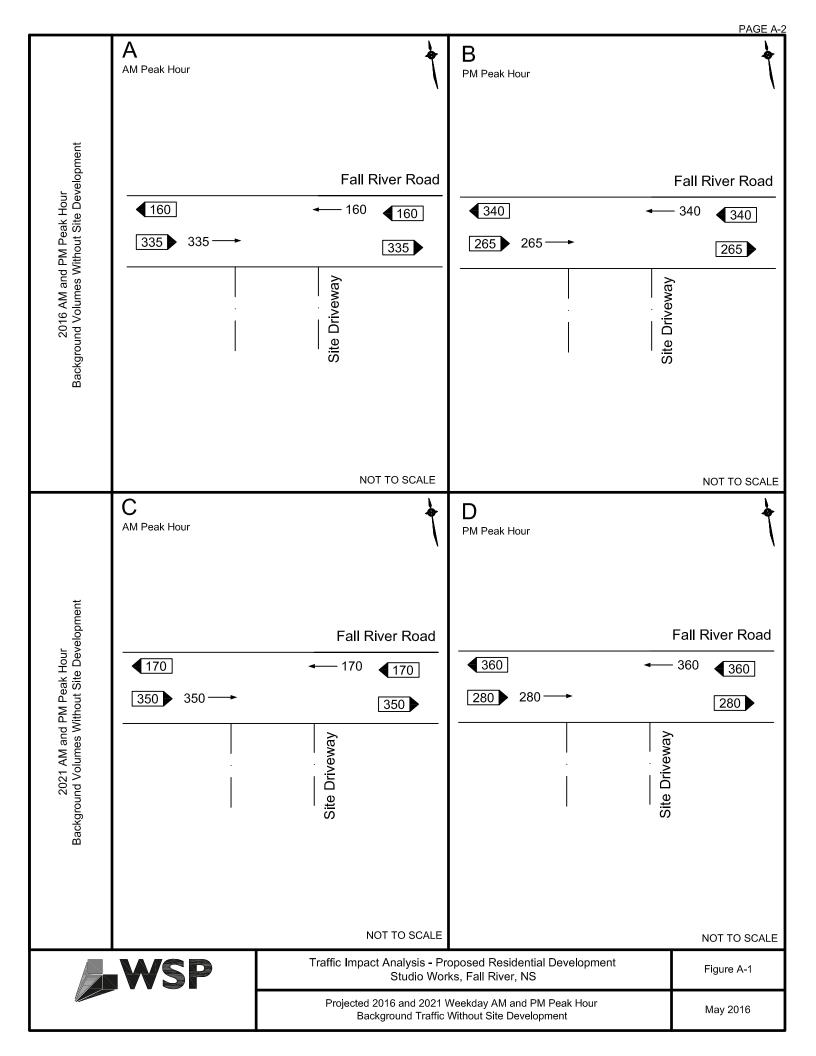
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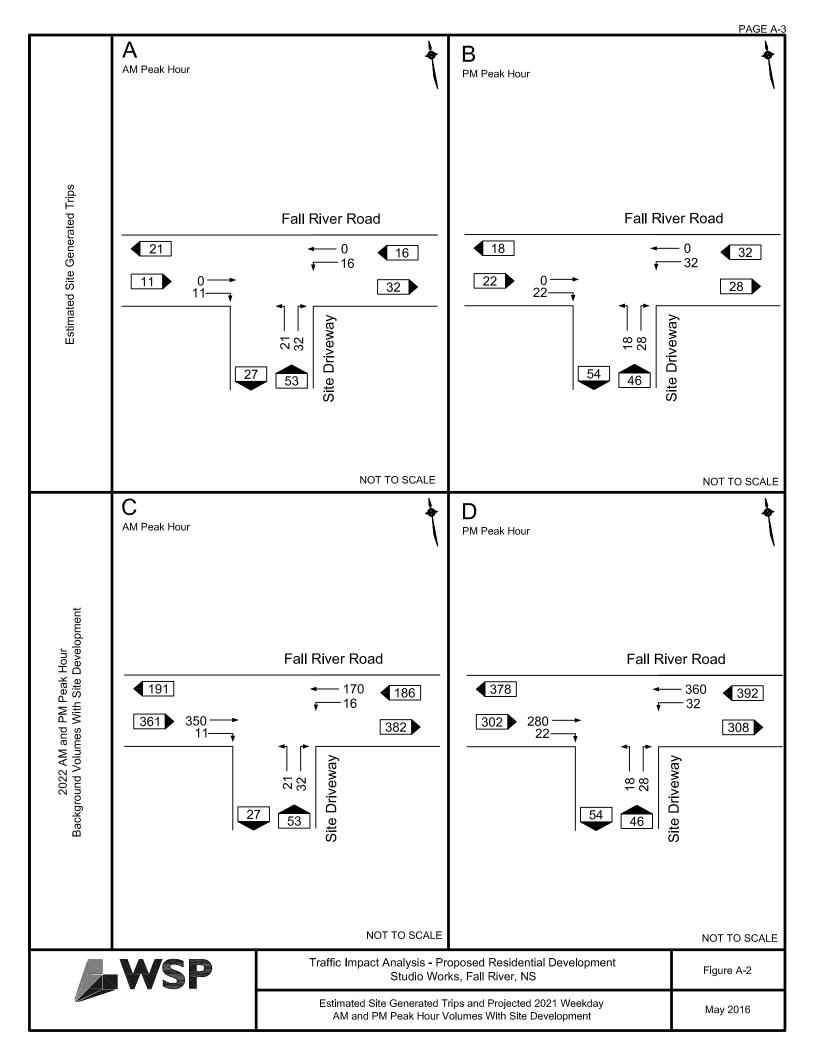
Ken O'Brien, P. Eng. Senior Traffic Engineer WSP Canada Inc.

