REGULAR COUNCIL

11/2022/R

The Corporation of the Village of Cumberland
Regular Council Meeting
April 25, 2022 at 5:30 p.m.
Council Chamber, 2675 Dunsmuir Avenue

We are honoured to gather on the unceded traditional territory of the K'ómoks First Nation.

The public may view the meeting in-person or on the Village of Cumberland YouTube channel.

1. Approval of Agenda

1.1 Agenda for regular Council meeting, April 25, 2022 — 1

Recommendation:

- THAT Council approve the agenda for the April 25, 2022 Regular Council meeting.

2. Minutes

2.1 Adoption of Minutes — 4

Recommendation:

THAT Council adopt the following minutes:

- Regular Council meeting, April 11, 2022

3. Delegations

3.1 Matt Merritt, RPF, Area Manager, Manulife Investment Management – Harvesting Update

Recommendation:

i. THAT Council receive the delegation from Manulife Investment Management regarding Harvesting update.

4. Unfinished Business

5. Reports

5.1 Development Permit – Proposed Lot 6 (2799 Beck Avenue) 9
Prepared by Meleana Searle, Planner

Recommendation:

i. THAT Council receive the Development Permit – Proposed Lot 6 (2799 Beck Avenue) report.
ii. THAT Council approve the application for a development permit (2022-02-DP) for the property described as Proposed Lot 6 (2799 Beck Avenue) Lot A, Section 34, Township 10, Comox District Plan EPP93477.

5.2 Temporary Use Permit (TUP) Renewal – 3276 Third Street 58
Prepared by Meleana Searle, Planner

Recommendation:

i. THAT Council receive the Temporary Use Permit renewal, 3276 Third Street report.
ii. THAT Council approve the Temporary Use Permit renewal for the property described as Lot 12, Block 10, District Lot 21, Nelson District, Plan 555-A (3276 Third Street) for the purposes of operating a cannabis retail business.

5.3 Solid Waste Collection - Recollect App 65
Prepared by Rob Crisfield, Manager of Operations

Recommendation:

i. THAT Council receive the Solid Waste Collection - Recollect App report.
ii. THAT Council support the purchase of the Recollect App to help assist the community with solid waste collection notifications, scheduling, and education.

6. Bylaws

6.1 2022 Property Tax Rates Bylaw 68
Prepared by Michelle Mason, CFO/Deputy CAO

Recommendation:

i. THAT Council receive the 2022 Property Tax Rates Bylaw report.
ii. THAT Council direct staff to amend the 2022 – 2026 Financial Plan bylaw to add a reserve contribution of $43,750 from growth taxes to the Emergency and Public Safety Reserve to save towards policing.

iii. THAT Council give first, second and third reading to "2022 Property Tax Rates Bylaw No. 1167, 2022".

7. New Business

8. Notices, Motions and Announcements

Matters considered here may include notices or motions to hold a meeting of the Committee of the Whole, a Village Hall meeting, a public hearing, and notices of motion introduced by a council member.

- Development Cost Charges Public Engagement Session – Wednesday April 26th from 2-5pm in Council Chambers.
- Heritage Committee May 2nd 5:00 p.m. Council Chambers

9. Question Period

A member of the public may only inquire about items included on the agenda for that meeting during a question period.

- Please send questions by email to info@cumberland.ca using subject line "Question Period"; Note: please limit to questions only - comments will not be read.

10. Closed Portion

THAT Council close the meeting to the public pursuant to Section 90 of the *Community Charter* to consider:

(a)personal information about an identifiable individual who holds or is being considered for a position as an officer, employee or agent of the municipality or another position appointed by the municipality;

11. Adjournment

REGULAR MINUTES

9/2022/R

The Corporation of the Village of Cumberland
Regular Council Meeting
April 11, 2022 at 5:30 p.m.
Council Chamber, 2675 Dunsmuir Avenue

Council Present:	**Staff Present:**
Mayor Leslie Baird	Clayton Postings, Chief Administrative Officer
Councillor Gwyn Sproule	Michelle Mason, Chief Financial Officer/Deputy CAO
Councillor Vickey Brown	Rachel Parker, Corporate Officer
Councillor Jesse Ketler	Courtney Simpson, Manager of Development Services
Councillor Sean Sullivan	Karin Albert, Senior Planner
	Meleana Searle, Planner

Mayor Baird called the meeting to order at 5:30 p.m. and acknowledged that the meeting was taking place on the unceded traditional territory of the K'ómoks First Nation.

1. Approval of Agenda

1.1 Agenda for regular Council meeting, April 11, 2022

Motion 22-337

Ketler/Brown

THAT Council approve the agenda for the April 11, 2022 Regular Council meeting with the addition of late item '2022 Property Tax Rates Bylaw' as item 7.5, and receipt of Advisory Planning Commission Minutes of February 10, 2022 as item 2.2.

Carried Unanimously

2. Minutes

2.1 Adoption of Minutes

2.2 Receipt of Minutes

Motion 22-338

Sullivan/Sproule

THAT Council adopt the following minutes: Regular Council meeting, March 28, 2022; and THAT Council receive the minutes of the Advisory Planning Commission meeting of February 10, 2022.

Carried Unanimously

3. Presentation of Audited Financial Statements

3.1 2021 Audited Financial Statements and Presentation

Motion 22-339
Brown/Sullivan
THAT Council receive the 2021 Audited Financial Statements report; and THAT Council receive the delegation of Cory Vanderhorst, CPA, CA to present the auditor's report to the Council for the year ended December 31, 2021.
Carried Unanimously

Motion 22-340
Brown/Ketler
THAT Council approve the Village of Cumberland Audited Financial Statements for the year ended December 31, 2021.
Carried Unanimously

4. Delegations

None

5. Unfinished Business

5.1 Elizabeth Lee, Genevieve Burdett, Lindsay Baker, Katie Lovely, Erika Spearman, of Some Concerned Moms of Cumberland, regarding "Moving Toward a Climate Change Action Plan for Cumberland"

Motion 22-341
Sullivan/Brown
THAT Council direct staff to include a summary of the status of Village and regional climate-related activities in the quarterly update;
THAT the Mayor meet with a representative of the delegation Some Concerned Moms of Cumberland to discuss the status of Village activities relating to climate change response; and
THAT climate action be further considered during the 2023 budget and strategic priorities discussions.
Carried Unanimously

6. Correspondence

6.1 Comox Valley Regional District, Cell 2 Excavation – Bylaw 950 Exemption Request

Motion 22-342
Brown/Sullivan
THAT Council receive the correspondence from the Comox Valley Regional District regarding Cell 2 Excavation.
Carried Unanimously

Motion 22-343
Sproule/Sullivan

THAT Council authorize an exemption to the Noise Control Bylaw No 950, 2012 to the Comox Valley Regional District for construction activities related to Cell 2 construction at the Comox Strathcona Waste Management Centre at 3699 Bevan Road, limited to excavation and hauling of gravel and not to include drilling, blasting, breaking or screening, for night work on Mondays after 9 p.m. to Fridays until 7 a.m. from May 15 to August 30, 2022; and that Council direct the Chief Administrative Officer to work with the Comox Valley Regional District on prescribed hours and public notice.
Carried Unanimously

7. Reports

7.1 Manufactured Home Park Permit, Development Permit & Development Variance Permit – 3025 Royston Road

Motion 22-344
Ketler/Brown
THAT Council receive the "Manufactured Home Park Permit, Development Permit & Development Variance Permit – 3025 Royston Road" report.
Carried Unanimously

Motion 22-345
Brown/Sullivan
THAT Council approve the manufactured home park permit, development permit and development variance permit for the property described as Lot 1, District Lot 24, Nelson District, Plan 38778 Except Part In Plan 49490 (3025 Royston Road).
Carried Unanimously

Motion 22-346
Brown/Sproule
THAT Council direct staff to bring back a report on updating bylaws to require stormwater plans to speak to 100 year storm events with a 15% climate change percentage impact as well.
Carried Unanimously

7.2 Options for Financial Support for 3345 Second Street Affordable Housing Project

Motion 22-347
Ketler/Brown
THAT Council receive the Options for Financial Support for 3345 Second Street Affordable Housing Project report.
Carried Unanimously

Motion 22-348
Brown/Sproule

THAT Council direct staff to draft a tax exemption bylaw establishing conditions and application requirements to grant property tax exemptions on the assessed improvement value of affordable rental housing projects.
Carried Unanimously

Motion 22-349
Brown/Sullivan
THAT Council direct staff to report to Council during the 2023 budget discussions on the establishment of a reserve to support affordable housing.
Carried Unanimously

7.3 Letter of Support for BC Trail Fund
Motion 22-350
Sullivan/Sproule
THAT Council receive the Letter of Support for BC Trail Fund report.
Carried Unanimously

Motion 22-351
Sullivan/Brown
THAT Council support the Outdoor Recreation Council of BC's proposal for a $10 million endowment for the BC Trail Fund.
Carried Unanimously

7.4 Council Members Monthly Reports
Motion 22-352
Ketler/Sullivan
THAT the Council Member Monthly reports be received.
Carried Unanimously

7.5 2022 Property Tax Rates Bylaw
Motion 22-353
Sproule/Brown
THAT Council receive the 2022 Property Tax Rates Bylaw report.
Carried Unanimously

8. New Business
None

9. Notices, Motions and Announcements

- Advisory Planning Commission April 14 at 4 p.m.
- Accessibility and Inclusion Committee, April 19 at 3 p.m.
- Homelessness & Affordable Housing Committee April 20 at 9:30 a.m.
- Economic Development Steering Committee April 20 at 6 p.m.

10. Question Period

Questions were received on the following matters:

- Manufactured home park, climate change impacts and floodplain requirements

Mayor Baird acknowledged Mr. Postings in his role of Chief Administrative Officer of the Village for the past two years and thanked Mr. Postings for his service.

11. Closed Portion

Motion 22-354

Sullivan/Brown

THAT Council close the meeting to the public at 7:28 p.m. pursuant to Section 90 of the *Community Charter* to consider:

(a) personal information about an identifiable individual who holds or is being considered for a position as an officer, employee or agent of the municipality or another position appointed by the municipality;

(c) labour relations or other employee relations;

(e) the acquisition, disposition or expropriation of land or improvements, if the council considers that disclosure could reasonably be expected to harm the interests of the municipality;

Carried Unanimously

12. Adjournment

The meeting was adjourned at 8:45 p.m.

Certified Correct:

_____ _____

Mayor Corporate Officer

COUNCIL REPORT

REPORT DATE: 3/17/2022
MEETING DATE: 4/25/2022

File No. 2022-02-DP

TO: Mayor and Councillors

FROM: Meleana Searle, Planner

SUBJECT: Development Permit – Proposed Lot 6 (2799 Beck Avenue)

RECOMMENDATION

i. THAT Council receive the "Development Permit – Proposed Lot 6 (2799 Beck Avenue)" report.

ii. THAT Council approve the application for a development permit (2022-02-DP) for the property described as Proposed Lot 6 (2799 Beck Avenue).

Subject Property

PURPOSE

The purpose of this report is to seek Council approval of a development permit to allow the construction of two industrial buildings and caretaker's suite on Proposed Lot 6 (2799 Beck Avenue).

BACKGROUND

Proposed Development

The applicant is proposing to construct two six-unit buildings for industrial warehousing. The property is currently under active subdivision. Any development permit or related building permits shall be held in abeyance until the subdivision is completed. The proposed development complies with current zoning and the applicant has sited the building to be compliant with the required setbacks for an I-2 zoned lot. This proposed development is the second to be developed as part of the Bevan Industrial Lands. Allowing processing of the development permit prior to completion of the subdivision allows the applicant to advance establishing their business in the Village of Cumberland. The development permit for Tree Island Yogurt on Proposed Lot one was approved by Council in May 2021.

Bevan Industrial Lands

The Bevan Industrial Lands Concept Plan and Report (Concept Plan) was developed by the Village in cooperation with Hancock Timber in 2019-2020 with input from key stakeholders in the community. The Bevan Industrial Lands contain approximately 500 hectares (1,235 acres) of land

and represent the largest supply of industrial lands in the Comox Valley. The CVRD Waste Facility and gravel extraction sites are current uses located within this area. These lands are currently serviced with water and contain significant environmental assets, including regionally significant groundwater aquifer, Comox Lake, and the headwaters to Morrison Creek. The Concept Plan considers the protection of these assets in its land use and servicing recommendations. The Concept Plan was approved by Village Council on September 14, 2020. Council's 2021 review of its 2020 to 2023 Strategic Priorities confirmed Economic Development as one of its key priority areas with the focus being on "Bevan Industrial Area Development."

Official Community Plan

Pursuant to the Official Community Plan (OCP), the proposed development is subject to two development permit areas (DPAs): DPA #1 -Environmental Protection and DPA #5 – Industrial.

The subject property is within Development Permit Area #1 (DPA #1) – Environmental Protection and is identified as a connectivity area. The primary function of this development permit area is to ensure that natural resources are protected, connectivity restored and maintained and development impacts mitigated, including allowing decision makers to have the ability to secure the necessary information and be able to place conditions on development.

The subject property is also in Development Permits Area # 5 – Industrial. The intent of this DPA is to enhance the visual quality of developments located along main thresholds to the community and to ensure that industrial development limits visual impact on adjacent uses. It is also an objective of the Village to encourage development that incorporates energy and water conservation principles as well as designs that work towards reducing greenhouse gas emissions.

Zoning Bylaw

The subject property is zoned I-2 – Heavy Industrial, which permits a large variety of industrial principal uses. Residential use is permitted as an accessory use as long as it's an integral part of the principal use. The maximum size of a dwelling unit in this zone is 90.0m² (987.7ft²).

Village of Cumberland Strategic Priorities

The Village of Cumberland Strategic Priorities guide the Village's corporate management and decision-making. The primary purpose of the Strategic Priorities is to communicate the priorities of Council and the community and to focus and coordinate the resources of the Village of Cumberland Council and staff. The Village of Cumberland seeks to support the local economy by facilitating and leveraging the energy and resources in the private and non-profit sectors. One of the identified priorities is economic development, specifically the development of the Bevan Industrial Lands

ANALYSIS

<u>Environmental Protection Area – DPA 1</u>

The applicant has provided a bio-inventory and impact assessment report prepared by a registered professional biologist (R.P. Bio). The report outlines that there are no waterbodies on or within 100m of the project area, no plant species at risk, no invasive species designated noxious, no wildlife or wildlife habitat features and no environmentally sensitive areas. The report states that;

"in the context of the project area being recently logged, in the vicinity of an active waste management facility, adjacent to a busy gravel road and active gravel mine, and being located over 340m from an aquatic ecosystem, sensitive terrestrial ecosystem, park or protected area, project development is expected to have a relatively minimal impact on the larger watershed area. Standard construction environmental best management practices for a project of this size and type are expected to adequately mitigate potential impacts."

Connectivity for this area is being addressed through the current subdivision. On the north side of proposed Lots 1-3, a 3.0 meter wide bioswale will provide a connectivity corridor for wildlife. Fencing of these lots will be required to be on the inside of the bioswale to minimize fragmentation of the corridor.

Fencing is not proposed for this development allowing wildlife to pass through the property. Should fencing be installed later the permit requires it to be designed according to the guidelines described in, "A Landowners Guide to Wildlife Friendly Fences: How to Build Fence with Wildlife in Mind" Montana Fish Wildlife and Parks. The application complies with all guidelines of Development Permit Area #6 – Environmental Protection.

Industrial – DPA 5

The property owner is proposing two industrial buildings with six rental units each, for a total of twelve units. The building facades that face one another have awnings at two levels and a staggered accessible path and plantings to balance the effect of parking and the large buildings. At mezzanine level surrounding the buildings is a band of cladding panels in different shades of green and windows of similar width. At ground level are larger and lighter cladding panels with large windows, overhead and entry doors. At roof level is corrugated aluminum cladding.

A landscaped buffer is proposed to be planted along the east side of the property along Bevan Road. The application complies with all guidelines of Development Permit Area #5 -Industrial.

PUBLIC NOTIFICATION AND CONSULTATION

As required by the *Village of Cumberland Procedures and Fees Bylaw No. 1073, 2018* the applicant has placed the required sign on-site.

Pursuant to the requirements of the *Local Government Act,* a notice of Council consideration of the Development Permit was mailed on March 26, 2022 to the owners of adjacent properties within 75.0metres. At the time of this report no submissions have been received by staff.

Staff recommends that Council does not require a neighbourhood public meeting. Although the *Village of Cumberland Procedures and Fees Bylaw No. 1073, 2018* states that Council may require that the applicant hold a neighbourhood public meeting, because Council has limited discretion when approving development permits, public meetings for development permit applications are generally not recommended.

REFERRALS

No referrals are recommended for this application. The proposed industrial buildings are consistent with the Bevan Lands Concept Plan approved by Council in 2020. The preparation of the Concept Plan included a component of public engagement, and the development of the Bevan Industrial Lands is a Council strategic objective.

ALTERNATIVES

1. THAT Council refer the development permit application (2022-02-DP) to the Advisory Planning Commission for comment.
2. THAT Council request further information or clarification or request the applicant to make changes to the plans. If changes are requested, specific direction about the type of alterations should be presented including reference to the relevant development permit area guideline or guidelines.

STRATEGIC OBJECTIVE

- ☐ Healthy Community
- ☐ Quality Infrastructure Planning and Development
- ☐ Comprehensive Community Planning
- ☒ Economic Development

FINANCIAL IMPLICATIONS

None.

OPERATIONAL IMPLICATIONS

The review of Development Permit applications is part of the services provided by the Development Services Department.

CLIMATE CHANGE IMPLICATIONS

The proposed subdivision will be within an existing industrial node and along an existing corridor. Future climate conditions and their expected impacts shall always be considered in the planning, design, and construction of any new development on the subject property.

ATTACHMENTS

1. 2022-02-DP DRAFT

CONCURRENCE

Courtney Simpson, Manager of Development Services ***CS***

Respectfully submitted,

M. Searle

_____

Meleana Searle
Planner

C. Postings

_____

Clayton Postings
Chief Administrative Officer

Corporation of the
Village of Cumberland

DEVELOPMENT PERMIT

TO: Acciano Development Inc.

OF: 3879 Warren Ave, Royston, BC V0R 2V0

1. This Development Permit (2022-02-DP) is issued subject to compliance with all of the bylaws of the Village of Cumberland applicable thereto, except as supplemented by this permit for the purposes of developing two industrial buildings on Proposed Lot 6.

2. This Development Permit applies to and only to a portion of those lands within the Village of Cumberland described below:

   Legal Description: Lot A Section 34 Township 10 Comox District Plan EPP93477

   Folio: 516 29039.521 **PID:** 031-308-937

   Civic Address: Proposed Lot 6 (2799 Beck Avenue)

3. The land described herein shall be developed substantially in compliance with the following terms and conditions and provisions of this permit:

   DPA#1 Environmental Protection Permit Areas

   a) All work will be completed outside of the breeding bird season (March 15 – August 31) to minimize impacts to wildlife. If work cannot be completed outside of the breeding bird season, then pre-clearing nest and small wildlife sweeps will be conducted and protective buffers maintained around active nests, as directed by a Qualified Environmental Professional. Recommendations for appropriate timing of works, and associated mitigations, are provided in section 5.5 of the Bioinventory Report.

   b) An additional invasive species survey should be conducted during the growing season and prior to development proceeding to identify whether species not identified in the fall of 2019 currently exist in the project area, as per Bio-Inventory and Impact Report section 4.4.2.3.

