

**INFORMATION:**

**DEVELOPMENT VARIANCE PERMIT**

Local Government Act (Part 14)

PERMIT NUMBER: **VP-604**

Bylaw No. 4640

SCHEDULE "B"

**TO:** Broadview Evangelical Free Church and Shuswap Christian Education Society

**For Location at:** **350B – 30 Street NE**

PID: 023-843-594

- 
1. This Development Variance Permit is issued subject to compliance with all applicable City of Salmon Arm Bylaws except as specifically varied by the Permit.
  2. This Development Variance Permit applies to, and only to, (legal description),  
Lot 1, Section 18, Township 20, Range 9, W6M, KDYD, Plan KAP59726
  3. The City of Salmon Arm
    - ☐ Zoning Bylaw No. 2303
    - ☒ Subdivision and Development Servicing Bylaw No. 4293
    - ☐ Sign Bylaw No. 2880
    - ☐ Required under Development Permit Areas (Official Community Plan Bylaw No. 4000)

is hereby varied as follows:

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**THAT: the Committee recommends to Council that Development Variance Permit No. VP-604 be authorized for issuance to vary the Subdivision and Development Servicing Bylaw No. 4293, for frontage of Lot 1, Section 18, Township 20, Range 9, W6M, KDYD, Plan KAP59726, as follows:**

- 1. waive the requirement to upgrade 30 Street NE to the RD-4 Urban Arterial Road standard; and**
- 2. waive the requirement to upgrade 2 Avenue NE to the RD-2 Urban Local Road standard.**

- 
4. The land described herein shall be developed strictly in accordance with the terms and conditions and provisions of this Permit.
  5. This Permit is not a Building or Sign Permit.
  6. Notice shall be filed in the Land Title Office that the land described herein is subject to this Permit.
  7. The terms of the Permit or any amendment to it are binding on all persons who acquire an interest in the land affected by the Permit.
  8. **If the holder of a land use permit does not substantially start any construction with respect to which the permit was issued within 2 years after the date it is issued, the permit lapses.**

AUTHORIZING RESOLUTION ADOPTED BY COUNCIL on the \_\_\_\_ day of \_\_\_\_\_, **2025.**

ISSUED this \_\_\_\_ day of \_\_\_\_\_, **2025.**

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CORPORATE OFFICER  
Rhonda West



## REQUEST FOR DECISION

To: Development & Planning Services Committee

Title: Development Variance Permit Application No. VP-604

Legal: Lot 1, Section 18, Township 20, Range 9, W6M, KDYD, Plan KAP59726  
Civic: 350B 30 Street NE  
Owner: Broadview Evangelical Free Church and Shuswap Christian Education Society  
Agent: TA Structures (Kyllo, G.)

Date: July 7, 2025

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### Executive Summary/Purpose:

The applicant is requesting to waive the service (frontage) upgrades required through a Building Permit application to both 30 Street NE and 2 Avenue NE which front the subject parcel.

### Motion for Consideration:

THAT: the Committee recommends to Council that Development Variance Permit No. VP-604 be authorized for issuance to vary the Subdivision and Development Servicing Bylaw No. 4293, for frontage of Lot 1, Section 18, Township 20, Range 9, W6M, KDYD, Plan KAP59726, as follows:

1. waive the requirement to upgrade 30 Street NE to the RD-4 Urban Arterial Road standard; and
2. waive the requirement to upgrade 2 Avenue NE to the RD-2 Urban Local Road standard.

### Staff Recommendation:

The motion for consideration be defeated.

### Proposal:

The applicant is requesting to waive the service (frontage) upgrades required through a Building Permit application along both 30 Street NE and 2 Avenue NE which front the subject parcel.

### Background:

The subject parcel contains Kings Christian School and is located on the corner of 30 Street NE and 2 Avenue NE just south of South Broadview Elementary School and to the north of the Public Works Yard. The parcel has two road frontages (on 30 Street NE and 2 Avenue NE) and is just over 5 acres in area (Appendix 1). The subject property is designated Institutional in the City's Official Community Plan (OCP) and similarly zoned P3 - Institutional Zone in Zoning Bylaw No. 2303 (Appendix 2 & 3).

30 Street NE is identified as a Bike Route in the OCP and further noted as a Priority Project in the Active Transportation Network Plan due to its position between schools, parks and residential areas within the community.

Adjacent land uses include the following:

North: School	Zoned P3
South: Residential uses	Zoned R10, R14, and R5
East: Mobile Home Park	Zoned R6
West: Small Scale Residential Use	Zoned R10

The applicant has made a Building Permit application for two new buildings. This triggers the provisions of the Subdivision and Development Servicing Bylaw No. 4293 (SDS) for frontage and service works.

Through this development, the applicant is required under the SDS to complete frontage works including upgrading the existing 30 Street NE frontage to the RD-4 standard (including a fire hydrant, street light, and multi-use path installation), and upgrading the 2 Avenue NE frontage to the RD-2 standard (including water-main, fire hydrant and street light installation). The cost estimates provided by the applicant's consulting Engineer total \$1,079,146.95 for these works. The Engineer's estimates are dated May 2024 and are included as a part of Appendix 5.

Table 1 provides a summary of the requirements of the SDS and the applicant's requests.

The fire flow requirements are specified within the SDS Bylaw, which details standards for development so those considering development may be informed in advance of the applicable standards. Schedule B, Part 1, Section 5.4.6 lists the Fire Flow Requirements as such:

Rural Areas	30 litres/sec
Single Family Dwelling / Mobile Home Parks / Duplex	60 litres/sec
Medium Density / Triplex / Fourplex	90 litres/sec
Commercial / Institutional / Apartments	150 litres/sec
Industrial	225 litres/sec

In addition to the frontage improvements, the City's servicing report in response to the Building Permit application noted that the subject parcel is located in an area identified for fire flow deficiency, that flow testing is required to confirm servicing is adequately sized to provide fire flows, and that the Owner/Developer is required to complete any subsequent upgrades necessary to meet these standards and is responsible for all associated costs.

Staff note that this application was initially submitted in July of 2024 under a different agent. This application proceeded through the application process including the distribution and collection of referrals as well as the drafting of a staff report, in preparation to advance the proposal to Council at the end of 2024. The application and associated materials were revoked in December by the agent. The application was subsequently transferred to a new agent, with finalized application materials submitted on May 2, 2025. As the new materials reflect the previously referred proposal, staff have been able to advance this to Council without an additional referral process.



**Relevant Policy(ies):**

Official Community Plan: 30 Street NE is identified as a Bike Route in the OCP.

Subdivision and Development Servicing Bylaw: the SDS Bylaw details the required frontage improvements applicable along 30 Street NE (RD-4) and 2 Avenue NE (RD-2).

Active Transportation Network Plan: 30 Street NE is identified as a Priority Project.

**Referral Comments:**Fire Department

No concerns.

Building Department

No concerns.

Engineering Department

The Engineering Department has provided comments and alternatives which form the basis for the above staff recommendation to deny the requested variances. The Engineering Department comments are attached as Appendix 5.

As stated in these comments, the subject property is within the Urban Development Area of the SDS, which requires full upgrades of the roads, works, and services along the subject parcel's frontages. The City's servicing report in response to the Building Permit application noted these requisite upgrades. The RD-2 and RD-4 standards are attached (Appendix 5).

Planning Department

When considering servicing variance requests, a number of factors are taken into consideration, including physical or legal constraints, scale of proposed development and growth potential in the area. The subject property is within the Urban Containment Boundary and zoned P3 Institutional. Given the OCP designation of Institutional, the land is intended for development as proposed.