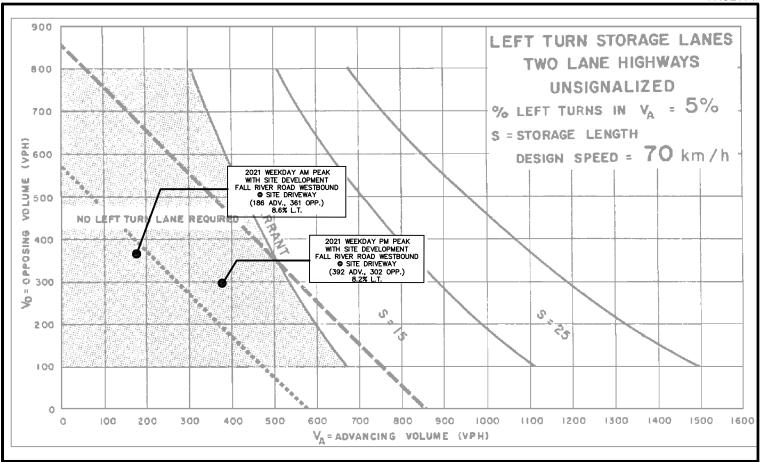


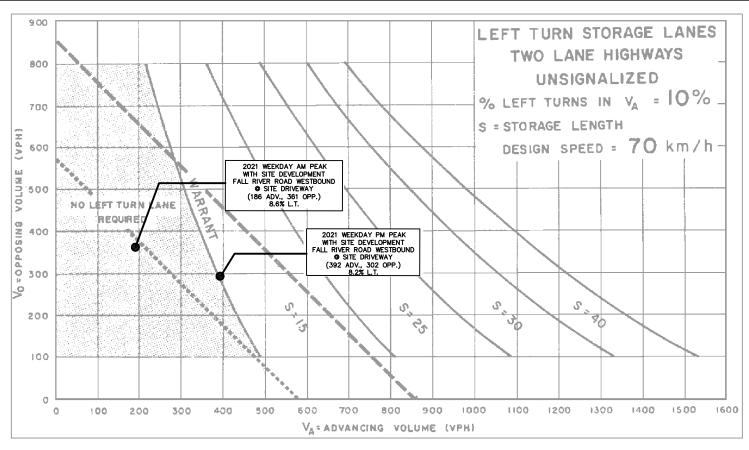


WSP Canada Inc. May 2016











| Traffic Impact Analysis - Proposed Residential Development |
|--|
| Studio Works, Fall River, NS |

Attachment B

Relevant Policy Excerpts from the River-lakes Secondary Plan under the Municipal Planning Strategy for Planning Districts 14 and 17

The Vision

The Vision for the River-lakes Secondary Planning Strategy is to maintain the rural village atmosphere and rural character of the area. At the core of this vision is the desire to create an attractive village centre to service the surrounding neighbourhoods and to preserve the rural character of the Plan Area. The rural character of this area is expressed in the low density development from of the neighbourhoods and positioning of the River-lakes Village Centre amidst the chain of lakes, forest covered hillsides, winding trunk highways and numerous cultural and natural features that give rise to the rural landscape.