   DPA#5 Industrial Development Permit Areas

i On-site topsoils to be conserved and re-used on site.

ii A landscaped buffer shall be provided along Bevan Road.

c) **Landscaping**

i Watering shall be via an on-site irrigation system with an automated 'smart' controller.

ii Efforts shall be made to restore native vegetation on site post re-grading.

iii Signage shall be subject to the applicable bylaw provisions.

d) **Building Form and Character**

i The proposed building will be constructed substantially in compliance with the drawings attached as Schedule A.

ii The building shall be designed to be solar ready. This includes providing a conduit to the roof for future solar panel installation.

iii A minimum of one 240 volt EV plug is to be provided.

4. Landscape Security

a) A security in an amount equal to 125% of the cost estimate for the approved landscape plan shall be received before the Permit is granted.

b) When the plan has been completely implemented the Owner shall request an inspection. If found to be compliant, a refund of 75% of the security received shall be made.

c) The remaining 25% will be held back for one year at which time the Owner will request an inspection. If the landscaping is to the satisfaction of the Village, the holdback will be returned to the person who paid it. If any of the plants have not survived, they shall be replaced by the Owner as per the approved landscape plan, or failing this, the Village may use the holdback to replace the plants. Any amount of the security not used for the purpose it was intended will be returned to person who paid it.

5. Expiry

Subject to the terms of the permit, if the Owner of this Development 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.

6. Timing and Sequencing of Development

7. List of Reports or Plans attached as Schedules

1. Schedule A - Site Plan
2. Schedule B - Elevations
3. Schedule C – Bio-inventory and Impact Assessment, Sept.3, 2019
4. Schedule D – Landscape Plan
5. Schedule E – Site Servicing Report

8. Contaminated Sites Regulation

This permit is issued pursuant to the requirements of the *Environmental Management Act,* whereby the Owner has completed a "Site Declaration" for the subject property.

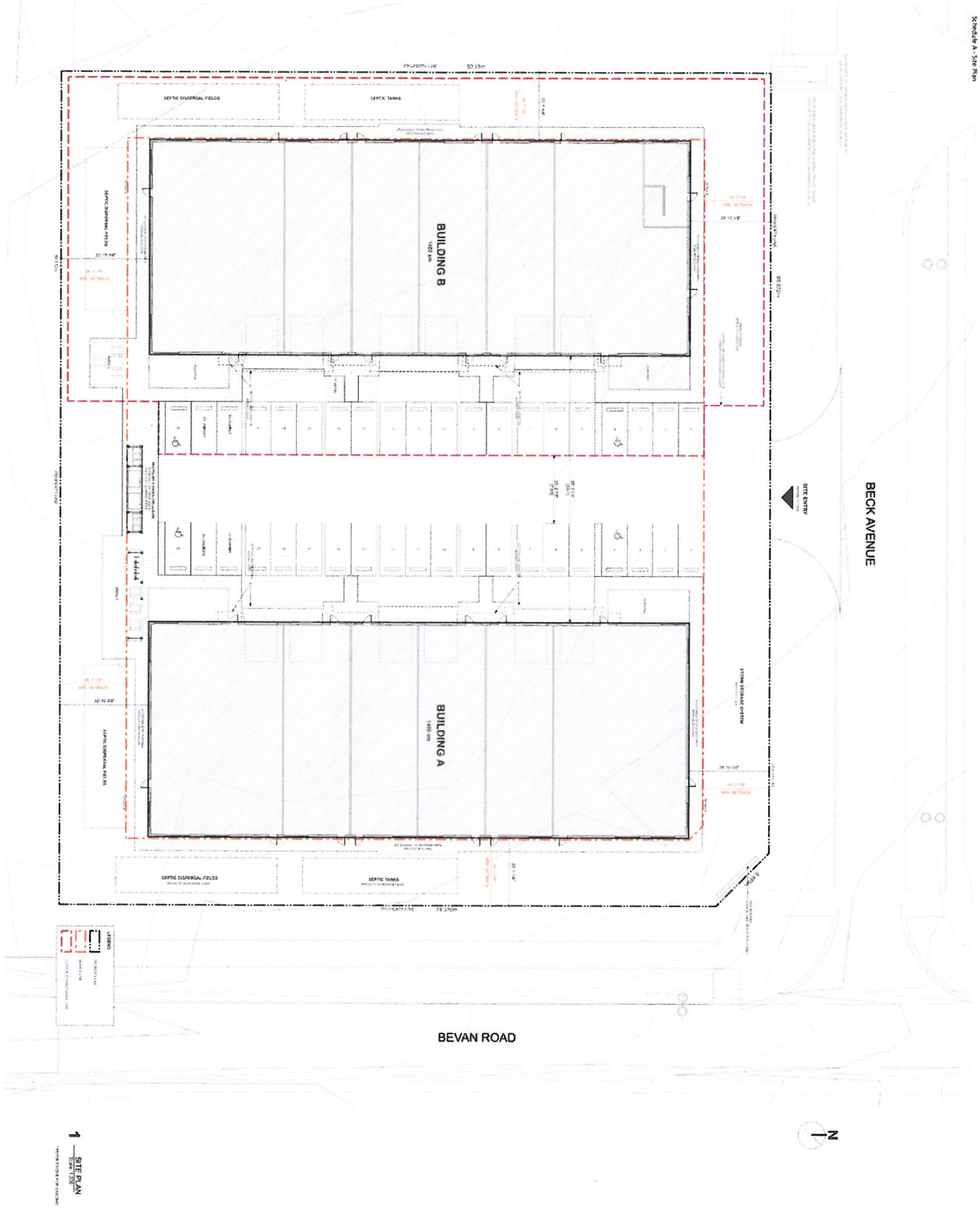
9. This Permit is **not** a Building Permit.

CERTIFIED as the **DEVELOPMENT PERMIT** granted by resolution of the Council of the Corporation of the Village of Cumberland on _____ 2022.

_____

Corporate Officer

Schedule A - Site Plan



1 SITE PLAN
Scale: 1:200

A0.02

SITE PLAN

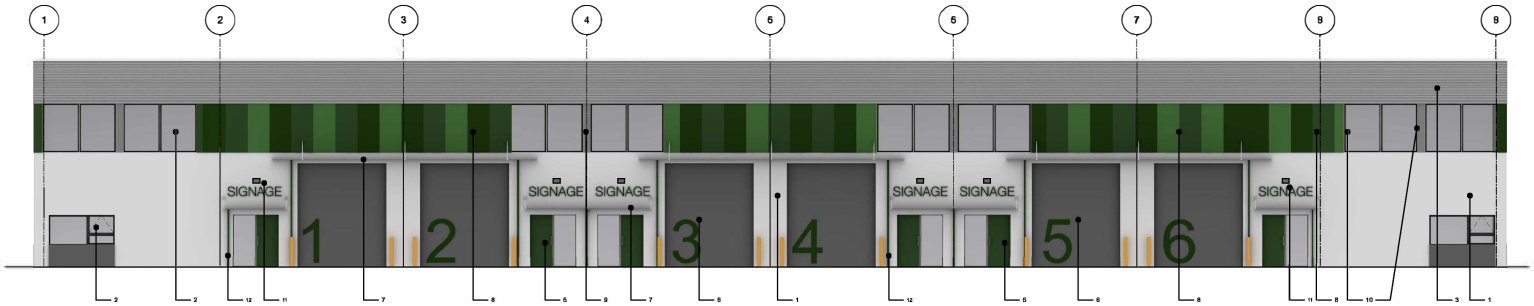
BEVAN ROAD LOT 6 - DREWRY ELECTRICAL

BEVEN ROAD CUMBERLAND

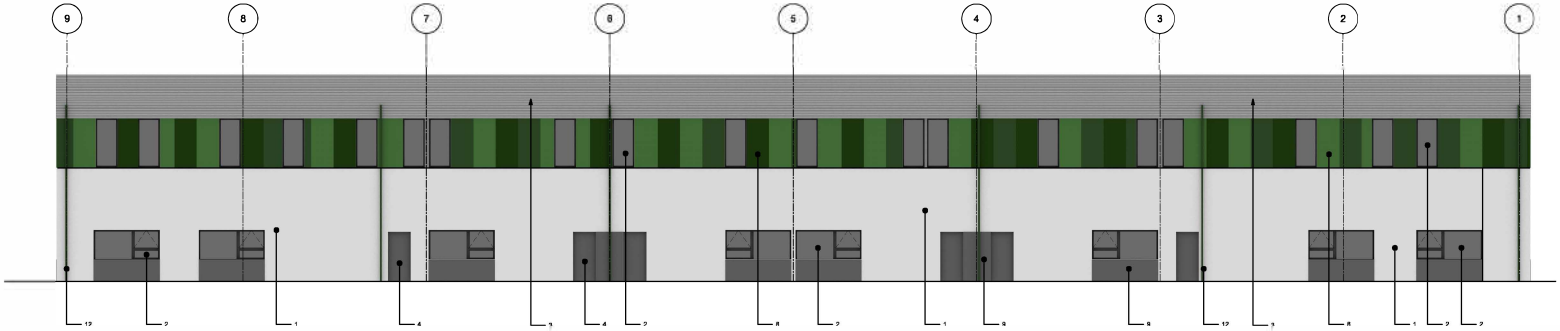
4	2022-02-15	Issued for Development Permit
3	2021-12-08	Issued for Examination
2	2021-08-23	Issued for Examination

22-02-17

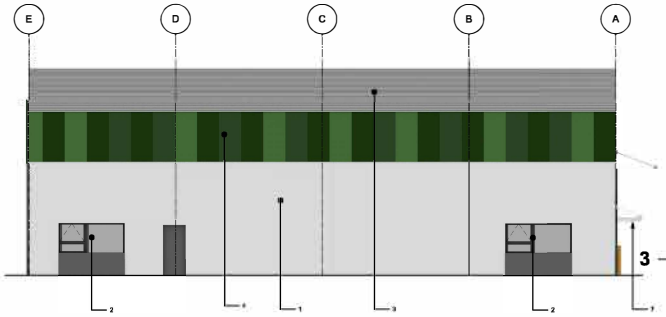
MacDonald Hagarty Architect Ltd.
156 Isabel Road
Comox BC
V9M 2R2



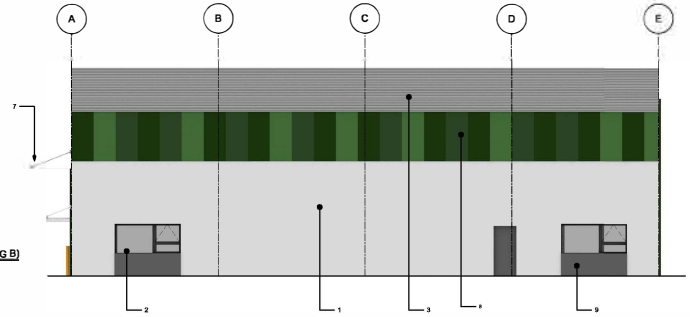
1 FRONT ELEVATION (BUILDINGS A&B)
Scale: 1/8" = 1'-0"



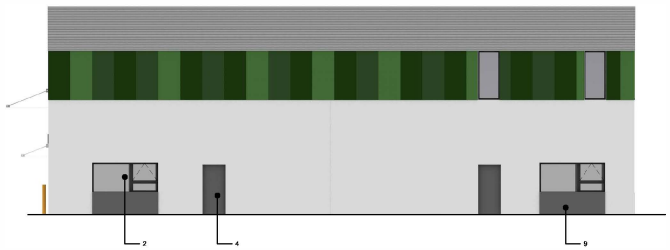
2 BACK ELEVATION (BUILDINGS A&B)
Scale: 1/8" = 1'-0"



3 NORTH (BUILDING A) AND SOUTH (BUILDING B)
Scale: 1/8" = 1'-0"



4 SOUTH (BUILDING A)
Scale: 1/8" = 1'-0"



5 NORTH ELEVATION (BUILDING B)
Scale: 1/8" = 1'-0"

MATERIAL LEGEND

1. SMOOTH LIGHT GREY METAL OR FIBER CEMENT CLADDING PANELS
2. GLAZING
3. CORRUGATED ALUMINUM
4. DOOR PRESSED STEEL FRAME, CHARCOAL
5. ENTRY DOOR WITH SIDELIGHT, COLOUR TBD ARCH
6. DOOR STEEL ROLL UP OVERHEAD DOOR, CHARCOAL
7. STEEL I-BEAM CANOPY WITH CORRUGATED COVER
8. COLOURED FIBER CEMENT PANEL, THREE GREENS
9. FIBER CEMENT PANEL MID-DARK GREY
10. METAL TRIM WINDOW BOX, CHARCOAL
11. SUITE SIGNAGE WITH LIGHT OVER
12. DOWNSPE, CHARCOAL OR DARK GREEN

MacDonald Higarty Architect Ltd.
ISHCOLV
22-02-17

BEVAN ROAD LOT 6 - DREWRY ELECTRICAL
BEVEN ROAD CUMBERLAND

ELEVATIONS

A2.01

BC LANDSCAPE STANDARDS

All construction to meet the requirements as set out in the BC Landscape Standards, 2012 edition, prepared by the B.C. Society of Landscape Architects and the B.C. Landscape and Nursery Association. Jointly.
Copies of the BC Landscape Standards are available through the BCLNA office at 1-604-574-7772

Contractor to consult with designer regarding any discrepancies.

Contractor to consult with designer if plant substitutions are required due to availability.

Contractor is responsible for obtaining written confirmation of utility locations prior to commencing digging.

Contractor is responsible for providing one year of maintenance and one year warranty on all materials and workmanship, from acceptance of landscape.

Refer to landscape specifications supplied with this plan at building permit level. If you did not receive the specifications, please contact the designer.

TOP SOIL REQUIREMENTS:
Minimum depth for shrub beds 450mm (18")
Minimum depth for groundcover 300mm (12")
Minimum depth for mulch 75mm (3")
Minimum depth for lawn areas 300mm (12")
Trees as per detail on these drawings.

LANDSCAPE AREA

PLANT AREA	2800.9 sqm	30,141 sq.ft.
FESCUE LAWN AREA	531.5 sqm	5,721 sq.ft.
FESCUE & WILDFLOWERS	860 sqm	9,257 sq.ft.
TOTAL LANDSCAPE	4,196 sqm	45,191 sq.ft.

PROJECT:

TREE ISLAND YOGURT FACILITY
BEVAN ROAD
CUMBERLAND, B.C.

ARCHITECT:

GAULETT ARCHITECTURE AND PLANNING

LANDSCAPE DESIGNER:

MYSTIC WOODS
LANDSCAPE DESIGN
4737 Gordon Rd.
Campbell River, B.C. V9H 1T3
phone 250-286-1327
cell phone 250-287-0160
design@mystic.woods.ca

DRAWN BY:
Corrine Matheson C.L.D. Q2
Certified Landscape Designer
Qualified Plantsman
Member of the BCLNA / CLNA

LANDSCAPE ARCHITECT:

ALISON PREWETT, BCSLA
766 Lass Road
Comox, B.C. V9M 3V6
phone 236-255-1055
amsuelt1@gmail.com
REVIEWED AND APPROVED BY:
Alison Prewett, BCSLA
Landscape Architect
Member of the BCSLA

SCALE: 1 : 200

DATE: February 9, 2021

Issued	February 12, 2021	For LA review
Issued	February 16, 2021	For LA review
Issued	February 20, 2021	For LA review
Issued	February 24, 2021	For Development Permit

"Not for Construction"

LANDSCAPE DRAWINGS TO BE PROVIDED FOR BUILDING PERMIT
L3 - CONSTRUCTION PLAN
L4 - SPECIFICATIONS

DRAWING: LANDSCAPE MASTER PLAN

DRAWING #: L1 OF 2

Schedule C - Bio-Inventory & Impact Assessment Sept 3, 2019

Tree Island yogurt Facility Bio-Inventory and Impact Assessment prepared by EcoFish Research Ltd. Dated September 3, 2019 86 pages.

See separate attachment.

Our File: 2211-47647-00

SITE SERVICING REPORT

To	From
Mr. Dave Drewry **Drewry Electrical**	**Neil Penner, P.Eng.** 2211 - Courtenay
Re	**Date**
Site Servicing Report for Lot 6 – Bevan Road **Lot 6 of Planned Subdivision of Lot A, Section 34, Township 10, Comox District, Plan EPP93477**	January 14, 2022

The following site servicing report has been prepared on behalf of the above client in support of a development permit application for the above noted parcel. The owner is proposing to construct two new industrial buildings on the subject property.

This servicing report covers sanitary sewer, storm drainage, and potable water. Commentary is also provided with respect to third party (BC Hydro, Shaw Cable, Fortis BC natural gas, and Telus) servicing.

This report presents both the estimated development loads as well as the general servicing methodology and confirms the suitability of the subject parcel for the intended development.

1. GENERAL

The subject property is future Lot 6 of the proposed subdivision of existing Lot A, Section 34, Township 10, Comox District, Plan EPP93477 , and is located at the intersection of Bevan Road and the proposed subdivision road (Beck Avenue).

The site is bound by future Beck Avenue to the north, undeveloped industrial property to the west, Bevan Road to the east, and undeveloped land to the south zoned I-2 (Heavy industrial).

The development proposal consists of two proposed industrial buildings with six rental units each, for a total of 12 units. The proposed buildings are to have single level units with mezzanines, for a total of two storeys in overall height. Each building has a proposed footprint of 1489 square metres. The development will also install a parking lot in between the two buildings for access to all units. Site access will be by way of a driveway tying into Beck Avenue. Please see **Appendix A** for the proposed architectural drawings.

The site generally slopes southwest to northeast towards Bevan Road and is void of mature vegetation.

2. STORM DRAINAGE

2.1. EXISTING STORMWATER MANAGEMENT

The majority of on-site stormwater infiltrates into the soil, excess volume drains to the northeast towards the Bevan Road ditch.

2.2. EXISTING RUNOFF AND PERFORMANCE TARGETS

A hydraulic model was developed using SWMM software to analyze existing site response to a variety of design rainfall events.

Existing soils were assumed to be SCS soil class B, based on Ryzuk's geotechnical memo (attached in **Appendix B**) for the neighbouring Lot 1, Plan EPP93477, the soils in the area have a high hydraulic conductivity of 2.5 x 10^{-2} cm/s (900 mm/hr). **The Ryzuk memo has been replied upon for this preliminary design phase only. It is understood that a detailed onsite geotechnical investigation (including permeameter testing) will be completed prior to finalizing detail design to confirm in-situ soil conditions.**

Simulations were completed for the 24-hour SCS Type 1A distribution, 2, 5, 10 and 100-Year design rainfall events. Design rainfall events were derived from Environment Canada's Courtenay-Puntledge BCHP rain gauge (1201990) and include an additional 15% on all intensities to account for climate change. Model input parameters, based on existing site parameters are summarized in the following **Table 1**. The results of the modeled existing site response are summarized in **Table 2**.