Staff note that the subject parcel on 30 Street NE is situated close to a number of community facilities including churches, schools (South Broadview Elementary, King's Christian, and Shuswap Middle School), recreation facilities, parks and trail networks (Turner Creek and Little Mountain). The location is also at a prominent position within the City's transportation network between the uptown commercial area, recreation facilities, the industrial park and residential areas. As previously noted, 30 Avenue is identified as a Bike Route in the OCP and is identified in the City's Active Transportation Plan as a priority "Major Project" (Major Project I – 30 Street NE School Connector) for investment in new infrastructure. Improving routes near school sites has been noted in community engagement activities and within the City's plans, where these routes have been particularly prioritized in order to serve youth and support safe routes to schools.

Staff recognize that scope of requisite improvements is large relative to the proposed project; however, completely offsetting the cost of upgrading and constructing frontage works onto the City is problematic, placing additional financial burden on the City for the improvements in the future and increased costs on future developers of adjacent properties.

Servicing requirements are in place to support the parcels being developed and the population growth in an area, which increases the need for safety improvements and fire protection

infrastructure. The provision of safe routes to schools is a noted priority of the Active Transportation Plan and is a common community concern. As such, staff do not recommend the variances as requested by the applicant be granted.

While staff recommend denying the request, an alternative for consideration to support limited variances has been suggested, with staff support for:

- The request to waive the required water-main upgrade along 2 Avenue NE;
- The request to waive the fire flow requirement, subject to confirmation that fire protection standards are achieved by other means; and
- The request to waive the fire hydrant installation requirement on 30 Street NE, subject to confirmation that fire protection standards are achieved by other means.

Considering the support for the elements above, staff note that in order to achieve the institutional fire flow standard, extensive service upgrades of water mains extending beyond the subject parcel's frontage would have to be completed. Thus, if standards for adequate fire protection of the proposed development can be met through other means onsite, then the request to waive the fire flow requirement and the fire hydrant requirement of 30 Street NE is acceptable to staff. As the upgrade to the water main along the 2 Avenue NE frontage is unlikely to impact fire flow standards given the systemic upgrades required beyond this frontage, staff are supportive of the request to waive this upgrade.

Staff note that the variance under consideration only relates to the development currently being proposed. Future developments on the site will be required to be fully serviced to the applicable standards of the day.

#### **Financial Considerations:**

Waiving these requirements places additional financial burden on the City for the improvements in the future and increased costs on future developers of adjacent properties.

#### **Committee Recommendations:**

Not applicable.

#### **Public Consultation:**

Pursuant to the *Local Government Act* and the Development Procedures Bylaw notices are mailed to land owners within a 30m radius of the application. The notices outline the proposal and advises those with an interest in the proposal to provide written submission prior to the Hearing and information regarding attending the Hearing. It is expected that the Hearing for this application will be held on July 14, 2025 at 7:00pm.

#### **Alternatives & Implications:**

Should Council wish to advance in alignment with these suggestions in whole or in part, staff recommend the following conditions be applied:

- That the fire hydrant on 2 Avenue NE be required to address the gap in fire hydrant coverage in the area. As this is a safety-related requirement concern, staff do not support waiving this requirement;

- That street lighting on 30 Street NE and 2 Avenue NE be required to address gaps in coverage. As this is a safety-related requirement, staff do not support waiving this requirement; and
- That any requisite right-of-way or dedication for future improvements along 30 Street NE and the corner cut at 30 Street NE and 2 Avenue NE be provided to the City.

Should Council wish to advance in alignment with the staff recommendations above, staff propose the following Motion for Consideration:

THAT: Development Variance Permit No. VP – 604 be authorized for issuance to vary the Subdivision and Development Servicing Bylaw No. 4293, for the frontages of Lot 1, Section 18, Township 20, Range 9, W6M, KDYD, Plan KAP59726, as follows:

1. Waive the required Institutional Fire Flow Standard of 150 litres-per-second, subject to confirmation that fire protection standards are achieved;
2. waive the required fire hydrant on 30 Street NE as per the RD-4 Standard, subject to confirmation that fire protection standards are achieved; and
3. waive the required water-main upgrade on 2 Avenue NE as per the RD-2 Urban Local Road standard.

The alternative motion above assumes all other upgrades to the applicable standards are completed.

In considering the above motion, staff recognize that scope of requisite improvements in this case is still large relative to the proposed project. Should Council wish to advance any alternative option with further decreased service levels more supportive of the applicant's proposal, staff recommend the following conditions be required:

1. the provision of road dedication to support the 30 Street NE multi use path;
2. the provision of road dedication to support the corner cut at 30 Street NE and 2 Avenue NE, and
3. confirmation that fire protection standards are achieved.

Staff note that the variance under consideration only relates to the development currently being proposed. Future developments on the site will be required to be fully serviced to the standards of the day.

Prepared by: Senior Planner

Reviewed by: Manager of Planning and Building

Reviewed by: Director of Planning and Community Services

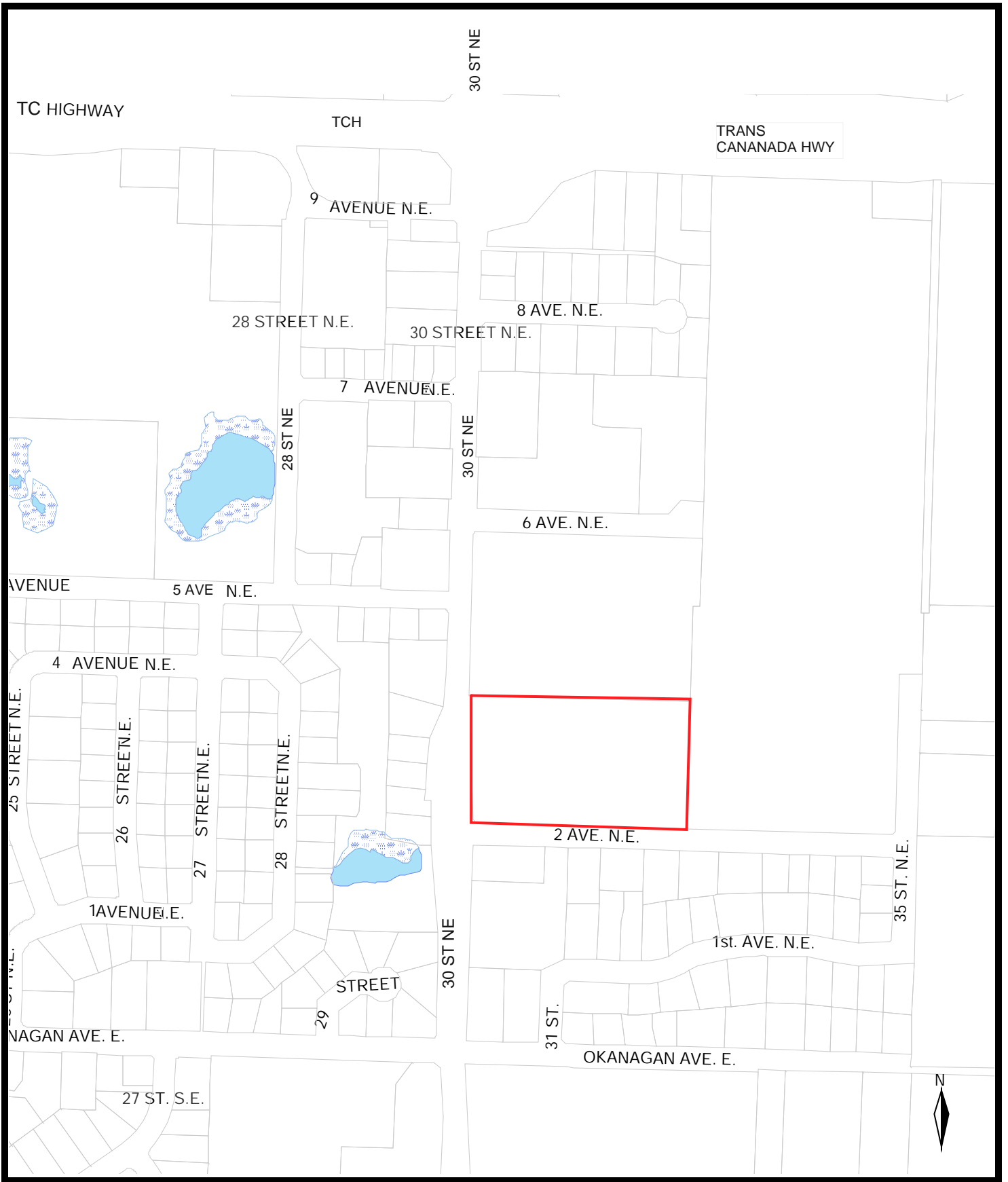
Approved by: Chief Administrative Officer