One of the most important natural assets throughout the Plan Area is the lakes. On the eastern side of the Plan Area, is Lake Thomas and Fletchers Lake and on the western side of the Plan Area is Kinsac Lake which forms part of the Shubenacadie Lakes System. It is the desire of the community to protect the relatively pristine nature of this lake system and controls will be established to limit the amount of phosphorus and pollutants entering the lakes through the retention of pervious surfaces, retention of natural vegetation on steep slopes, provision of landscaping, regulation on the amount and scale of development and management of stormwater.

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Residential Developments in the River-lakes Secondary Planning Strategy Area

There is a desire to allow for the development of alternative housing forms to accommodate the housing needs of seniors, young adults and other sectors of the population that need access to housing other than single and two unit dwellings. In particular, there is a need for townhouses and low rise multi-unit dwellings (maximum 3-story) to meet the urgent needs of seniors who wish to remain in the community.

There are however, limitations to the amount of development that that Secondary Planning Strategy Area may support without exceeding the limited carrying capacity of the lakes and road systems and adversely affecting the rural community character. The Shubenacadie Lakes Watershed Study¹ indicates that groundwater conditions are limited and the receiving waters of Lake Thomas and Fletchers Lake are nearing the threshold of desirable water quality objectives for the Shubenacadie Lakes. The Fall River/Waverley/Wellington Areas Transportation Study also indicates that the intersection of Fall River Road and Highway 2 and the Highway 118 and Highway 102 interchanges are heavily congested during peak driving periods and are at certain times of the day failing to achieve acceptable levels of service. ²

¹ Fall River-Shubenacadie Lakes Watershed Study, Jacques Whitford Limited, Centre for Water Resource Studies and ABL Limited, prepared for Halifax Regional Municipality, July 2010.

² Fall River/Waverley/Wellington Areas Transportation Study, CBCL Limited, prepared for Halifax Regional Municipality, January 2010.

Given the urgent need to allow for alternative housing forms, the River-lakes Secondary Planning Strategy will allow consideration of townhouse developments and low-rise multiple-unit dwellings within a few locations through the provisions of a development agreement. This will allow the Municipality to assess these developments on a case-by-case basis to determine if the developments can be permitted without adversely affecting the limited traffic capacity of the roads and the limited environmental capacity of the receiving lakes. These forms of housing shall only be considered, through the provisions of a development agreement, within the areas zoned Village Mainstreet, within the River-lakes River-lakes Village Centre Designation and on the four opportunity sites situated throughout the Secondary Planning Strategy Area as shown on Map RL-3.

In order to determine if it is feasible to develop these sites, studies shall be required before a development agreement is approved by Council to determine if the development can proceed without exceeding the limits for phosphorus export, pursuant to Policy RL-22, or transportation system, pursuant to Policy RL- 25. Multiple-unit housing developments shall be limited to three stories in height and shall have to generally conform to the architectural and site design requirements set out under the Land Use By-law. The developments shall also be designed as Classic *Conservation (RC-Jun 25/14;E-Oct 18/14)* Design developments to minimize impacts on the environment and surrounding community and preserve the rural character of the area. . .

<u>Site B – Fall River Village North Residential Opportunity Site</u>

Site B is situated at the north-end of Fall River Village, running parallel with the Fall River Road. It is a 46 acre site that was once the site of the "Old Carr Farm". It has a natural landscape with rolling hills, low lying areas and mature vegetation. These features offer an opportunity to offset the differences in scales of development if it is designed to fit into the natural landscape. The Classic *Conservation (RC-Jun 25/14;E-Oct 18/14)* Design approach also offers the opportunity to preserve the environmental and cultural assets of the site and to minimize impact on the receiving environment.

Residents from Fall River Village have concerns about the potential for traffic impact should a road connection be established from the Fall River Road to Fall River Village over this site. There are also concerns about the loss of privacy and aesthetic impact of multiple-unit housing if not situated in such a manner so as to minimize impact on the surrounding low density residential area.

In order to prevent a high concentration of multiple-unit buildings at this location, a maximum of three multiple-unit buildings with a maximum of 40 units per building shall be considered for development on this site. Council will also consider the development of townhouses, single unit dwellings, two unit dwellings or single unit dwellings to form part of this development in order to meet a range of housing needs. Overall density on this site shall be limited to 4 units per acre subject to the submission of studies to verify that the development can take place without adversely affecting the road systems, surrounding neighbourhoods and receiving waters of Lake Thomas and that there are adequate soils and water to service the development. Multiple-unit buildings and associated parking will be situated closer to the Fall River Road and parking lots

for the multiple unit buildings will be kept out of the view of Fall River Road and any low density residential uses through the use of siting and buffering. The development will have to conform to the architectural requirements established under the Land Use By-law and the height of all buildings shall be limited to a maximum of three stories. The development shall also be designed to minimize the impact of traffic flow on the surrounding low density residential development.

