

Greg Dureault

Barrister & Solicitor

8652 Commerce Court

Burnaby, B.C. V5A 4N6

Tel. (604) 338-8820

*denotes personal law corporation

Email greg@dureault.com

9/15/2016

By Hand Delivery

PORT MOODY

100 Newport Drive

Port Moody, BC

V3H SC3

Attention: Mr. Robinson Puche

Infrastructure Engineering Development Services

Dear Sirs & Mesdames:

Re: Anmore Green Estates; Drainage relating to lands subdivided by Strata Plan LMS3080 (the "Strata Lands") affecting the Eagle Mountain Middle School (the "School") Development Site (Lot 2 Plan BCP5107 and Lots 4 and 5 Plan 1MP40733, all of Section L6 Township 39 New Westminster District) (the "School Site") owned by The Board of Education of School District No. 43 (Coquitlam)

Robinson I am writing to you further to our meeting on July 20, 2016 with reference to the above subject matter. You may recall that we discussed "Anmore Green Estates", which I advise is formally known as Strata LMS 3080 ("AGE"). It is an urban development located adjacent the Village of Anmore's southern boundary with the City.

For approximately 18 years 51 residential homes have been serviced by an aging sewage septic system under permit PE-04606 issued in or about 1997 by the Ministry of Environment, Lands and Parks.

In 2008 the firm of Arden Consulting Engineers Ltd. (“ACE”) was engaged to review the existing Sewage Treatment Plant (“STP”) and septic field for AGE. ACE was hired to make recommendations for retrofitting or replacement of the STP, and to assess the design parameters of the septic field concerning an apparent breakout occurring at a berm down gradient of the west septic field area.¹

ACE described the system was designed to service 39 two bedroom homes and 12 three bedroom homes for a maximum discharge rate of 61m³/day. Test data indicted an average flow rate of approximately 35 m³/day.²

ACE reported that the subsurface conditions of the septic field generally consisted of the following: 0-910mm Silty SAND, some gravel, brown, dense to very dense. Based on the maximum design flow of 61m³/day and the provided length of 616 lineal meters per field, ACE extrapolated that the design percolation rate should have been 10 minutes per inch for treatment plant effluent.

The average of the six percolation tests³ conducted was 50 minutes per inch, which falls above the 30 minutes per inch maximum allowable percolation rate under the ***Municipal Sewage Regulation*** for ground disposal. ACE observed field seepage occurring at 1m, and ponded water⁴ containing Fecal coliform concentrations of 990 CFU per 100mL occurring at a distance of approximately 3.5m from the south edge of the west septic field.

The field was established prior to construction of City’s “North Shore Community Park” sports complex, Heritage Woods Secondary School, and more recently the Eagle Mountain Middle School (collectively the “Development”). AGE’s septic drain field is situated immediately adjacent the Development. It is at high elevation, as much as 10 meters above the Development. Steep slopes from the septic field are now present and ground water from the field is likely draining directly toward the park and two schools.

¹ I am enclosing pictures of this area taken on February 24, 2016

² Effluent quality and flow data collected by Corix Utilities encompassing the operating period from March 2006 to September 2007 as well flow and effluent quality data from Orion Water Services from January to June of 2008

³ Three tests conducted in the west field and three tests conducted in the east field

⁴ Ponding was still evident during a dry time a year with no rainfall occurring during testing between July 3rd and 15th

I showed you the Contract of Purchase and Sale dated November 2, 2001 between the City and School District 43 (“Purchase Agreement”). At page 9, section 3.2(e) it provided: “(e) The Purchaser and the Vendor also acknowledge and agree that there may be some septic effluent leachate from adjacent lands within the Village of Anmore onto the Property and the parties shall act reasonably and cooperate with each other to minimize and control any such problems.” The reference to adjacent lands can only be interpreted as AGE’s septic drain field.⁵

The residents of AGE remain defensive that they have done their utmost to contain and treat sewage effluent since the establishment of their homes in 1998. Following the ACE report AGE’s STP was rehabilitated in approximately 2008 at a cost of approximately \$300,000. However, by letter dated October 23, 2013 the School District 43 has complained to AGE that:

- “In the course of preparing the School Site for construction, we have discovered a concrete catchment basin and three underground pipes on the School Site that appear to be draining water from the Strata Lands. That drainage is interfering with the construction of the School.”
- “Also, we enclose for your reference a copy of a report prepared by Keystone Environmental Ltd. dated August 13, 2013. The report indicates that water flowing onto the School Site is contaminated by e-coli and fecal coliforms, in excess of BC Water Quality Guidelines. It appears that there may be some discharge onto the School Site from the septic field on the Strata Lands.”