Table 1: DVP-604 – Applicant’s Proposal, Alternate and Staff Recommendations

<b>SDS Bylaw Requirements</b>	<b>Applicant’s Proposal</b>	<b>Staff Alternate Recommendation</b>	<b>Minimum Suggested Requirements</b>
<b>30 Street NE – RD-4 Standard</b>  -road widening and boulevard / Multi-Use Path  -fire hydrant  -street-lighting  -corner-cut	Waive all 30 Street NE frontage upgrade requirements.  Corner cut will be provided.  Request to waive dedication for MUP.	Deny request to waive all requirements.  Support the request to waive: 1) fire hydrant and 2) fire flow standard requirements subject to confirmation that fire protection standards are achieved.  Note need for improved street-lighting.  Note that MUP is a priority AT Project.	Recommend dedication for MUP along 30 Street and corner cut be required.  Confirmation that fire protection standards are achieved.
<b>2 Ave NE – RD-2 Standard</b>  -fire hydrant  -street-lighting  -water-main  -corner-cut	Waive all 2 Avenue NE road upgrade requirements.	Deny request to waive all requirements.  Support the request to waive the water-main upgrade.  Note that fire hydrant and meeting the fire protection requirement is a priority.  Note need for improved street-lighting.	Recommend dedication for corner cut be required.  Confirmation that fire protection standards are achieved.

Attachments:

- Appendix 1 - Location Map
- Appendix 2 – OCP Map
- Appendix 3 – Zoning Map
- Appendix 4 – Letter and Site Plans
- Appendix 5 – Engineering Review





# Ortho Map

Appendix 1

6 AVE. N.E.



2 AVE. N.E.

1st. AVE. N.E.

OKANAGAN AVE. E.

31 ST



0 15 30 60 90 120 Meters

## Legend



Parcels



Subject Property





# Zoning Map

Appendix 3

6 AVE. N.E.

3200

350

(350 B)

2 AVE. N.E.

3080

3110

3140

3180

3230

3260

3310

3360

3380

34

191

1st. AVE. N.E.

3311

3361

339

3280

3320

3360

3390

3240

3220

3150

31 ST.

3141

3161

3181

3221

3271

3321

3361

33

OKANAGAN AVE. E.

3430

STREET

61

81

70

50

40



0 15 30 60 90 120 Meters

## Legend

- Parcels
- Subject Property

- C-10
- P-1
- P-3
- R-5
- R-6
- R-10
- R-11
- R-14





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**Re: Response to memorandum from the Engineering and Public Works Department, 1<sup>st</sup> October 2024.**

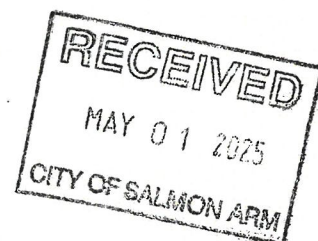
Kings Christian School Annex Project  
350B 30<sup>th</sup> Street NE Salmon Arm, BC V1E 1J2  
Variance Permit Application File No. VP-604  
March 14<sup>th</sup> 2025

Following the Variance Permit Application submitted on July 17<sup>th</sup>, 2024, by the Applicant, King's Christian School, the Salmon Arm Engineering and Public Works Department issued a memorandum outlining six (6) civil upgrades required for the construction of the modular classrooms, as referenced in the original Building Permit Application dated February 7<sup>th</sup>, 2024. The recommendations from the department are detailed in the document dated October 1<sup>st</sup>, 2024.

After careful consideration of these recommendations, the King's Christian School respectfully maintains that the scope and associated costs of the proposed civil upgrades are disproportionate to the project's scale. These upgrades would impose an unreasonable financial burden on the school. A third-party estimate by Gentech Engineering, dated May 16<sup>th</sup>, 2024, indicated that the original civil upgrade requirements would add approximately \$1.1 million to the total project cost, nearly tripling the overall budget. Should the City of Salmon Arm insist on further upgrades beyond the proposed compromises outlined below, the project will need to be cancelled due to insufficient funding.

The following summarizes the six (6) civil upgrade items, as per the October 1<sup>st</sup>, 2024, memorandum, and the school's corresponding proposals:

Item #	Civil Upgrade Requirement	King's Christian School Proposal
1	Install Street Lighting.	The school to continue with variance application to have this requirement waived due to the limited scope of work on the project.
2	Install an offset Multi-Use Path (MUP) on 30 Street NE.	The school to continue with variance application to have this requirement waived as no MUP's have been built adjacent to the school parcel.
3	Reduce the requirement to upgrade the existing 150mm watermain on 2 Avenue NE to 200m along the entire frontage.	The school agrees with the Engineering department's recommendation to waive the requirement upgrade.



4	Reduce the requirement to meet or exceed 150 l/s fire flows for Institutional Development.	The school to continue with variance application to have this requirement waived due to the limited scope of work. The unsprinklered buildings do not introduce burden on the existing infrastructure.
5	Fire Hydrant Installation.	The existing hydrant on the school property satisfies the requirement for the new hydrant along 2nd Avenue. The hydrant has undergone regular maintenance, and the school can provide supporting documentation.
6	Corner Cut Dedication.	The school agrees that the corner cut is a reasonable request and will proceed accordingly.

We appreciate your consideration of our proposed compromises and request that the City review these recommendations with a view to minimizing the financial impact on the school.

Thank you for your attention to this matter.

Sincerely,  
 Greg Kylo  
 President/CEO Twin Anchors Manufacturing LTD.

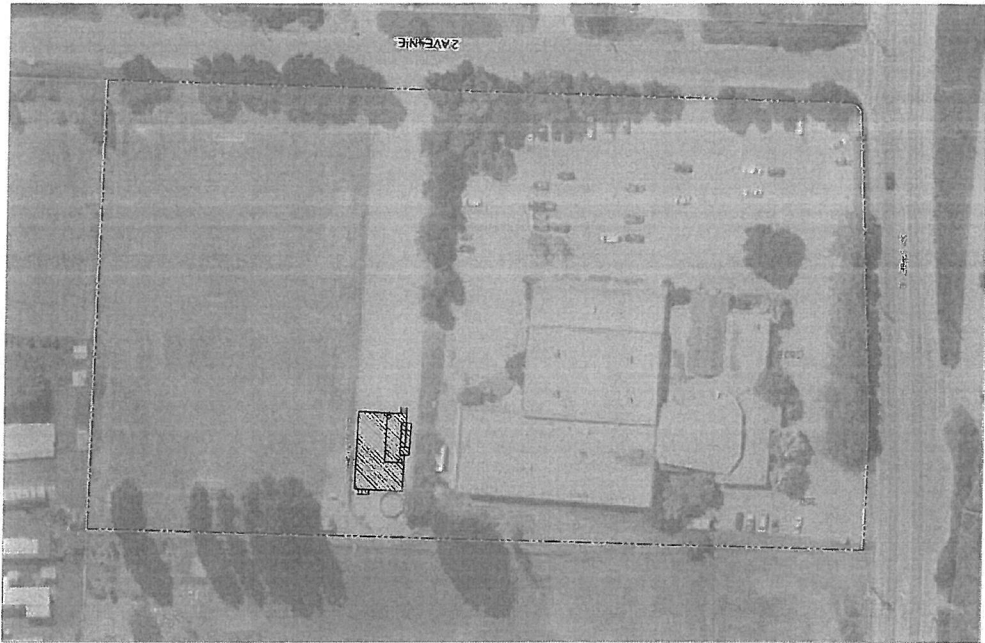
ATTACHED:

