

Attachment 7
*Engineering Servicing
Memo*

Memorandum

To: Dilys Huang, Planner

Date: July 18, 2022

From: Roger Chang, Engineering Technologist

File: PRJ-009229

Subject: WORKS AND SERVICES REQUIREMENTS FOR 802 - 809 EIGHTH AVENUE –
DP000864

We are responding to your application as referenced above dated Oct 14, 2020 for the proposed infill townhouse HRA project on three existing lots.

Please be advised that staff have done a review of this project and identified the following details that will need to be addressed as part of this application:

1. The applicant is required to submit a subdivision application and follow the subdivision process. For more information on the requirements, see our webpage at <https://www.newwestcity.ca/subdivision-process#subdivision-process>.
2. The applicant shall, at a minimum, familiarize themselves with the following documents and plans:
 - Zoning Bylaw
 - Subdivision and Development Control Bylaw
 - Tree Protection and Regulations Bylaw
 - Erosion and Sediment Control Bylaw
 - Master Transportation Plan
 - Urban Forest Management Strategy
 - Engineering Fees and Rate Bylaw
 - Development Cost Charges Bylaw
3. Onsite storm sewer water management will be required to limit the post development flow to pre-development flow. The onsite works shall be designed in accordance with the City's Integrated Storm Water Management Plan.
4. All site drainage works shall be designed and constructed in accordance with the City's Erosion and Sediment Control Bylaw 7754, 2016. The developer shall retain a qualified professional to ensure that the design and implementation of the erosion and sediment controls meet the requirements outlined in the Bylaw.
5. All existing trees are to be protected in accordance with the City's Tree Protection and Regulations Bylaw No. 7799, 2016 and any trees identified for removal will need to have a permit approved and in place prior to removal.
6. Provision of easement, dedications and statutory rights of way that may be required to meet the capacity, functionality and design objectives for all modes of travel of the City including access to the proposed development. To be confirmed through a complete review of a full application with required technical information, studies and analysis. At a minimum, the City will be requiring, but not necessarily limited to the following:

- 6.1. A 5.0m x 5.0m corner truncation dedication will be required at the corner of Eighth Street and Eighth Avenue for infrastructure, utilities and public access.
 - 6.2. A 3.0m x 3.0m corner truncation will be required at the corner of Eighth Street and Lane.
 - 6.3. A 0.3m wide right-of-way along portions of Eighth Avenue to accommodate transit stop requirements and sidewalk clear widths.
 - 6.4. A 0.3m wide right-of-way along the Eighth Street frontage to accommodate pedestrian network improvements.
7. At the time of Demolition Permit issuance, the applicant will be required to make a payment of a flat fee in the amount of **\$5,500.00** plus GST per serviced parcel for capping at the main, by the City, of all existing sewer and water service connections not for reuse.

OFF-SITE WORKS AND SERVICES

8. Under the City of New Westminster Subdivision and Development Control Bylaw No. 7142, 2007 and amendments thereto, the developer for the above noted property is also required to enter into a Works and Services Agreement with the City addressing off-site servicing requirements. The off-site services will be identified during the detailed development review and will be required prior to issuance of a building permit. These works could include but may not be limited to the following generally described servicing:

ROAD WORKS

The subject site is bounded by Eighth Avenue to the south, Eighth Street to the east and a lane to the north. According to the City's Office Community Plan, both Eighth Avenue and Eighth Street are designated as collector roads.

Eighth Street

- 8.1. Reconstruction of Eighth Street frontage complete with new sidewalk, curb and gutter, trees, landscaping (including drainage and irrigation), street furniture, street lighting (including pedestrian level lighting), signage, underground electrical and telecommunication servicing. Eighth Street shall be reconstructed on the following minimums:
 - Reconstruction of the existing road structure shall be based on the analysis of a Benkelman Beam Test, or other approved method, carried out on the existing road which is to be upgraded. If the test results are proven satisfactory, the minimum requirement shall be a mill and overlay.
 - 2.0m wide unobstructed separated sidewalk
 - 2.0m wide boulevard with street trees

Eighth Avenue

- 8.2. Reconstruction of Eighth Street frontage complete with new sidewalk, curb and gutter, trees, landscaping (including drainage and irrigation), street furniture, street lighting (including pedestrian level lighting), signage, underground electrical and telecommunication servicing. Eighth Street shall be reconstructed on the following minimums:
- Reconstruction of the existing road structure shall be based on the analysis of a Benkelman Beam Test, or other approved method, carried out on the existing road which is to be upgraded. If the test results are proven satisfactory, the minimum requirement shall be a mill and overlay.
 - 2.0m wide unobstructed separated sidewalk
 - 2.0m wide boulevard with street trees
- 8.3. Transit stop as per TransLink Bus Infrastructure Design Guidelines, at minimum 3.0m x 3.0m landing pad with tactile surface, a bus shelter (2.0 m clear width sidewalk between shelter and curb), and a Bus bay.

Lane

- 8.4. Construction of a full lane complete with new pavement, roll over curb and gutter (south side) and drainage for storm water runoff collection for the frontage of the development.

Vehicular Site Access

- 8.5. All vehicle access requirement shall meet City Bylaws specifications and accessed from the lane.

UNDERGROUND UTILITIES

Sanitary

- 8.6. Provision of an adequate single sanitary sewer service connection for the development complete with a manhole or inspection chamber at property line. Size and location to be determined by the developer's consulting engineer and approved by the City. Existing infrastructure which is undersized or not capable of handling the post development flows shall be upgraded at the developer's expense.

