

**CORPORATION OF THE CITY OF COURTENAY
COUNCIL MEETING AGENDA**

Date: March 15, 2021
Time: 4:00 p.m.
Location: City Hall Council Chambers

We respectfully acknowledge that the land on which we gather is the *unceded traditional territory of the K'ómoks First Nation*

Due to the Coronavirus COVID-19 emergency, the City of Courtenay with the authority of Ministerial Order No. M192 Local Government Meetings & Bylaw Process (COVID-19) Order No. 3 implemented changes to its open Council meetings.

In the interest of public health and safety, and in accordance with section 3(1) of Ministerial Order No. 3 M192, in-person attendance by members of the public at Council meetings will not be permitted until further notice. Council meetings are presided over by the Mayor or Acting Mayor with electronic participation by Council and staff via live web streaming.

K'OMOKS FIRST NATION ACKNOWLEDGEMENT

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Presentation facilitated by:	
<ul style="list-style-type: none">• Lindsay McGinn, Facilitator, Comox Valley Community Health Network• Sally Kupp, Consultant	

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8. RESOLUTIONS OF COUNCIL

9. UNFINISHED BUSINESS

10. NOTICE OF MOTION

11. NEW BUSINESS

12. BYLAWS

12.1. For First and Second Reading

12.1.1. Zoning Amendment Bylaw No. 2986, 2021 - 2129 Blue Jay Place

99

(A bylaw to amend Zoning Bylaw No. 2500, 2007 to rezone property from Residential One to Residential One S Zone (R-1S) to permit the addition of a secondary suite - 2129 Blue Jay Place)

13. ADJOURNMENT

Minutes of a Regular Council Meeting

Meeting #: R5/2021
Date: March 01, 2021
Time: 4:01 pm
Location: City Hall, Courtenay, BC, via video/audio conference

Attending:

Mayor: B. Wells, via video/audio conference
Councillors: W. Cole-Hamilton, via video/audio conference
D. Frisch, via video/audio conference
D. Hillian, via video/audio conference
M. McCollum, via video/audio conference
W. Morin, via video/audio conference
M. Theos, via video/audio conference

Staff: T. Kushner, Interim CAO, via video/audio conference
W. Sorichta, Corporate Officer, via video/audio conference
D. Bardonnex, Fire Chief, via video/audio conference
I. Buck, Director of Development Services, via video/audio conference
C. Davidson, Director of Engineering Services, via video/audio conference
J. Nelson, Director of Financial Services, via video/audio conference
M. Fitzgerald, Manager of Development Planning, via video/audio conference
R. Wyka, Manager of Finance, via video/audio conference
R. Matthews, Executive Assistant/Deputy Corporate Officer, via video/audio conference
E. Gavelin, Network Technician, via video/audio conference

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1. ADOPTION OF MINUTES

1.1 Adopt February 16th, 2021 Regular Council meeting minutes (0570-03)

Moved By McCollum

Seconded By Cole-Hamilton

THAT the February 16th, 2021 Regular Council meeting minutes be adopted.

Carried

1.2 Adopt February 22nd, 2021 Committee of the Whole meeting minutes (0570-03)

Moved By McCollum

Seconded By Cole-Hamilton

THAT the February 22nd, 2021 Committee of the Whole meeting minutes be adopted.

Carried

2. INTRODUCTION OF LATE ITEMS

3. DELEGATIONS

3.1 Royal Canadian Legion Branch 17 - Courtenay "Leave the Streets Behind" program (0400-01)

Bill Webb, Service Officer, Royal Canadian Legion, Branch 17, Courtenay; Don Taylor, Royal Canadian Legion Branch 76, Qualicum Beach; and Scott Harrison, Councillor, Town of Qualicum Beach presented information to Council regarding a program developed by the Royal Canadian Legion to identify and assist homeless Veterans and Veterans at risk of homelessness.