1. Site Plan (AMCA)

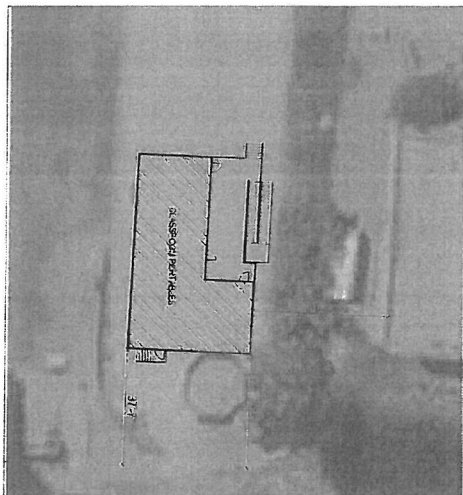
[illegible]

Printed Name FI 939 Date 04/03/2025 Drawing file CODE ANVALISIS	Kings Christian School Portable Additions
	Project Address 3609 - 30 <sup>th</sup> STREET NE VANCOUVER BC V6L 2G6 Tel: 604-271-1111

**RECEIVED**  
MAY 01 2025  
CITY OF SALT LAKE



**FULL SITE PLAN**  
SCALE: N/A



**PARTIAL SITE PLAN**  
SCALE: N/A

**NOTE**  
THE FINAL DESIGN OF THE 2,400-SQ-FT PORTABLE  
WILL BE DETERMINED BY THE ARCHITECT.

**PORTAL SEPARATION EAST WALL OF EXISTING SCHOOL**  
TABLE 1.1.1.1.1  
DISTANCE FROM EXISTING WALL TO NEW WALL: 10.0 FT  
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**PORTAL SEPARATION WEST WALL OF PORTABLES**  
TABLE 1.1.1.1.2  
DISTANCE FROM EXISTING WALL TO NEW WALL: 10.0 FT  
DISTANCE FROM EXISTING WALL TO NEW WALL: 10.0 FT  
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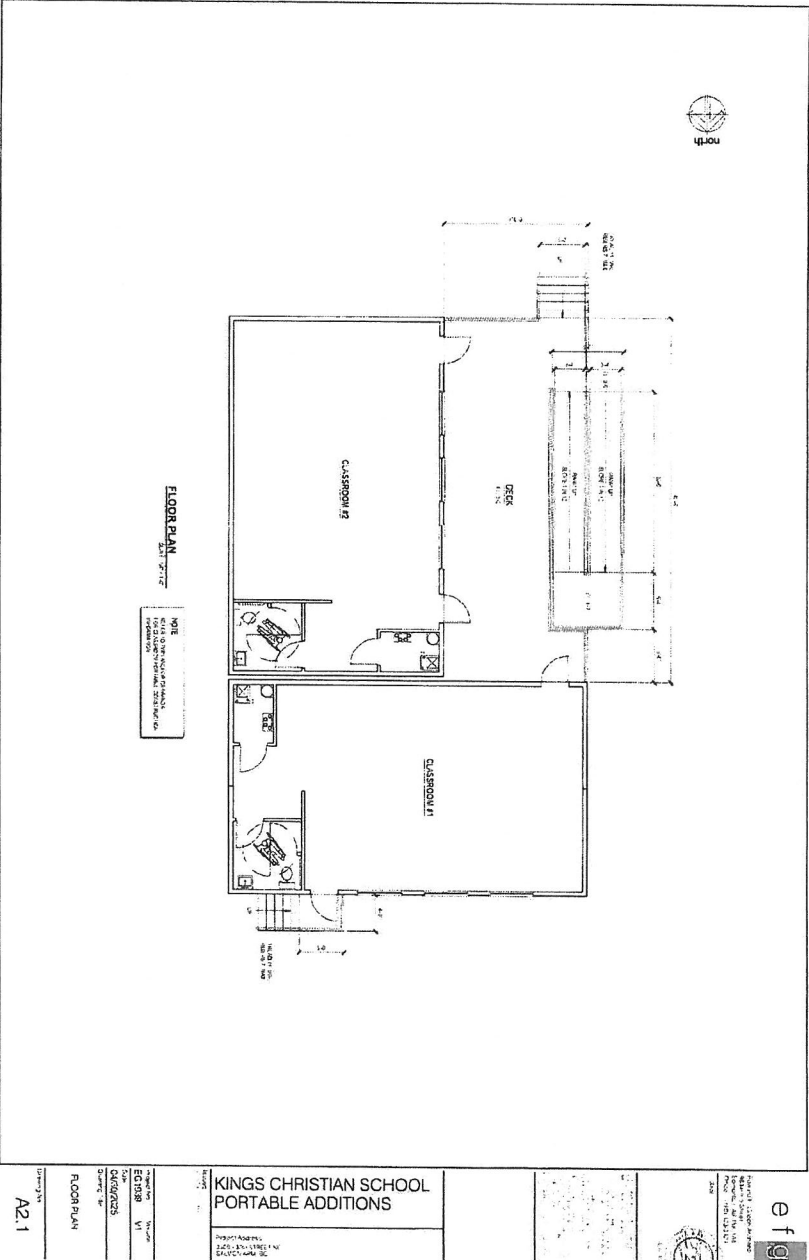
**KINGS CHRISTIAN SCHOOL  
PORTABLE ADDITIONS**

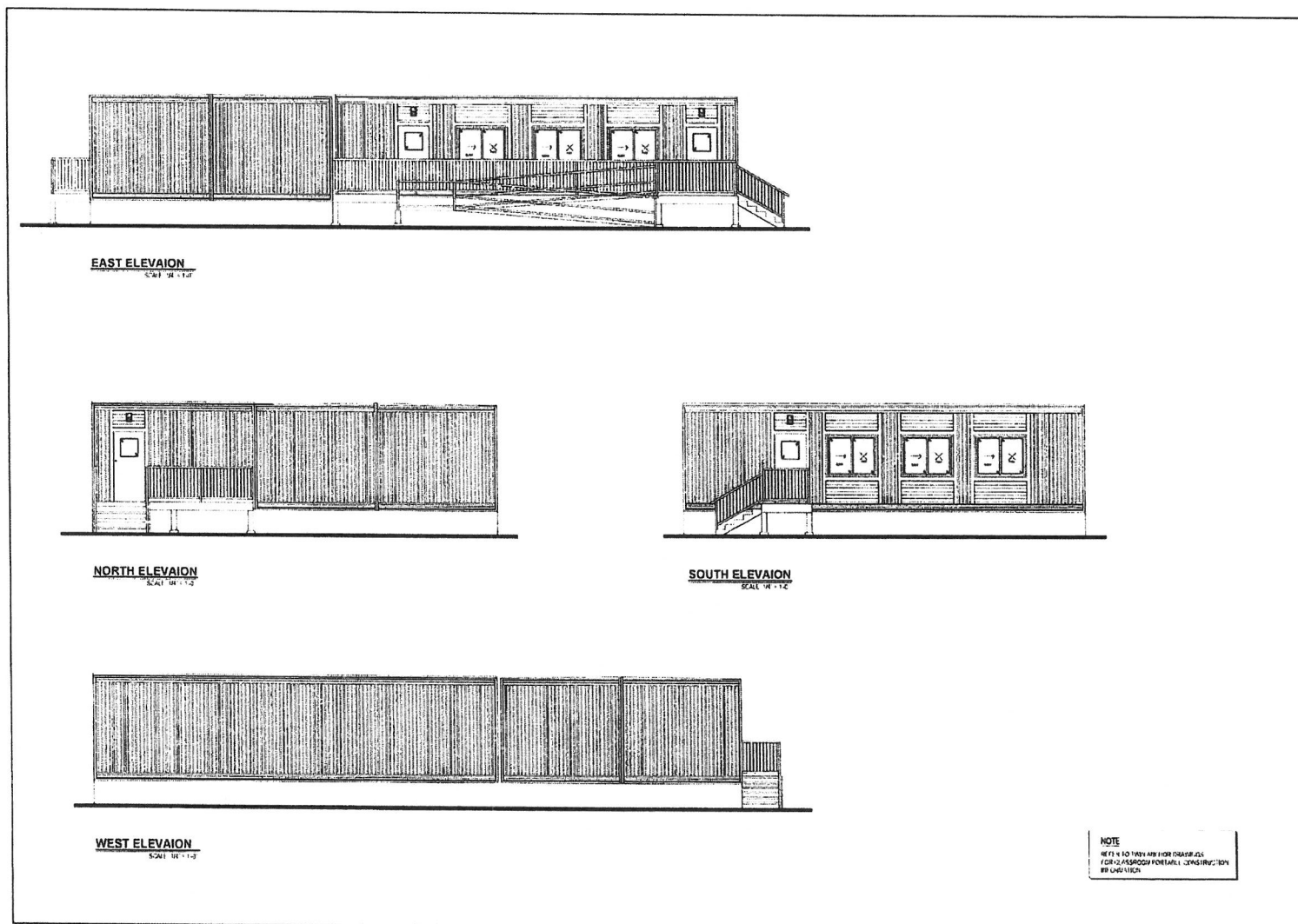
Project No. 2024-001  
Version 1.0  
Date 04/30/2025