Table 1: Existing Site-Specific Storm Water Management Parameters

PARAMETER	EXISTING SITE
Area (ha)	0.754
Width (m)	69
Slope (%)	1.0
% Impervious	20
N Imperv	0.013
N Perv	0.2
Dstore Imperv	2
Dstore Perv (mm)	15
Zero % Imperv	25

PARAMETER	EXISTING SITE
Outlet Routing	Pervious
SCS Curve #	61

Table 2: Existing Runoff Quantities

24 HOUR DISTRIBUTION (EC COURTENAY-PUNTLEDGE)	TOTAL PRECIPITATION	EXISTING RUNOFF	
		PEAK RATE (L/S)	TOTAL VOLUME (m^3)
1 in 2-Year +15%	83.8mm	4.4	185
1 in 5-Year +15%	108.9mm	9.6	309
1 in 10-Year +15%	125.5mm	14.1	397
1 in 100-Year +15%	177.5mm	29.0	696

2.3. DESIGN ELEMENTS

The development is proposing the following stormwater management methods and best management practices to manage stormwater on this site and maintain runoff rates to existing levels up to and including the 10-Year return period rainfall event:

- Retain/ re-establish landscaped areas onsite.
- Install an in-ground infiltration gallery with approximately 61.5 cubic metres of storage to control runoff rates to existing levels up to and including the 10-year return period rainfall event. See Section 2.3.1 for additional details.
- Install a modern oil/ grit separator manhole onsite to treat flows prior to discharging into the infiltration gallery.
- Capture runoff from the parking lot and paved areas using catchbasins and drain roof leaders to onsite storm main.
- Grade areas around the proposed buildings to provide positive drainage away from the building.
- Construct swales around the perimeter to prevent runoff from flowing onto neighbouring properties.

2.3.1. Preliminary Infiltration Gallery

To control peak outflows, an in-ground infiltration gallery is proposed to be located along the northwestern property line of the development, as shown on drawing C-101 (attached in **Appendix C**). Preliminary storage unit design has a long-term effective storage capacity of 61.5 cubic metres. The infiltration

gallery will utilize the in-situ free draining soils to return runoff to the ground. The infiltration gallery is to be 5m away from any building and 7.5m away from any sewage dispersal field.

The preliminary infiltration gallery proposes the use of Stormtech SC-740 chambers to maximize the storage volume while minimizing the footprint of the gallery.

The infiltration gallery has been sized to meet the minimum storage requirements of the lot as set out in Wedler's overall stormwater management plan for the subdivision – drawing V18-0316/A-03 rev. Q dated 2021-07-22 (attached in **Appendix D**). The drawing states that Lot 6 is to provide 59 cubic metres of storage. Correspondence with Wedler also confirmed that storage outfalls are to drain overland to the Beck Avenue bioswales or to tie into the proposed perforated pipe (copy of correspondence located in **Appendix D**).

A lawn basin will be installed at the northern end of the infiltration gallery to allow for emergency overflow for the gallery to the adjacent bioswale on Beck Avenue. The infiltration gallery will also be located downstream of an oil grit separator.

2.3.2. Quality/ Oil Grit Separator

All runoff from impervious areas will be routed through catch basins complete with grit sumps and conveyed through an oil grit separator (specific model to be determined during detailed design). See drawing C-101 in **Appendix C** for proposed location.

2.4. POST-DEVELOPMENT RUNOFF

The post-developed site was modeled using SWMM software. Simulations were completed for the 24-hour SCS Type 1A distribution 2, 5,10 and 100-Year rainfall events. Rainfall events were derived from Environment Canada's Courtenay-Puntledge 2019 rain gauge and include an increase of 15% for all intensities to account for climate change. Model input parameters are summarized in **Table 3** below. The post-development model includes the effects of the above listed BMP's in **Section 2.3**. The Post-development model includes two catchments; the area that is captured and drains to the proposed infiltration gallery (referred to as Capturable Area) and the areas that runoff overland (called Remainder Area).

Table 3: Site-Specific Storm Water Management Parameters

PARAMETER	EXISTING SITE	PROP. CAPTURABLE AREA	PROP. REMAINDER AREA
Area (ha)	0.754	0.537	0.217
Width (m)	69	51	217
Slope (%)	1.0	0.5	2.0
% Impervious	20	91	39

PARAMETER	EXISTING SITE	PROP. CAPTURABLE AREA	PROP. REMAINDER AREA
N Imperv	0.013	0.013	0.013
N Perv	0.2	0.15	0.15
Dstore Imperv	2	2	2
Dstore Perv (mm)	15	10	30
Zero % Imperv	25	25	25
Outlet Routing	Pervious	Impervious	Pervious
SCS Curve #	61	61	61

Table 4 below compares existing and post-development simulated runoff for the site. The analysis shows that with the use of the listed stormwater management methods and BMP's listed above in **Section 2.3**, runoff can be detained and released with peak rates at or below existing up to the 100-year design storm; this is further illustrated in hydrographs provided as **Figures 1 through 4**. Site runoff is largely from the remainder areas, which are primarily landscaped and will drain to perimeter swales and roadside ditching.

Table 4: Post-Development Runoff Quantities

24 HOUR DISTRIBUTION (EC COURTENAY-PUNTLEDGE 2019)	TOTAL PRECIPITATION	EXISTING RUNOFF		POST-DEVELOPMENT RUNOFF	
		PEAK RATE (L/S)	TOTAL VOLUME (m^3)	PEAK RATE (L/S)	TOTAL VOLUME (m^3)
1 in 2-Year +15%	83.8mm	4.4	185	2.5	65
1 in 5-Year +15%	108.9mm	9.6	309	6.3	106
1 in 10-Year +15%	120.0mm	14.1	397	7.6	134
1 in 100-Year +15%	169.7mm	29.0	696	11.9	228

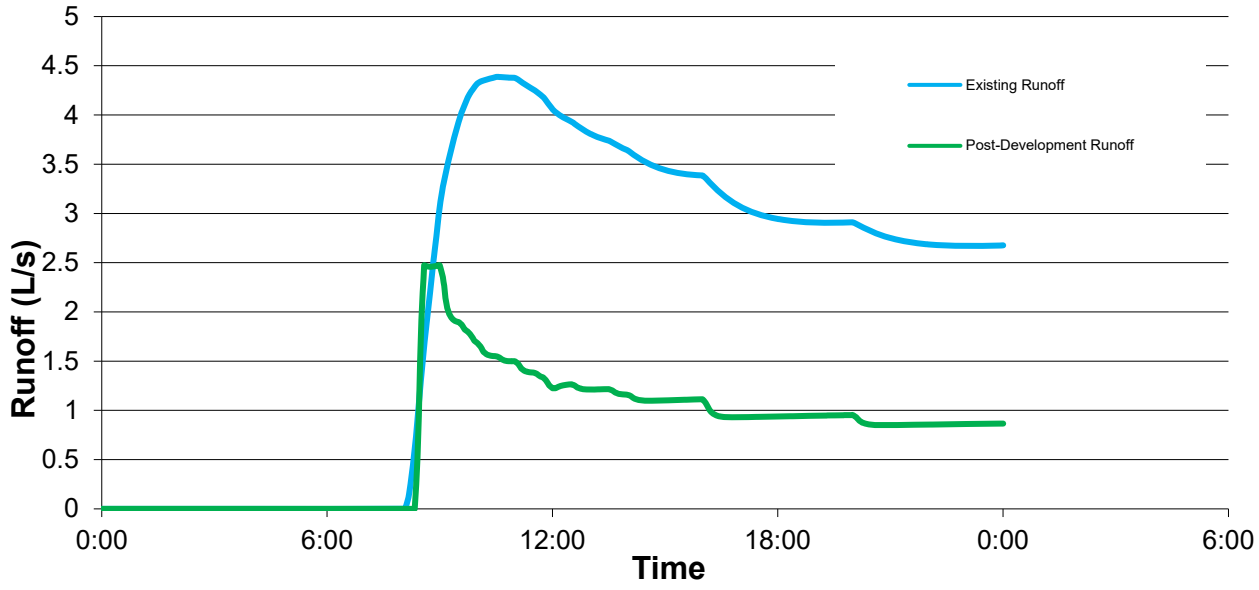


Figure 1 - 2-Year Bylaw 2919 +15% Event Hydrograph

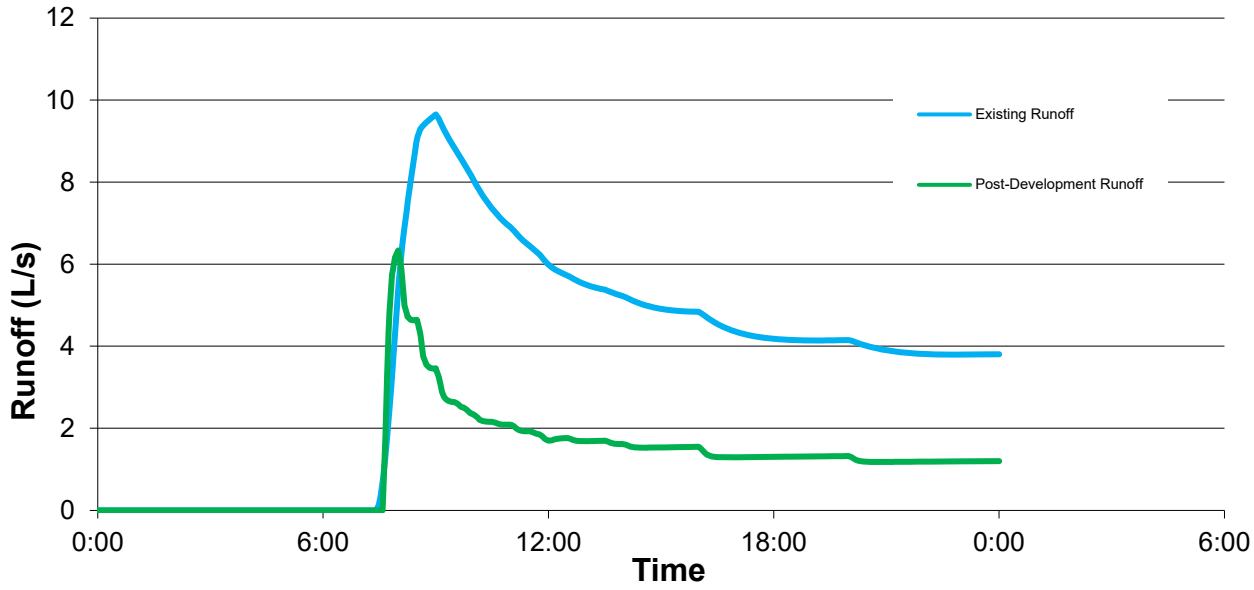


Figure 2 - 5-Year Bylaw 2919 +15% Event Hydrograph

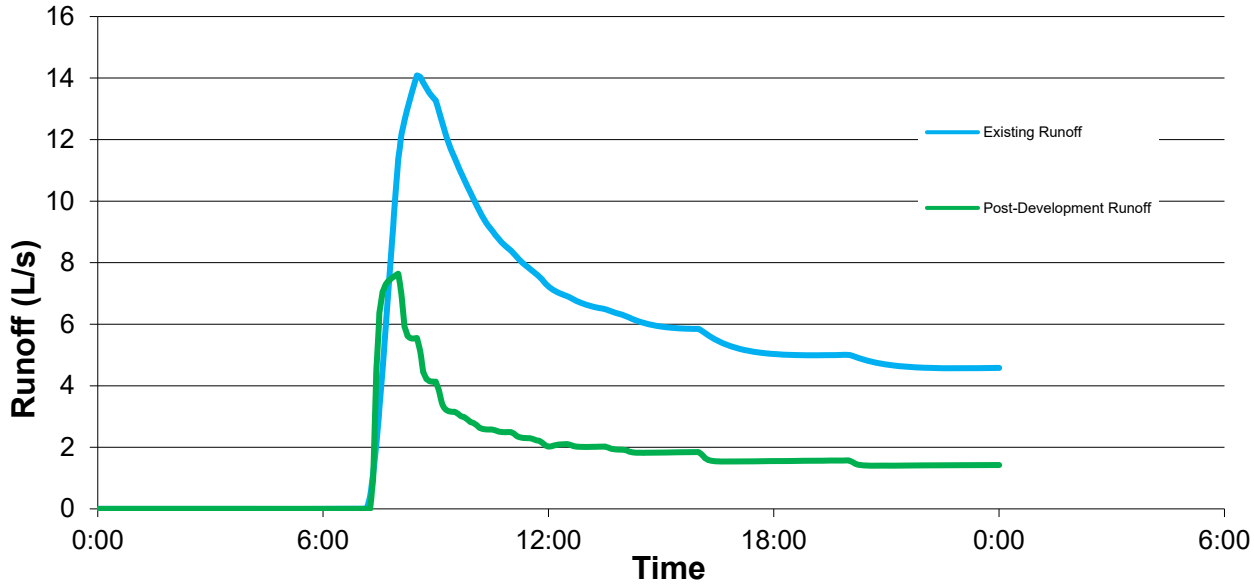


Figure 3 - 10-Year Bylaw 2919 +15% Event Hydrograph

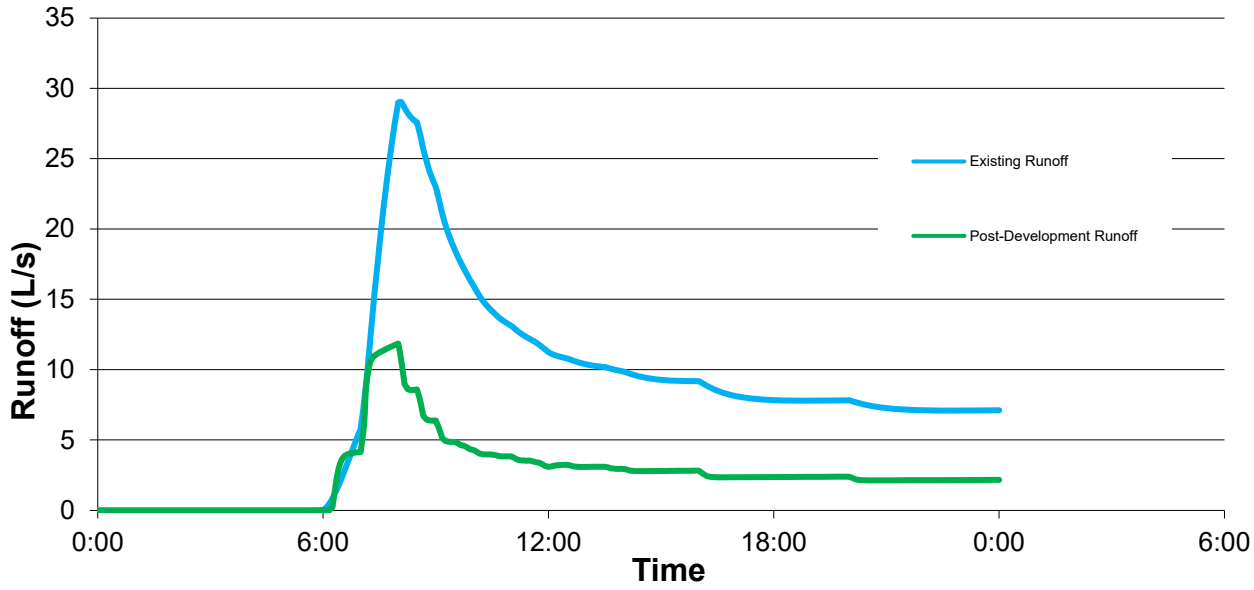


Figure 4 - 100-Year Bylaw 2919 +15% Event Hydrograph

2.5. OFF-SITE DITCHING / PIPE NETWORK CONVEYANCE CAPACITY

The proposed stormwater management program will mitigate runoff at or below existing rates up to and including the 100-year rainfall event, and therefore should have no effect on downstream capacity. The development is also adhering to the stormwater requirements set out by the overall subdivision stormwater management plan.

3. SANITARY SEWERS

Estimated sanitary sewer flows for the proposed development have been estimated based on MMCD Design Guidelines 2014, as specific uses and fixtures for each unit are unknown at this time.

Assuming an Industrial Average Dry Weather Flow (ADWF), the peak wet weather sanitary demand for the development (PWWF) was estimated to be 0.74 l/s. Please see **Appendix E** for detailed calculations.

The sanitary system, including services for each unit, will be sized as 150mm diameter PVC in order to achieve full flow velocity of 0.6 m/s as outlined by MMCD design Guidelines 2014. The services will be located at the rear of the units, close to the proposed septic fields (septic fields by others).

The sanitary sewer sizing in this report is preliminary and will be confirmed following building demand confirmation by a mechanical engineer during detailed design.

4. POTABLE WATER DEMAND

The site is serviced by a 150mm diameter PVC water service.

The development proposes to extend the 150mm diameter PVC main onsite and provide individual 150mm services for each unit (as the occupancy type is unknown). A new hydrant will also be installed onsite to ensure a hydrant within 45m of the fire department connections for each building (assuming that each building will be sprinklered). The development will also install a 150mm diameter water meter and a 150mm diameter double check valve proximal to the site entrance (both sizes preliminary and to be refined as necessary during detailed design).

The water meter is proposed to be located on private property and within an SRW in favour of the Village of Cumberland to avoid placing the water meter within the driveway, which has specific construction requirements outlined by Wedler drawing V18-0316/A-05 attached in **Appendix D**.

4.1. POTABLE WATER DEMAND

Estimated potable water demand for the proposed building has been estimated based on MMCD design Guidelines 2014 and assuming Industrial uses. The estimated potable water demand range for the development is 0.087 l/s to 0.87 l/s (as per MMCD Design Guidelines Section 2.4 – see detailed calculations attached in **Appendix E**).

4.2. ESTIMATED FIRE FLOW

Fire flow was estimated based on MMCD design Guidelines 2014 which states that FUS is to be used, but that the minimum fire flow required of industrial areas is 225 l/s. A preliminary FUS calculation was completed that estimated fire flows to be 117 l/s, which is less than the minimum of 225 l/s, so the MMCD minimum value governs. Therefore, offsite fire flow required is 225 l/s.

Development water service sizing in this report is preliminary and is to be confirmed during detailed design stage in coordination with a mechanical engineer. Onsite fire flow requirements and service sizing will be adjusted to suit NFPA calculations during detailed design.

5. ROAD NETWORK

The development site is serviced by Beck Avenue, which is supported by Bevan Road.

The development access is designed so that a TAC WB-20 (semi-truck and trailer) can enter the site. Site design is such that delivery vehicles and large trucks (such as garbage trucks) pull into the center of the parking lot and unload from there. Please see drawings C-103 and C-104 for vehicle turning templates for a TAC HSU (garbage truck) and WB-20 respectively.

The site access will be constructed as per the typical driveway section provided on Wedler drawing V18-0316/A-05 attached in **Appendix D**.

6. THIRD PARTY UTILITIES

The existing lot is serviced by underground BC Hydro, Telus, Shaw and FortisBC per record drawings received. Design drawings from each utility will be provided to the Village when available.

7. CLOSURE

We trust the information provided in this report is sufficient to process the development permit application. We would also be pleased to meet with Village staff to discuss the contents and findings of this report as necessary.

Sincerely,
McElhanney Ltd.

Prepared by:

Reviewed by:

Neil Penner, P.Eng.
npenner@mcelhanney.com

Derek Jensen, AScT.
djensen@mcelhanney.com

/njg

CC: Jay Worthing, MH Architects Ltd.

