

# Attachment #5

## Initial Engineering Servicing Memo



### Memorandum

To: Mike Watson, Development Planner

Date: July 31, 2024

From: Christian Medurecan, Senior Engineering Technologist

File: PRJ-010852 DRF00318

#### **Subject:** <u>HIGH LEVEL COMMENTS</u> FOR WORKS AND SERVICES REQUIREMENTS FOR 88 TENTH STREET – REZ00239

We are providing the following High Level Engineering Works and Services Requirements to support the Columbia Square Policy Statement.

- 1. The developer shall, at a minimum, familiarize themselves with the following documents and plans:
  - 1.1. Master Transportation Plan (MTP)
  - 1.2. Downtown Transportation Plan
  - 1.3. Active Transportation Network Plan (ATNP)
  - 1.4. Official Community Plan (OCP)
  - 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. Street and Traffic Bylaw No.7664, 2015
  - 1.9. Downtown Building and Public Realm Design Guidelines and Master Plan
- 2. Should the developer choose to subdivide any portions of the land, they will be required to submit a subdivision application and follow the subdivision processes. For more information on the requirements, see our webpage at <a href="https://www.newwestcity.ca/subdivision-process#sub
- 3. Completion of a Road Closure Agreement including all costs associated with the removal and/or relocation of all existing utilities located within the Eleventh Street road dedication between Royal Avenue and Columbia Street.
- 4. Provision of easements, 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. Including areas such at plaza and internal road system.
- 5. Provision of a Comprehensive Transportation Review (CRT) and Traffic Impact Analysis (TIS) in accordance with the Terms Of Reference (TOR) provided by Staff in 2023 which: Assesses the impacts of the proposed development on the surrounding neighborhood transportation network, including pedestrians, cycling, transit and road networks; Evaluates how people living, working at, or visiting the development site will access the site by all travel modes, and move within the site to access vehicles and bicycle parking areas, loading areas, solid waste, recycling and compost areas, amenity areas, and building access/entry points; Identifies mitigation measures to address potential impacts resulting from the proposed development that will be implemented through the development.

- 6. Provision of Construction and Transportation Management Plans that will develop concurrently with the rezoning application for all phases of construction including, but not necessarily limited, to the following:
  - Installation of servicing and utilities to minimize impacts on the surrounding neighborhoods
  - Timing to overlap with other scheduled utility works
  - Detailed phasing plans which outline condition during and at the completion of each phase of construction (i.e. topography, material treatment, roads, and pedestrian and bicycle connections
  - All undeveloped portions on the site shall be appropriately fences-off and secured
  - Access to key services in and around the site shall be maintained at all times throughout the construction of all phases
  - Temporary pedestrian conditions shall be maintained and accessible at all times
  - Vacant sites shall be activated with temporary uses (i.e. food trucks, playgrounds, markets, festivals).
- 7. 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 elevation 4.15 meters Geodetic Survey of Canada Datum the "Flood Construction Level" (FCL). A letter will be required from a qualified Professional Geotechnical Engineer certifying that the site 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.
- 8. Geotechnical consideration shall be given to the constructability and phase of the development with respect to proposed servicing. A geotechnical engineer's report will be required to identify and address offsite preparation requirements for the satisfactory performance of all roads, sidewalks, underground utilities and other offsite servicing improvements. At the completion of the site preparation, the geotechnical engineer will be required to certify the offsite 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 life of the project.
- 9. A Stormwater Management Plan (SWMP) detailing the proposed storm drainage servicing for the development and the impact on the downstream system is required and shall be in accordance with the City's Design Criteria. Detention and Retention facilities shall be designed to meet the rainwater management targets of the City's *Integrated Stormwater Management Plan* (ISMP).
- 10. Onsite storm sewer water management will be required to limit the post development flow to predevelopment flow. The onsite works shall be designed in accordance with the City's *Subdivision & Development Control Bylaw* and *Integrated Storm Water Management Plan*.
- 11. 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.
- 12. 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.

13. All construction to be in accordance with the most current MMCD (Platinum Edition), City of New Westminster Subdivision and Development Control Bylaw No. 7142, 2007, Design Criteria and Supplementary Specifications unless specified elsewhere.