Site Plans  
Drawing No. A1.1

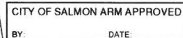
Prepared: Lauren McArthur  
Checked: David Smith  
Scale: 1/8" = 1'-0"













*Memorandum from the  
Engineering and Public  
Works Department*

TO: Director of Development Services  
 DATE: 1 October 2024  
 PREPARED BY: Mustafa Zakreet, Engineering Assistant  
 SUBJECT: **VARIANCE PERMIT APPLICATION FILE NO. VP- 604**  
 OWNER: **Broadview Evangelical Free Church, and Shuswap Christian Education Society, - 350 – 30 Street NE, Salmon Arm, BC V1E 1J2**

LEGAL: Lot 1, Section 18, Township 20, Range 9, W6M, KDYD, Plan KAP59726  
 CIVIC: **350B – 30 Street NE**

Further to the request for variance dated 17 July 2024 the Engineering Department has reviewed the site and offers the following comments and recommendations relative to the requested variance:

The applicant is requesting that Council waive the following requirements of the Subdivision and Development Servicing Bylaw No. 4293 (SDSB).

## 1. Install Street Lighting

### Background:

The SDSB dictates the level of lighting that is required for all categories of road. Currently this section of 30 Street NE and 2 Avenue NE have minimal pole-mounted lights and lighting levels fall well below the required illumination standard (See picture, Figure 1). Moreover, leasing BC Hydro lights comes at a substantial annual cost, prompting the replacement of pole-mounted lights with City-owned lights wherever possible.

The subject property borders sidewalks frequently used by school children, making sufficient lighting crucial for safety reasons. The City has received several complaints about the inadequate illumination in the area, highlighting the need for improvement.



A cost estimate of **\$101,875** has been generated by Gentech Engineering (See Appendix #1) to install new street lights. However, the City Engineering Department disagrees with this estimate, as it assumes retaining the existing hydro pole lights and adding new street lights, which is not the standard approach.

Figure 1- Existing Hydro Pole Street Lights



If the variance request is denied, the City will request the installation of street lights to comply with the SDSB, ensuring necessary illumination standards are met.

**Recommendation:**

In the interest of both traffic and pedestrian safety, **the Engineering Department recommends that request to waive the requirement to Install Street Lighting be denied.**

**2. Install an offset Multi-Use Path (MUP) on 30 Street NE.**

**Background:**

30 Street NE is an Urban Arterial Road, requiring an offset MUP on both sides of the road to comply with current SDSB standards. One of the key objectives of the MUP is to get cyclists off motorized roads and to separate cyclists and pedestrians from motorists.

This route has been designated as a "Major Priority Project" in the City's Active Transportation Network Plan and is included in the Official Community Plan's "Cycle Network Plan." Its significance lies in its heavy usage by school children, pedestrians, cyclists, and motorists, making it an ideal candidate for Active Transportation (AT) upgrades that prioritize safety.

The existing sidewalk along the school frontage is substandard, failing to meet both the city's standards and road cross-section requirements (refer to Figure 2). Its deteriorated condition is evident in its age-related cracks, and it lacks essential features such as curbs and gutters, further emphasizing the need for upgrades to ensure safety and accessibility.



*Figure 2- Existing Sidewalk*

The City cross section standard for an urban Arterial road has an ultimate 25.0m road dedication (12.5m on either side of road centerline). The City only requires an Interim total of 20.0m of road dedication (10.0m on either side of road centerline) at this time and available records indicate that no additional road dedication is required. However the City will require a statutory right of way for an additional 2.5m beyond the current road dedication for the construction of a multi-use path to accommodate the construction multi-use-path.

For detailed cost estimates, please refer to Appendix 2.

**Recommendation:**

**The Engineering Department recommends that request to waive the requirement to install an offset Multi-Use Path be denied.**

Should Council decide to waive this requirement, it is important that the City still obtains the right of way over the property, as this will be necessary to construct a MUP in the future.

**3. Reduce the requirement to upgrade the existing 150mm watermain on 2 Avenue NE to 200mm along the entire frontage**

**Background:**

The minimum watermain size for institutional areas is 200mm, as specified in the SDSB. 2 Avenue and 30 Street NE are identified in the 2011 Water Study (Dayton & Knight, 2011) as having inadequate Fire Flows, with rates below the recommended minimum of 150 l/s, dropping below 90 l/s at the east end of the subject property



*Figure 3- watermains along the frontage*

Before any new development in the area, it is crucial to address the fire coverage and flow deficiencies.

Upgrading the existing infrastructure is necessary to ensure adequate fire protection; however, it is unlikely that the required main upgrade on 2 Avenue will result in the necessary fire flows and surrounding areas are designated medium to low density in the OCP requiring only a 150mm watermain

For detailed cost estimates, please refer to Appendix 2.

**Recommendation:**

**The Engineering Department recommends that request to waive the requirement upgrade the existing 150mm watermain on 2 Avenue NE to 200mm along the entire frontage be supported.**

**4. Reduce the requirement to meet or exceed 150 l/s fire flows for Institutional Development**

The minimum fire flows required for Institutional Development is 150 l/s. Meeting the required flows would likely require extensive system upgrades as none of the nearby mains achieve this flow. The 2011 Water Master Plan indicates fire flows are between 90 and 149 l/s in the majority of the zone, dropping below 90 l/s at the east side of the subject property.

The Engineering Department would recommend the developer be required to complete a Fire Hydrant Flow Test to confirm the fire flows in the area. If the fire flows required by the bylaw not be achieved, the fire department recommends engaging a fire protection engineer to evaluate the water flow requirements for the proposed development's sprinkler system, ensuring it meets the necessary standards for adequate fire protection.

**Recommendation:**

**The Engineering Department recommends that the request to reduce the requirement to meet or exceed 150 l/s fire flows for Institutional Development be supported subject to:**



1. Completion of a fire hydrant flow test.
2. Review and approval by the Fire Department.
3. Adequate fire hydrant spacing.
4. Engagement of a fire protection engineer to evaluate and confirm that the proposed development's sprinkler system meets necessary standards for adequate fire protection, as recommended by the Fire Department.

## 5. Fire hydrant Installation.

### Background:

There is currently large gaps in the fire hydrant coverage for the subject parcel.

