# SALMONARM

Memorandum from the Engineering and Public Works Department

TO: Gary Buxton, Director of Planning

DATE: August 23, 2023

PREPARED BY: Mustafa Zakreet, Engineering Assistant

APPLICANT: J. Weed & E. Cockrill

SUBJECT: SUB-23.13

LEGAL: Lot 4, Section 24, Township 20, Range 10, W6M KDYD, Plan 1500 Except

Plans 1948 and EPP 119501

CIVIC: 2391 – 26 Avenue NE

Further to your referral dated July 5, 2023, we provide the following servicing information. The following comments and servicing requirements are not conditions for Rezoning, but are requirements as a condition of Subdivision.

Comments are based on the Subdivision/Development as proposed in the referral. If the development plans for the property change significantly, comments below may change.

#### General:

- 1. Full municipal services are required as noted herein. Owner / Developer to comply fully with the requirements of the Subdivision and Development Services Bylaw No 4293. Notwithstanding the comments contained in this referral, it is the applicant's responsibility to ensure these standards are met.
- 2. Comments provided below reflect the best available information. Detailed engineering data, or other information not available at this time, may change the contents of these comments.
- 3. Properties shall have all necessary public infrastructure installed to ensure properties can be serviced with underground electrical and telecommunication wiring upon development.
- 4. Property under the control and jurisdiction of the municipality shall be reinstated to City satisfaction.
- 5. Owner / Developer will be responsible for all costs incurred by the City of Salmon Arm during construction and inspections. This amount may be required prior to construction. Contact City Engineering Department for further clarification.
- 6. Erosion and Sediment Control (ESC) measures will be required prior to the commencement of construction. ESC plans to be approved by the City of Salmon Arm.
- 7. Any existing services (water, sewer, hydro, telus, gas, etc) traversing the proposed lot must be protected by easement or relocated outside of the proposed building envelope. Owner/Developer will be required to prove the location of these services. Owner / Developer is responsible for all associated costs.
- 8. At the time of subdivision the applicant will be required to submit for City review and approval a detailed site servicing / lot grading plan for all on-site (private) work. This plan will show such items as parking lot design, underground utility locations, pipe sizes, pipe elevations, pipe grades, catchbasin(s), control/containment of surface water, contours (as required), lot/corner elevations, impact on adjacent properties, etc.

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- 9. For the on-site development, prior to commencement the applicant will be required to submit to the City for review and approval detailed engineering plans in accordance with the requirements of the Subdivision and Development Servicing bylaw 4293. These plans must be prepared by a qualified professional engineer. As a condition of final subdivision approval, the applicant will be required to deposit with the City for a period of 1 year, funds equaling 10% of the estimated cost for all works that are to be transferred to the City.
- 10. For the off-site improvements at the time of subdivision the applicant will be required to submit for City review and approval detailed engineered plans for all off-site construction work. These plans must be prepared by a qualified engineer. As a condition of subdivision approval, the applicant will be required to deposit with the City funds equaling 125% of the estimated cost for all off-site construction work.

## Roads / Access:

- 1. 25 Street NE, on the subject property's eastern boundary, is designated as an Urban Local Road standard, requiring 20.0m road dedication (10.0m on either side of road centerline). Available records indicate that no additional road dedication is required (to be confirmed by a BCLS).
- 2. 25 Street NE is currently constructed to an Interim Rural Paved Road standard. Upgrading to an Urban Local Road standard is required, in accordance with Specification Drawing No. RD-2. Upgrading may include, but is not limited to, road widening and construction, curb & gutter, sidewalk, boulevard construction, street lighting, fire hydrants, street drainage and hydro and telecommunications. Owner / Developer is responsible for all associated costs.
- 3. 26 Avenue NE, on the subject property's southern boundary, is designated as an Urban Local Road standard, requiring 20.0m road dedication (10.0m on either side of road centerline). Available records indicate that 2.38m of additional road dedication is required (to be confirmed by a BCLS).
- 4. 26 Avenue NE is currently constructed to an Interim Rural Paved Road standard. Upgrading to an Urban Local Road standard is required, in accordance with Specification Drawing No. RD-2. Upgrading may include, but is not limited to, road widening and construction, curb & gutter, sidewalk, boulevard construction, street lighting, fire hydrants, street drainage and hydro and telecommunications. Owner / Developer is responsible for all associated costs.
- 5. A 3.0m by 3.0m corner cut is required to be dedicated at the intersection of 26 Avenue NE and 25 Street NE, and at the intersection of 26 Avenue NE and any proposed Road.
- 6. Owner / Developer is responsible for ensuring all boulevards and driveways are graded at 2.0% towards the existing roadway.
- 7. Temporary dead-end roads internal to the subdivision may be terminated with a paved temporary T-turn around in accordance with Specification Drawing No. RD-13. Temporary dead-end roads at the limits of the subject property shall be terminated with temporary culde-sacs in accordance with Specification Drawing No. RD-11a (attached).