RL-13 HRM shall consider permitting low scale multiple-unit dwellings townhouses, single unit dwellings or two unit dwellings on Site B through the provisions of a development agreement. The development shall be designed as a Classic *Conservation* (RC-Jun 25/14;E-Oct 18/14) Development pursuant to Policy S-17 (RC-Jun 25/14;E-Oct 18/14) of the Regional Plan to offset the bulk and appearance of alternate building forms on surrounding low density residential development and to preserve the cultural and environmental assets of this site. In considering such an agreement, Council shall have regard to the provisions of Policy S-17 (RC-Jun 25/14;E-Oct 18/14) of the Regional Plan and the following:

Built Form, Architecture and Use

- (a) that the maximum gross density is limited to 4 units per acre, the number of multiple-unit buildings is limited to 3, the number of units per multiple-unit building is limited to 40 units, and the height of any multiple-unit building is limited to three stories above average grade, excluding rooflines;
- (aa) that a minimum of 60% of the site is retained as open space; (RC-Jun 25/14;E-Oct 18/14)
- (b) that the massing and built form of the development is compatible with any adjacent low density residential uses through the use of siting, transition of building scales, architectural elements to promote visual integration and landscaping and buffering;
- (c) that multiple-unit dwellings are situated closer to the Fall River Road to prevent the aesthetic impact of the bulk of larger buildings and extensive parking areas on the surrounding low density residential neighbourhood;
- (d) that the elevation of any townhouse buildings shall be articulated in a manner that provides variation between units, and reinforces common characteristics that visually unites the block;
- (e) that there are off-sets or other articulations in the overall roof structure to break up the massing of townhouse blocks;
- (f) that the development generally conforms to the architectural provisions set out under the land use by-law;

Site Development Criteria

- (g) that parking areas are situated behind the buildings, out of view from Fall River Road;
- (h) that landscaping is designed to create a visually attractive appearance and reduce stormwater impacts;

- (i) that pedestrian walkways are provided throughout the site to provide safe and direct access to buildings, parking lots, trails and adjacent public streets and adequate useable amenity areas are provided;
- (j) that important cultural features such as the trails the Blue Hill Road Trail as illustrated on Map RL-4, views of the foreground meadows from the Fall River Road and the Carr Farmhouse are used to form an attractive focal point for the development where possible;

Site Impact Controls/Assessments

- (k) that the lighting on the site is designed to prevent light pollution impacts on adjacent properties and to give a coordinated and unified appearance between the buildings and the site with oriented luminaries;
- (l) that any development situated adjacent to a low density residential development does not result in any undue adverse impacts on adjacent properties in terms of traffic or privacy conditions for those residential uses and their outdoor amenity areas;
- (m) that the traffic generated by the development will not adversely affect the intersection of Fall River Road and Highway 2 or the Highway 102 and Highway 118 interchanges; and
- (n) that studies required pursuant to Policies RL-22 and RL-25 are undertaken prior to the approval of a development agreement; and
- (o) any other matter relating to the impact of the development on the surrounding community as outlined in Policies RL-23 and P-155 are addressed.

Water Quality Objectives

Given the environmental sensitivity of the Shubenacadie Lakes and the desire of residents to preserve and protect its water quality, the Study recommends an oligotrophic status with an upper limit of $10\mu g/L$ should be maintained for Grand Lake. This is also desirable since Grand Lake is a municipal water supply for the Municipality of East Hants. Trophic Status limits should also be set for the lakes upstream from Grand Lake, Lake Fletcher, Lake Thomas, Kinsac, William and Charles - to ensure that this objective is maintained.

The Study recommends an upper limit of $20\mu g/L$ for Lake Thomas and Lake Fletcher which are within the River-lakes Secondary Planning Strategy Area. It also recommends $20\mu g/L$ for Lake William which may be impacted by future developments in the southern portion of the Plan Area that is within the Lake William Sub-watershed. Although a limitation of $20\mu g/L$ will maintain Lake William, Lake Thomas and Lake Fletcher at the upper range mesotrophic level in the long-term, this Secondary Planning Strategy has no control over the developments that are in the portions of these sub-watersheds that area outside of this Plan Area.