Councillor Harrison, Town of Qualicum Beach, spoke to a resolution passed by Qualicum Beach Council resolving to support the Royal Canadian Legion Branch 76's application to Canada Mortgage and Housing Corporation (CMHC) for funding to determine the number of homeless veterans in the Oceanside and Comox Valley regions; and, to provide matching funding for the first \$3,000 raised if the grant application is successful.

The delegation is seeking a letter of support for an application to the CMHC's National Housing Strategy grant program and matching funding up to a maximum of \$3,000 towards a Veterans homelessness study for Veterans housing and support services.

Moved By Hillian
Seconded By Morin

THAT in response to the request made by the Royal Canadian Legion Branch 17 (Courtenay) in their March 1st, 2021 delegation presentation to Council seeking funding up to \$3,000 and a letter of support for their grant application to Canada Mortgage and Housing Corporation (CMHC);

THAT Council direct staff to consult with the Courtenay Legion and Comox Valley Coalition to End Homelessness (CVCEH) to discuss the CMHC's National Housing Strategy initiatives program to fund a study for homeless Veterans and Veterans at risk of homelessness; and

THAT the result of this consultation be brought forward at a future Council meeting for consideration.

Carried

3.1.1 Leave the Streets Behind Poster

The "Leave the Streets Behind Poster" was received for information.

3.1.2 Homeless Flyer - Branch 17 - Courtenay Legion

The "Homeless Flyer - Branch 17 - Courtenay Legion" was received for information.

3.1.3 Town of Qualicum Beach - Certified Resolution

The certified true copy dated November 26th, 2020 of the "Town of Qualicum Beach - Certified Resolution", was received for information.

VARY AGENDA

Moved By Hillian
Seconded By McCollum

THAT Council vary the order of the March 1st, 2021 regular Council agenda so that item 6.1 Courtenay Fire Department - 2020 Annual Report (*Under 6. Internal Reports and Correspondence for Information*) is received before 4.1 Development Variance Permit No. 2004 - #700 - 444 Lerwick Road (*Under 4. Staff Reports/Presentations*).

Carried

6.1 Courtenay Fire Department - 2020 Annual Report

The "Courtenay Fire Department - 2020 Annual Report" was received for information.

4. STAFF REPORTS/PRESENTATIONS

4.1 Development Services

4.1.1 Development Variance Permit No. 2004 - #700 - 444 Lerwick Road (3090-20-2004)

Moved By McCollum

Seconded By Cole-Hamilton

THAT based on the March 1st, 2021 staff report "Development Variance Permit No. 2004 - #700-444 Lerwick Road", Council approve OPTION 1 and proceed with issuing Development Variance Permit No. 2004.

Carried

4.1.2 Zoning Amendment Bylaw No. 3026 to Allow for a Secondary Residence at 2011 Cummings Road (3360-20-2015)

Moved By Frisch

Seconded By Cole-Hamilton

THAT based on the March 1st, 2021 staff report "Zoning Amendment Bylaw No. 3026 to Allow for a Secondary Residence at 2011 Cummings Road" Council approve OPTION 1 and proceed to First and Second Readings of Zoning Amendment Bylaw No. 3026, 2021; and,

THAT Council direct staff to schedule and advertise a statutory public hearing with respect to Zoning Amendment Bylaw No. 3026.

Carried

4.2 Financial Services

4.2.1 Parcel Tax Review Panel – 2021 (1950-02)

Moved By Frisch

Seconded By McCollum

THAT based on the March 1st, 2021 staff report "Parcel Tax Review Panel - 2021", Council approve OPTION 1 as follows:

THAT the date and time for the parcel tax review panel be established as 3:00 p.m., Monday, April 19, 2021; and,

WHEREAS to protect the health and safety of the public, Council and staff during the COVID-19 pandemic, and in consideration of the Provincial

Class Order (mass gatherings) and BC Centre for Disease Control (BCCDC) physical distancing guidelines;

THEREFORE BE IT RESOLVED that Council authorize staff to proceed with virtual participation of the parcel tax review panel as authorized under Ministerial Order M192/2020 with the following conditions:

