



Attachment #15
Engineering Servicing Memo

Memorandum

To: Mike Watson, Acting Supervisor of Development Planning

Date: May 20, 2022

From: Christian Medurecan, Engineering Technologist

File: PRJ-005523

Reference No: DRF00073

Subject: OFF-SITE WORKS AND SERVICES (REVISED) REQUIREMENTS FOR 514 CARNARVON STREET – SDP00198/OCP00010/HER00510

We are responding to the application as referenced above dated August 28, 2017 for the proposed Mixed-Use Development.

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 the application:

1. Prior to First and Second Reading, the Applicant shall address all onsite and offsite Transportation matters which could have impacts to the adjacent road network(s) (i.e. Turning movements, Loading areas, etc.)
2. 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)
3. On-site storm sewer water management will be required to limit the post development flow to pre-development flow. The on-site 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 Regulation 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 a suitable reciprocal Access and Parking Easement with section 219 Covenant for the joint driveway and shared parking between the two lots. The City shall be party to the easement and covenant such that they cannot be discharged without the City's consent.
7. Provision of a Public Gathering and Access Statutory Right of Way with section 219 Covenant over the onsite plaza area, elevator and limited mobility ramp. The legal agreements shall include a maintenance component such that the Plaza Area, Elevator and Limited Mobility Ramp are maintained by the property owner(s).
8. Provision of an Encroachment Agreement for the landscaped slope along the Carnarvon Street Cathedral frontage such that it is maintained by property owner(s).
9. 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.
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 **\$5,850.00** plus GST for capping at the main, by the City, of all existing sewer and water service connection not for reuse.

Provided you are successful in obtaining Council's Approval, the Engineering department requirements under the Subdivision and Development Control Bylaw include but are not necessarily limited to the following:

11. Submission of an application for subdivision for the additional Lot accompanied by a BC Land Surveyor's Proposed Subdivision and Topographical Survey Plan. The Subdivision Application Form can be found on the City's website under "Subdivision Process" or at the Engineering Front Counter and City Hall.

OFF-SITE WORKS AND SERVICES

12. 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:

ROADWORKS

The subject site is bounded by Carnarvon Street to the north, Clarkson Street and Church Street to the south. According to the City's Mater Transportation Plan (MTP), Carnarvon Street is classified as a collector road and Clarkson and Church Streets as Laneway/Narrow Streets.

CARNARVON STREET

- 12.1. Reconstruction of the Carnarvon Street frontage complete with new sidewalk, curb and gutter, trees, landscaping (including drainage and irrigation), street furniture, traffic calming, street lighting, underground electrical and telecommunication servicing. Carnarvon 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
 - The existing curb bulge will need to be shifted and Carnarvon Street widened to the west edge of the Central Stairs. The final design and alignment of Carnarvon Street shall be in accordance with the concepts identified in the City's Downtown Transportation Plan.
 - The landscaped slope retention along the Cathedral frontage on Carnarvon Street shall be designed in such a way that it can be easily maintained.

CLARKSON STREET

- 12.2. Reconstruction of the Clarkson Street frontage complete with new sidewalk, curb and gutter, street lighting, underground electrical and telecommunication servicing. Clarkson Street shall be reconstructed in its entirety 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
 - 2.5m wide unobstructed sidewalk
 - Two 3.0m wide travel lanes
 - One 2.4m wide parking lane
 - Fully marked crosswalk at the Clarkson and Church Street intersection.

CHURCH STREET

- 12.3. Reconstruction of the Church Street Frontage complete with new sidewalk, curb and gutter, trees, drainage and irrigation, street lighting, underground electrical and telecommunication servicing. Church Street shall be reconstructed in its entirety 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
- Rollover curb and gutter along the west side of Church Street
- Two 4.0m wide travel lanes
- 2.4m wide parallel parking lane on the east side of Church Street
- Barrier curb and gutter along the east side of Church Street
- 1.2m wide hard surface boulevard with tree pits on the east side of Church Street
- 3.0m wide unobstructed sidewalk along the east side of Church Street

SPECIAL EVENT TRAFFIC MANAGEMENT

- 12.4. Arrangements with the City of New Westminster Police Department will need to be formulated and agreed upon allowing temporary two-way access along Clarkson Street to the subject property via Sixth Street during events that will close Columbia Street to all vehicular traffic.