#### WORKS AND SERVICES – OFF-SITE

14. 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:

#### ROADWORKS

The subject site is bounded by Tenth Street to the east, Royal Avenue to the north and Columbia Street to the southwest. According to the City's Master Transportation Plan (MTP), Tenth Street is classified as a neighborhood collector, Royal Avenue as a major road network and Columbia Street as an arterial road.

#### TENTH STREET - ROYAL AVENUE - COLUMBIA STREET

- 14.1. Reconstruction of the Tenth Street, Royal Avenue and Columbia Street frontages in accordance with the Downtown Transportation Plan and the Downtown Building and Public Realm Design Guidelines and Master Plan complete with new sidewalk curb and gutter, boulevard improvements (including trees, drainage and irrigation), benches and seating opportunities, weather protection, potential for bicycle facilities, street lighting (including pedestrian scale lighting), underground electrical and telecommunication servicing
  - Provision of curb bulges at site entrances (including: rain gardens and planting) Refer to: "Bump Out Park - S3 6.2.3" in the <u>Downtown Building and Public Realm Design</u> <u>Guidelines.</u>
  - Provision of parklet's (including benches, tables, movable chairs and landscaping) Refer to: "Parklet - P2 6.1.2" in the <u>Downtown Building and Public Realm Design</u> <u>Guidelines</u>.
  - Provision of Boulevard Rooms along city sidewalks (including various streetscape components) – Refer to: "Boulevard Room - P3 6.1.3" in the <u>Downtown Building and</u> <u>Public Realm Design Guidelines</u>
  - Provision of Protected mobility lane (including core network cycling facilities) Refer to: "Columbia Square Connections corridor C12" in the <u>Downtown Transportation Plan</u>

#### **VEHICULAR SITE ACCESS**

14.2. All vehicle access for the subject property shall be from the private internal road network limiting the creation of new access points to the site from the adjacent roads.

#### INTERNAL ROAD NETWORK & PLAZA AREA

14.3. The internal road system and plaza space shall be privately owned, operated and maintained with the provision of a Statutory Right of Way over these portion of the land for Public Access/Use.

#### **UNDERGROUND UTILITIES**

#### Sanitary

14.4. 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.

Based on the Modeling Analysis results; to fully separate the existing combined sewers, the results show 7 hydraulic deficiencies, including 5 where the HGL is greater than the ground elevation. The development will be required to upgrade a total of 7 segments of sewer pipes (approx. 376m) of existing combined sewer mains on the Columbia Street frontage, from Royal Avenue to Tenth Street, and on Tenth Street from Columbia Street to Quayside Drive.

#### Storm

14.5. 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.

#### Water

14.6. 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.

Based on the Modelling Analysis results; the development requires upsizing of 13 pipe segments (a total of approx. 675m of water mains). The majority of the existing 150mm water mains on Columbia Street and Tenth Street frontages require upsizing. Therefore, the development will be required to upsize the existing 150mm water main on the Columbia Street frontage, from Royal Avenue to Tenth Street. in addition, the 150mm water main on the Tenth Street frontage also requires upsizing, from Royal Avenue to Quayside Drive.

#### **Electrical, Telecommunication and Gas**

14.7. Provision of 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. It is recommended that any kiosks be placed in an indented SROW to avoid conflicts with the proposed sidewalks. The development should plan the site to account for a vista on their site as a default if their transformer is 2500kVA or larger. (Significant upgrades to existing electrical infrastructure is anticipated to service load demands for this development, including upsizing and providing additional electrical feeders to the site. All costs for electrical upgrades will be the responsibility of the developer.)

- 14.8. 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. Connection to the Open Access Fiber Network (BridgeNet) will be required.
- 14.9. Provision of all costs associated with the design and construction of gas servicing for the development.

#### STREET LIGHTING

14.10. 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**

14.11. 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. Boulevard trees will be selected, purchased, installed and maintained by the Parks Department.

The above noted information is provided as High Level Comments of the expected servicing requirements. As the project evolves and additional details are provided there may be further revisions, changes or modifications to these servicing requirements.

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

Regards,

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Attached.

cc

- L. Leblanc, Director of Engineering Services
  - K. Agyare-Manu, Deputy Director of Engineering Services
  - H. Maghera, Engineering Development Services Supervisor
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  - G. Otieno, Infrastructure Engineer
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