- a. That statutory public notice requirements are satisfied in accordance with S. 94 and S. 208 of the Community Charter;
- b. That electronic participation be conducted by phone and virtual participation via webinar;
- c. That the virtual parcel tax review is broadcasted for public viewing via live web streaming on the City of Courtenay website www.courtenay.ca; and,

THAT electronic participation for the parcel tax review proceed in the course of the COVID-19 pandemic; and, may be subject to change as follows:

- a. As directed under the authority of the provincial or federal governments through the Emergency Program Act, the Covid-19 Related Measures Act, or Emergencies Act Canada;
- b. Until such time as the health orders restricting mass gathering and physical distancing have been lifted;
- c. Until such time as the provincial state of emergency for the COVID-19 pandemic has been rescinded and local governments may resume regular operations; or
- d. By resolution of Council.

Carried

4.2.2 Security Issuing Resolution - Long Term Debenture Loan Authorization Bylaw No. 2978, 2020 (1760-02)

Moved By Cole-Hamilton

Seconded By McCollum

THAT based on the March 1st, 2021 staff report “Security Issuing Resolution - Long Term Debenture Loan Authorization Bylaw 2978, 2020”, Council approve OPTION 1 and approve borrowing from the Municipal Finance Authority of British Columbia, as part of the 2021 Fall borrowing session, \$3,400,000 as authorized through the 5th Street Bridge Rehabilitation Loan Authorization Bylaw No. 2978, 2020; and,

THAT the Comox Valley Regional District be requested to consent to the borrowing over a 20 year term and include the borrowing in a Security Issuing Bylaw.

Carried

4.3 Engineering Services

4.3.1 5th Street Bridge Rehabilitation Project Update (5335-20/5400-02)

Moved By Frisch

Seconded By Theos

THAT the March 1st, 2021 staff report “5th Street Bridge Rehabilitation Project Update”, be received for information.

Carried

Moved By Frisch

Seconded By Cole-Hamilton

THAT based on the March 1st, 2021 staff report “5th Street Bridge Rehabilitation Project Update” Council approve OPTION 1 and,

THAT based on the results of the 5th Street Bridge colour selection survey, Council direct staff to proceed with coating the bridge “Classic Green” consistent with the existing original colour while using modern coating material.

Carried

5. EXTERNAL REPORTS AND CORRESPONDENCE FOR INFORMATION

5.1 Comox Valley Sewage Commission - Next Steps Approved for Comox Valley Sewer Service Planning RE: Preferred Conveyance Route for the Comox Valley Sewer Service’s Liquid Waste Management Plan (LWMP) (0360-20)

Moved By Hillian

Seconded By Frisch

THAT the correspondence dated February 24th, 2021 from Doug Hillian, Chair, Comox Valley Sewage Commission, regarding the approved next steps for the preferred conveyance route in the Comox Valley Sewer Service's Liquid Waste Management Plan (LWMP), be received for information.

Carried

6. INTERNAL REPORTS AND CORRESPONDENCE FOR INFORMATION

7. REPORTS/UPDATES FROM COUNCIL MEMBERS INCLUDING REPORTS FROM COMMITTEES

7.1 Councillor Hillian

Councillor Hillian participated in the following events:

- K'ómoks First Nation (KFN) Main Treaty Table meeting
- Comox Valley Coalition to End Homelessness (CVCEH) meeting
- Kus-kus-sum Project Committee meeting
- Meeting with 6th Street Multi-Use Active Transportation Bridge Project proponents
- Comox Strathcona Regional Hospital District Board meeting (2 Total)
- Comox Valley Sewage Commission meeting (2 Total)
- Comox Valley Water Committee meeting (2 Total)
- CVRD Board meeting (2 Total)
- Lunch and Learn session with Staff and Council regarding the Official Community Plan (OCP)
- Comox Valley Sewage Commission Agenda Review meeting
- Comox Strathcona Regional Hospital District Agenda Review meeting
- Comox Valley Community Justice Centre Board meeting
- Dawn to Dawn Action on Homelessness Society and Comox Valley Transition Society, Coldest Night of the Year fundraiser event
- Meeting with CVRD and Chief and Council of the K'ómoks First Nation (KFN)