The Keystone Environmental Report concludes:

“It is recommended, based on bacteria values and future on-Site land use, that the Village of Anmore and Anmore Estates be made aware of the human health concerns, and implement measures to prevent the septic field discharge migrating on-Site prior to the Site school being operational and/or Site grounds accessible to the public. If this request does not receive

⁵ Under the Purchase Agreement the School District conditionally reserved the right (at page 10, section 4.1 (2)) to receive a “site profile referred to in paragraph 3.2 herein and a report dealing with the septic effluent leachate referred to in Section 3.2(d)”. That condition was to be performed by December 18, 2001, prior to construction of the Eagle Mountain Middle School.

an immediate response, it is recommended that the BC Ministry of Health be contacted to alert them of the potential public health threat.”⁶

Ongoing efforts have been pursued for connection to the GVSD&D sewer system and decommissioning of the existing STP and septic field as early as 2003. Apparently an agreement in principle to consider connection to the regional sewer system for a specified limited sewerage area was reached by the Village of Anmore in March 2007 and by the City of Port Moody in June, 2007. To my knowledge this has not changed. Anmore has requested that the GVSD&D accept connection of AGE residents to the regional sewerage system. This requires that Anmore become a member of the GVSD&D in order to extend the Fraser Sewage Area. As there are no regional sewer pipes in that area, the GVSD&D has previously concluded that Anmore is best served by reaching an agreement with Port Moody to allow a connection from AGE to the existing Port Moody neighborhood sewer system.

To the extent that there is an unresolved issue causing past delay as discussed with you, it is that while Anmore is a member of the GVRD it has yet to become a member of the GVSD&D despite a series of positive resolutions and affirmations by Anmore Council to so become a member.

As I expressed to you at our meeting, the AGE sewage connection is needed because of apparent STP’s failing or poor performance and lack of sustainable viable alternatives. R.F. Binnie & Associates Ltd. were hired. I am now able to provide their Sanitary Sewer Design for connecting the AGE residents to the City sewer system. The design and a cost estimate are attached.

The proposed project is to abandon and remove the existing septic system and be replaced with a new sanitary sewer system. The proposed sanitary sewer is to be connected to an existing downstream sanitary sewer system located on David Avenue in the City of Port Moody. The City’s North Slope Sewer design appears to have anticipated an expansion of sewer service to the Anmore area. The 400mm sewer along Heritage Mountain Boulevard is apparently oversized and connects to the GVSD&D Port Moody Interceptor.

⁶ Emphasis added, a copy of this report is attached

The existing sanitary sewer located within David Avenue allowance is under the jurisdiction of the City of Port Moody. Therefore, the design and construction of the proposed sanitary sewer system must be reviewed and approved by the City of Port Moody Engineering Department. The scope of services performed for the sanitary sewer design included the following:

1. Completion of a topographic survey for the project site and preparation of a plan in CAD format.
2. Site visits to check for existing services.
3. Completion of sanitary sewer flow calculations.
4. Preparation of a civil base drawing showing the topographic survey and all existing underground services within the project site. The base plan also reflects the existing topographic survey.
5. Preparation of a detailed sanitary sewer plan and profile drawing.

The AGE septic drain field appears to be compromised. To date they have spent more on STP rehabilitations than it would appear to cost to connect to the City's sewer system.

It is recognized that a definitive agreement is required between the City and Anmore based upon certain 2008 recommendations of the GVSD&D. As there has been little progress since 2008, I am seeking your assistance to determine the apparent feasibility of R.F. Binnie & Associates' design proposal. Under existing zoning, the subject area is perhaps capable of potential development of a further 14 bare land strata homes. The proposed limited sewerage area would on that basis serve approximately 65 residences in addition to existing services to the Eagle Mountain Middle School from School District 43.

I am hoping you can help resolve this long outstanding matter, or point me in the right direction if you cannot do so as we last discussed. At the least I hope that you will be able to review the Sanitary Sewer Design for feasibility purposes.

I look forward to hearing from you, and thank you in advance for your consideration of this matter.

Best Regards,



Greg Dureault

GD/*

Cc Mr. Trevor Hamelin, ASCT
Environmental Protection Officer
Authorizations - South
(Office) 604-582-5275
(Fax) 604-584-9751
Hamelin, Trevor M ENV:EX [<mailto:Trevor.Hamelin@gov.bc.ca>]

List of Attachments Enclosed:

1. Letter dated October 23, 2013 from School District 43;
2. Report prepared by Keystone Environmental Ltd. dated August 13, 2013;
3. Letter dated January 4, 2008 from Metro Vancouver to Anmore;
4. R.F. Binnie & Associates Ltd. Sanitary Sewer Design and Cost Estimate;
5. Google Earth 400 Ft Overview of Site, and adjacent Developments
6. February 24, 2016 Pictures of the relevant septic field site above Eagle Mountain Middle School