The proposed regulations for the River-lakes Village Centre Designation will significantly reduce the permitted floorspace and amount of impervious surface within the River-lakes Village Centre Designation from the previous regulations under the C-2 (Community Commercial) and C-4 (Highway Commercial) Zones. The new regulations proposed under the River-lakes Village Centre Designation Zones require the retention of a minimum of 50% of each site as pervious

surface. The permitted building footprint for all buildings permitted within the various zones has been reduced from 10,000 square feet to anywhere between 2000 to 4000 square feet depending on the zone. The Regional Plan requires the retention of riparian buffers and wetlands which will also aid in the uptake of phosphorus and ameliorate its impacts. However, there is a substantial amount of housing development proposed within the southern and northern portions of the Secondary Planning Strategy Area which should be assessed to ensure that it does not exceed the capacity of the receiving waters to assimilate phosphorus without exceeding the water quality objectives established under this Secondary Plan.

In order to maintain the health and resilience of these receiving waters, this Secondary Planning Strategy will establish a no net increase phosphorus export policy for any future residential developments exceeding 8 units/lots within the River Lakes Secondary Planning Strategy Area. Pursuant to the Regional Plan, any development requiring a new road for the development of more than 8 lots is only allowed to proceed under the provisions of a development agreement. As part of the assessment process for a development agreement, applicants shall be required to submit a study by a qualified person demonstrating that the proposed development will not export any more phosphorus from the site than what may be exported from the site prior to the development taking place. The total amount of phosphorus that is expected to be exported from the site prior to the undertaking of a development shall in effect become the phosphorus budget or limit for the amount of phosphorus that may be allowed to be exported from the site under the proposed development for that area. If the amount of phosphorus for a proposed development exceeds the phosphorus budget for the site, then the density of development will have to be adjusted to reduce the phosphorus impacts on the receiving environment. The feasibility of continuing development in the northern portion of the Secondary Planning Strategy Area should be reviewed during the Phase II planning process.

In order to achieve an appropriate balance of development throughout the Shubenacadie Lakes System and to maintain an oligotrophic level for Grand Lake, water quality objectives should be established for each contributing sub-watershed after HRM adopts a water quality monitoring functional plan. HRM is currently undertaking a watershed study of the Shubenacadie Lakes Watershed to assess the impacts of potential future development in the Port Wallis area within the Lake Charles Sub-watershed. It would be appropriate to review the River-lakes Secondary Planning Strategy when setting targets for future growth in the Lake Charles or Lake William sub-watersheds that are upstream from Fall River. At this time, threshold values should be set for the Shubenacadie Lakes System against which to regulate the density of all future development.

RL-22 The River-lakes Secondary Planning Strategy shall establish a no net increase in phosphorus as the performance standard for all large scale developments considered through the provisions of a development agreement pursuant to policies RL-4, RL-5, RL-11, RL-12, RL-13, RL-14 and RL-15 of this Secondary Plan. This Policy shall also apply to proposed developments pursuant to policies S-15 and S-16 of the Regional Municipal Planning Strategy. A study prepared by a qualified person shall be required for any proposed development pursuant to these policies to determine if the proposed development will export any greater amount of phosphorus from the subject land area during or after the construction of the proposed development than the amount of phosphorus determined to be leaving the site prior to the development taking place. If the study reveals that the phosphorus levels predicted to be exported

from the proposed development exceed the phosphorus levels currently exported from the site, then the proposed development will not be permitted to take place unless there are reductions in density or *other methods that* (RC-Feb 23/16;E-Apr 2/16) to reduce phosphorus export levels to those current before the proposed development. *Any stormwater management devices designed to treat phosphorus must be located on the privately-owned land included in the proposed development agreement.* (RC-Feb 23/16;E-Apr 2/16) The cost of the study shall be borne by the applicant. The study may rely on phosphorus export coefficients derived from existing studies if they can be justified for application to local environmental conditions. All existing and proposed development within the affected area shall be taken into account and the consultant shall undertake Wet Areas Mapping to help define the ecological boundaries associated with the flow channels, accumulation points, and riparian zones to restrict any high impact development in those areas.

- RL-23 The following measures shall be incorporated into all <u>development agreements</u> in the River-lakes Secondary Planning Strategy Area:
 - (a) A site non- disturbance area of a minimum of 50% of the site or greater if required pursuant to any other policies within this Secondary Planning Strategy or the Regional Municipal Planning Strategy; and
 - (b) Stormwater management and erosion and sedimentation control plans are in place to minimize impact on receiving waters.

Transportation

River-lakes Road Systems

The Fall River/Waverley/Wellington Areas Transportation Study was prepared by CBCL for the River-lakes Secondary Planning process. The purpose of the study was to examine traffic conditions on the existing road network and to recommend transportation improvements for current and future potential growth.