Storm

- 8.7. Provision of an adequate single storm sewer service connection for the development complete with a manhole or inspection chamber at property line. Size and location to be determined by the developer's consulting engineer and approved by the City. Existing infrastructure which is undersized or not capable of handling the post development flows shall be upgraded at the developer's expense.

Water

- 8.8. Provision of an adequate single water service connection for the development satisfying the fire and domestic demands complete with a suitable water meter with backflow protection. Size and location to be determined by the developer's consulting engineer and approved by the City. Existing infrastructure which is undersized or not capable of handling the post development water demands must be upgraded at the developer's expense.

Electrical, Telecommunication and Gas

- 8.9. All costs associated with the design and conversion of the existing overhead electrical and telecommunication utilities on the roadways adjacent to the site with an underground system for the development. Please contact Marc Rutishauser in the City Electrical Operations Department at (604) 527-4533 for electrical servicing details. Contact Telus and Shaw directly for telecommunication servicing details.
- 8.10. City communication conduit shall be provided in accordance with the City's intelligent City Design requirements as it pertains to the Fiber Optic Network and Street Lighting Design. Please contact Phil Kotyk, Fiber Network Operations Manager at (604) 527-4641 for City communication servicing details.
- 8.11. All costs associated with the design and construction of gas servicing for the development. Please contact Fortis BC directly for servicing details.
- 8.12. All third party utility construction drawings shall include the Civil Design Drawings base plan and must be submitted to the City's Engineering Services Division for review and approval. The developer's consulting engineering shall ensure that the design of all third party utilities, including New Westminster Electrical, have been coordinated with the Civil Design Drawings. Coordination of the drawings must be completed prior to issuance of the Works and Services Agreement.

STREET LIGHTING

- 8.13. Roadway lighting for all street frontages shall be provided and upgraded for safety and to produce accurate and comfortable night time visibility using energy efficient lighting such as LED. Design of roadway lighting shall be in accordance with the City of New Westminster Design Criteria Section 6 and the MMCD (Platinum Edition) Design Guidelines Section 6.0 Roadway Lighting (for LED).

BOULEVARD TREES

- 8.14. The boulevards shall be prepared for boulevard trees complete with a 900mm, New Westminster Planting Blend or approved equal, growing medium for the full width of the boulevard, including drainage and irrigation. Boulevard landscaping and irrigation shall be provided in suitable locations to the satisfaction of the Parks Department. If adequate soil volume is not achievable, provision shall be made for soil cell technology or any other approved method to achieve the specified soil volume. For further information, please contact Sylvain Martel, Senior Arborist at (604) 527-4625.
- 8.15. Boulevard trees will be selected, purchased, installed and maintained by the Parks Department.

9. The preparation of detailed design drawings by a qualified Professional Engineer for the off-site works and services to the satisfaction of the City and in accordance with the City's Design Criteria, Supplemental Specification and Detail Drawings, and Master Municipal Construction Documents. The engineering design drawings for the proposed works may include the following plans:

- Road works
- Storm drainage collection facilities
- Sanitary sewer collection facilities
- Water distribution facilities
- Street lighting
- Street trees, landscaping
- Topographical and lot grading plans
- Erosion and sediment control plans
- Electrical power supply and distribution facilities
- Telecommunication facilities
- Gas facilities

10. Under the Works and Services Agreement with the City the developer must address the following requirements:

- 10.1. Employment and retention of a Professional Engineer to prepare and seal the design drawings; to provide a Resident Engineer for inspection of all design and construction related problems; to prepare, certify and seal "As-Constructed" drawings, including landscape & irrigation drawings and to certify that all materials supplied and works performed conform to City standards as contained within the Subdivision and Development Control Bylaw and/or the Master Municipal Construction Documents.
- 10.2. The developer will be required to post a security deposit for 120% of the estimated construction cost of the offsite servicing works including GST. The security deposit shall be in the form of an Irrevocable Letter of Credit or cash deposit. The security deposit will be reduced once the off-site works are completed to the satisfaction of the City less a 10% holdback. Upon issuance of a Certificate of Completion by the City, the 10% security deposit will be held for a two year maintenance period.

11. The following payments and deposits shall be paid at the time of execution of the Works and Services Agreement:

- 11.1. Payment to cover the cost of preparing the Works and Services Agreement, currently **\$1,960.00** plus tax.
- 11.2. Payment of **four percent (4%)** of the estimated construction costs to cover engineering and administrative costs incurred by the City.
- 11.3. Under the Works and Services Agreement the developer will be required to pay a deposit **\$5,000.00** to cover any charges for emergency works and signage.
- 11.4. Payment of a flat fee in the amount of **\$728.00** per tree for Parks Department to select, purchase, install, and maintain the trees.

- 11.5. Signing of a latecomer waiver clause.
- 12. Submission of any agreements, easements, and right-of-ways documents required by the City in relation to the proposed development.
- 13. The following charges shall be paid at the time of Building Permit Issuance:
 - 13.1. Payment of applicable Greater Vancouver Sewerage & Drainage District (GVS&DD) Development Cost Charges in accordance with Bylaw 187, 1996 and amendments.
 - 13.2. Payment of applicable New Westminster Development Cost Charges in accordance with Bylaw 7311, 2009 and amendments.
 - 13.3. Payment of applicable School Site Acquisition charges in accordance with School District #40 Capital Bylaw No. 2008-1.
 - 13.4. Payment of applicable Regional Transportation Development Cost Charges in accordance with Bylaw No. 124-2018.

Sincerely,



Roger Chang ASCT
Engineering Technologist

cc L. Leblanc, Director of Engineering Services
 E. Wat, Manager Infrastructure Planning
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