Councillor Hillian mentioned that the Comox Valley Regional District (CVRD) has given six months' notice to the Comox Valley Economic Development Society (CVEDS), advising of the early termination of the CVRD-CVEDS Service Agreement. Councillor Hillian acknowledged the service of CVEDS, in particular, its volunteer CVEDS Board of Directors and staff who have made considerable contributions over many years to the growth and development of the Comox Valley.

7.2 Councillor Morin

Councillor Morin participated in the following events:

- Comox Valley Sewage Commission meeting
- Comox Valley Water Committee meeting; elected as Chair
- CVRD Board meeting
- Virtual *Welcoming Communities Coalition Collaboratory* hosted by the Immigrant Welcome Centre
- Comox Strathcona Regional Hospital District meeting

Councillor Morin mentioned that she was recently nominated by Chief Nicole Rempel, K'ómoks First Nation (KFN), to partake in the “Winter Challenge”, among many other local leaders. The “Winter Challenge” involves nominees having to take a plunge either in water or snow as a symbolic way of ridding troubles and negativity. The nominees then challenge others to do the same within 24 hours and share their video to social media.

7.3 Mayor Wells

Mayor Wells reviewed his attendance at the following events:

- Dawn to Dawn Action on Homelessness Society and Comox Valley Transition Society, Coldest Night of the Year fundraiser event
- Virtual 2021 YANA Big Love Benefit Gala
- Interviewer for Georges P. Vanier Secondary School *Career 10* Interviews

Mayor Wells mentioned the recent increase in COVID-19 exposures in the Comox Valley and reminded everyone to remain vigilant in preventing the spread of COVID-19; avoid large gatherings, wash hands frequently, wear a mask when physical distancing is not possible, and to be kind to each other.

8. RESOLUTIONS OF COUNCIL

8.1 Councillor Morin Resolution - Speed Limits & Safety Signage on Multi-use Paths (5400-20)

Moved By Morin

Seconded By McCollum

WHEREAS the City's multi use paths have become increasingly busy, with pedestrian, bicycle, and e-bike traffic; and,

WHEREAS significant safety concerns have been expressed by path users, particularly around cycling speeds and pathway sharing;

THEREFORE BE IT RESOLVED that staff prepare a report that outlines options for implementation of increased safety measures such as speed limits and signage, that researches these measures and their impacts in other communities, and that pilots these measures on the Airpark/Riverway Trail and the steep section of the McDonald Road/Lerwick Road area.

Carried

8.2 In Camera Meeting

Moved By Frisch

Seconded By Cole-Hamilton

THAT a Special In-Camera meeting closed to the public will be held March 1st, 2021 at the conclusion of the Regular Council Meeting pursuant to the following sub-section of the *Community Charter*:

- 90 (1) (i) the receipt of advice that is subject to solicitor-client privilege, including communications necessary for that purpose.

Carried

9. UNFINISHED BUSINESS

10. NOTICE OF MOTION

11. NEW BUSINESS

12. BYLAWS

12.1 For First and Second Reading

12.1.1 Zoning Amendment Bylaw No. 3026, 2021 (2011 Cummings Road)

Moved By Cole-Hamilton

Seconded By Frisch

THAT "Zoning Amendment Bylaw No. 3026, 2021" pass first and second reading.

Carried

12.2 For Third Reading

12.2.1 Zoning Amendment Bylaw No. 3010, 2020 (#301 & #302 - 444 Lerwick Road)

Moved By McCollum

Seconded By Frisch

THAT "Zoning Amendment Bylaw No. 3010, 2020" pass third reading.