The Study found that existing traffic at the Highway 102 / Highway 2 / Highway 118 interchange, the Fall River Road / Lockview Road intersection and Fall River Road / Highway 2 intersection is heavily congested during the am and pm peak periods. The intersection of Highway 2 / Highway 118 southbound / Highway 102 northbound ramps were found to be functioning very poorly with substantial queuing occurring on Highway 2 (up to 1500 m) during the am peak. During the pm peak, the Highway 102 southbound ramp / Highway 2 intersection and the Highway 118 southbound ramp / Highway 2 intersection were both experiencing poor operating conditions with queuing of up to 500 m on the Highway 118 southbound ramp. Also during the pm peak period, the Highway 118 northbound exit ramp was shown to experience significant queuing which would sometimes extend all the way back onto the highway.

The Study indicates that conditions will worsen at these intersections as more development takes place over the next 20-25 years and that the Fall River Road / MacPherson Road and Fall River Road / Highway 2 intersections will also exceed capacity. Without road improvements or controls on growth, the intersections of Highway 2 / Highway 118 southbound ramp, Highway 2

/ Highway 102 southbound ramp, Highway 2 / Fall River Road, Fall River Road / McPherson Road, and Fall River Road / Lockview Road are predicted to experience significantly diminished operations.

The Study recommends a number of short-term improvements to alleviate current traffic conditions that were recommended by the Fall River VIC for implementation (Appendix A). These include recommendations to channelize traffic through a right turning lane from Fall River Road to Highway 2, restricting left turns from Fall River Road into Wilson's and improvement of pedestrian facilities at the intersection of Fall River Road and Highway 2. It is also recommended that the Municipality also encourage the Province of Nova Scotia to consider the development of a roundabout between Highway 2, Perrin Drive and the Highway 102 northbound ramp to alleviate current traffic conditions at the interchanges.

A number of longer-term solutions were also recommended including the widening of the Fall River Bridge to 4 lanes and upgrading the Fall River Road and Highway 2 Intersection. The Committee does not recommend the Fall River Road and Highway 2 Intersection upgrade as designed by the consultants since it will not retain the rural village character desired by the community for the River-lakes Village Centre. It is the recommendation that an alternative design solution be considered that is more in keeping with the vision for the River-lakes Village Centre.

The Study also recommends the development of a new interchange to reduce traffic on Highway 2 and to take pressure off the Highway 102 and Highway 118 interchanges. Three of the most probable locations include 1) the extension of the Windsor Junction Road past the Cobequid Road to connect with a full access interchange with Highway 102; 2) the extension of the Cobequid Road to connect with a full access interchange with Highway 102; or 3) the construction of a new road to the north of the Plan Area to connect to the eastbound leg of the interchange at Aerotech Park. The modeling results for the study predicts that the development of an interchange south of the Plan Area via connection from either Windsor Junction Road or Cobequid Road would be the more effective means of alleviating traffic congestion on Highway 2.

The Municipal Planning Strategy for Planning Districts 14/17 recommends the construction of a collector road over the backlands from Fall River Road to Wellington to provide eventual connection to a road that was previously contemplated by the Nova Scotia Department of Transportation and Infrastructure Renewal. This road was the Hammonds Plains/Beaver Bank By-pass which would have extended from the Highway 213 across the Hammonds Plains, Lucasville, Middle Sackville, Beaver Bank and Fall River/Fletchers Lake backlands to connect to Highway 102 at the Aerotech Interchange (Transportation Map 3). This by-pass road is no longer proposed by the Nova Scotia Department of Transportation and Infrastructure Renewal and responsibility for future road development is now the responsibility of HRM. HRM will review its best locations for growth and long-term infrastructure development in light of the findings of the Shubenacadie Lakes Watershed and Fall River/Waverley/Wellington Transportation studies, in the Phase II River-lakes planning process. . .

RL-25 As an interim measure, HRM shall require the proponents for any large scale

residential developments considered through the provisions of Policies RL-11, RL-12, RL-13, RL-14 and RL-15 of this Secondary Planning Strategy or commercial development considered pursuant to policies RL-4 and RL-5 or Policy P-68 of the Planning Districts 14/17 Municipal Planning Strategy and polices S-15 and S-16 of the Regional Municipal Planning Strategy, to submit a traffic study to determine the impacts of development on the Fall River Road and Highway 2 Intersection, the Highway 102 / Highway 118 interchanges and the Lockview Road and MacPherson Road intersection. The study shall take into consideration the findings of the Fall River/Waverley/Wellington Transportation Study and the amount of development permitted in areas subject to these development agreements shall be regulated on the basis of the receiving road network capacity and the provisions of Policy RL-22.

