

Attachment 7  
*Engineering Services Memo*

# Memorandum

To: Erin Forzley, Senior Development Planner

Date: May 12, 2025

From: Roger Chang, Engineering Technologist

File: PRJ-008574

Subject: WORKS AND SERVICES REQUIREMENTS FOR 721 CUMBERLAND STREET & 102-128 EAST EIGHTH AVENUE – REZ00204/DP000860

---

We are responding to your re-submitted application as referenced above dated November 28, 2024 for the proposed rezoning for a 55-unit infill townhouse development with a ten lots consolidation.

1. The applicant shall, at a minimum, familiarize themselves with the following:
  - 1.1. Master Transportation Plan
  - 1.2. Active Transportation Network Plan
  - 1.3. Urban Forest Management Strategy
  - 1.4. Zoning Bylaw No. 6680, 2001
  - 1.5. Subdivision and Development Control Bylaw No. 7142, 2007
  - 1.6. Erosion & Sediment Control Bylaw No. 7754, 2016
  - 1.7. Tree Protection and Regulation Bylaw No. 7799, 2016
  - 1.8. Engineering Fees and Rate Bylaw No. 7552, 2013
  - 1.9. Development Cost Charges Bylaw No. 8327, 2022
2. To address the hydraulic deficiencies identified in the *Utility Modelling Results – 102–108 East Eighth Avenue and 721 Cumberland Street Development* memorandum dated February 26, 2024, the City and the applicant have agreed to the following servicing requirement:
  - 2.1. The applicant is responsible for constructing approximately 150 meters of 250mm sewer line within the rear lane.
  - 2.2. The applicant shall provide a financial contribution of **\$110,000** toward the future installation of a storm sewer along Cumberland Street.
  - 2.3. Implement a retention and detention system. Detention should follow ISMP guidelines, ensuring that the 10-year post-development peak flow is reduced to the 2-year pre-development peak flow.
3. A cash contribution in lieu of constructing pavement to the centerline of E. Eighth Avenue, with the cost to be determined by the civil consultants during detail design.
4. All work and service requirements shall be completed and implemented during the project's first phase.
5. Geotechnical consideration should be given to the constructability and phasing of the development with respect to the proposed servicing. A geotechnical engineer's report will be required to identify and address off-site preparation requirements for the satisfactory performance of all roads sidewalks, underground utilities and other off-site servicing improvements. At the completion of the site preparation the geotechnical engineer will be required to certify the off-site works and services can be

built within the tolerances outlined in the Master Municipal Specifications and the Subdivision and Development Control Bylaw for the designated design life of the infrastructure.

6. 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 *Subdivision & Development Control Bylaw* and *Integrated Storm Water Management Plan*.
7. 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.
8. 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.
9. 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:
  - 9.1. Dedication of a 3.0m x 3.0m corner truncation will be required at the corner of Cumberland Street and East Eighth Avenue.
  - 9.2. Dedication of a 3.0m x 3.0m corner truncation will be required at the corner of York Street and East Eighth Avenue.
  - 9.3. Dedication of a 3.0m x 3.0m corner truncation will be required at the corner of York Street and Lane for visibility.
  - 9.4. Dedication of a 3.0m x 3.0m corner truncation will be required at the corner of Cumberland Street and Lane for visibility.
  - 9.5. Dedication of a 0.25m along the lane frontage to accommodate a future 6.0m wide lane.
  - 9.6. Dedication is required along portions of E. Eighth Avenue to accommodate transit stop requirements.
  - 9.7. Dedication is required along E. Eighth Avenue to accommodate adequate width for sidewalk and boulevard.
10. At the time of Demolition Permit issuance, the applicant will be required to make a payment of a flat fee in the amount of **\$6,355.00** 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**

11. 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 prior to issuance of a building permit. The off-site services shall include, but are not necessarily limited to the following:

### **ROAD WORKS**

#### **East Eighth Avenue**

- 11.1. Reconstruction of East Eighth Avenue 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. East Eighth Avenue shall be reconstructed up to road centerline based 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 sidewalk
  - 2.0m wide boulevard with street trees
- 11.2. Transit stop as per TransLink Bus Infrastructure Design Guidelines, and the City's Subdivision and Development Control Bylaw.
- 11.3. Transit priority measures (Figure 6-6, 6-7) as identified in the Sapperton & Massey-Victory Heights Transportation Plan
- 11.4. Relocation of utilities (e.g. Fire hydrants) out of the new sidewalk alignments may be required
- 11.5. Roadway and Intersection improvements on E. Eighth Avenue and Cumberland Street improvements as identified in the Sapperton & Massey-Victory Heights Transportation Plan (Figure 7-1). Replacement of the traffic controller and power requirements, further discussion required with transportation division and electrical department.

