

Attachment 12
Engineering Servicing
Memo

Memorandum

To: Wendee Lang, Development Planner

Date: January 4, 2023

From: Hardeep Maghera, Senior Engineering Technologist

File: PRJ-009749

Ref: DRF00250

Subject: SERVICING REQUIREMENTS FOR 102-104 EIGHTH AVENUE AND 728 FIRST STREET - OCP00040, REZ00228, DP000973.

We are responding to the application as referenced above for the 10-unit townhouse development at 102-104 Eighth Avenue and 728 First Street.

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

1. The applicant shall, at a minimum, be aware of, or familiarize themselves with the following documents and plans:
 - Subdivision and Development Control Bylaw
 - Tree Protection and Regulation Bylaw
 - Erosion and Sediment Control Bylaw
 - Zoning Bylaw
 - Street and Traffic Bylaw
 - Master Transportation Plan (MTP)
 - Official Community Plan (OCP)
2. The modeling results of the storm, sanitary and watermain systems has confirmed that the available capacity is sufficient for the proposed development.
3. Consolidation of the lands, 102-104 Eighth Avenue and 728 First Street to form one (1) single parcel of land.
4. Provision of any road dedications and statutory rights of way that may be required along all frontages to meet the capacity, functionality and design objectives for all modes of travel of the City including access to the proposed development. At a minimum, the City will be requiring, but not necessarily limited to the following:
 - A 0.6m Lane dedication along the development frontage.
 - Dedication of a minimum 3.0m x 3.0m corner truncation at the intersection of Eighth Avenue and the lane.
5. Onsite storm sewer water management will be required to limit the post development flow to pre-development flow. The on-site works shall be designed to incorporate green infrastructure in accordance with the City's Integrated Storm Water Management Plan.

6. 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.
7. All existing trees are to be protected in accordance with the City's Tree protection and Regulation Bylaw No. 7799, 2016 and any trees identified for removal will need to have a permit approved and in place prior to removal.
8. Payment of a flat fee in the amount of \$5,500.00 plus GST for capping at the main, by the City, of all existing sewer and water service connections not for reuse.

OFF-SITE WORKS AND SERVICES

9. 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 required to enter into a Works and Services Agreement with the City addressing all 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 a lane to the west, First Street to the east and Eighth Avenue to the north. According to the City's Master Transportation Plan (MTP), Eighth Avenue is classified as a City Collector and First Street is classified as a Local Road.

Eighth Avenue

- 9.1. Reconstruction of the Eighth Avenue frontage complete with new sidewalk, curb and gutter, trees, landscaping (including drainage and irrigation), street lighting, underground electrical and telecommunication servicing. Eighth Avenue shall be constructed 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 landscaped front boulevard.
 - Provide a letdown (MMCD C7) at the intersection of Eighth Avenue and the Lane complete with a continuous sidewalk along Eighth Avenue.
 - Provide a curb bulge on the southwest corner of the intersection similar to the one on the southeast corner.

First Street

- 9.2. Reconstruction of the First Street frontage complete with new sidewalk, curb and gutter, trees, landscaping (including drainage and irrigation), street lighting, underground electrical and telecommunication servicing. First Street shall be constructed 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. Gutter alignment to follow existing alignment.
 - Front and back landscaped boulevards. Front boulevard to be a minimum 2.0m wide.
 - An upgrade of the existing signal at the First Street and Eighth Avenue intersection is required. Signal to be upgraded from its current condition to a bike/pedestrian activated half signal.

Lane

- 9.3. Reconstruction of the Lane in its entirety complete with rollover curb and gutter and underground electrical and telecommunication servicing. The Lane shall be reconstructed 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.
 - 5.0m wide pavement width with rollover curb and gutter on both sides.
 - A speed hump/speed bump will be required be placed approximately 30 m from the Eighth Ave/Lane intersection (subject to location of driveways, utility poles and other considerations).