Revision History

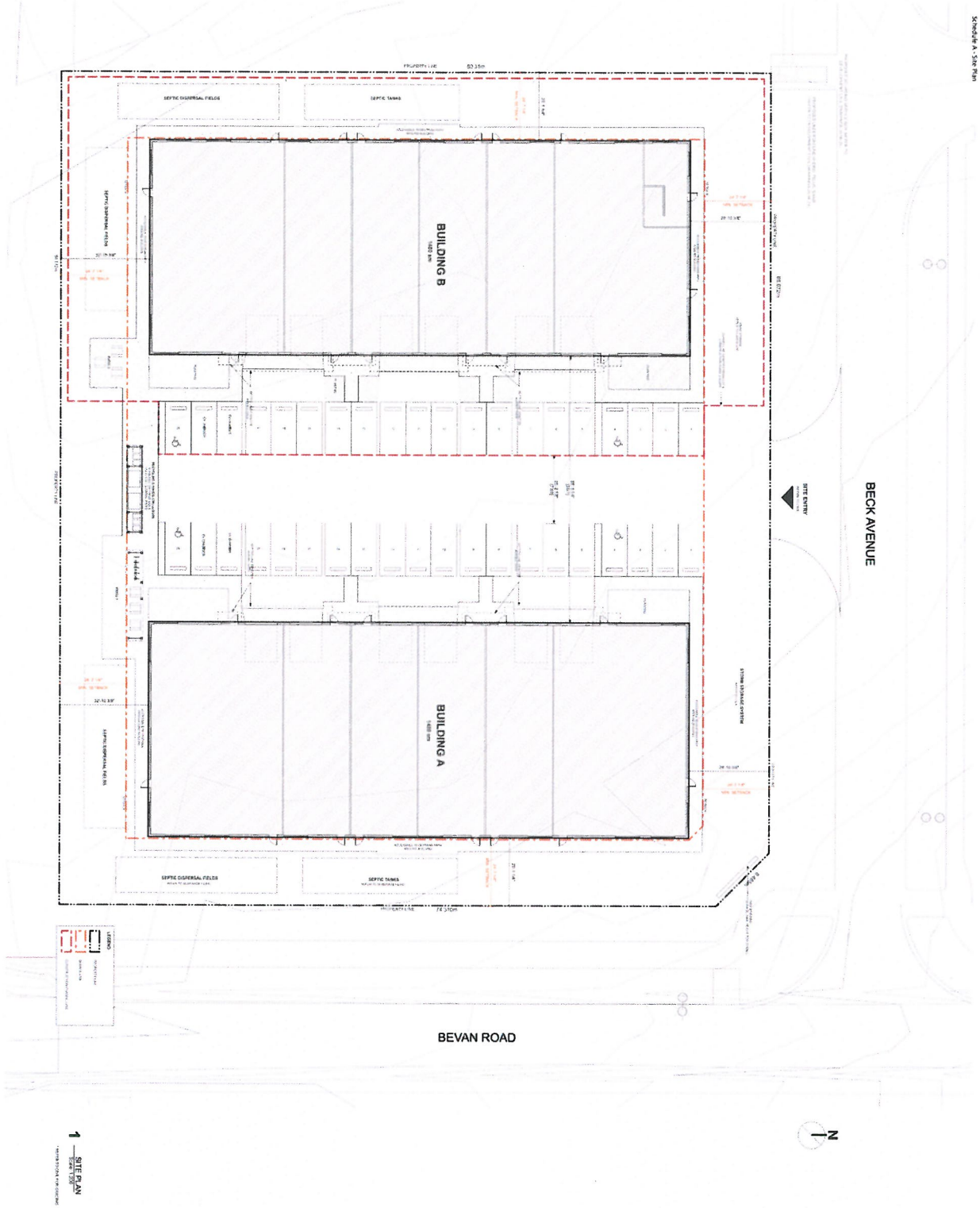
Date	Status	Revision	Author
January 14, 2022	*Final*	*Rev.0*	*N. Penner, P. Eng.*

Limitation

APPENDIX A

Proposed Architectural Site Plan

Schedule A - Site Plan



1 SITE PLAN
Scale: 1:200

A0.02

SITE PLAN

BEVAN ROAD LOT 6 - DREWRY ELECTRICAL

BEVEN ROAD CUMBERLAND

4	2022-02-15	Issued for Development Permit
3	2021-12-08	Issued for Examination
2	2021-08-23	Issued for Examination

22-02-17

MacDonald Hagarty Architect Ltd.
156 Isabel Road
Comox BC
V9M 2R2

APPENDIX B

Lot 1 Geotechnical Memo

RYZUK GEOTECHNICAL
Engineering & Materials Testing
28 Crease Avenue, Victoria, BC, V8Z 1S3 Tel: 250-475-3131 Fax: 250-475-3611 www.ryzuk.com

December 18, 2020
File No: 10251-1

Acciano Development Inc.
3747 Island Highway South
Courtenay, BC
V9N 9T4

Attn: Scott Diguistini
(By E-mail: scottdig@treeislandyogurt.com)

Re: Proposed Subdivision
Bevan Road – Cumberland, BC

As requested, we attended the referenced site on December 21, 2018 to complete an investigation and assessment of the existing geotechnical conditions as such relate to the feasibility of the proposed subdivision development. We subsequently issued a geotechnical report dated January 7th, 2019, for Tree Island Yogurt, our client at that time. Tree Island Yogurt has given permission to Acciano Development Inc. to utilize the information we have previously gathered at the referenced site for the following geotechnical report. Our associated observations and recommendations in this regard are provided herein. Our work has been undertaken in accordance with, and is subject to, the attached Terms of Engagement, provided that this report may be submitted to the Approving Officer of the Village of Cumberland for reliance by the Village of Cumberland.

PROPOSED DEVELOPMENT

The site is a relatively level rural parcel located along the west side of Bevan Road located about 500 metres north of the Comox Valley Waste Management Centre. It encompasses approximately 6.5 hectares of undeveloped land and is bounded by recently cleared areas to the north, south and west, and Bevan Road to the east. The parcel appears to have been recently logged and currently lies undeveloped with sporadic vegetated areas consisting of saplings and minimal brush.

Based on the drawings/plans provided, and discussions with Acciano Development Inc., we understand that the proposed development would consist of a subdivision of 6 lots for industrial/residential/commercial use. At this time, no building details have been provided, however we expect the structures would consist of industrial/warehouse style buildings constructed at grade.

SURFACE & SUBSURFACE CONDITIONS

Our geotechnical assessment has involved a review of available relevant information including aerial photography and surficial geology mapping for the site. We also included permeameter testing as a part of our investigation to characterize the suitability of inground stormwater disposal of the underlying subsurface soils. A total of 24 test pits were completed in the locations shown on the attached Location Plan drawing.

Results of our test pit investigation were relatively consistent, with soils consisting of a surficial layer of 0.2 to 0.3 metres of topsoil or disturbed organic ground cover from recent logging activities atop 0.3 to 0.7 metres of native, dense, reddish-brown sand and gravel with trace cobble, silt and organics, atop dense to very dense grey sand and gravel with trace cobble to a maximum test pit depth of 2.3 metres. Detailed test pit results are provided in the attached Table 2: Summary of Test Pit Information.

Long term groundwater observations were not undertaken as part of our work at this site, however, groundwater was not observed in any of the test pits. Perched water table conditions could be experienced during and after periods of heavy or prolonged precipitation, resulting in surface ponding and/or groundwater flow.

Using a Guelph Permeameter, we completed permeameter testing at the base of TP18-16 within the very dense grey sand and gravel to estimate the hydraulic conductivity of the course granular material. The Guelph Permeameter is an in-situ constant head permeameter which measures the steady state rate of water recharge into unsaturated soil for a cylindrical well hole while a constant water head is maintained. The double head testing procedure was used, and the test was completed twice, with a head height of 5 and 10 cm. The resulting calculated saturated hydraulic conductivity of the noted soil is 2.5×10^{-2} cm/s.

GEOTECHNICAL ASSESSMENT & RECOMMENDATIONS

Based on the above, for the purposes of Section 86(1)(d) of the Land Title Act (British Columbia), we certify that the proposed subdivision and construction of at-grade structures may be used safely for the use intended. Further, our test pit and permeameter test results suggest that soil conditions for in-ground stormwater disposal are generally favorable.

We expect that anticipated excavations for proposed foundations could readily completed with hydraulic excavator equipment with suitable bearing soils to be reached at relatively shallow depths. The native sand and gravel soils encountered are considered capable of supporting

standard concrete spread footing foundations, slabs on grade, subdivision servicing, as well as paved or unpaved road structure for access roads and parking lots, etc.

Excavation Considerations

The topsoil and disturbed organic cover observed at the site should not be relied on for foundation support and should be removed from the any proposed building areas. Such organic soils may be reused in landscaping areas. Grade may be recovered to design level with engineered fill consisting of imported select granular material, blast rock fill or the sand and gravel material from the referenced site; however, such engineered fills would need to be approved by a geotechnical professional. Given our understanding that the future structures are at-grade, we anticipate maximum excavation depths will be relatively shallow, strictly to remove non-select soils, and for the installation of underground utility trenches, roads, and possibly stormwater dispersion systems.

Given the subsurface soils observed at the site, we expect temporary cutslopes, including utility trench excavations, will be stable at the following configurations:

- Topsoil/disturbed surficial materials – 1H:1V (Horizontal : Vertical)
- Dense sand and gravels – 1H: 1V

Topsoil should be pulled back from the excavation to prevent sloughing. Adjustments to the above configurations may be required pending site observations during excavation. According to WorkSafeBC guidelines, excavations deeper than 1.2 meters must be inspected and approved by a qualified geotechnical professional.

Engineered Fill

Engineered fill used to recover site grade must be placed on approved subgrade in thin lifts up to 300 mm and suitably compacted to at least 95% Standard Proctor Maximum Dry Density (SPMDD), or judged equivalent. Any fill placement within building footprints, as well as the subgrade upon which it is placed, must be approved by a qualified geotechnical professional. All placed engineered fill must have a footprint that extends horizontally beyond the footings a distance equal to the thickness of the engineered fill at that location in order to provide adequate splay for building loads. A geotechnical professional should review grading plans prior to work commencing.

Building Foundations

At this time, details of the proposed buildings have not been determined. As such, the following information is general in nature, and the suitability of such recommendations should be verified for each proposed building.

We anticipate that conventional spread footing foundations bearing on the native sands and gravel will likely be capable of providing stable, long-term support to moderately loaded at-grade structures. Provided that the footings bear directly on undisturbed native soils, or engineered fill placed directly atop such, foundation elements can be designed with regard to limit state design (LSD). A serviceability limit state (SLS) of 145 kPa and 220 kPa (ULS) may be used for sizing of strip footings, and 175 kPa (SLS) and 265 kPa (ULS) may be used for sizing pad footings, assuming suitably compacted granular soils, using a geotechnical resistance factor of 0.5 as per the current Canadian Foundation Engineering Manual.

We recommend minimum footing widths of 400 and 600 mm for strip and pad footings, respectively. For frost protection, the base of all footings should extend to a depth of at least 500 mm below adjacent finished grades. Care should be taken to not overly disturb the native soil during forming and placement of reinforcement. Any loose or mounded soil will need to be removed/compacted prior to pouring concrete. All foundation subgrade areas will need to be inspected by the project geotechnical personnel to confirm the bearing capacity once footing subgrade is exposed, and prior to construction of footings. Depending on the actual details of the proposed structure, foundation recommendations may be modified.

Slab Construction

Use of a grade supported floor slab is considered feasible for structures. In order to maintain dry conditions below the floor slab, it is recommended that a minimum 150 mm depth of 19 mm minus crushed rock fill, or medium to coarse grained sand containing less than 5% fines, be placed below the slab. A subslab vapour barrier is also recommended to inhibit capillary rise of moisture into the slab. It is possible to reuse excavated native sand and gravel soils, as engineered fill or backfill for slabs on grade, around foundation walls, trench backfill, etc., provided all organic material is removed.

Drainage Considerations

Conventional perimeter foundation drainage is recommended to maintain a locally low groundwater table and limit hydrostatic pressures against foundation walls in those areas. The drain arrangement (perforated pipe and uniform gravel/drain rock) should be covered with non-woven geotextile filter fabric, or a suitably graded granular material, to prevent migration of finer materials from the backfill into voids within the drain rock. The final grade at the site should be shaped to direct surface water away from the building and foundation areas.

Drainage from roof leaders, slab drains, and foundation drains may be disposed of utilizing an in-ground disposal system. Design of such can be completed once roof and other hard surfaced areas are known. Stormwater should be conveyed in a manner which does not cause erosion. Dispersal trenches would typically be sized considering an appropriate design rainfall event and duration period specific to the area. Accordingly, dispersal trenches would need to be located at an appropriate grade and distance considering adjacent structures.

Seismic Considerations

The Cumberland area is situated in a region of relatively high seismicity. Earthquake risk exists stemming from our proximity to the Cascadia subduction zone and numerous more local faults in southwestern BC and northwestern Washington State. Based on observed and anticipated geological conditions at the site, the shear wave velocity in the upper 30 m (V_s^{30}) is expected to be between 360 and 760 m/s. This corresponds to a Site Classification for Seismic Site Response of 'C', in accordance with the current BC Building Code.

Based on the 2018 BC Building Code, Table 1 provides the associated seismic acceleration spectra for the required design seismic event.

Table 1: NBC 2015 Spectral Accelerations for 2% in 50-year Probability Event

Period (sec)	PGA (g)	0.2	0.5	1.0	2.0	5.0	10.0
Response (g) Site Class 'C'	0.34	0.73	0.71	0.48	0.31	0.11	0.04

Foundation and Retaining Walls

Lateral loads on foundation and retaining walls can be calculated using the following guidelines and equations. Where the grade elevation differs significantly between the two sides of a wall, and the wall is free to rotate in order to develop the active earth pressure state (rotation of 0.1% of the wall height), the wall should be designed to resist a lateral earth pressure (due to granular backfill) similar in magnitude and distribution to that of a fluid having density of 6.3 kN/m^3. Lateral earth pressures due to floor loadings and/or foundation loads from adjacent portions of the building can be calculated assuming a lateral coefficient of 0.35. Where the wall cannot rotate, it should be designed to resist an at rest lateral earth pressure loading, similar in magnitude and distribution to that of a fluid having a density of 8.6 kN/m^3. In this case, lateral earth pressure due to floor loadings and/or foundation loads from adjacent buildings can be calculated assuming a lateral coefficient of 0.45. Equipment larger than a bobcat should not be allowed within 1.5 meters of the foundation walls during backfilling. It is recommended that foundation walls be backfilled with clean, well graded granular material, compacted in maximum 300 mm lifts to 95% of SPMDD. Locally sourced granular soils may be used as backfill material, provided such are low in fines.

Lateral earth pressures resulting from seismic activity can be calculated according to the following equations:

Non Rigid Wall : $P_E = 0.375\ k_h\ \gamma\ H^2$
Rigid Wall : $P_E = 0.5\ k_h\ \gamma\ H^2$

where:

- P_E is the resultant force per unit length of wall;
- the coefficients of 0.375 and 0.5 are dimensionless;
- k_h is the design peak horizontal ground acceleration coefficient (from above);
- γ is the moist unit weight of the backfill material, which is approximately 20.4 kN/m^3 for most granular backfill;
- H is the height of the wall.

In the case of the non rigid wall, the backfill pressure distribution resulting from the earthquake loading can be assumed to be triangular, increasing from zero at the base of the wall to a maximum of $0.75\ k_h\ \gamma\ H$ at the top of the wall, with the resultant force acting at 0.67H above the base of the wall.

In the case of the rigid wall, the backfill pressure distribution resulting from the earthquake loading can be assumed to be parabolic, with the resultant force acting at 0.5H above the base of the wall.

For design purposes, the pressure distribution resulting from earthquake loading on the backfill should be added to either the active or at rest pressure distribution depending on whether or not the noted wall rotation can occur.

Road Construction

On-site road construction preparation should consist of removal of topsoil/loose surficial soils to expose suitable native subgrade, followed by placement of the road structure to desired grade. We consider the undisturbed native dense sand and gravel and or engineered fill atop such to be suitable for road subgrade. However, such should be confirmed prior to placement of base and sub-base materials.

Our recommendations for asphalt thickness and pavement structure vary depending on the intended usage of the road, and the suitability of such should be confirmed for each of the proposed buildings. The table on the following page shows two different loading scenarios.

Table 1 – Proposed Road Structure

Intended Usage	Asphalt Thickness (mm)	Base Course	Subbase Course
Heavy vehicle traffic, farm vehicles, tanker trucks	100	250 mm of 19 mm minus crushed rock	450 mm of 75 mm minus crushed rock or approved native sand and gravel
Light vehicle traffic	50	100 mm of 19 mm minus crushed rock	200 mm of 75 mm minus crushed rock or approved native sand and gravel

In areas where the total asphalt thickness exceeds 50 mm, it is advisable that it be placed in two lifts in order to achieve suitable asphalt compaction. We recommend that all granular courses be thoroughly compacted in maximum 150 mm lifts to a minimum 100% of SPMDD. This is consistent with the 2016 Ministry of Transportation and Infrastructure Standards.

Presence of Underground Coal Mines

The proposed project is located within an area where there is a high likelihood of abandoned subsurface coal mine workings. The presence of these mines may cause deformation and movement of the ground surface, which is termed subsidence. The magnitude of subsidence can vary substantially based on the soil/rock stratigraphy, mining methods, extent and depth of coal workings extraction, time passed since mining etc.

We have reviewed available drawings from the British Columbia Ministry of Energy, Mines and Petroleum Resources, which detail the extents of the No.1 seam workings in Number Two and Four coal mines. It appears the site is located where room and pillar type mining was historically completed at depth below the site. Based on the drawings and reports, it also appears that the rock pillars were left in place and not removed when withdrawing from the mine. The noted thickness of the mine working as roughly 0.9 m to 2.1 m metres in height consisting of mixed rock and coal at a depth of about 150 meters below existing grade. It should be noted that the drawings and survey information referenced was completed about 100 years ago, and associated accuracy was limited by technology, survey methods used, and prudence of personnel documenting the information. Accordingly, this information is subject to error.

Predicting surficial subsidence from subsurface mining can be challenging. Given that the mine was active about 100 years ago, determining if subsidence has since fully/partially occurred is not feasible. It is possible that complete development of the subsidence has already occurred;

however, delayed propagation of bed separation followed by downward sagging of beds is also possible. Our review of available information and associated calculations estimate that the site may experience a maximum theoretical surficial subsidence of 600 mm, however, given the sufficiently broad pillars left in the workings, the presence of thick sandstone strata above the coal formations, and the time passed since mining was completed, we consider that there is minimal risk of ongoing subsidence at referenced site.

CLOSURE

Based on our geotechnical investigation and review of available information, for the purposes of Section 86(1)(d) of the *Land Title Act* (British Columbia), we certify that the land may be used safely for the intended use, that being a 6 lot industrial/residential/commercial subdivision. No significant fill zones or slopes were identified during our subsurface investigation. Note that prior to the development of each lot, a geotechnical professional should confirm the suitability of the provided recommendations for each specific structure. Our assessment has taken into account a design seismic event with 2% probability of exceedance in 50 years in accordance with the current BC Building Code.

We trust the preceding is suitable for your purposes at present. If you have any questions, or require anything further, please do not hesitate to contact us.

Regards,
Ryzuk Geotechnical

Attachments: Terms of Engagement
Location Plan Drawing No. 10251-1-1
Table 2: Summary of Test Pit Information

RYZUK GEOTECHNICAL
ENGINEERING & MATERIALS TESTING

TERMS OF ENGAGEMENT

1 GENERAL

1.1 Ryzuk Geotechnical (the Consultant) shall render the Services, as specified in the agreed Scope of Services, to the Client for this Project in accordance with the following terms of engagement. The Services, and any other associated documents, records or data, shall be carried out and/or prepared in accordance with generally accepted engineering practices in the location where the Services were performed. No other warranty, expressed or implied, is made. The Consultant may, at its discretion and at any stage, engage sub-consultants to perform all or any part of the Services.