Municipal Planning Strategy and Land Use By-law Amendment(s) Initiated by Regional Council

Halifax Regional Municipality Charter, Part VIII, Planning and Development, including:

Planning documents reasonably consistent

214 (1) Planning documents adopted after the adoption of a statement of provincial interest that applies within the Municipality must be reasonably consistent with the statement.

Planning advisory committee

- 215 (1) The Municipality may, by policy, establish a planning advisory committee and may establish different planning advisory committees for different parts of the Municipality.
- (4) The purpose of a planning advisory committee or a joint planning advisory committee is to advise respecting the preparation or amendment of planning documents and respecting planning matters generally.

Public participation program

- 219 (1) The Council shall adopt, by policy, a public participation program concerning the preparation of planning documents.
- (2) The Council may adopt different public participation programs for different types of planning documents.
- (3) The content of a public participation program is at the discretion of the Council, but it must identify opportunities and establish ways and means of seeking the opinions of the public concerning the proposed planning documents.
- 220 (1) The Council shall adopt, by by-law, planning documents.
- (4) The Council shall complete the public participation program before placing the first notice for a public hearing in a newspaper circulating in the Municipality.

Purpose of municipal planning strategy

- The purpose of a municipal planning strategy is to provide statements of policy to guide the development and management of the Municipality and, to further this purpose, to establish
 - (a) policies that address problems and opportunities concerning the development of land and the effects of the development;
 - (b) policies to provide a framework for the environmental, social and economic development within the Municipality;
 - (c) policies that are reasonably consistent with the intent of statements of provincial interest; and
 - (d) specify programs and actions necessary for implementing the municipal planning strategy.

Statements of policy in planning strategy

- 229 (1) A municipal planning strategy may include statements of policy with respect to any or all of the following:
 - (a) the goals and objectives of the Municipality for its future;
 - (b) the physical, economic and social environment of the Municipality;

- (c) the protection, use and development of lands within the Municipality, including the identification, protection, use and development of lands subject to flooding, steep slopes, lands susceptible to subsidence, erosion or other geological hazards, swamps, marshes or other environmentally sensitive areas;
- (d) stormwater management and erosion control;
- (e) in connection with a development, the excavation or filling in of land, the placement of fill or the removal of soil, unless these matters are subject to another enactment of the Province:
- (f) in connection with a development, retention of trees and vegetation for the purposes of landscaping, buffering, sedimentation or erosion control;
- (g) studies to be carried out prior to undertaking specified developments or developments in specified areas;
- (h) the staging of development;
- (i) the provision of municipal services and facilities;
- municipal investment for public and private development and the coordination of public programs relating to the economic, social and physical development of the Municipality;
- (k) non-conforming uses and structures;
- (I) the subdivision of land;
- (m) the use and conservation of energy, including the height and siting of developments;
- (n) measures for informing, or securing, the views of the public regarding contemplated planning policies and actions or bylaws arising from such policies;
- (o) policies governing
 - (i) land-use by-law matters,
 - (ii) amendment of the land-use by-law,
 - (iii) the acceptance and use of cash-in-lieu of required parking,
 - (iv) the use of development agreements,
 - (v) the establishment of comprehensive development districts,
 - (vi) the use of site-plan approval areas, including whether notice must be given to owners and tenants of property that is thirty metres or more from the applicant's property,
 - (vii) the establishment of transportation reserves,
 - (viii) the use of infrastructure charges,
 - (ix) the eligibility criteria for the establishment of a commercial development district including, without limiting the generality of the foregoing, the percentage increase

in the taxable assessed value of the eligible properties, as defined in subsection 92C(1), within the proposed commercial development district and the period over which the increase in the taxable assessed value of the properties occurs;

- (p) the regulation or prohibition of development in areas near airports with a noise exposure forecast or noise exposure projections in excess of thirty, as set out on maps produced by an airport authority, as revised from time to time, and reviewed by the Department of Transport (Canada);
- (q) any other matter relating to the physical, social or economic environment of the Municipality.
- (2) The Council shall include policies in the municipal planning strategy on how it intends to review the municipal planning strategy and land-use by-law.

No action inconsistent with planning strategy

232 (1) The Municipality may not act in a manner that is inconsistent with a municipal planning strategy.

Adoption of land-use by-law or amendment

Where the Council adopts a municipal planning strategy or a municipal planning strategy amendment that contains policies about regulating land use and development, the Council shall, at the same time, adopt a land-use by-law or land-use by-law amendment that enables the policies to be carried out.