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8. The proposed road changes the original conceptual design, and subdivision approval is subject to providing access from the proposed road to 2141 26 Avenue NE, or proving an access road from 26 Avenue NE can be achieved in accordance with the Subdivision and Development Servicing Bylaw 4293.

#### Water:

- 1. The subject property fronts a 100mm diameter Zone 2 watermain on 26 Avenue NE, partially fronts a 100mm diameter Zone 3 watermain on 25 Street NE, and a 300mm diameter Zone 2 watermain in a right of way (ROW) crosses the subject property. Upgrading the 100mm diameter watermains to 150mm diameter across the frontage of the property on 26 Avenue NE is required.
- 2. The 300mm diameter Zone 2 watermain is to be relocated to within the proposed 23 Street NE.
- 3. An additional 3m right of way is required for the watermain running along the northern property line (total width 6m).
- 4. Records indicate that the existing property is serviced by a 19mm service from the Zone 2 watermain. Due to the size of the existing service, upgrading to a new metered service (minimum 25mm) will be required. All existing inadequate / unused services must be abandoned at the main. Owner / Developer is responsible for all associated costs.
- 5. Each proposed parcel is to be serviced by a single metered water service connection (as per Specification Drawing No. W-10), adequately sized to satisfy the proposed use (minimum 25mm). Water meter will be supplied by the City at the time of building permit, at the Owner / Developer's cost. Owner / Developer is responsible for all associated costs.
- 6. The subject property is located within an area of identified fire flow deficiency, according to the 2011 Water Study (OD&K 2012). The Owner / Developer's authorized engineer is to complete a flow test on the closest fire hydrant to confirm the existing watermain servicing the subdivision is adequately sized to provide fire flows in accordance with the requirements of the Subdivision and Development Servicing Bylaw No 4293. Where the City water distribution system has insufficient capacity to meet the required fire flow, the Owner / Developer will be required to make the necessary upgrades to meet these standards. Owner / Developer is responsible for all associated costs.
- 7. Fire protection requirements to be confirmed with the Building Department and Fire Department.
- 8. Fire hydrant installation will be required. Owners consulting Engineer shall review the site to ensure placement of fire hydrants meet the low density spacing requirements of 150 meters.

## Sanitary:

1. The subject property fronts a 200mm diameter sanitary sewer on 25 Street NE and a 150mm diameter sanitary sewer terminates at the intersection of 23 Street NE and 26 Avenue NE on the subject property's southern boundary. Since this sewer is below the

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minimum required diameter for sanitary sewers, Owner / Developer's engineer will be required to prove that there is sufficient downstream capacity within the existing sanitary sewer to receive the proposed discharge from the development. If there is insufficient capacity, upgrading of the existing sanitary sewer system will be required.

- 2. Extension of a sanitary sewer along the frontage on 26 Avenue is not required at this time as there are no other benefitting properties. However, extending the sanitary main to the furthest end of the proposed 23 Street NE is a required.
- 3. The remainder and proposed parcel(s) are each to be serviced by a single sanitary service connection adequately sized (minimum 100mm diameter) to satisfy the servicing requirements of the development. Owner / Developer is responsible for all associated costs.
- 4. Records indicate that the existing property is serviced by a 100mm service from the sanitary sewer on 26 Avenue NE. All existing inadequate/unused services must be abandoned at the main. Owner / Developer is responsible for all associated costs.

#### Drainage:

- 1. The subject property does not currently front onto a City storm sewer. Extension of the City Storm system to and along the frontages of the subject property will be required to accommodate the required road drainage. Owner / Developer is responsible for all associated costs.
- 2. Records indicate that the existing property is not currently serviced by a storm service. All existing inadequate/unused services must be abandoned at the main. Owner / Developer is responsible for all associated costs.
- 3. An Integrated Stormwater Management Plan (ISMP) conforming to the requirements of the Subdivision and Development Servicing Bylaw No. 4163, Schedule B, Part 1, Section 7 shall be provided.
- 4. Where onsite disposal of stormwater is recommended by the ISMP, an "Alternative Stormwater System" shall be provided in accordance with Section 7.2.
- 5. Where discharge into the Municipal Stormwater Collection System is recommended by the ISMP, this shall be in accordance with Section 7.3. Each proposed parcel shall be serviced by a single storm service connection adequately sized (minimum 150mm) to satisfy the servicing requirements of the development. Owner / Developer's engineer may be required to prove that there is sufficient downstream capacity within the existing City Storm System to receive the proposed discharge from the development. All existing inadequate / unused services must be abandoned at the main. Owner / Developer is responsible for all associated costs.
- 6. 2791 25 Street NE storm water currently discharges onto the subject property. This property shall be serviced by a storm service connection adequately sized (minimum 150mm) connecting to the City's storm system.

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# Geotechnical:

1. A geotechnical report in accordance with the Engineering Departments Geotechnical Study Terms of Reference for: Category A (Building Foundation Design), Category B (Pavement Structural Design), Category C (Landslide Assessment), is required.

Mustafa Zakreet, EIT **Engineering Assistant**  Gabriel Bau P.Eng.

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City Engineer