VEHICULAR SITE ACCESS

- 12.5. All proposed vehicular access for the subject properties shall be from Clarkson Street
- 12.6. All access requirements shall meet City Bylaw specifications

LOADING AND WASTE MANAGEMENT

- 12.7. Garbage and recycling operations and functions shall occur on-site. Staging of containers on Clarkson Street or the sidewalk is not permitted.
- 12.8. All pick-up / drop-off and loading / unloading function for both the commercial and residential components shall occur on-site.

PLAZA AREA / NORTH-SOUTH PASSAGE

- 12.9. The Public Plaza Space will require safe, intuitive and fully accessible pedestrian connections.
- 12.10. Provision of a 3.0m wide limited mobility ramp with a grade of no more than 5% is required to adequately accommodate wheelchair users.
- 12.11. Provision of comfortable seating and resting areas, as well as, incorporation of public art.

UNDERGROUND UTILITIES

WATER

- 12.12. Upgrading of the existing 150mm water-main to 200mm along Carnarvon Street from the east end of the subject property up to Fourth Street to service the development for the fire and domestic demands. This will include upgrading the existing fire hydrant located on the south side of Clarkson Street at the east end of the subject property.
- 12.13. 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.

SANITARY

- 12.14. Provision of an adequate sanitary sewer service connection for each lot in the development complete with inspection chambers or manholes at property line. Size and location to be determined by the Developer's consulting engineer and approved by the City.

STORM

- 12.15. Provision of an adequate storm sewer service connection for each lot in the development complete with inspection chambers or manholes at property line. Size and location to be determined by the Developer's consulting engineer and approved by the City.

ELECTRICAL, TELECOMMUNICATION AND GAS

- 12.16. 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 Marc Rutishauser in the City's Electrical Operations Department at (604) 527-4533 for electrical and City communication servicing details. Contact Telus and Shaw directly for telecommunication servicing details.
- 12.17. 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. For further information, please contact Phil Kotyk, Fiber Network Operations Manager at (604) 524-4641.
- 12.18. All costs associated with the design and construction of gas servicing for the development. Please contact Fortis BC directly for servicing details.

- 12.19. 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 engineer 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 the issuance of the Works and Services Agreement.

STREET LIGHTING

- 12.20. Roadway lighting for all street frontages shall be provided 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

- 12.21. The boulevards shall be prepared for Boulevard and/or Street 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, provisions 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.
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
 - Boulevard preparation for tree, irrigation and drainage
 - Topographical and lot grading plans
 - Erosion and sediment control plans
 - Electrical power supply and distribution facilities
 - Telecommunication Servicing Plans
 - 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 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;
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 **\$1,960.00** plus tax;
 - 15.2. Payment of **four percent** (4%) of the estimated construction costs to cover the 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 of **\$5,000.00** to cover any charges for emergency works and signage.
 - 15.4. Payment of a fee (**\$650.00 plus Tax per Tree**) towards the cost to the City for selecting, purchasing, installing, establishing and maintaining Street Trees.
 - 15.5. Signing of a latecomer waiver clause.
16. Submission of any easements or right of way documents required by the City in relation to the proposed development.
17. Submission of the Subdivision Plan and Documents for execution by the Approving Officer.
18. The following charges shall be paid at the time of Building Permit issuance:
 - 18.1. Payment of applicable Greater Vancouver Sewerage & Drainage District (GVS&DD) Development Cost Charges in accordance with Bylaw 187, 1996 and amendments.

18.2. Payment of applicable New Westminster Development Cost Charges in accordance with Bylaw 7311, 2009 and amendments.

18.3. Payment of applicable School Site Acquisition charges in accordance with School District #40 Capital Bylaw No. 2008-1.

18.4. 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 604-636-4463.

Thank you,



Christian Medurecan, CTech, CPWI-2, BC-CESCL
Engineering Technologist

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