Content of land-use by-law

- 235 (1) A land-use by-law must include maps that divide the planning area into zones.
 - (2) A land-use by-law must
 - (a) list permitted or prohibited uses for each zone; and
 - (b) include provisions that are authorized pursuant to this Act and that are needed to implement the municipal planning strategy.
- (3) A land-use by-law may regulate or prohibit development, but development may not be totally prohibited, unless prohibition is permitted pursuant to this Part.
 - (4) A land-use by-law may
 - (a) regulate the dimensions for frontage and lot area for any class of use and size of structure;
 - (b) regulate the maximum floor area of each use to be placed upon a lot, where more than one use is permitted upon a lot;
 - (c) regulate the maximum area of the ground that a structure may cover;
 - (d) regulate the location of a structure on a lot;
 - (e) regulate the height of structures;
 - (f) regulate the percentage of land that may be built upon;
 - (g) regulate the size, or other requirements, relating to yards;

- (h) regulate the density of dwelling units;
- (i) require and regulate the establishment and location of off-street parking and loading facilities;
 - (j) regulate the location of developments adjacent to pits and quarries;
 - (k) regulate the period of time for which temporary developments may be permitted;
- (I) prescribe the form of an application for a development permit, the content of a development permit, the period of time for which the permit is valid and any provisions for revoking or renewing the permit;
 - (m) regulate the floor area ratio of a building;
- (n) prescribe the fees for an application to amend a landuse by-law or for entering into a development agreement, site plan or variance.
 - (5) Where a municipal planning strategy so provides, a land-use by-law may
- (a) subject to the *Public Highways Act*, regulate or restrict the location, size and number of accesses from a lot to the abutting streets, as long as a lot has access to at least one street;
 - (b) regulate or prohibit the type, number, size and location of signs and sign structures;
 - (c) regulate, require or prohibit fences, walks, outdoor lighting and landscaping;
- (d) in connection with a development, regulate, or require the planting or retention of, trees and vegetation for the purposes of landscaping, buffering, sedimentation or erosion control;
- (e) regulate or prohibit the outdoor storage of goods, machinery, vehicles, building materials, waste materials, aggregates and other items and require outdoor storage sites to be screened by landscaping or structures;
 - (f) regulate the location of disposal sites for any waste material;
- (g) in relation to a development, regulate or prohibit the altering of land levels, the excavation or filling in of land, the placement of fill or the removal of soil unless these matters are regulated by another enactment of the Province;
 - (h) regulate or prohibit the removal of topsoil;
 - (i) regulate the external appearance of structures;
- (j) set out conditions, including performance standards, to be met by a development before a development permit may be issued;
- (k) provide for incentive or bonus zoning in the HRM by Design Downtown Plan Area and the Centre Plan Area, including requirements for incentive or bonus zoning;
- (I) prescribe methods for controlling erosion and sedimentation during the construction of a development;
- (m) regulate or prohibit excavation, filling in, placement of fill or reclamation of land on floodplains identified in the land-use by-law;

- (n) prohibit development or certain classes of development where, in the opinion of the Council, the
 - (i) cost of providing municipal wastewater facilities, stormwater systems or water systems would be prohibitive,
 - (ii) provision of municipal wastewater facilities, stormwater systems or water systems would be premature, or
 - (iii) cost of maintaining municipal streets would be prohibitive;
- (o) regulate or prohibit development within a specified distance of a watercourse or a municipal water-supply wellhead;
 - (p) prohibit development on land that
 - (i) is subject to flooding or subsidence,
 - (ii) has steep slopes,
 - (iii) is low-lying, marshy, or unstable,
 - (iv) is otherwise hazardous for development because of its soil conditions, geological conditions, undermining or topography,
 - (v) is known to be contaminated within the meaning of the Environment Act, or
 - (vi) is located in an area where development is prohibited by a statement of provincial interest or by an enactment of the Province;
- (q) regulate or prohibit development in areas near airports with a noise exposure forecast or noise exposure projections in excess of thirty, as set out on maps produced by an airport authority, as revised from time to time, and reviewed by the Department of Transport (Canada);
- (r) permit the development officer to grant variances in parking and loading spaces, ground area and height, floor area occupied by a home-based business and the height and area of a sign.
- (6) Where the land-use by-law provides for incentive or bonus zoning within the Centre Plan Area, the land-use by-law must require the inclusion of affordable housing in a development in addition to any other requirements adopted by the Council, as the contribution for any incentive or bonus zoning applicable to the development.

No appeal permitted

- 263 The following are not subject to an appeal:
- (d) an amendment to a land-use by-law that is required to carry out a concurrent amendment to a municipal planning strategy.