

Ref. No. 141-14781

November 12, 2014

Ms. Ashley Blissett, P. Eng., Senior Development Engineer HRM Community Development PO Box 1749 HALIFAX NS B3J 3A5

RE: Traffic Impact Statement, Proposed Residential / Commercial Development, Corner of Chebucto Road and Beech Street, Halifax, Nova Scotia

Dear Ms. Blissett:

Plans are being prepared for a mixed use residential / commercial development on the parcel (PID: 00021006) bounded by Chebucto Road, Beech Street, and Elm Street in Halifax, NS (See Figure 1). The proposed development includes a 5-storey, 40-unit apartment building and approximately 7,529 square feet of ground floor commercial space. The site will include a total of 47 parking spaces (39 underground, 8 surface). This is the Traffic Impact Statement (TIS) required to accompany the development application.

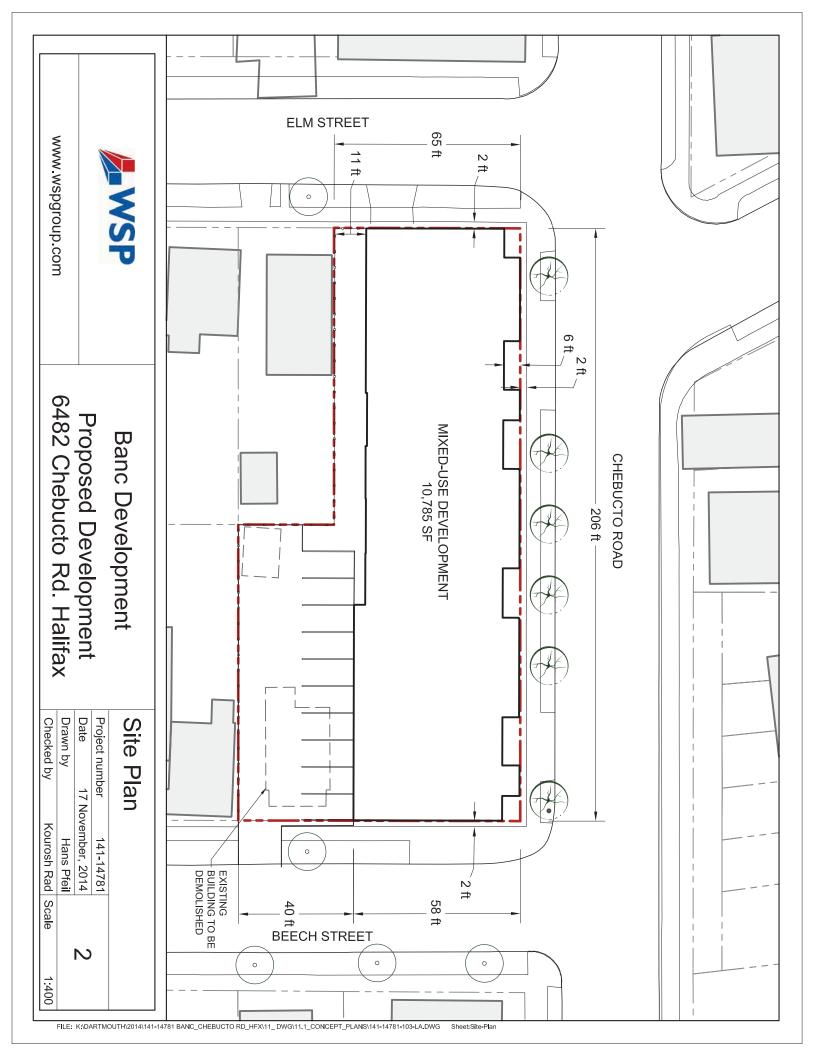
Site Description- The proposed development site is an approximately 17,104 square foot vacant lot bounded by Chebucto Road, Beech Street, and Elm Street (See Photo 1). The site was formerly occupied by a gas station with car wash.



Photo 1 – The proposed development site (looking east from Elm Street)

Description of Site Access- Vehicular access to the proposed development will be via driveways to Elm Street and Beech Street. A parking garage will be accessed via a driveway to Elm Street (See Photos 2 and 3) located approximately 15-20m south of Chebucto Road. Although it is recognized that this is less than the 30m minimum distance (from a major street) stipulated in *HRM By-Law S-300 [Section 36(1b)]*, the driveway has been located as far to the south as is practical given the limits of the site. A driveway to Beech Street (See Photos 4 and 5), located approximately 30m south of Chebucto Road, will provide access to a surface parking lot.

Sight distance appears to be adequate on both approaches to the driveways. Pedestrian access will be accommodated via primary entrances on Chebucto Road, as well as secondary entrances on Beech Street and Elm Street.