1.2 Ryzuk Geotechnical is a wholly owned subsidiary of Ryzuk Geotechnical Ltd.

2 COMPENSATION

2.1 All charges will be payable in Canadian Dollars. Invoices will be due and payable by the Client on receipt of the invoice without hold back. Interest on overdue accounts is 24% per annum.

3 REPRESENTATIVES

3.1 Each party shall designate a representative who is authorized to act on behalf of that party and receive notices under this Agreement.

4 TERMINATION

4.1 Either party may terminate this engagement without cause upon thirty (30) days' notice in writing. On termination by either party under this paragraph, the Client shall forthwith pay to the Consultant its Charges for the Services performed, including all expenses and other charges incurred by the Consultant for this Project.

4.2 If either party breaches this engagement, the non-defaulting party may terminate this engagement after giving seven (7) days' notice to remedy the breach. On termination by the Consultant under this paragraph, the Client shall forthwith pay to the Consultant its Charges for the Services performed to the date of termination, including all fees and charges for this Project.

5 ENVIRONMENTAL

5.1 The Consultant's field investigation, laboratory testing and engineering recommendations will not address or evaluate pollution of soil or pollution of groundwater. The Consultant will cooperate with the Client's environmental consultant during the field work phase of the investigation.

6 PROFESSIONAL RESPONSIBILITY

6.1 In performing the Services, the Consultant will provide and exercise the standard of care, skill and diligence required by customarily accepted professional practices and procedures normally provided in the performance of the Services contemplated in this engagement at the time when and the location in which the Services were performed.

7 INSURANCE

1.7.1 Ryzuk Geotechnical is covered by Professional Indemnity Insurance as follows:
1. $ 3,000,000 each and every claim
2. $ 5,000,000 aggregate
3. $ 5,000,000 commercial/general liability coverage

7.2 Notwithstanding the provision of insurance coverage by the Client, the Engineer hereby agrees to indemnify and save

harmless the Client, its successor(s), assign(s) and authorizes representative(s) and each of them from and against losses, claims, damages, actions, and causes of action, (collectively referred to as "Claims") that the Client may sustain, incur, suffer or be put to at any time either before or after the expiration or termination of this Agreement, that arise out of errors, omissions or negligent acts of the Engineer or their Subconsultant(s), servant(s), agent(s) or employee(s) under this Agreement, excepting always that this indemnity does not apply to the extent, if any, to which the Claims are caused by errors, omissions or the negligent acts of the Client, its other consultant(s), assign(s) and authorized representative(s) or any other persons.

8 LIMITATION OF LIABILITY

8.1 The Consultant shall not be responsible for:
1. the failure of a contractor, retained by the Client, to perform the work required for the Project in accordance with the applicable contract documents;
2. the design of or defects in equipment supplied or provided by the Client for incorporation into the Project;
3. any cross-contamination resulting from subsurface investigations;
4. any Project decisions made by the Client if the decisions were made without the advice of the Consultant or contrary to or inconsistent with the Consultant's advice;
5. any consequential loss, injury or damages suffered by the Client, including but not limited to loss of use, earnings and business interruption;
6. the unauthorized distribution of any confidential document or report prepared by or on behalf of the consultant for the exclusive use of the Client
7. Subsurface structures and utilities

8.2 The Consultant will make all reasonable efforts prior to and during subsurface site investigations to minimize the risk of damaging any subsurface utilities/mains. If, in the unlikely event that damage is incurred where utilities were unmarked and/or undetected, the Consultant will not be held responsible for damages to the site or surrounding areas, utilities/mains or drilling equipment or the cost of any repairs.

8.3 The total amount of all claims the Client may have against the Consultant or any present or former partner, executive officer, director, stockholder or employee thereof under this engagement, including but not limited to claims for negligence, negligent misrepresentation and breach of contract, shall be strictly limited to the amount of any professional liability insurance the Consultant may have available for such claims. Where the Engineer is a corporation or partnership, the Client and Consultants of the Client will limit any claim they may have to the corporation or partnership, without liability on the part of any officer, director, member, employee, or agent of such corporation or partnership.

8.4 No claim may be brought against the Consultant in contract or tort more than two (2) years after the date of discovery of such defect.

9 DOCUMENTS AND REPORTING

9.1 All of the documents prepared by the Consultant or on behalf of the Consultant in connection with the Project are instruments of service for the execution of the Project. The Consultant retains the property and copyright in these documents, whether the Project is executed or not. These documents may not be used on any other project without the prior written agreement of the Consultant.

9.2 The documents have been prepared specifically for the Project, and are applicable only in the case where there has been no physical alteration to, or deviation from any of the information provided to the Consultant by the Client or agents of the Client. The Client may, in light of such alterations or deviations, request that the Consultant review and revise these documents.

9.3 The identification and classification as to the extent, properties or type of soils or other materials at the Project site has been based upon investigation and interpretation consistent with the accepted standard of care in the engineering consulting practice in the location where the Services were performed. Due to the nature of geotechnical engineering, there is an inherent risk that some conditions will not be detected at the Project site, and that actual subsurface conditions may vary considerably from investigation points. The Client must be aware of, and accept this risk, as must any other party making use of any documents prepared by the Consultant regarding the Project.

9.4 Any conclusions and recommendations provided within any document prepared by the Consultant for the Client has been based on the investigative information undertaken by the Consultant, and any additional information provided to the Consultant by the Client or agents of the Client. The Consultant accepts no responsibility for any associated deficiency or inaccuracy as the result of a miss-statement or receipt of fraudulent information.

10 JOBSITE SAFETY AND CONTROL

10.1 The Client acknowledges that control of the jobsite lies solely with the Client, his agents or contractors. The presence of the Consultant's personnel on the site does not relieve the Client, his agents or contractors from their responsibilities for site safety. Accordingly, the Client must endeavor to inform the Consultant of all hazardous or otherwise dangerous conditions at the Project site of which the Client is aware.

10.2 The client must acknowledge that during the course of a geotechnical investigation, it is possible that a previously unknown hazard may be discovered. In this event, the Client recognizes that such a hazard may result in the necessity to undertake procedures which ensure the safety and protection of personnel and/or the environment. The Client shall be responsible for payment of any additional expenses incurred as a result of such discoveries, and recognizes that under certain circumstances, discovery of hazardous conditions or elements requires that regulatory agencies must be informed. The Client shall not bring about any action or dispute against the Consultant as a result of such notification.

11 FIELD SERVICES

11.1 Where applicable, field services recommended for the Project are the minimum necessary, in the sole discretion of the Consultant, to observe whether the work or a contractor retained by the Client is being carried out in general conformity with the intent of the Services. Any reduction from the level of services recommended will result in the Consultant providing qualified certifications for the work.

12 DISPUTE RESOLUTION

12.1 If requested in writing by either the Client or the Consultant, the Client and the Consultant shall attempt to resolve any dispute between them arising out of or in connection with this Agreement by entering into structured non-binding negotiations with the assistance of a mediator on a without prejudice basis. The mediator shall be appointed by agreement of the parties. If a dispute cannot be settled within a period of thirty (30) calendar days with the mediator, the dispute shall be referred to and finally resolved by arbitration under the rules of the arbitrator appointed by agreement of the parties or by reference to a Judge of the British Columbia Court.

13 CONFIDENTIALITY

13.1 During the period of this Agreement, the Consultant shall not use or disclose any Confidential Information to any third parties. The Consultant will only use Confidential Information for the sole purpose of carrying out the service(s) agreed upon. Access to the Client's Confidential Information will be restricted to employees who need the information to perform work duties. The Consultant may share photos of the project without disclosing any information not already made public unless the Client refuses consent of photos shared on social media. Unless already made public, the Consultant will not share owner or site address information on social media or with outside parties.

NOTES

1. This drawing is scaled for 8.5x11 sheet and does not require further scaling to fit. Scales will differ if printed on different sheet size.
2. Base Plan taken from CVRD Regional Map Aerial Imagery (2016)
3. Site reconnaissance carried out by Ryzuk Geotechnical on December 21, 2018.
4. Location of test pits are estimated based on surface features accurate to +/- 5 m.

RYZUK GEOTECHNICAL
ENGINEERING & MATERIALS TESTING
28 CREASE AVENUE - VICTORIA, BC V8Z 1S3
TEL: 250-475-3131 FAX: 250-475-3611
mail@ryzuk.com

-44-

SEAL

DRAWN BY: CPAS	CLIENT: ACCIANO DEVELOPMENT INC.
PROJECT MANAGER: CJF	PROJECT TITLE: PROPOSED SUBDIVISION
REVIEW:	PROJECT ADDRESS: BEVAN ROAD - CUMBERLAND, BC
SCALE: AS SHOWN	DRAWING NAME: **TEST PIT LOCATION PLAN**
DATE: 2020/12/16	PROJECT No.: 10251-1
	SHEET No.: 01 of 01
	REVISION: 00

R:\Ryzuk Data\8-10000 to 8-10999\10251-1 Bevan Rd\4 Ryzuk Drawings\10251-1 2020.12.16 revised test pit plan mpd.dwg

Table 2: Summary of Test Pit Information

	[2] Stratigraphy			
[1] Test Pit #	Topsoil/Disturbed material (m)	reddish-brown sand and gravel with trace cobble (m)	grey sand and gravel with trace cobble (m)	Comments
TP18-01	-	0 – 0.5	0.5 – 1.7	No organic/topsoil cover.
TP18-02	0 – 0.2	0.1 – 0.9	0.9 – 1.2	
TP18-03	0 – 0.3	0.3 – 1.2	1.2 – 2.3	
TP18-04	0 – 0.3	0.3 – 0.8	0.8 – 2.0	
TP18-05	0 – 0.3	0.3 – 0.6	0.6 – 1.4	
TP18-06	-	0 – 0.3	0.3 – 0.8	Center of access road, no organic soil cover.
TP18-07	-	-	0 – 0.9	Cleared area, no organic soil cover/upper sand.
TP18-08	0 – 0.2	0.2 – 0.6	0.6 – 1.2	
TP18-09	0 – 0.2	0.2 – 0.5	0.5 – 0.9	
TP18-10	0 – 0.2	0.2 – 0.5	0.5 – 1.5	
TP18-11	0 – 0.2	0.2 – 0.6	0.6 – 1.2	
TP18-12	0 – 0.2	0.2 – 0.9	0.9 – 1.7	
TP18-13	0 – 0.2	0.2 – 0.8	0.8 – 1.4	
TP18-14	0 – 0.2	0.2 – 0.6	0.6 – 0.9	
TP18-15	0 – 0.2	0.2 – 0.9	0.9 – 1.2	
TP18-16	0 – 0.2	0.2 – 0.8	0.8 – 1.2	Permeability testing location.

TP18-17	0 – 0.2	0.2 – 0.3	0.3 – 1.1	
TP18-18	0 – 0.2	0.2 – 0.8	0.8 – 1.2	
TP18-19	0 – 0.2	0.2 – 0.8	0.8 – 1.0	
TP18-20	0 – 0.2	0.2 – 1.1	1.1 – 1.5	
TP18-21	0 – 0.2	0.2 – 0.9	0.9 – 1.2	
TP18-22	0 – 0.2	0.2 – 0.9	0.9 – 1.2	
TP18-23	0 – 0.2	0.2 – 1.4	1.4 – 1.6	
TP18-24	0 – 0.2	0.2 – 0.6	0.6 – 1.1	

* No seepage encountered in all test pits

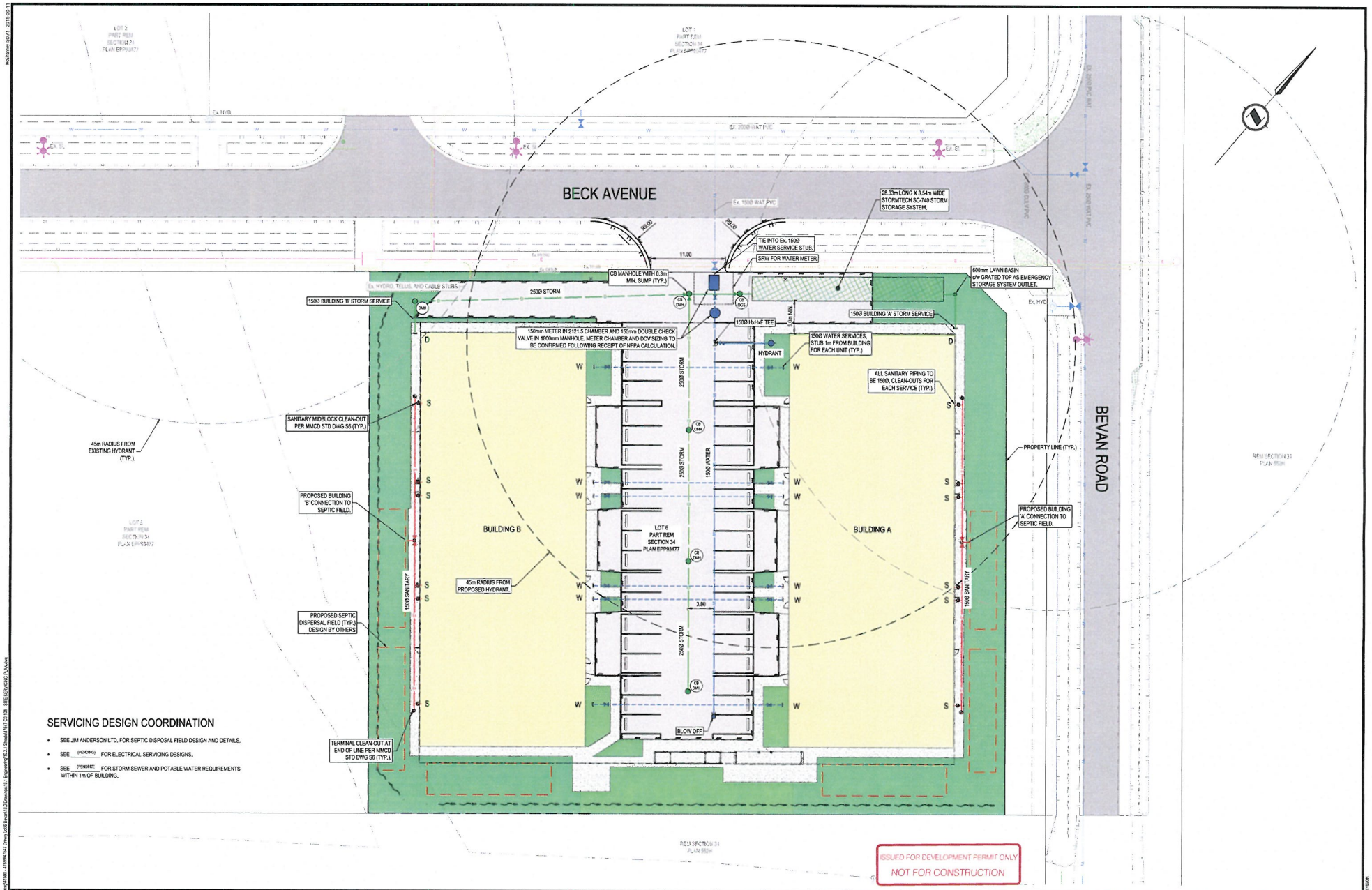
Notes:

1) Test pits advanced to desired depths with small/medium sized excavator December 21, 2018. See Test Pit Location Plan, Drawing No. 8637-2-1 for test pit locations.

2) Stratigraphy
   - Topsoil – mixed organics, trace sand, trace gravel
   - Upper Sand and Gravel – dense, reddish-brown, silty, trace to some cobble, trace organics, damp
   - Lower Sand and Gravel – dense to very dense, grey, trace cobble, damp. Thinly interbedded layers of reddish-brown sand and gravel less silt were observed within the lower sand and gravel below the transition zone between the soils.

APPENDIX C

McElhanney Development Permit Drawings



SERVICING DESIGN COORDINATION

- SEE JIM ANDERSON LTD. FOR SEPTIC DISPOSAL FIELD DESIGN AND DETAILS.
- SEE (PENDING) FOR ELECTRICAL SERVICING DESIGNS.
- SEE (PENDING) FOR STORM SEWER AND POTABLE WATER REQUIREMENTS WITHIN 1m OF BUILDING.

Rev	Date	Description	Drawn	Design	Appd
PA	2022-01-14	ISSUED FOR DEVELOPMENT PERMIT	FM	MP	DJ

ORIGINAL DWG SIZE: A1 (594 x 841mm)

0 1:250 10

McElhanney

1211 Ryan Road
Courtenay BC
Canada V9N 3R6
Tel 250 338 5455

PERMIT TO PRACTICE
McElhanney Ltd.
PERMIT NUMBER: 1003299
Engineers and Geoscientists of British Columbia

Approved Sealed

DREWRY ELECTRICAL
5069 MITCHELL RD, COURTENAY, BC V9J 1S4

LOT 6 BEVAN INDUSTRIAL PARK
SITE SERVICING PLAN

PART REM SECTION 34, PLAN EPP93477

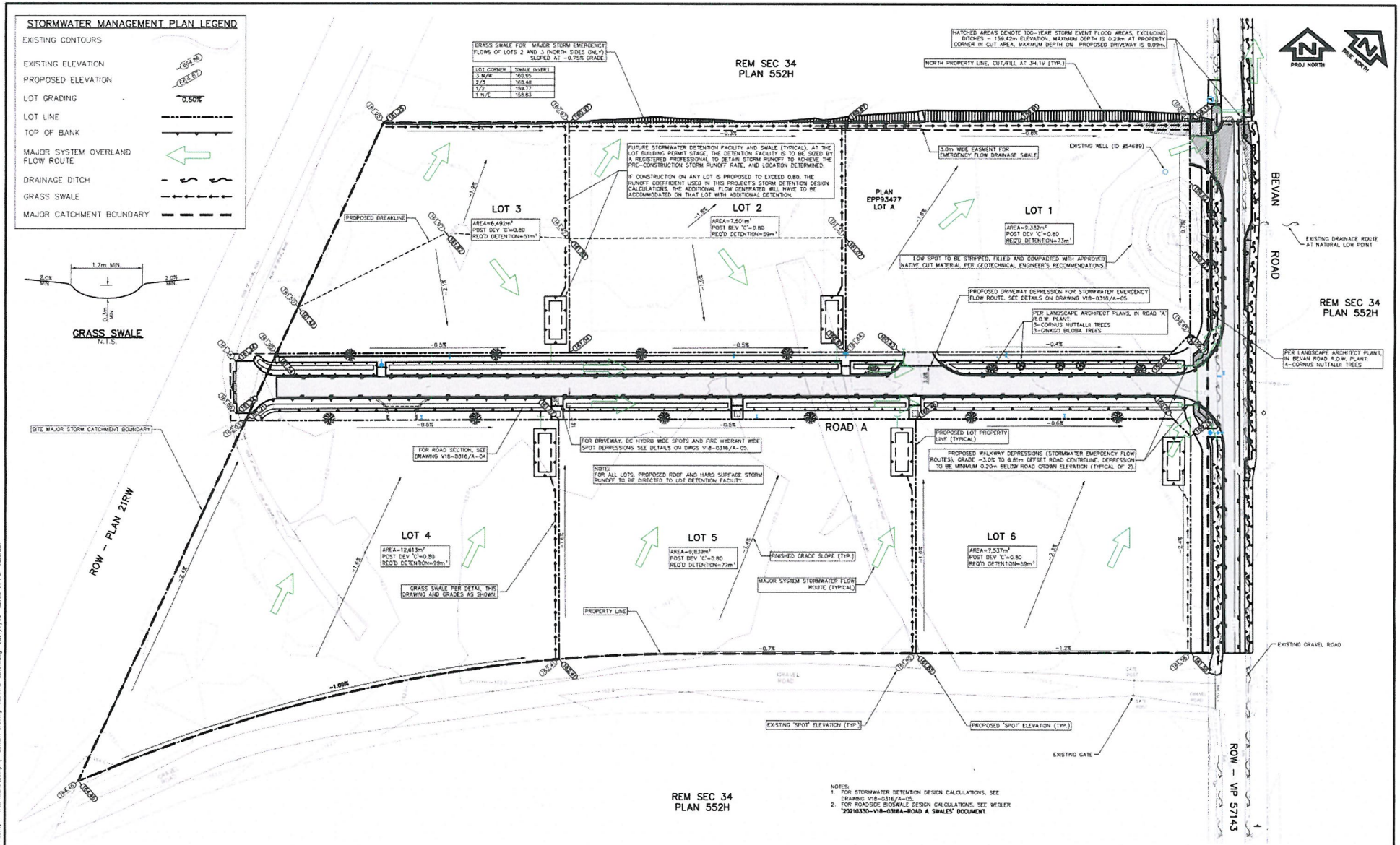
Drawing No. 101

Project Number 2211-47647-00

Rev. PA

APPENDIX D

Wedler Drawings V18-0316/A-03, /A-05 and Correspondence



REV	DESCRIPTION	YYYY-MM-DD	BY
A	ISSUED FOR CONCEPTUAL REVIEW	2021-02-02	SBH
B	UPDATED PER CLIENT COMMENTS	2019-01-17	SBH
C	REVISED LOT LAYOUT	2019-03-07	TJD
D	REVISED LOT LAYOUT	2019-03-13	TJD
E	REVISED LOT LAYOUT	2019-03-26	TJD
F	REVISED LOT LAYOUT	2019-03-29	TJD
G	ISSUED FOR PRELIMINARY COSTING	2019-04-18	TJD
H	REVISED LOT LAYOUT	2019-07-11	TJD
L	ISSUED FOR MUNICIPAL REVIEW	2020-06-24	TJD
M	ISSUED FOR APPROVAL	2020-08-26	TJD
N	ISSUED FOR APPROVAL	2021-04-07	TJD
O	ISSUED FOR MUNICIPAL REVIEW	2020-05-12	TJD
P	ISSUED FOR CONSTRUCTION	2021-06-01	TJD
Q	RE-ISSUED FOR CONSTRUCTION	2020-07-23	TJD

