

161-12598
February 23, 2017

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Regional Planning – Policy and Strategic Initiatives
40 Alderney Dr, Dartmouth, NS
B2Y 2N5

Re: Servicing Capacity Calculations/Conversions Letter

WSP has been retained by Tabrizi Rugs to complete a planning inquiry to amend the Bedford South Secondary Planning Strategy, the Bedford Municipal Planning Strategy and existing Development Agreements Cases 00762 & 00492. The purpose of this work program is to enable an alternate development program than what has been previously approved.

The current approvals allow for the following development scheme:

- 30,000 ft² of commercial on Lot BH-1
- 1 single family home (accessed via Glenmont Ave.)
- One multi-unit residential building containing 44 units.
- One 16,000 ft² commercial building
- 12 townhouse units

This alternate development program is as follows:

- One Multiunit building containing 112 residential Units
- 12 traditional style townhouse units (accessed via Glenmont Ave.)
- 18 duplex-style townhouse units (accessed via Bedford HWY)
- 1 single family home (accessed via Glenmont Ave.)

Sanitary flow calculations were conducted for both development schemes noted above. WSP has made assumptions on the types of permitted uses that could be developed under the current scheme. These assumptions are noted in Table 1.1. Based on these assumptions the existing development scheme would generate a peak dry weather flow of 7.65 L/s. The proposed development scheme would generate a peak dry weather flow of 6.41 L/s as shown in Table 1.2. Since the

development areas under both scenarios would remain the same, we have not accounted for wet weather flow as part of these calculations.

Based on the information presented above the proposed development scheme would generate a smaller sanitary flow.

We trust the foregoing is satisfactory, if you have any questions please contact the undersigned.

Original Signed

Neil Fougere, P.Eng.

Project Manager – Municipal Infrastructure

Halifax Water Sanitary Sewer System Calculations

Table 1.1 - Existing Development Scheme

| Phase | Units/ Sq. m/seats | Density | Population | Average Dry Weather Flow Allowance | Flow Units | Average Dry Weather Flow (l/d) | Peaking Factor | Peak Dry Weather Flow (l/d) | Safety Factor | Peak Dry Weather Flow (l/s) |
|---|--------------------|---------|------------|------------------------------------|--------------------|--------------------------------|----------------|-----------------------------|---------------|-----------------------------|
| Residential (Multi-Unit) | 44 | 2.25 | 99 | 300 | L per Pers per day | 29700 | 4.24 | 126070 | 1.25 | 1.82 |
| Residential (Single Family/Townhouse) | 13 | 3.35 | 44 | 300 | L per Pers per day | 13200 | 4.33 | 57098 | 1.25 | 0.83 |
| Hotel | 61 | 1 | 61 | 340 | L per Room | 20740 | 4.50 | 93330 | 1.25 | 1.35 |
| Restaurant | 200 | 1 | 200 | 225 | L per Seat | 45000 | 4.50 | 202500 | 1.25 | 2.93 |
| Commercial | 1850 | 1 | 1850 | 6 | L/m2/day | 11100 | 4.50 | 49950 | 1.25 | 0.72 |
| Total Sanitary Flow | | | | | | | | | | 7.65 |
| Assumptions | | | | | | | | | | |
| 1. 5,350sq ft for the Restaurant use. 25% of the total area of the restaurant is for kitchen space and a unit rate of 20 SF per seat in the remaining 75% of the restaurant facility. | | | | | | | | | | |
| 2. Average Hotel Room Square footage = 325 sq. ft | | | | | | | | | | |
| 3. 20,000sq ft of Commercial | | | | | | | | | | |