Street Descriptions– Elm Street and Beech Street are parallel local residential streets with sidewalks on both sides and a speed limit of 50km/h (See Photos 2 to 5). On Elm Street, time restricted daytime parking (1 hour, 8AM-6PM weekdays) is permitted on the west side of the street. On the east side of the street, parking is permitted only between 6PM and 8AM. On Beech Street, time restricted daytime parking (2 hour, 8AM-6PM weekdays) is permitted on the east side of the street. On the west side of the street. is permitted parking only between 5PM and 9AM.

Chebucto Road is an arterial street that runs east-west approximately 2km between the Roundabout Armdale and Windsor Street on the Halifax peninsula. In the vicinity of the proposed development, it has two westbound lanes and one eastbound lane (See Photo 6). The street intersects with North Street approximately 100m east of the site, which provides direct access to the Angus There are Macdonald Bridge. sidewalks on both sides of the street, and on-street parking is not permitted on either side. The speed limit is 50km/h.

The intersections of Chebucto Road with Beech Street and Elm Street are stop-controlled T-intersections. The site also sits opposite the stop-controlled intersection of Chebucto Road and Connolly Street, which is slightly offset from Elm Street. There is an RA-5 crosswalk with actuated flashing beacons located between Connolly Street and Elm Street.



Photo 2 - Looking left (south) on Elm Street toward from the proposed site driveway.



Photo 3 - Looking right (north) on Elm Street from the proposed site driveway.



Photo 4 - Looking left (north) on Beech Street from the proposed site



Photo 5 – Looking right (south) on Beech Street from the proposed site driveway.





Photo 6 - Looking east on Chebucto Road toward the Beech Street intersection.

Transit – The site is very well served by Metro Transit, with six bus routes on Chebucto Road adjacent to the site (Routes 2, 4, 5, 14, and 52) and additional routes nearby on Oxford Street (Routes 1 and 14) and Quinpool Road (6, 20, and 32). There are existing bus stops located directly in front of the site on Chebucto Road. Also, the site is approximately 1km from Metro Transit's Mumford Terminal, which serves 13 bus routes and provides access to all routes in HRM.

Trip Generation – Trip generation estimates, prepared using published trip generation rates from *Trip Generation*, *9th Edition* (Institute of Transportation Engineers, 2012), are included in Table 1. It is estimated that the proposed mixed use development will generate about 31 vehicle trips (10 entering and 21 exiting) during the AM peak hour and 45 vehicle trips (25 entering and 20 exiting) during the PM peak hour. It is expected that the underground parking areas will be designated for residential tenants, therefore, patrons of the commercial uses will be restricted to on-street parking.

Table 1 - Trip Generation Estimates

	Units ²	Trip Generation Rates ³				Trips Generated⁴			
Land Use ¹		AM Peak		PM Peak		AM Peak		PM Peak	
		In	Out	In	Out	ln	Out	In	Out
Apartment (ITE 222)	40	0.10	0.41	0.40	0.22	4	16	16	9
Specialty Retail (ITE 826) ⁵	7.5 KGLA	0.76	0.60	1.19	1.52	6	5	9	11
Total Estimated Trips						10	21	25	20

Notes: 1. Land use codes are from Trip Generation, 9th Edition, Institute of Transportation Engineers, 2012.

- 2. Residential units are the number of dwelling units. KGLA is '1000 square feet gross leasable area',
- 3. Trip generation rates are 'vehicles per hour per unit.'.
- 4. Trips generated are 'vehicles per hour' for AM and PM peak hours.
- 5. The Specialty Retail (ITE Land Use 826) rate for 'Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6PM' has been used. Since there is no published rate for the AM peak hour of adjacent street traffic for this land use, and since AM peak hour trips to specialty retail are generally low, AM trip rates have been assumed to be 50% of the PM rate with reversal of the directional split.



Summary and Conclusions -

- Plans are being prepared for a mixed use residential / commercial development on a parcel bounded by Chebucto Road, Beech Street, and Elm Street in Halifax, NS. The proposed development includes a 5-storey, 40-unit apartment building and approximately 7,529 square feet of ground floor commercial space.
- 2. Vehicular access to the site will be from driveways to Elm Street and Beech Street. The Elm Street driveway will access a 39-space underground parking garage; the Beech Street driveway will access an 8-space surface parking lot.
- 3. It is estimated that the proposed development will generate about 31 vehicle trips (10 entering and 21 exiting) during the AM peak hour and 45 vehicle trips (25 entering and 20 exiting) during the PM peak hour.
- 4. The site has good connectivity to higher order streets including Chebucto Road, North Street, Oxford Street, and Quinpool Road.
- 5. It is expected that site generated trips will have a relatively high transit and pedestrian mode share given that the site is very well served by Metro Transit and located in a central urban location.
- 6. Given the good connectivity to higher order streets and proximity to transit service associated with the proposed development site, site generated trips are not expected to significantly impact levels of performance on the adjacent streets and intersections.

If you have any questions or comments, please contact me by email at mike.connors@wspgroup.com or by telephone at 835-9955.

Sincerely:

Original Signed

Mike Connors, P. Eng. Traffic Engineer WSP Canada Inc.