PROJ MGR. ARC
DESIGN/DRAWN TJD
PEER REVIEWED
HORZ. SCALE 1:600
VERT. SCALE N/A

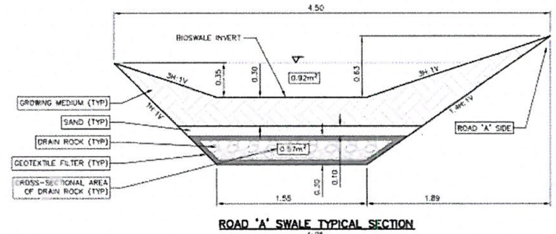
WEDLER ENGINEERING
www.wedler.com
THE WEDLER GROUP
Abbotsford 1.604.746.0990
Chilliwack 1.604.792.0651
Courtenay 1.250.334.3063
Surrey 1.604.588.1918

ACCIANO DEVELOPMENTS INC.
6 LOT INDUSTRIAL SUBDIVISION
BEVAN ROAD, CUMBERLAND, BC

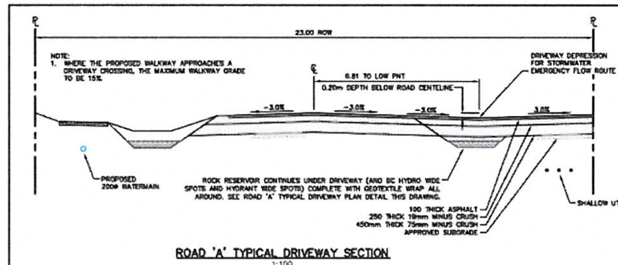
STORMWATER MANAGEMENT & GRADING PLAN

DRAWING NO. V18-0316/A-03 OF 18
LOCAL GOVERNMENT FILE
PHASE
REVISION Q

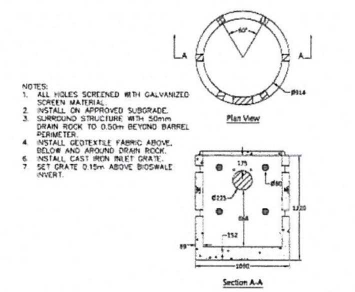
ISSUED FOR CONSTRUCTION



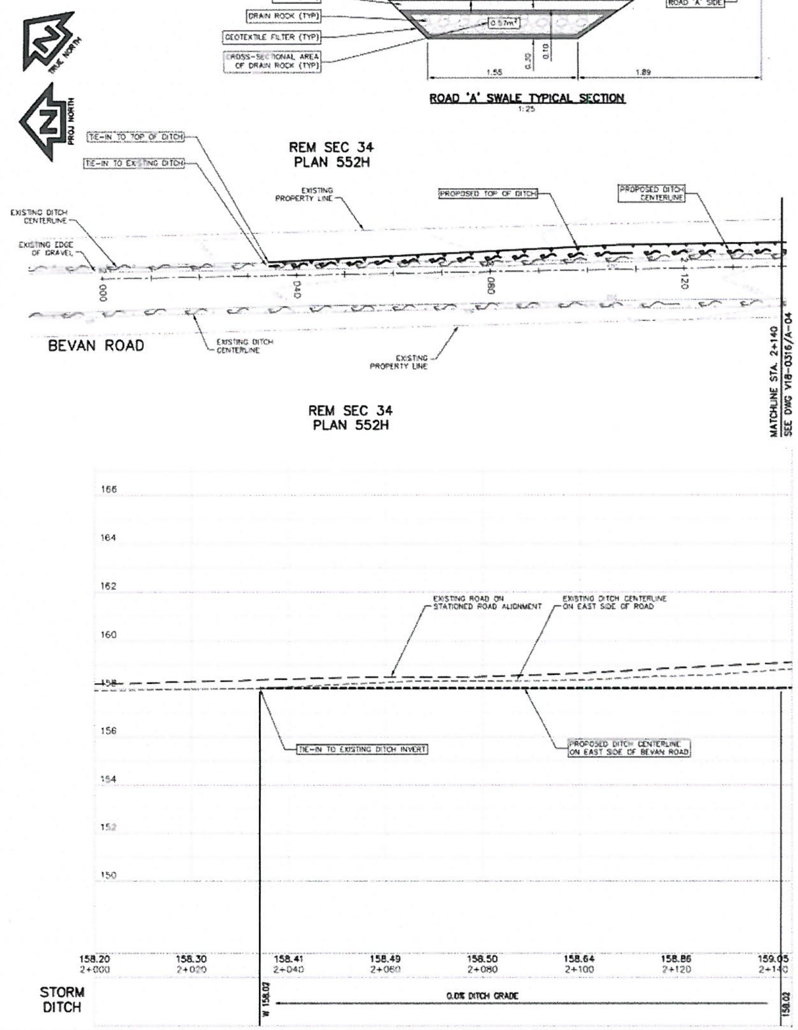
ROAD 'A' SWALE TYPICAL SECTION
1:25

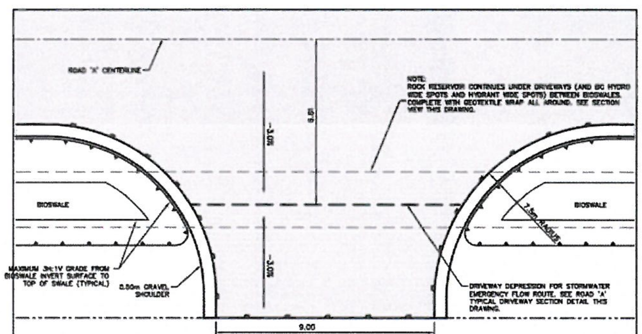


ROAD 'A' TYPICAL DRIVEWAY SECTION
1:100

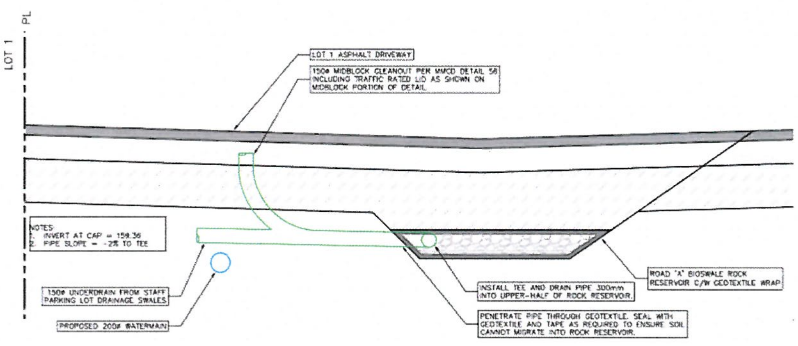


900ø INFILTRATION CATCH BASIN DETAIL
N.T.S.





ROAD 'A' TYPICAL DRIVEWAY PLAN
1:100



UNDERDRAIN TIE-IN TO ROAD 'A' BIOSWALE DETAIL
1:25

Development Detention Requirements Information

Catchment Area =	5.330 ha
Pre-Dev Runoff Coefficient =	0.30 (slash, lighty seed)
Pre-Dev Time of Concentration =	48 min
5 Year Pre-Dev Rainfall Intensity =	22.9 mm/hr
5 Year Pre-Dev Design Discharge Rate =	0.09 m³/sec
Allowable Release =	0.09 m³/sec
Post-Dev Runoff Coefficient =	0.800
Post-Dev Time of Concentration =	14 min
5 Year Post-Dev Rainfall Intensity =	38.0 mm/hr
5 Yr Post Peak Runoff Discharge Rate =	0.48 m³/sec
Infiltration =	2.70 m³/min

Detention Calculations Based on 5 Year Storm Event
(Storage Required Using The Modified Rational Method)

Time (T) (minutes)	Intensity (i) (mm/hr)	Peak Flow at T (Qp2) (m3/sec)	Peak Flow - Post (Qp1) (m3/sec)	Storage Volume (m3)	Infiltration (m3)	Final Det (m3)
0	0.0	0.0000	0.5	0.[illegible]	0	0.00
5	90.0	0.7107	0.5	184.14	13.5	170.64
10	44.0	0.5212	0.5	258.93	27	231.93
15	38.0	0.4501	0.5	325.93	40.5	285.43
30	27.0	0.3198	0.5	4[illegible].31	81	339.31
60	20.0	0.2369	0.5	542.70	162	380.70
120	16.0	0.1895	0.5	741.30	324	417.30
240	11.0	0.1303	0.5	627.64	648	-20.36
360	9.0	0.1066	0.5	426.43	972	-545.57
540	7.5	0.0888	0.5	88.42	1458	-1399.58
720	6.5	0.0770	0.5	-437.98	1944	-2381.98
1080	4.5	0.0533	0.5	-2106.74	2916	-5106.74

Pre-Development Time of Concentration Calculations
(Based on 5 year pre-development storm event)

Airport Method
L = 300.00 m
C = 0.30
S = 0.83 %
Ti = 48.64 min

Post-Development Time of Concentration Calculations
(Based on 5 year pre-development storm event)

Lot Sheet Flow
C = 0.80
L = 131.00
S = 2.00
T = 8.91

Ditch Flow
L = 317.00
A = 0.03
R = 0.28
S = 0.005
Tt 5.23

Time of Concentration= 14.14 min

Individual Lot - Stormwater Detention Volume Requirements

Lot Number	Lot Area (m^2)	% Area of All Lots	Lot Storage (m^3)
1	9332	0.18	73
2	7501	0.14	59
3	6492	0.12	51
4	12613	0.24	99
5	9839	0.18	77
6	7837	0.14	56

NOTES:
1. INTENSITY DURATION FREQUENCY CURVE USED FOR ALL STORMWATER CALCULATIONS – COURTENAY PUNTLEDGE CVHP ID:1021990; THE VILLAGE OF CUMBERLAND STORMWATER DRAINAGE MASTER PLAN REFERENCES THIS IDF CURVE.
2. THE IDF CURVE REFERENCED ABOVE IMPLEMENTS A 15% HISTORICAL INTENSITY INCREASE FOR CLIMATE CHANGE.
3. SEE DRAWING V18-0316/A-03, THIS DRAWING SET, FOR STORMWATER MANAGEMENT DRAWING.

STORMWATER DETENTION DESIGN CALCULATIONS

LEGAL:

BM/TBM:

REV	DESCRIPTION	YYYY-MM-DD	BY	REV	DESCRIPTION	YYYY-MM-DD	BY
A	ISSUED FOR CONCEPTUAL REVIEW	2021-02-02	SBH	H	REVISED LOT LAYOUT	2019-07-11	TJD
B	UPDATED PER CLIENT COMMENTS	2019-01-17	SBH	L	ISSUED FOR MUNICIPAL REVIEW	2020-08-24	TJD
C	REVISED LOT LAYOUT	2019-03-07	TJD	M	ISSUED FOR APPROVAL	2020-08-26	TJD
D	REVISED LOT LAYOUT	2019-03-13	TJD	N	ISSUED FOR APPROVAL	2021-04-07	TJD
E	REVISED LOT LAYOUT	2019-03-26	TJD	O	ISSUED FOR MUNICIPAL REVIEW	2021-05-12	TJD
F	REVISED LOT LAYOUT	2019-03-29	TJD	P	ISSUED FOR CONSTRUCTION	2021-06-01	TJD
G	ISSUED FOR PRELIMINARY COSTING	2019-04-18	TJD	Q	RE-ISSUED FOR CONSTRUCTION	2021-07-22	TJD

PROJ. MGR. ARC
DESIGN/DRAWN TJD
PEER REVIEWED
HORZ. SCALE 1:500
VERT. SCALE N/A

WEDLER ENGINEERING
THE WEDLER GROUP
Abbotsford
Chilliwack
Courtenay
Surrey
www.wedler.com

ACCIANO DEVELOPMENTS INC.
6 LOT INDUSTRIAL SUBDIVISION
BEVAN ROAD, CUMBERLAND, BC

BEVAN ROAD ROADWORKS, NORTH BEVAN ROAD STORM TIE-IN, DETAILS, AND STORMWATER CALCULATIONS

DRAWING NO. V18-0316/A-05 OF 18
LOCAL GOVERNMENT FILE
PHASE
REVISION Q

N:\18\V18-0316A – New Yogurt Facility – Tree Island\Design\-- Current Drawing Files\V18-0316A.dwg 2021/7/22 02:58:11 PM tdverdan

ISSUED FOR CONSTRUCTION

Neil Penner

From: Andrew Gower <agower@wedler.com>
Sent: Monday, January 10, 2022 11:23 AM
To: Neil Penner
Subject: RE: Bevan 6 Lot Subdivision - Overall Stormwater Management
Attachments: 20210722-V18-0316A-REV Q-sealed.pdf

[EXTERNAL EMAIL] Check email address, links, and attachments
Hi Neil,

Yes – if post development C factor is 0.8 or less, the detention requirement is 59 m3.

I've attached the IFC drawings for your review / info. The storm infrastructure along the road frontage is a bio-swale. We have included details for how driveways should be designed. To tie-in, you can either connect to the perf pipe or do a surface outfall to the swale (with appropriate erosion control).

Thanks,

Andrew

Andrew Gower, FEC, P.Eng., PE, CCA
Partner - Courtenay Branch Manager
Wedler Engineering LLP | Courtenay
(EGBC Permit to Practice 1000196)
T: 1 (250) 334-3263 ext. 102

From: Neil Penner <NPenner@mcelhanney.com>
Sent: January 7, 2022 4:42 PM
To: Andrew Gower <agower@wedler.com>
Subject: Bevan 6 Lot Subdivision - Overall Stormwater Management

Hi Andrew,

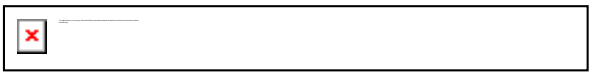
McElhanney is working on the development of Lot 6 of the Acciano Developments Ltd. Bevan Road Subdivision, for which Wedler has done the overall design.

In reviewing Wedler's drawing V18-0316/ A-05, rev. Q dated 2021-07-22, it is noted that Lot 6 is to provide 59 cubic metres of storage onsite. Is this drawing the current drawing and is 59 cubic metres the current required volume? We have received a few documents here and there and just want to make sure we are in alignment with the current overall stormwater management plan. If there are other stormwater management requirements that are required of Lot 6, can you please let us know.

Thanks in advance for your help,

Neil Penner, P.Eng.
Civil Engineer
McElhanney
www.mcelhanney.com
1211 Ryan Road, Courtenay, BC, V9N 3R6
T 250 338 5495
npenner@mcelhanney.com

Connect with McElhanney: Facebook | Twitter | LinkedIn



APPENDIX E

Detailed Calculations

47647 - Drewry Lot 6 Bevan Rd Sanitary Demands
Date: 12/9/2021
By: NP

For onsite sanitary, McElhanney will need to direct sanitary flows to the west to the tanks and dispersal fields.

Fixtures and ultimate usage is unknown, but overall land use is assumed to be industrial.

Using MMCD DGL 2014 section 3.3 - Industrial - ADWF = 25000 L/ha/day

The total size of the development = 0.7537 ha

Therefore, sanitary demand = 18842.5 L/day
0.22 L/s

I & I = 0.06 L/s/ha for new pipe and ground water doesn't appear to be an issue.
Total I&I = 0.05 L/s

Peaking Factor (PF) = 3.2

PWWF = ADWF * PF + I&I = 0.74 l/s Total Design sanitary flow

Manning's Formula (Flow in Full Pipe) - For sizing of onsite san services

$$Q = \frac{A \quad R^{2/3} \quad S^{1/2}}{0.018 \quad 0.112035 \quad 0.070711} = \frac{}{0.013} \quad n$$

= 0.0108 m³/sec
10.8 l/sec
0.61 Velocity (m/s)

Diameter of Pipe (mm)	150
Slope of Pipe (%)	0.50
Manning's n	0.013

The onsite sanitary main needs to be at least 150mm diameter so that full flow velocities are at min 0.6 m/s velocities
For the preliminary stage, as ultimate unit uses are unknown at this time, all sanitary piping will be 150mm diameter.

47647 - Drewry Lot 6 Bevan Rd Water Demands
Date: 1/10/2021
By: NP

Existing Water service stub is 150mm diameter.

Assuming buildings will be sprinklered.
Check first that the hydrant along the frontage is within 45m of the buildings.
Only the eastern most building is within 45m of the existing hydrant, therefore a new hydrant is required.

This means that the main onsite service will need to be 150mm diameter.

The type of occupancy is assumed to be industrial, but specific uses are unknown at this time.

Per MMCD DGL 2014 section 2.4 - Industrial uses Max day demand ranges from 10000 L/ha/da to 100000 L/ha/da

The total size of the development (assuming entire lot and assuming that the demands include irrigation) = 0.7537 ha

Therefore, Max Day Water demands will be in the range of: 7537 L/d to 75370 L/d
0.087 L/s to 0.87 L/s

For the Development Permit Stage, the services to the buildings will be left as 150mm services to make sure there is no undersizing to the units.

Preliminary FUS Demand = 116.8 l/s
Minimum Fire Flow - Industrial - MMCD DGL 2014 = 225 L/s
Preliminary Total water demand = 225.9 l/s

Fire Flow Calculations 11-Jan-22
FUS Method NP
ML Project No. 2211-47647-0 Rev 0
Drewry Lot 6 Bevan Road

FUS Method (fire Underwriters Survey - 1999 guide)

Calculation being done for the western most building.