Loading, Garbage and Recycling

- 9.4. All loading to occur as identified on GDP Architecture - Glenbrooke Row Townhouses Sheet A-009rev2 – Garbage Recycling Collection Plan.
- 9.5. Garbage and recycling functions are to be located at the rear of the site in the lane in accordance with GDP Architecture - Glenbrooke Row Townhouses Sheet A-009rev2 – Garbage Recycling Collection Plan.

UNDERGROUND UTILITIES

Water

- 9.6. 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. A hydrant test should be conducted at the development connection location to verify the pressure and the required fire flow should be validated using the FUS document Water Supply for Public Fire Protection (2020) when architectural plans for the development are finalized. Size and location to be determined by the Developer's consulting engineer and approved by the City.

Sanitary

- 9.7. Provision of an adequate single sanitary sewer service connection for the development complete with a manhole or inspection chamber at property line. Provision of a storm main extension in the lane to pick up lane drainage. Size and location to be determined by the Developer's consulting engineer and approved by the City.

Storm

- 9.8. Extension of the existing 750mm storm sewer along Eight Avenue frontage from First Street to the lane to service the development complete with single service connection with either 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.

Electrical and Telecommunication

- 9.9. All costs associated with the design and replacement of the existing overhead electrical and telecommunication utilities on the roadways adjacent to the site with an underground system with servicing for the development. It is recommended that any kiosks be placed in an indented SROW to avoid conflicts with the proposed sidewalks. For further information please contact Marc Rutishauser in the City Electrical Operations Department at (604) 527-4533 for electrical servicing details. Contact Telus or Shaw directly for telecommunication details.
- 9.10. 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. For further information, please contact Phil Kotyk, Fiber Network Operations Manager at (604) 524-4641.
- 9.11. All costs associated with the design and construction of gas servicing for the development. Please contact Fortis BC directly for servicing details.

- 9.12. 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 engineer shall ensure that the design of all third party utilities 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

- 9.13. Roadway lighting for the frontages shall be provided and/or 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

- 9.14. 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) 524-4625 or smartel@newwestcity.ca.
10. 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
 - Boulevard preparation for trees, irrigation and drainage
 - Topographical and lot grading plans
 - Erosion and sediment control plans
 - Electrical power supply and distribution facilities
 - Telecommunication servicing plans
 - Gas facilities

Under the Works and Services Agreement with the City, the Developer must address the following requirements:

- 11.1. 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.
- 11.2. The Developer will be required to post a security deposit for 120% of the estimated construction cost of the off-site 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.

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

- 11.3. Payment to cover the cost of preparing the Works and Services Agreement, currently **\$1,960.00** plus tax;
 - 11.4. Payment of **four percent** (4%) of the estimated construction costs to cover engineering and administrative costs incurred by the City;
 - 11.5. Under the Works and Services Agreement the Developer will be required to pay a **\$5,000.00** deposit to cover any charges for emergency works and signage.
 - 11.6. Payment of a deposit (**\$650.00 plus Tax per Tree**) towards the cost to the City for selecting, purchasing, installing, establishing and maintaining Boulevard Trees.
11. Signing of a latecomer waiver clause.
12. Submission of any easement or right of way 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.

Should you have any further questions or concerns please do not hesitate to contact me directly at (604) 527-4545.

Thank you,



Hardeep Maghera, A.Sc.T, BC-CESCL
Senior Engineering Technologist

cc L. Leblanc, Director of Engineering Services
 M. Anderson, Manager, Transportation
 K. Agyare-Manu, Senior Manager Engineering Services
 C. Dobrescu, Utilities and Special Projects Engineer
 G. Hermanson, Transportation Planner
 E. Mashig, Manager, Horticulture, Parks, and Open Space Planning
 M. Rutishauser, Manager, Elec. Engineering, Design & Planning, Electric Utility
 P. Kotyk, Fiber Networks Operations Manager
 S. Trachta, Manager, Inspections, Development Services – Building & Plumbing