



Appendix D:
Engineering Services Memo

Memorandum

To: HANNAH JARRETT, Development Planner

Date: July 31, 2024

From: Christian Medurecan, Senior Engineering Technologist

File: PRJ-011418
DRF00346

Subject: WORKS AND SERVICES REQUIREMENTS FOR 1084 TANAKA COURT – OCP00044,
REZ00253

We are responding to your Development Permit application as referenced above dated April 17, 2024 for the proposed Rezoning and Official Community Plan Amendment of the subject property.

Provided the applicant is successful in obtaining a Development Permit, the Engineering Department requirements include but may not necessarily be limited to the following:

1. The developer is required to submit a subdivision application and follow the subdivision processes. For more information on the requirements, see our webpage at <https://www.newwestcity.ca/subdivision-process#subdivision-process>.
2. The developer shall, at a minimum, familiarize themselves with the following documents and plans:
 - 2.1. Master Transportation Plan
 - 2.2. Active Transportation Network Plan
 - 2.3. Official Community Plan (OCP)
 - 2.4. Zoning Bylaw No. 6680, 2001
 - 2.5. Subdivision and Development Control Bylaw No. 7142, 2007
 - 2.6. Erosion & Sediment Control Bylaw No. 7754, 2016
 - 2.7. Tree Protection and Regulation Bylaw No. 7799, 2016
 - 2.8. Street and Traffic Bylaw No. 7664, 2015
3. A Comprehensive Transportation Review (CRT) will be required for the proposed development. A Terms of Reference (ToR) will be prepared by City Staff at the request of the applicant and as part of the full application review/
4. Modeling of the storm, sanitary and watermain systems are required to confirm if the available capacity is sufficient for the proposed development. In order to complete a detailed review for this project your engineering consultant will need to submit a completed “Utilities Modeling Analysis Application Form” (attached) and pay a modeling fee in the amount of **\$7,899.15**. Any capacity constraints identified in the modeling analysis may require upgrades to the existing infrastructure as a requirement to proceed with your development.
5. A Geotechnical Engineering Report is required from a qualified geotechnical engineer to satisfy potential differential settlement problems for all roads, sidewalks, underground utilities and other required off-site servicing improvements. The report shall also address any anticipated short and long term settlement and potential differential settlement issues. At the completion of the site preparation your geotechnical engineer will be required to certify the off-site works and services have been built in accordance with the design drawings, the Master Municipal Specifications and the Subdivision and

Development Control Bylaw and are expected to perform within the design tolerances for the designated design life of the infrastructure

6. The property is located within a designated floodplain area and no areas suitable for habitation may be constructed with the bottom of a wooden floor system or top of concrete pad elevation lower than 3.53 meters Geodetic Survey of Canada Datum the “Flood Construction Level” (FCL). Prior to building permit approval you will need to obtain a soil deposit permit and complete placement of fill to address the FCL. We will require a letter from a qualified Professional Geotechnical Engineer certifying that the fill placement has been completed and the lot can be safely used for the intended use. There may be additional requirements identified at the time of development permit and building permit application stages and you should discuss any plans for new construction with the Development Services Department.
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 meets the requirements outlined in the Bylaw.
8. 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. The development will be required to provide on-site storage for a 25 year 24 hour storm event to pre-development runoff rate due to existing catchment constraints in the Boundary Road System.
9. 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.
10. 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.
11. All construction to be in accordance with the most current MMCD (Platinum Edition), City of New Westminister Subdivision and Development Control Bylaw No. 7142, 2007, Design Criteria and Supplementary Specifications unless specified elsewhere.

WORKS AND SERVICES – OFF-SITE

12. Under the City of New Westminister 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:

ROADWORKS

The subject site is bounded by Tanaka Court to the north and Southern Railway to the south. According to the City's Master Transportation Plan (MTP) Tanaka Court is classified as a local road.

Tanaka Court

12.1. Reconstruction of Tanaka Court frontage complete with new sidewalk, curb and gutter, trees, landscaping (including drainage and irrigation), street lighting (including pedestrian level lighting), signage, underground electrical and telecommunication servicing. Tanaka Court 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.
- 1.8m wide unobstructed sidewalk along the property frontage up to Gifford Street
- 2.0m wide boulevard
- 2.4m wide parking lane
- 3.0m wide travel lane
- Wheelchair letdowns at south east corner of Gifford Street and Tanaka Court
- Pedestrian crossing across Tanaka Court at the east end of the subject property with wheelchairs on both sides of the road

Southern Railway

12.2. Provision of suitable chain-link fencing along the Southern Railway frontage to deter the public from crossing the railway property and tracks.

Vehicular Site Access

12.3. All vehicle access requirement shall meet City Bylaws specifications.

UNDERGROUND UTILITIES

Sanitary

12.4. 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

12.5. 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

- 12.6. 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. 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

- 12.7. 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.
- 12.8. 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.
- 12.9. All costs associated with the design and construction of gas servicing for the development. Please contact Fortis BC directly for servicing details.
- 12.10. 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

- 12.11. 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

- 12.12. 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. For further information, please contact Sylvain Martel, Senior Arborist at (604) 527-4625.

- 12.13. Boulevard trees will be selected, purchased, installed and maintained by the Parks Department.
13. 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
14. Under the Works and Services Agreement with the City the developer must address the following requirements:
 - 14.1. 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.
 - 14.2. 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.
15. The following payments and deposits shall be paid at the time of execution of the Works and Services Agreement:
 - 15.1. Payment to cover the cost of preparing the Works and Services Agreement, currently **\$2,067.00** plus tax.
 - 15.2. Payment of **four percent (4%)** of the estimated construction costs to cover engineering and administrative costs incurred by the City.

- 15.3. 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.
- 15.4. Payment of a flat fee in the amount of **\$955.00** per tree for the selected, purchased, installed, and maintained by the Parks Department.
- 15.5. Signing of a latecomer waiver clause.
16. Submission of any easement or right of way documents required by the City in relation to the proposed development.
17. The following charges shall be paid at the time of Building Permit Issuance:
 - 17.1. Payment of applicable Greater Vancouver Sewerage & Drainage District (GVS&DD) Development Cost Charges in accordance with Bylaw 187, 1996 and amendments.
 - 17.2. Payment of applicable New Westminister Development Cost Charges in accordance with Bylaw 7311, 2009 and amendments.
 - 17.3. Payment of applicable School Site Acquisition charges in accordance with School District #40 Capital Bylaw No. 2008-1.
 - 17.4. Payment of applicable Regional Transportation Development Cost Charges in accordance with Bylaw No. 124-2018.
 - 17.5. Payment of applicable Greater Vancouver Water District Development Cost Charges in accordance with Bylaw 257, 2022 and amendments.

Should you have any further questions, please contact the undersigned at 604-636-4463 or cmedurecan@newwestcity.ca.

Regards,



Christian Medurecan, ASCT, CPWI-2, BC-CESCL
Senior Engineering Technologist

Attached.

- cc
- L. Leblanc, Director of Engineering Services
 - K. Agyare-Manu, Deputy Director of Engineering Services
 - 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, Acting Deputy Director of Parks, Planning and Policy
 - M. Rutishauser, Manager, Deputy Director of Electrical Services
 - S. Trachta, Senior Manager Building Inspections