Building Floor Area	1880.00	sq.m.	Main floor area plus mezzanines - 6 Units
coefficient for building construction type	1.00		Assuming Ordinary construction (specific construction type unknown)
Initial fire flow calc'd	9538.97	l/min	
or	158.98	l/s	
Apply occupancy factor (industrial building)	1.25		High Hazard - Group F Division 2 per architect - occupant type unknown
resulting flow rate	11923.72	l/min	
apply sprinkler system factor	0.50		Building is sprinklered - assuming 50% reduction.
resulting flow rate	5961.86	l/min	
apply exposure factor	1.18		surcharge - three sides
resulting flow rate	7008.16	l/min	
or	**117**	l/s	
Max 75% surcharge per FUS Part II.4	174	l/s	
Result	**117**	**litres/sec**	
	1851	**gpm**	

Future West Industrial Building	15.15	m away =	13%	surcharge	assuming a future building with a 7.5m setback
East Industrial Building	30.1	m away =	5%	surcharge	

Based on MH Architects Drawing A0.01 - Cover and Project Data - Rev. 3 dated 2021-12-09

COUNCIL REPORT

REPORT DATE: 4/18/2022
MEETING DATE: 4/25/2022

File No. 2018-01-TUP

TO: Mayor and Councillors

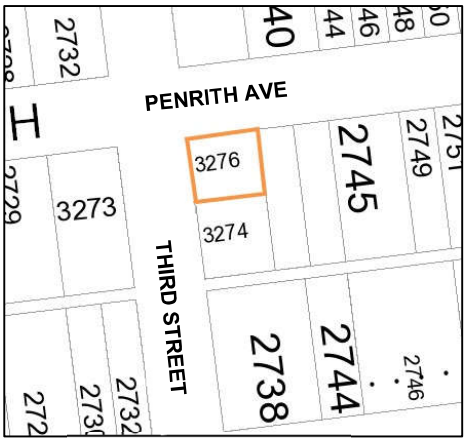
FROM: Meleana Searle, Planner

SUBJECT: Temporary Use Permit (TUP) Renewal - 3276 Third Street

RECOMMENDATION

i. THAT Council receive the Temporary Use Permit renewal, 3276 Third Street report.

ii. THAT Council approve the Temporary Use Permit renewal for the property described as Lot 12, Block 10, District Lot 21, Nelson District, Plan 555-A (3276 Third Street) for the purposes of operating a cannabis retail business.



Subject Property

PURPOSE

The purpose of this report is to seek Council decision on an application for a renewal of a temporary use permit for cannabis retail at 3276 Third Street for a period of three years.

PREVIOUS COUNCIL DIRECTION

Date	Resolution
May 27, 2019	THAT Council approve the Heritage Alteration Permit Application – 3276 Third Street (2018-04-HAP) for property described as Lot 12, Block 10, District Lot 21, Nelson District, Plan 552 -A substantially in compliance with the Heritage Alteration Permit dated May 27, 2019
February 11, 2019	THAT Council approve the application for a Temporary Use Permit for property described as Lot 12, Block 10, District 21, Nelson District, Plan 552-A (3276 Third Street) for the purposes of operating a cannabis retail business, substantially in compliance with the Temporary Use Permit.
September 24, 2018	THAT Council adopt Zoning Amendment Bylaw No. 1085, 2018

BACKGROUND

Proposed Development

On November 26, 2018, Council chose Trugreen Solutions as one of the successful proponents to be given the opportunity to apply for a Temporary Use Permit (TUP) for Retail Sales of Cannabis and Cannabis Related Products within the Village of Cumberland. Trugreen Solutions has been operating at 3276 Third Street for three years. As per the *Local Government Act* a person that has had a TUP issued may apply to have the permit renewed for an additional three years. A permit may only be renewed once.

Official Community Plan

The subject property is located in the Heritage Conservation Area (HCA) 1-Historic Village Commercial Core (HVCC). The HCA is intended to provide long-term protection of the Historic Village Commercial Core, which contains resources with special heritage value or heritage character. Any alterations to a building in the HCA requires a Heritage Alteration Permit. The property owner was issued a Heritage Alteration Permit on May 27, 2019, and at the time of this report has met all requirements of the permit.

Zoning Bylaw

The subject property is located in the Village Core Commercial Mixed-Use Zone (VCMU-1). The Zone permits a wide variety of commercial uses. Cannabis retail is currently not permitted in the VCMU-1 Zone, but is a designated area for consideration of a TUP for Cannabis Retail.

ANALYSIS

The applicant has met all requirements of the Temporary Use Permit issued in February 2019, the Heritage Alteration permit issued in May 2019 and the Business License granted on July 30, 2020.

The Business License required a security plan for the premises that includes video surveillance, proof of a security alarm contract that includes monitoring at all times by a licensed third party, adequate health and safety signage, and installation of an air infiltration system.

Bylaw Enforcement

During the three years Trugreen has been in operation, there have been no bylaw complaints regarding the TUP for cannabis retail that was approved in 2019.

Social Procurement

As a requirement of the TUP process the applicant was required to outline how their business plan meets the objectives and policies contained in the OCP. To-date, Trugreen's business plans and operations remain aligned with the current zoning and OCP designation for the property.

The TUP process also included strong considerations and expectations related to the Village's Social Procurement Policy. This policy was included within the TUP process to ensure that approved recreational cannabis retailers within the Village of Cumberland would operate in a manner that provides value and benefit to the community. As example, commitments to hiring locally and diversely and paying living wages were factored into the TUP process. The applicant also proposed to seek/promote social benefits within the community by:

- Encouraging social foot traffic, tourists, and promote pride that residents show in their community with further social enterprise supporting patrons who visit Cumberland

- Allow safe, strict, and responsible access to cannabis
- Remaining accountable and transparent in our approach to cannabis regulation and the Village bylaws.
- Utilizing triple bottom line (social, environmental, and financial integrity) to ensure a prosperous relationship with the community and nature.
- Maintaining good standing in relationships with the Provincial Liquor and Cannabis Regulation Branch as well as the Village of Cumberland.

To-date the applicant has acknowledged an ongoing commitment to maintaining the requirements of the TUP. The applicant has reported that hiring locally and paying living wages has resulted in better employee engagement, operational performance, and lower related administrative costs for the business. Similarly, the applicant has also engaged and utilized local companies to provide web design, brand development and marketing services, which has created additional economic benefit to the community.

PUBLIC NOTIFICATION AND REFERRALS

As per the requirements of the *Local Government Act*, Section 497 (3), notification is not required for a TUP renewal. After the expiry of a TUP that has been renewed, the applicant could apply for a new TUP which would require public notification.

ALTERNATIVES

1. THAT Council refer the application for a renewal for a Temporary Use Permit for the property described as Lot 12, Block 10, District Lot 21, Nelson District, Plan 555-A (3276 Third Street) for the purposes of operating a cannabis retail business to the Advisory Planning Commission for comment.
2. THAT Council deny the application for a renewal for a Temporary Use Permit for the property described as Lot 12, Block 10, District Lot 21, Nelson District, Plan 555-A (3276 Third Street) for the purposes of operating a cannabis retail business.

STRATEGIC OBJECTIVE

☐ Healthy Community
☐ Quality Infrastructure Planning and Development
☐ Comprehensive Community Planning
☒ Economic Development

FINANCIAL IMPLICATIONS

None.

OPERATIONAL IMPLICATIONS

The review of Temporary Use Permit renewal application is part of the services provided by the Development Services Department.

CLIMATE CHANGE IMPLICATIONS

Climate change mitigation efforts have been addressed through the renovations and ventilation system upgrades to the building, provision of product delivery via bicycle and the development of a new retail business in the existing downtown core which supports the Village's goal for compact growth.

ATTACHMENTS

1. 2018-01-TUP

CONCURRENCE

Courtney Simpson, Manger of Development Services ***CS***

Kaelin Chambers, Economic Development Officer ***KC***

Mike Williamson, Manager of Protective Services ***MW***

Respectfully submitted,

M. Searle

_____

Meleana Searle
Planner

C. Postings

_____

Clayton Postings
Chief Administrative Officer

Corporation of the
Village of Cumberland

TEMPORARY USE PERMIT

EXTENSION

TO: 1102849 BC Ltd AGENT: Trugreen Solutions Inc. (Michael Arneja)

OF: 1212 – 1175 Douglas Street, Victoria, BC V8W 2E1

1. This Temporary Use Permit (2018-01-TUP) is issued subject to compliance with all of the bylaws of the Village of Cumberland applicable thereto, supplemented by this Permit for the purposes of operating a cannabis retail business.

2. This Temporary Use Permit applies to and only to those lands within the Village of Cumberland described below, and any and all buildings, structures and other development thereon:

Legal Description:	Lot 12, Block 10, District Lot 21, Nelson District, Plan 552-A		
Folio:	516 00173.000	**PID:**	003-179-061
Civic Address:	3276 Third Street		

3. The land described herein shall be developed substantially in accordance with the following terms and conditions and provisions of this Permit:

   a) **Site Design**

   The siting shall be substantially in conformance with the attached Schedule A.

   b) **Landscaping**

   The landscape plan shall be implemented substantially in conformance with the attached Schedule A.

4. **Security**

   A Landscaping Security is required, which provides the means by which Council can carry out the landscaping works if the Owner does not complete the approved Landscape Plan. The details of the security are as follows:

   a) The amount shall be 120% of the cost estimate for the approved landscape plan and shall be received before the Permit is issued.

   b) An inspection shall be carried out upon completion of the plan and if compliant, a refund of 75% shall be made.

c) The remaining 25% will be held back for one year at which time the Owner will request an inspection. If the plantings are to the satisfaction of the Village, the holdback will be returned to the person who paid it. If any of the plants have not survived, they shall be replaced by the Owner per the approved landscape plan, or failing this, the Village may use the holdback to replace the plants. Any amount of the security not used for the purpose it was intended will be returned to person who paid it.

5. **Expiry and Renewal**

a) The Owner of land in respect of which a Temporary Use Permit has been issued has the right to put the land to the use described in the Permit for three years after the Permit is issued. The expiry date is February 11, 2025.

b) Council may grant renewal of the Permit once for a period not to exceed three years. The Applicant is expected to apply for renewal at least 60 days prior to the expiry date.

c) When the Permit expires, the Cannabis Retail operation will cease within 30 days and any applicable Business License will be revoked at this time.

6. **Timing and Sequencing of Development**

None

7. **List of Reports or Plans attached as Schedules**

Schedule A – Site & Landscape Plan

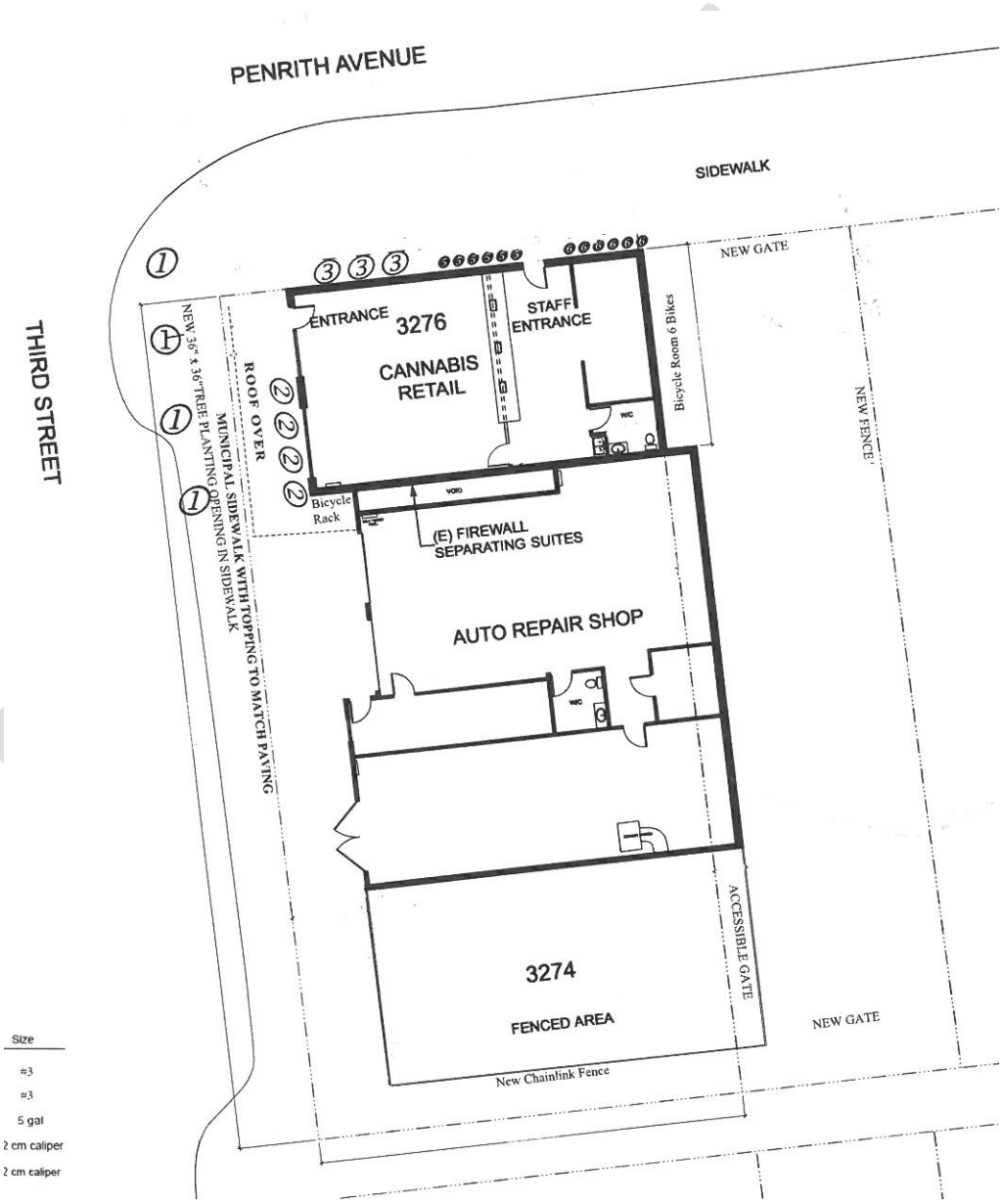
8. This Permit is **not** a Building Permit.

CERTIFIED as the Temporary Use Permit granted by resolution of the Council of the Corporation of the Village of Cumberland on the 11 day of February, 2019 and issued on the 12 day of February, 2019. *(the Council grants the Permit, and senior staff shall issue the Permit when all the conditions have been met. (such as the landscaping security, etc)*

CERTIFIED as the Temporary Use Permit **extension** granted by resolution of the Council of the Corporation of the Village of Cumberland on the 25 day of April, 2022.

Corporate Officer

Schedule A – Site and Landscape Plan



COUNCIL REPORT

REPORT DATE: April 11, 2022
MEETING DATE: April 25, 2022

TO: Mayor and Council

FROM: Manager of Operations

SUBJECT: Solid Waste Collection - Recollect App

RECOMMENDATION

1. THAT Council receive the Solid Waste Collection - Recollect App report;
2. AND THAT Council support the purchase of the Recollect App to help assist the community with solid waste collection notifications, scheduling, and education.

PURPOSE

Seek Council support for the implementation of the Recollect App to assist with communications to the public on solid waste collection schedules, delays, and other communication opportunities.

PREVIOUS COUNCIL DIRECTION

Date	Resolution
January 10, 2022	THAT Council direct staff to enter into a Memorandum of Understanding with the City of Courtenay and the Town of Comox for the issuance of a joint Request for Proposal to solicit proposals for a three stream curbside collection service for a five year contract with the provision for a five year extension.

BACKGROUND

Solid waste collection has become a challenging component of the many services the Village of Cumberland provides to its residents and businesses. Coupled with the COVID pandemic, collection interruptions have frustrated the community. With the Village and other communities in the valley now on an 'add a day' schedule, there is additional confusion for some residents.

Currently there is an opportunity to partner with the Comox Valley Regional District in utilizing the Recollect App that is used by the City of Courtenay along with a large number of other communities on the Island and across BC and Canada. This app has been developed to not only assist with providing solid waste collection scheduling for the community, but also helps residents understand what goes where, provides notification to subscribers of when to place their solid

waste at the curb, and when there are service delays due to major weather events such as snowfall. The app can also be used as a communication tool in other areas of municipal operations where messaging needs to get out to the community. Additional features of the app include reduced call volumes, lower recycle contamination levels, and the ability to create reports.

Proven benefits from this App include lower contamination levels, increased diversion of materials, reduced customer complaint calls, education on what goes where including a fun waste sorting game, and improved customer communication and engagement. One of the more important benefits will be the ability to educate residents on recycling and hopefully reduce our contamination levels experience with the single stream curbside collection. Currently we are above the maximum level of contamination permitted under our agreement with Recycle BC.

Costs for the App are based on community size and partnering with the CVRD utilizing a 'multiple community' option, the combined total annual cost to both organizations would be $10,444. Cost sharing will be based on number of customers would require the Village to approximately 58% or $6,100. In 2021, the Village received funding from Recycle BC specifically for resident education and administration totalling we collected $4,822. Some of these funds could be used to offset the annual fee for this app along with solid waste reserve funding.

ALTERNATIVES

1. Not proceed with implementation of the Recollect App.

STRATEGIC OBJECTIVE

- ☐ Quality Infrastructure Planning and Development
- ☐ Comprehensive Community Planning
- ☐ Healthy Community
- ☐ Climate Change
- ☒ Effective communication, administrative, financial and support services

FINANCIAL IMPLICATIONS

We currently receive funding from Recycle BC in support of education and administration. These funds could help offset the Village's annual costs to fund the Recollect App tool. Additional funding would come from solid waste collection reserves to make up the total annual fee. Staff do not expect that the solid waste service would need additional funds for this purchase; however, if it is determined to be needed, it will come forward with other budget amendments to be funded by general stabilization funds.

OPERATIONAL IMPLICATIONS

We anticipate this App will greatly reduce call volumes when there are service delays due to severe weather or equipment breakdowns.

ATTACHMENTS

None

CONCURRENCE

Michelle Mason, Chief Financial Officer ***MM***

Respectfully submitted,

R. Crisfield

_____
Rob Crisfield
Manager of Operations

C. Postings

_____
Clayton Postings
Chief Administrative Officer

COUNCIL REPORT

REPORT DATE: 4/14/2022
MEETING DATE: 4/25/2022

File No. 1700

TO: Mayor and Councillors

FROM: Michelle Mason, Chief Financial Officer/Deputy CAO

SUBJECT: 2022 Property Tax Rates Bylaw

RECOMMENDATION

i. THAT Council receive the 2022 Property Tax Rates Bylaw report.

ii. THAT Council direct staff to amend the 2022 – 2026 Financial Plan bylaw to add a reserve contribution of $43,750 from growth taxes to the Emergency and Public Safety Reserve to save towards policing.

iii. THAT Council give first, second and third reading to "2022 Property Tax Rates Bylaw No. 1167, 2022".

PURPOSE

The purpose of this report is to provide to Council the "2022 Property Tax Rates Bylaw No. 1167, 2022" for consideration of first, second and third reading.

PREVIOUS COUNCIL DIRECTION

Date	Resolution
January 10, 2022	THAT Council adopt 2022 - 2026 Financial Plan Bylaw No. 1152, 2021.