#### **Cumberland Street**

- 11.6. Reconstruction of Cumberland 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. Cumberland Street shall be reconstructed up to road centerline based 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 sidewalk
- 2.0m wide boulevard with street trees

- 11.7. Relocation of utilities (e.g. Fire hydrants) out of the new sidewalk alignments may be required
- 11.8. Consideration for Integrated Stormwater Management initiatives along Cumberland Street.

### **York Street**

- 11.9. Reconstruction of York 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. York Street shall be reconstructed up to road centerline based 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 sidewalk
  - 2.0m wide boulevard with street trees
- 11.10. Consideration for Integrated Stormwater Management initiatives along York Street

### **Lane**

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

### **Vehicular Site Access**

- 11.12. All proposed vehicular access for the development shall be from the Lane.

## **UNDERGROUND UTILITIES**

### **Sanitary**

- 11.13. 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**

- 11.14. 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**

- 11.15. 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**

- 11.16. 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 Arne Hannula in the City Electrical Operations Department at (604) 527-4533 for electrical servicing details. Contact Telus and Shaw directly for telecommunication servicing details.
- 11.17. 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.
- 11.18. All costs associated with the design and construction of gas servicing for the development. Please contact Fortis BC directly for servicing details.
- 11.19. 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**

- 11.20. 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**

- 11.21. 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.

- 11.22. At the developer's cost, trees will be selected by the City's Parks Department from a City Approved nursery based on available soil volume and location. The developer shall retain a City pre-approved contractor to pick-up and plant the trees in accordance with City Specifications.
12. 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
13. Under the Works and Services Agreement with the City the developer must address the following requirements:
- 13.1. 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; and
- 13.2. 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.
14. The following payments and deposits shall be paid at the time of execution of the Works and Services Agreement:
- 14.1. Payment to cover the cost of preparing the Works and Services Agreement, currently **\$2,129.00** plus tax.
- 14.2. Payment of **four percent (4%)** of the estimated construction costs to cover engineering and administrative costs incurred by the City.

- 14.3. 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.
- 14.4. Payment of a flat fee in the amount of **\$1,050.00** per tree for selection and purchase by the Parks Department.
- 14.5. Signing of a latecomer waiver clause.
- 15. Submission of any legal documents required by the City in relation to the proposed development.
- 16. The following charges shall be paid at the time of Building Permit Issuance:
  - 16.1. Payment of applicable School Site Acquisition charges in accordance with School District #40 Capital Bylaw No. 2008-1.
  - 16.2. Payment of applicable Translink Regional Transportation Development Cost Charges in accordance with Bylaw No. 155-2024 and amendments.
  - 16.3. Payment of applicable Metro Vancouver Regional Sewerage & Drainage District (GVS&DD) Development Cost Charges in accordance with Bylaw 187, 1996 and amendments.
  - 16.4. Payment of applicable Metro Vancouver Regional Water District Development Cost Charges in accordance with Bylaw 257, 2022 and amendments.
  - 16.5. Payment of applicable Metro Vancouver Regional Parkland Acquisition Development Cost Charge in accordance with Bylaw 1367, 2023 and amendments.

Should you have any further questions, please contact the undersigned at 604-527-4633 or [rchang@newwestcity.ca](mailto:rchang@newwestcity.ca).

Regards,



Roger Chang, ASct, PMP  
Engineering Technologist

cc L. Leblanc, Director of Engineering Services  
K. Agyare-Manu, Senior Manager  
H. Maghera, Engineering Development Services Supervisor  
C. Dobrescu, Utilities and Special Projects Engineer  
G. Otieno, Infrastructure Engineer  
M. Anderson, Manager Transportation  
G. Hermanson, Transportation Planner  
E. Mashig, Manager, Park Horticulture & Open Space Planning  
M. Rutishauser, Manager, Electrical Engineering Design & Planning



J. Krevs, Senior Plan Reviewer