- A 64-meter gap exists on the 100mm Zone 4 watermain on 2 Avenue NE
- A 30-meter gap exists on the 200mm and 300mm Zone 4 watermain on 30 Street NE.

Please refer to the adjacent figure, which illustrates the current fire hydrant coverage and spacing requirements for residential and institutional buildings. This visual representation highlights the gaps in coverage and the need for additional hydrants to meet fire protection standards.

For detailed cost estimates, please refer to Appendix 2.



Figure 4- Firehydrant spacing

### Recommendation:

The Engineering Department recommends:

- Deny the request to waive the requirement to install a fire hydrant on 2 Avenue NE, due to the existing 64-meter gap in coverage, which poses a risk to fire protection and public safety.
- Approve waiving the installation of a fire hydrant on 30 Street NE, as the 30-meter gap in coverage is relatively shorter and may be addressed through alternative fire protection measures.

## 6. Corner Cut Dedication

On arterial streets, a 5.0 meter x 5.0 meter corner cut is mandatory at all intersections. This dedication serves multiple purposes:

- Enhanced Visibility: Creates a clear line of sight for drivers, pedestrians, and cyclists, improving overall safety.
- Reduced Collision Risk: Allows drivers to navigate turns with ease, minimizing the risk of accidents.

Infrastructure Accommodation:  
Enables the installation of traffic signals, streetlights, and future infrastructure upgrades.



Figure 5- Corner Cut Required

### Recommendation:

**The Engineering Department strongly advises against waiving the corner cut dedication requirement, as it is essential for ensuring safety, accessibility, and efficient traffic flow. Denial of such requests will help maintain the integrity of our transportation network.**

The Engineering Department recognizes that the amount of frontage improvements is out of proportion to the scope of development proposed. While we cannot recommend waiving any of the requirements as they are all important improvements, we note the highest priority items are as follows:

- Adequate fire protection to protect persons and property
- Acquiring dedication and/or ROW to enhance safety and allow for installation of important active transportation infrastructure
- Improving lighting for pedestrian and active transportation user safety

**Mustafa Zakreet, EIT**  
Engineering Assistant

**Jenn Wilson P.Eng.,**  
City Engineer

2.0	Div. 26	Electrical				
	26 56 01	Roadway Lighting				
2.01	1.9.1	Street Light Conduit RPVC 32ø, c/w trench excavation, bedding, warning tape, backfill, wiring, connections & permits	Lineal Metre	310	\$ 75.00	\$ 23,250.00
2.02	1.9.1	Poles & Fixtures - 9m Davit Street Light	Each	1	\$ 9,500.00	\$ 9,500.00
2.03	1.9.1	Poles & Fixtures - 9m Davit Street Light c/w power base	Each	1	\$ 12,000.00	\$ 12,000.00
2.04	1.9.1	Poles & Fixtures - 5m Post Top Street Light	Each	4	\$ 6,500.00	\$ 26,000.00
2.05	1.9.1	Davit Concrete Pedestal	Each	2	\$ 2,000.00	\$ 4,000.00
2.06	1.9.1	Post Top Concrete Pedestal	Each	4	\$ 1,500.00	\$ 6,000.00
2.07	1.9.1	Junction Box	Each	1	\$ 750.00	\$ 750.00
Subtotal: Division 26 - Electrical					\$	81,500.00

**\$81,500 x 1.25 (Contingency)= \$101,875**

## Appendix 2

Item No.	MMCD Ref.	Description	Unit	Quantity	Unit Price	Amount
1.0	Div. 03	Concrete				
	03 30 20	Concrete Walks, Curb and Gutter				
1.01	1.4.3, 1.4.4	Machine Placed or Hand Formed Curb & Gutter barrier - CGS1	Lineal Metre	130	\$ 175.00	\$ 22,750.00
1.02	1.4.3, 1.4.4	Machine Placed or Hand Formed Curb & Gutter rollover	Lineal Metre	8	\$ 150.00	\$ 1,200.00
1.03	1.4.3, 1.4.4	Machine Placed or Hand Formed Curb & Gutter median curb	Lineal Metre	85	\$ 150.00	\$ 12,750.00
1.04	1.4.5S	Concrete Sidewalk, In-fill strips and Walkways 150mm thickness, broomed finish, c/w ramps	Square Metre	5	\$ 325.00	\$ 1,625.00
1.05	1.4.5S	Concrete Sidewalk, In-fill strips and Walkways 180mm thickness, broomed finish, c/w ramps	Square Metre	6	\$ 425.00	\$ 2,550.00
	03 40 01	Pre-Cast Concrete				
1.06	1.4.3	Concrete Lock Block Wall all sizes of blocks	Per Block	180	\$ 525.00	\$ 94,500.00
Subtotal: Division 03 - Concrete						\$ 135,375.00
2.0	Div. 26	Electrical				
	26 56 01	Roadway Lighting				
2.01	1.9.1	Street Light Conduit RPVC 32ø, c/w trench excavation, bedding, warning tape, backfill, wiring, connections & permits	Lineal Metre	310	\$ 75.00	\$ 23,250.00
2.02	1.9.1	Poles & Fixtures - 9m Davit Street Light	Each	1	\$ 9,500.00	\$ 9,500.00
2.03	1.9.1	Poles & Fixtures - 9m Davit Street Light c/w power base	Each	1	\$ 12,000.00	\$ 12,000.00
2.04	1.9.1	Poles & Fixtures - 5m Post Top Street Light	Each	4	\$ 6,500.00	\$ 26,000.00
2.05	1.9.1	Davit Concrete Pedestal	Each	2	\$ 2,000.00	\$ 4,000.00
2.06	1.9.1	Post Top Concrete Pedestal	Each	4	\$ 1,500.00	\$ 6,000.00
2.07	1.9.1	Junction Box	Each	1	\$ 750.00	\$ 750.00
Subtotal: Division 26 - Electrical						\$ 81,500.00
3.0	Div. 31	Earthwork				
	31 11 01	Clearing and Grubbing				



## Kings Christian School Upgrades

May 2024

## Class C Cost Estimate

Item No.	MMCD Ref.	Description	Unit	Quantity	Unit Price	Amount
3.01	1.4.1, 1.4.2	Clearing and Grubbing	Square Metre	1,200	\$ 7.50	\$ 9,000.00
3.02	1.4.2	Isolated Tree Clearing and Grubbing	Each	6	\$ 325.00	\$ 1,950.00
	<b>31 24 13</b>	<b>Roadway Excavation, Embankment and Compaction</b>				
3.03	1.8.4	Remove Ex. Asphalt or Concrete Pavement, Sidewalks, Utility Strips, Driveways all thicknesses, c/w off-site disposal	Square Metre	800	\$ 12.50	\$ 10,000.00
3.04	1.8.4	Remove Existing Asphalt or Concrete Curbs & Gutters c/w off-site disposal	Lineal Metre	150	\$ 15.00	\$ 2,250.00
3.05	1.8.5	Common Excavation off-site disposal	Cubic Metre	300	\$ 15.00	\$ 4,500.00
<b>Subtotal: Division 31 - Earthwork</b>						<b>\$ 27,700.00</b>
<b>4.0</b>	<b>Div. 32</b>	<b>Roads and Site Improvements</b>				
	<b>32 11 16.1</b>	<b>Granular Sub-Base</b>				
4.01	1.4.2S	Granular Sub-Base variable thickness for roads, sidewalks, and driveways	Cubic Metre	400	\$ 95.00	\$ 38,000.00
	<b>32 11 23</b>	<b>Granular Base</b>				
4.02	1.4.1S	Granular Base variable thickness for roads, sidewalks, and driveways	Cubic Metre	115	\$ 125.00	\$ 14,375.00
	<b>32 12 16</b>	<b>Hot-Mix Asphalt Concrete Paving</b>				
4.03	1.5.1S, 1.5.2	Asphalt Pavement - Lower Course # 1 50mm thickness	Square Metre	162	\$ 35.00	\$ 5,670.00
4.04	1.5.1S, 1.5.2	Asphalt Pavement - Upper Course # 1 (CoSA) 50mm thickness	Square Metre	630	\$ 40.00	\$ 25,200.00
4.05	1.5.1S, 1.5.2	Asphalt Pavement - Upper Course # 2 (CoSA) 50mm thickness	Square Metre	370	\$ 40.00	\$ 14,800.00
	<b>32 31 13</b>	<b>Chain Link Fences and Gates</b>				
4.06	1.5.1	Chain Link Fence 4 foot tall - black	Lineal Metre	90	\$ 85.00	\$ 7,650.00
	<b>32 91 21</b>	<b>Topsoil and Finish Grading</b>				
4.07	1.4.1S	Imported Topsoil 150mm thickness	Square Metre	1,450	\$ 15.00	\$ 21,750.00
	<b>32 92 19</b>	<b>Hydraulic Seeding</b>				
4.08	1.8.1	Hydraulic Seeding	Square Metre	750	\$ 3.00	\$ 2,250.00