BACKGROUND

The 2022-2026 Financial Plan bylaw (attached for information) must be adopted prior to adoption of the 2022 Tax Rates bylaw and this requirement has been met. The 2022 year of the approved five-year financial plan requires municipal property tax revenues in the amount of $3,609,820. Property tax revenues levied in 2021 totaled $3,425,300 (net of 2021 growth taxes). The budgeted property tax revenues' impact to existing 2021 ratepayers is a 5.39% increase.

The tax rate bylaw attached to this report establishes tax rates for the Village of Cumberland and for other government agencies for which the Village levies and collects taxes. The tax rates bylaw must be adopted by May 15, 2022.

Council was presented with a draft tax rates bylaw at the April 11, 2022 Council meeting for feedback. Based on feedback at that meeting, staff has provided extra information regarding class six, business/other properties (below) and has prepared the tax rates bylaw based on the tax distribution presented at that meeting. The tax rates in the bylaw for municipal library services have not changed. The final requisitions for the Comox Valley Regional District and Comox Strathcona Hospital District have slightly changed those rates in the attached bylaw.

The variable tax rate system in BC levies property tax to owners based on the value of their properties. The tax rate each year is based on the revenue the Village budgets to collect and the assessed values of all the properties in the Village at that time. Changes in the total assessed property values in the Village will cause the tax rate to change. The property tax rates in the bylaw are based on assessments from the Revised Roll received in March 2022. The total market value in 2022 assessments for Cumberland increased by approximately 36%. The decreased rates reflect this significant market increase in the various classes. Currently the increased tax revenue is spread equally between all classes.

Property Class	2021 Tax Rates	2022 Tax Rates	2022 Tax Ratios (Multiples of Class 1)
Class 1 (residential)	3.0616	2.3423	1.00
Class 2 (utilities)	57.0564	50.8039	21.69
Class 5 (light industry)	9.8933	7.1533	3.05
Class 6 (business/other)	7.9245	7.0561	3.01
Class 7 (managed forest)	32.5851	34.3514	14.67
Class 8 (rec/non-profit)	2.1308	2.3423	1.00
Class 9 (farm)	3.0616	2.3423	1.00

Property taxes generated by growth in 2022 is not in the financial plan and will be included in the first financial plan amendment with a recommended contribution to the Emergency and Public Safety reserve to save towards policing. The taxes from growth in 2022 based on the revised roll totals just under $44k. Staff recommend that these funds be contributed to the Emergency and Public Safety reserve to save towards policing.

Based on the revised assessment roll and approved financial plan, property and parcel taxes as well as utility fees are estimated to increase in 2022 for average single-family and residential strata properties as follows:

		Total 2022 Charges * Compared to Total 2021 Charges		
Household Type	Average Assessment	2022	2021	Estimated Increase
Single-family	$708,763	$3,903	$3,621	$284
Strata units	$498,808	$2,758	$2,739	$21

*** Single-family and strata unit total charges have $770 home owner grants deducted**
*** 2022 school tax rates are not available and have been estimated at a five percent increase**
*** 2022 police tax rates are not available and been estimated at a 10% increase**

The estimated increase for the single-family residential household above ($284) is much higher than the increase for the strata units ($21) due to the rate of increase in the assessment values between single-family and strata units. The average single-family assessment values (39% increase) have

increased at a much higher rate than the average strata units (28% increase) which has caused the single-family households to pay a bigger portion of the tax revenues in 2022 than the strata units within class one. That's why the single-family tax increase is so much higher than originally expected and the strata units tax increase is significantly lower than originally expected.

The table below shows different ranges of property tax increases and the number of Business/Other properties that are in each range. Council expressed interest in understanding any relationships in the changes in tax increases. Out of the 70 taxable properties in class six, 47 of them are located on Dunsmuir Avenue or in the downtown area so of course the largest portion of the different classes of increases outlined below are in the downtown area. The largest tax decrease in class six is the Village's largest tax payer. This property did have a significant assessment increase between 2021 and 2022; however, the assessment increase was at a much smaller rate of increase compared to the increases for the other properties in this class and therefore, there was almost a $16k decrease in taxes. Out of the other 28 properties where taxes decreased, 17 of them were properties on Dunsmuir Ave and the rest were spread evenly throughout Cumberland. Out of the 22 properties where taxes increase between $0 and $1,000, 16 of them were properties on Dunsmuir or in the downtown area and the rest were spread evenly throughout Cumberland. Out of the 17 properties where taxes increase between $1000 and $5000, 14 were properties on Dunsmuir or in the downtown area and the rest were spread evenly throughout Cumberland.

Business/Other Property Tax Increase/(Decrease) Ranges	**Number of Properties**	**Number of Properties on Dunsmuir & Downtown Area**
($15,900) to $0 (Decrease)	29	17
$0 to $1,000 (max. $1k increase)	22	16
$1,000 to $5,000 (max. $5k increase)	17	14
$16,000 *	1	
$21,000 *	1	

* Undeveloped land

The Village of Cumberland must establish rates by bylaw for the Vancouver Island Regional Library services (VIRL), the Comox Valley Regional District (CVRD) and Comox Strathcona Regional Hospital District (CSRHD). Tax rates for the VIRL are based on invoiced amounts to the Village by the Library board as per their adopted financial plan. Tax rates for CVRD and CSRHD are based on amounts requisitioned to the Village by the CVRD and CSRHD as per their adopted financial plan.

Staff cautions that property assessments do not change equally across all properties and market pressures and property improvements will result in different assessment changes for different property owners. Property owners have the option to appeal their property assessment values to BC Assessment by January 31st each year. Changes as a result of any appeal are usually included in the revised roll.

Property Tax Deferral

Certain residential property owners may be eligible for property tax deferment. Property tax deferment is an existing low interest loan program that helps qualified B.C. homeowners pay their annual property taxes on their principal residence. Homeowners that are 55 or older, a surviving

spouse, a person with disabilities or a family with children may qualify for deferment. In addition to general information about property tax deferral and the required steps, there is information about the two specific programs (attached to this report):

- Regular Property Tax Deferment Program, for those aged 55 or older or in other specified circumstances
- Families with Children Tax Deferment Program, for those financially supporting children.

ALTERNATIVES

1. Council can provide feedback to staff on the current rates being presented.
2. Not proceed with any action at this time.

STRATEGIC OBJECTIVE

- ☐ Healthy Community
- ☐ Quality Infrastructure Planning and Development
- ☐ Comprehensive Community Planning
- ☐ Economic Development

FINANCIAL IMPLICATIONS

Financial implications for the attached 2022 tax rate bylaw are mostly outlined above in this report.

The table on page five outlines the 2021 (2022 not available at this stage) taxes and charges that a representative house paid in communities on Vancouver Island (information taken from the Province of BC website). The last column estimates what the total charges for the other communities would be if they increased by 2% compared with the actual charges for Cumberland (5.39%).

Municipality	House Assessment	Total Residential Variable Rate Tax (HOG not taken)	Total Residential Parcel Taxes	Total Residential Utility Fees	Total Residential Taxes and Charges	Assume a 2% increase for 2022
Cumberland	$ 510,441	$ 3,163	$ 350	$ 779	$ 4,292	$ 4,675*
Courtenay	$ 510,671	$ 3,020	$ 245	$ 1,040	$ 4,305	$ 4,391
Comox	$ 593,809	$ 3,146	$ 120	$ 1,066	$ 4,332	$ 4,419
Campbell River	$ 483,444	$ 3,506	$ 136	$ 1,026	$ 4,668	$ 4,761
Qualicum Beach	$ 688,660	$ 4,187	$ 240	$ 421	$ 4,848	$ 4,945
Parksville	$ 529,355	$ 3,442	$ 20	$ 745	$ 4,207	$ 4,291
Lantzville	$ 754,076	$ 3,413	$ 20	$ 965	$ 4,398	$ 4,486
Nanaimo	$ 544,227	$ 3,903	$ -	$ 993	$ 4,896	$ 4,994
Ladysmith	$ 483,347	$ 3,224	$ 809	$ 1,033	$ 5,066	$ 5,167

* Increase for Cumberland for the 2022 average house assessment above is the actual increase (5.39%) in this report ($708,763 and total charges without a home owner grant claimed is $4,675)

OPERATIONAL IMPLICATIONS

The adoption of the property tax rate bylaw is the last step in the financial planning process and must be adopted after the financial plan bylaw has been adopted and prior to May 15th of each year. Tax levies are expected to be mailed after the May long weekend. Home owner grants and tax deferrals are administered by the Province of BC directly. Property owners wanting to use these programs, need to use the provinces website. Links to the applicable website can be found by searching *Property Taxes and Home Owner Grants* on the Village website cumberland.ca.

CLIMATE CHANGE IMPLICATIONS

While the actual financial planning process does not directly relate to any climate change implications, projects in the annual budget to be carried out in 2022, may have climate change implications which will be taken into account by staff.

ATTACHMENTS

1. 2022 Property Tax Rates Bylaw No. 1167, 2022
2. 2022-2026 Financial Plan Bylaw No. 1152, 2021 for information

CONCURRENCE

None

Respectfully submitted,

M. Mason

_____
Michelle Mason
Chief Financial Officer/Deputy CAO

C. Postings

_____
Clayton Postings
Chief Administrative Officer

THE CORPORATION OF THE VILLAGE OF CUMBERLAND

BYLAW NO. 1152

A Bylaw to adopt the 2022 – 2026 Financial Plan.

The Council of the Corporation of the Village of Cumberland in open meeting assembled enacts as follows:

1. This Bylaw may be cited as "2022 - 2026 Financial Plan Bylaw No. 1152, 2021".

2. The financial plan attached as Schedule A to this Bylaw is adopted as the financial plan for the municipality for the period commencing January 1, 2022 and ending December 31, 2026.

3. The objectives and policies attached as Schedule B to this Bylaw outline the proportion of total revenue from different funding sources, the distribution of property taxes among the property classes, and the use of permissive tax exemptions.

4. This Bylaw has full force and effect from January 1, 2022 until amended, repealed or replaced.

READ A FIRST TIME THIS	**13TH**	**DAY OF**	**DECEMBER**	**2021.**
READ A SECOND TIME THIS	**13TH**	**DAY OF**	**DECEMBER**	**2021.**
READ A THIRD TIME THIS	**13TH**	**DAY OF**	**DECEMBER**	**2021.**
ADOPTED THIS	**10TH**	**DAY OF**	**JANUARY**	**2022.**

Mayor

Corporate Officer

Schedule A
2022 – 2026 Financial Plan

	2022 Budget	2023 Budget	2024 Budget	2025 Budget	2026 Budget
REVENUES					
Property taxes & payments in lieu	$ (3,666,370)	$ (3,906,185)	$ (4,089,400)	$ (4,337,965)	$ (4,571,440)
Parcel taxes	(684,860)	(731,250)	(779,230)	(795,640)	(868,680)
Sale of services & fees	(2,218,390)	(2,316,570)	(2,410,810)	(2,504,250)	(2,613,290)
Sale of services to other government	(487,470)	(491,580)	(262,770)	(268,020)	(273,380)
Transfers from other government	(1,367,810)	(1,437,130)	(4,288,150)	(1,027,400)	(1,396,730)
Other revenue	(794,190)	(800,200)	(582,120)	(564,060)	(566,010)
	(9,219,090)	(9,682,915)	(12,412,480)	(9,497,335)	(10,289,530)
EXPENSES					
Other municipal purposes	6,850,190	6,955,760	7,016,730	7,191,860	7,263,760
Debt interest	203,340	164,890	255,650	278,370	302,610
Amortization	1,469,270	1,469,270	1,469,270	1,469,270	1,469,270
	8,522,800	8,589,920	8,741,650	8,939,500	9,035,640
NET (REVENUES) EXPENSES	(696,290)	(1,092,995)	(3,670,830)	(557,835)	(1,253,890)
ADJUSTMENTS					
Acquisition of capital assets	853,100	1,921,330	5,319,510	2,403,760	3,061,520
Add back amortization	(1,469,270)	(1,469,270)	(1,469,270)	(1,469,270)	(1,469,270)
Proceeds from borrowing	(40,000)	(110,000)	(128,000)	(355,350)	(38,000)
Principal payments on debt	718,450	719,470	836,270	745,160	765,570
TOTAL ADJUSTMENTS	62,280	1,061,530	4,558,510	1,324,300	2,319,820
CHANGE IN CONSOLIDATED FUNDS	(634,010)	(31,465)	887,681	766,465	1,065,930
TRANSFER FROM RESERVES					
Reserves	(1,918,830)	(2,362,515)	(2,190,020)	(2,328,805)	(2,786,130)
Development Cost charges	(24,750)	(22,200)	(592,320)	(414,720)	(385,120)
TRANSFER TO RESERVES					
Reserves	2,577,590	2,416,180	1,894,660	1,977,060	2,105,320
TRANSFER TO / (FROM) RESERVES	634,010	31,465	(887,680)	(766,465)	(1,065,930)
TRANSFER TO/(FROM) ACCUMULATED SURPLUS	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

Schedule B
Policies and Objectives

Pursuant to section 165 (3.1) of the *Community Charter*

Part A: Proportion of Total Revenue Proposed To Come From Each Funding Source

Table 1: The proportion of total revenue proposed to be raised from each funding source in 2022 (based on 2021 Revised Assessment Roll) .

Revenue Source	% Total Revenue	Dollar Value
Property Value Taxes & Payments in Lieu	39%	3,666,370
Sale of Services and Fees	29%	2,705,860
Government Grants	15%	1,367,810
Other Revenue	9%	794,190
Parcel Taxes	7%	684,860
Proceeds from Borrowing	1%	40,000
Total	**100%**	**9,259,090**

1. Property value tax is typically the primary source for operating funds for general municipal purposes. Property taxation is simple to administer, and offers a stable and reliable source of revenue for services that are difficult or undesirable to fund on a user-pay basis.

2. Sale of services and fees form another significant portion of planned revenue. Many municipal services, such as utilities and recreation, lend well to a fee for service basis. Costs can be associated to a level of service provided, particularly where services are optional. In addition, the municipality sells water, fire protection and animal control services to other municipalities.

3. The Village seeks out all grant opportunities that become available. The Comox Valley Regional District as part of a landfill host agreement provides amenity funds to the Village and this funding will continue until 2032. The municipality also receives funds under the Strategic Community Initiative (Small Community grant) which provides a significant source of funds for operations and capital maintenance programs.

4. Other revenue includes sources of funds which do not fit in another category and include donations, developer amenity funds, grants from non-government sources, investment revenue, permits and licensing.

5. Parcel taxes fund the capital costs of providing water, sewer and storm water infrastructure. The intention is to use these taxes toward the replacement of water, sewer and storm water infrastructure as well as reducing the Village's wet weather flows through storm and sewer inflow and infiltration.

6. The municipality finances vehicles and equipment and secures debenture financing for portions of large committed projects not funded by grants or development cost charges. The municipality reviews all other funding options prior to financing recognizing that borrowing constitutes a long-term commitment and because borrowing authority is limited for an organization of this size.

Objective and Policies

Over the next five years, the municipality has the following objectives and policies:

- to actively seek grants for major infrastructure repair and replacement;
- to annually review utility rates to ensure water, sewer and storm water operating and delivery costs are fully funded; and
- to review all other services to determine optimal proportions of cost recovery from fees versus general revenues and taxation.

Part B: Distribution of Property Taxes among Property Classes

Table 2: The distribution of property tax revenue among the property classes (based on 2021 Revised Assessment Roll)

Property Class	% Total Property Tax	Dollar Value
1. Residential	76%	2,734,830
2. Utilities	2%	68,581
3. Supportive Housing		
4. Major Industry		
5. Light Industry	3%	90,594
6. Business and Other	16%	577,442
7. Managed forest	3%	135,900
8. Recreation & Non Profit	0%	2,468
9. Farm	0%	5
Total	**100%**	**3,609,820**

Tax rates are set in order to maintain tax stability. Annual tax increases are apportioned over the classes to ensure stability.

There are no class 3 or 4 properties located within the Village.

The municipality recognizes the need to attract and retain businesses and industry for economic development and not to rely heavily on any one industry as a tax source. Council believes that the non-residential rates based on these ratios reflect that philosophy.

Part C: The Use of Permissive Tax Exemptions

Council does not generally support exemptions. Taxpayers within the various property classes are treated equitably and policies are established for each class and not for individual property owners. There are two exceptions to this policy.

1. Parcels that qualify for partial statutory exemption, such as the grounds surrounding places of worship, are granted an exemption from taxes. These exemptions represent a very small dollar value which would not recover the associated costs of administering the taxes.

2. Permissive tax exemptions will also be provided for municipal properties occupied by a community group or partner agency where the group or agency has been granted a reduced or zero lease rate but may be subject to property tax under section 229 of the *Community Charter*. This exemption recognizes that municipal buildings are not subject to property taxes when used for municipal purposes; the groups or agencies are deemed by Council to be providing a valuable community benefit or municipal service; that the group or agency may not be granted exclusive use of the building and/or that the space may be reclaimed by the municipality as and when needed.

THE CORPORATION OF THE VILLAGE OF CUMBERLAND

BYLAW NO. 1167

A bylaw to establish property tax rates and impose property value taxes for the year 2022.

The Council of the Corporation of the Village of Cumberland in open meeting assembled enacts as follows:

1. This Bylaw may be cited as "2022 Property Tax Rates Bylaw No. 1167, 2022."

2. The following rates are imposed and levied for the year 2022:

   (a) for all lawful and general purposes of the municipality on the taxable assessed value of land and improvements for general purposes, rates are shown in column A of Schedule A to this Bylaw;

   (b) for the purposes of the Vancouver Island Regional Library on the taxable assessed value of land and improvements for general purposes, rates are shown in column B of Schedule A to this Bylaw;

   (c) for the purposes of Comox Valley Regional District on the taxable assessed value of land and improvements for general purposes, rates are shown in column C of Schedule A to this Bylaw;

   (d) for the purposes of Comox Valley Regional District on the taxable assessed value of land and improvements for hospital purposes, rates are shown in column D of Schedule A to this Bylaw; and

   (e) for the purposes of the Comox-Strathcona Regional Hospital District on the taxable assessed value of land and improvements for hospital purposes, rates are shown in column E of Schedule A to this Bylaw.

READ A FIRST TIME THIS	**DAY OF**	**2022.**
READ A SECOND TIME THIS	**DAY OF**	**2022.**
READ A THIRD TIME THIS	**DAY OF**	**2022.**
ADOPTED THIS	**DAY OF**	**2022.**

_____ _____

Mayor Corporate Officer

SCHEDULE A
(Dollars of tax per $1,000 of assessed value)

		(column A)	*(column B)*	*(column C)*	*(column D)*	*(column E)*
Property Class		**Municipal**	**VANCOUVER Island Regional Library**	**Regional District**		**Regional Hospital District**
		General	**General**	**General**	**Hospital**	**Hospital**
1	Residential	2.3423	0.1545	0.2421	0.3176	0.2905
2	Utilities	50.8039	3.3511	5.2511	1.1116	1.0168
3	Supportive Housing	2.3423	0.1545	0.2421	0.3176	0.2905
4	Major Industry	7.1533	0.4712	0.7384	1.0798	0.9877
5	Light Industry	7.1533	0.4712	0.7384	1.0798	0.9877
6	Business and Other	7.0561	0.4650	0.7287	0.7781	0.7117
7	Managed Forest	34.3514	2.2665	3.5516	0.9528	0.8715
8	Rec/Non Profit	2.3423	0.1545	0.2421	0.3176	0.2905
9	Farm	2.3423	0.1545	0.2421	0.3176	0.2905