## Kings Christian School Upgrades

May 2024

## Class C Cost Estimate

<i>Item No.</i>	<i>MMCD Ref.</i>	<i>Description</i>	<i>Unit</i>	<i>Quantity</i>	<i>Unit Price</i>	<i>Amount</i>
	<b>32 92 23</b>	<b>Sodding</b>				
4.09	1.8.2	Nursery Sod	Square Metre	700	\$ 25.00	\$ 17,500.00
<b>Subtotal: Division 32 - Roads and Site Improvements</b>						<b>\$ 147,195.00</b>
<b>5.0</b>	<b>Div. 33</b>	<b>Utilities</b>				
	<b>33 11 01</b>	<b>Waterworks</b>				
5.01	1.8.1, 1.8.2	<b>Watermain PVC C900 DR18</b> 200ø, all depths, native backfill	Lineal Metre	210	\$ 350.00	\$ 73,500.00
5.02	1.8.3	<b>In-Line Gate Valves</b> 200ø	Each	5	\$ 2,950.00	\$ 14,750.00
5.03	1.8.3	<b>Tee</b> 200ø x 200ø x 150ø, c/w thrust block	Each	4	\$ 1,500.00	\$ 6,000.00
5.04	1.8.3	<b>Tee</b> 200ø x 200ø x 200ø, c/w thrust block	Each	1	\$ 1,750.00	\$ 1,750.00
5.05	1.8.3	<b>Bends (11.25°, 22.5°, 45°, 90°)</b> 200ø, c/w thrust block	Each	2	\$ 2,500.00	\$ 5,000.00
5.06	1.8.3	<b>Reducer</b> 200ø x 150ø, c/w thrust block	Each	1	\$ 1,250.00	\$ 1,250.00
5.07	1.8.4	<b>Water Service Connections</b> 25ø service pipe, c/w tie-in to existing service	Each	5	\$ 2,000.00	\$ 10,000.00
5.08	1.8.13	<b>Watermain Tie-In</b> to existing , c/w couplers	Lump Sum	5	\$ 6,000.00	\$ 30,000.00
5.09	1.8.14	<b>Hydrant Assembly</b> c/w 150ø gate valve & lead, all fully restrained	Each	1	\$ 12,500.00	\$ 12,500.00
		<b>Other</b>				
5.10		<b>Utility Sleeve PVC SDR28</b> 100ø, c/w end caps	Lineal Metre	12	\$ 75.00	\$ 900.00
<b>Subtotal: Division 33 - Utilities</b>						<b>\$ 155,650.00</b>
<b>6.0</b>		<b>Other</b>				
6.01		<b>BC Hydro Civil Works (Allowance)</b>	Lump Sum	1	\$ 75,000.00	\$ 75,000.00
6.02		<b>Telecommunications Civil Works (Allowance)</b>	Lump Sum	1	\$ 45,000.00	\$ 45,000.00
<b>Subtotal: Other</b>						<b>\$ 120,000.00</b>



## Kings Christian School Upgrades

May 2024

## Class C Cost Estimate

<i>Item No.</i>	<i>MMCD Ref.</i>	<i>Description</i>	<i>Unit</i>	<i>Quantity</i>	<i>Unit Price</i>	<i>Amount</i>
<b>Summary of Cost Estimate</b>						
1.0	Div. 03	Concrete				\$ 135,375.00
2.0	Div. 26	Electrical				\$ 81,500.00
3.0	Div. 31	Earthwork				\$ 27,700.00
4.0	Div. 32	Roads and Site Improvements				\$ 147,195.00
5.0	Div. 33	Utilities				\$ 155,650.00
6.0		Other				\$ 120,000.00
<b>Subtotal: Construction</b>						<b>\$ 667,420.00</b>
7.0	Class C	Contingency (25%)				\$ 166,855.00
<b>Subtotal: Construction w/ Contingency</b>						<b>\$ 834,275.00</b>
8.0		<b>Engineering</b>				
		Design (5%)				\$ 41,713.75
		Field Services (6%)				\$ 50,056.50
		Records (2%)				\$ 16,685.50
		Materials Testing (QA) (3%)				\$ 25,028.25
		Geotechnical Investigation & Report (Allowance)				\$ 25,000.00
<b>Subtotal: Engineering</b>						<b>\$ 158,484.00</b>
9.0		<b>Shallow Utility Design Contribution</b>				
		BC Hydro (Allowance)				\$ 25,000.00
		Telecommunications (Allowance)				\$ 10,000.00
<b>Subtotal: Shallow Utility Design Contribution</b>						<b>\$ 35,000.00</b>

## Kings Christian School Upgrades

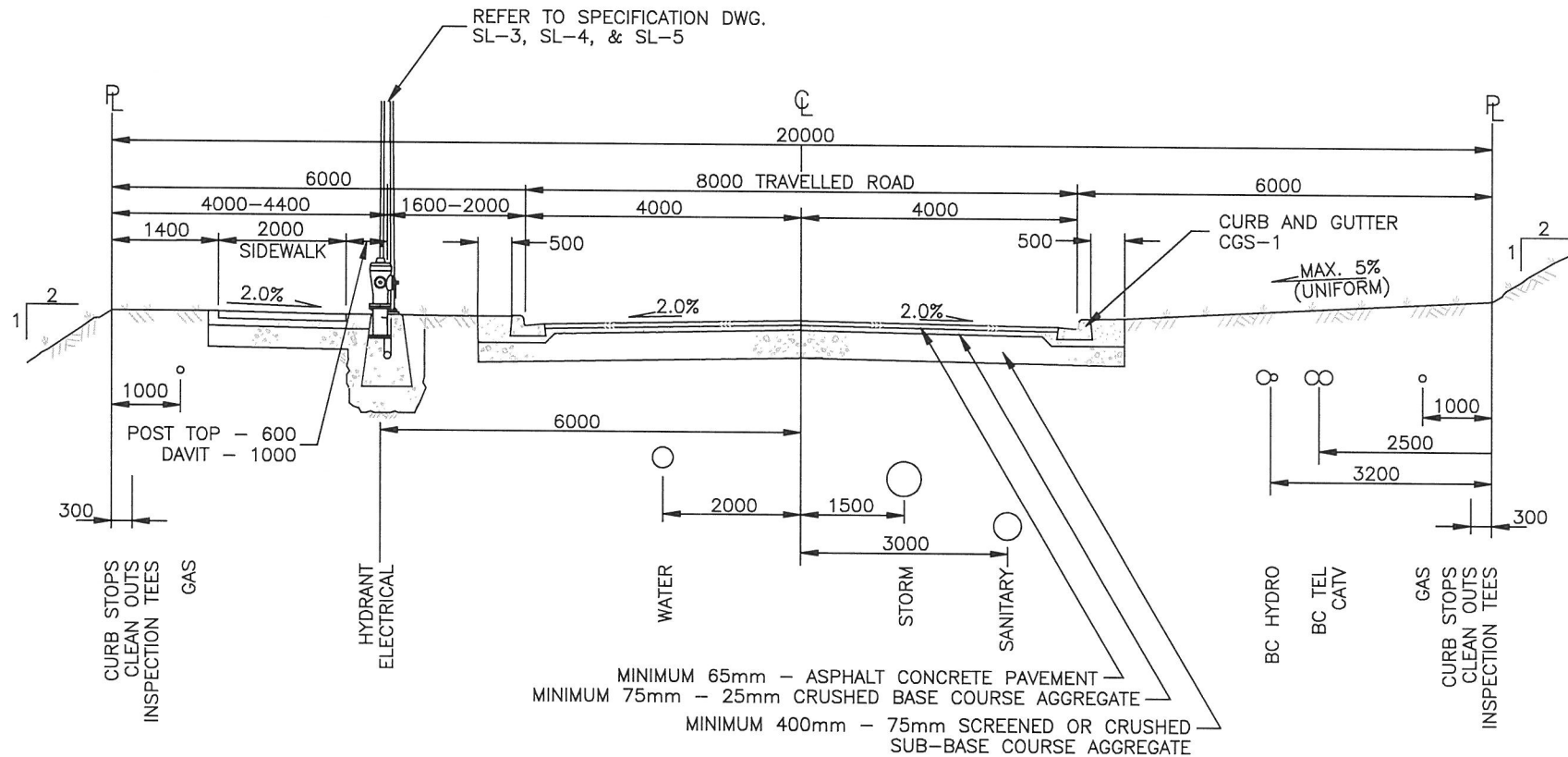
May 2024

## Class C Cost Estimate

<i>Item No.</i>	<i>MMCD Ref.</i>	<i>Description</i>	<i>Unit</i>	<i>Quantity</i>	<i>Unit Price</i>	<i>Amount</i>
					<b>Subtotal</b>	<b>\$ 1,027,759.00</b>
					GST (5%)	\$ 51,387.95
					<b>Total</b>	<b>\$ 1,079,146.95</b>

Cost Estimate Notes:

- 1) Quantities may vary depending on field revisions and/or conditions encountered at the time of construction, thereby affecting the final cost.
- 2) Unit Prices are influenced by supply & demand for both contractors and materials at the time of construction, thereby affecting the final cost.
- 3) Unless noted otherwise, prices do not include BC Hydro, Telecommunications, FortisBC, Legal Survey (BCLS) and property/right-of-way acquisitions.
- 4) Unless noted otherwise, prices do not include Geotechnical, Environmental and Archaeological studies, reviews, and approvals.
- 5) Unit Prices are estimated in 2024 Canadian Dollars for similar works and exclude taxes.



# NOTES:

- 1) All utility appurtenances to be set to designed boulevard grade.
- 2) Boulevards to be graded towards the Roadway (Maximum 5% and Minimum 2%)
- 3) All materials shall be supplied and placed in accordance with schedule B, Part 3.0 and Schedule D, Approved material list.
- 4) Grades in excess of 2H:1V shall be recommended by a geotechnical engineer and approved by the City Engineer.

**CITY OF**  
**SALMON ARM**

No.	REVISION	Date
A	SDSB 4293 - ISSUED FOR APPROVAL	06/12/23

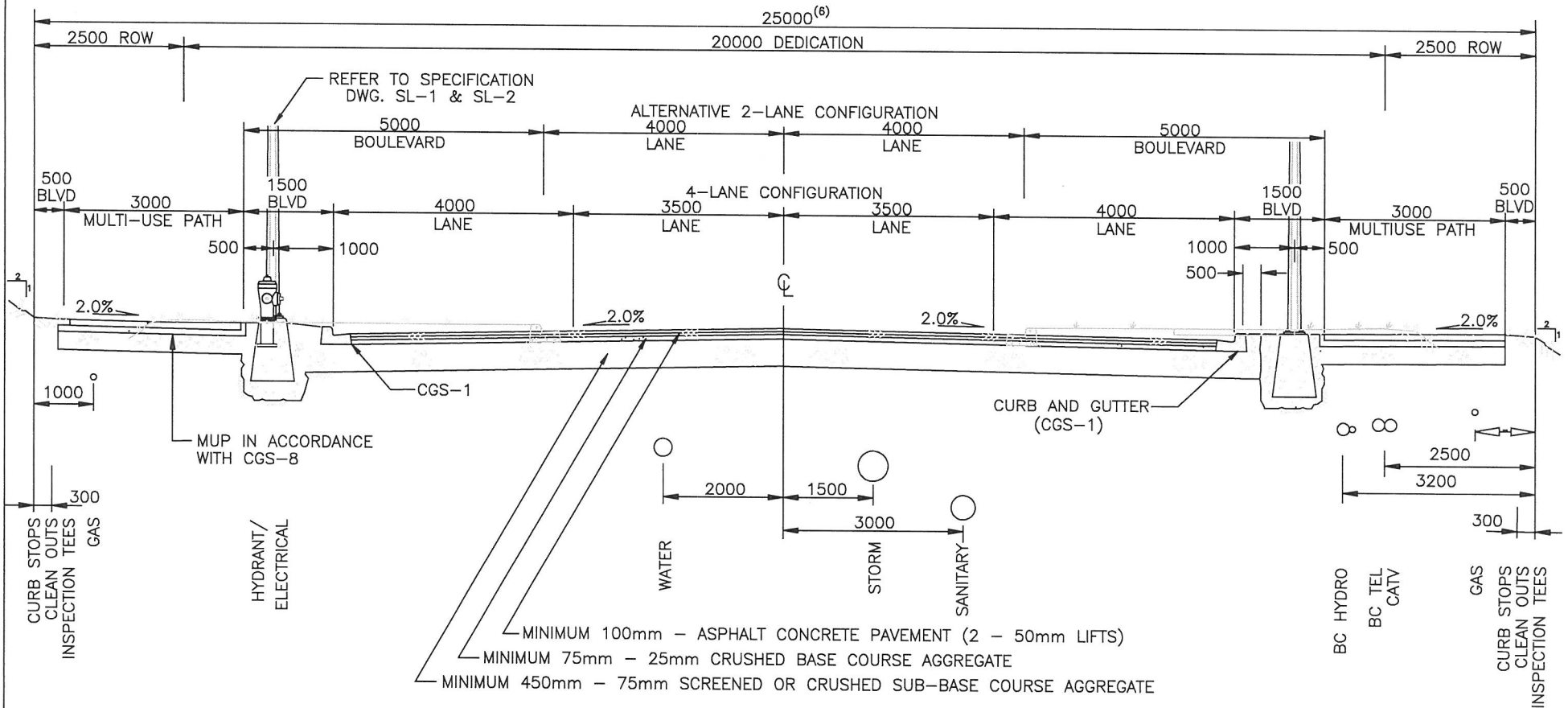
APPROVED



20m R/W Urban Local Road  
Cross-Section

SPECIFICATION  
DRAWING No.:

RD-02



NOTES:

- 1) All utility appurtenances to be set to designed boulevard grade.
- 2) Boulevards to be graded towards the Roadway (Maximum 5% and Minimum 2%)
- 3) All materials shall be supplied and placed in accordance with schedule B, Part 3.0 and Schedule D, Approved material list.
- 4) Grades in excess of 2H:1V shall be recommended by a geotechnical engineer and approved by the City Engineer.
- 5) Additional 3.5m x 3.5m ROW may be required for BC Hydro infrastructure.
- 6) Where 25.0m of dedication is not available, ROW shall be provided to supplement available dedication.

**CITY OF  
SALMON ARM**

No.	REVISION	Date
A	SDSB 4293 – ISSUED FOR APPROVAL	06/12/23

APPROVED



25M R/W URBAN ARTERIAL  
ROAD CROSS-SECTION

SPECIFICATION  
DRAWING No.:

RD-04