Carried with Councillor Theos opposed

12.3 For Final Adoption

12.3.1 Zoning Amendment Bylaw No. 3010, 2020 (#301 & #302 - 444 Lerwick Road)

Moved By Frisch

Seconded By Morin

THAT "Zoning Amendment Bylaw No. 3010, 2020" be finally adopted.

Carried with Councillor Theos opposed

13. ADJOURNMENT

Moved By Frisch

Seconded By McCollum

THAT the meeting now adjourn at 6:33 p.m.

Carried

CERTIFIED CORRECT

Corporate Officer

Adopted this 15th day of March, 2021

Mayor

Minutes of a Special Council Meeting

Meeting #: S3/2021
Date: March 10, 2021
Time: 4:00 pm
Location: City Hall, Courtenay, BC, via video/audio conference

Attending:

Mayor: B. Wells, via video/audio conference
Councillors: W. Cole-Hamilton, via video/audio conference
D. Frisch, via video/audio conference
D. Hillian, via video/audio conference
M. McCollum, via video/audio conference
W. Morin, via video/audio conference
M. Theos, via video/audio conference

Staff: T. Kushner, Interim CAO, via video/audio conference
W. Sorichta, Corporate Officer, via video/audio conference
D. Bardonnex, Fire Chief, via video/audio conference
I. Buck, Director of Development Services, via video/audio conference
C. Davidson, Director of Engineering Services, via video/audio conference
K. MacDonald, Deputy Fire Chief, via video/audio conference
J. Nelson, Director of Financial Services, via video/audio conference
K. O'Connell, Director of Corporate Support Services, via video/audio conference
K. Shaw, Director of Public Works Services, via video/audio conference
A. Berard, Manager of Financial Planning, Payroll, & Business Performance, via video/audio conference
N. Borecky, Manager of Information Systems, via video/audio conference
R. Matthews, Executive Assistant/Deputy Corporate Officer, via video/audio conference
E. Gavelin, Network Technician, via video/audio conference

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1. STAFF REPORTS/PRESENTATIONS

1.1 Financial Services

1.1.1 2021-2025 General Capital Financial Plan (1705-20)

Moved By Cole-Hamilton

Seconded By Frisch

THAT the March 8th, 2021 staff report “2021-2025 General Capital Financial Plan”, be received for information.

Carried

Moved By Cole-Hamilton

Seconded By Frisch

THAT based on the March 8th, 2021 staff report “2021-2025 General Capital Financial Plan” Council approves the 2021-2025 General Capital Financial Plan” with the following amendment:

THAT the \$30,000 allocated for design work in the 2022 Proposed General Capital budget listed as “Access and Parking to McPhee Meadows” under the Recreation and Culture Department be moved to the 2021 General Capital Budget; and,

THAT staff be directed to include the 2021-2025 General Capital Financial Plan into the 2021-2025 Financial Plan Bylaw as amended.

Carried

The meeting via video/audio conference recessed at 5:25 p.m.

The meeting via video/audio conference reconvened at 6:00 p.m.

1.1.1 2021-2025 General Operating Financial Plan (1705-20/1715-20)

Moved By Frisch

Seconded By Cole-Hamilton

THAT the March 10th, 2021 staff report “2021-2025 General Operating Financial Plan”, be received for information.

Carried

Moved By Hillian

Seconded By Frisch

THAT based on the March 10th, 2021 staff report “2021-2025 General Operating Financial Plan”, Council approve OPTION 1, and proceed with the recommended 2021-2025 General Operating Financial Plan; and,

THAT Council approve a 1.86% property tax increase for 2021.

Carried

2. ADJOURNMENT

Moved By McCollum

Seconded By Frisch

THAT the meeting now adjourn at 7:27 p.m.

Carried

CERTIFIED CORRECT

Corporate Officer

Adopted this 15th day of March, 2021

Mayor



STAFF REPORT

To: Council

File No.: 2380-30 Lot 2

From: Chief Administrative Officer

Date: March 15, 2021

Subject: Amendment to Lease Agreement for Lot 2, 100-20th Street - Courtenay Airpark

PURPOSE:

The purpose of this report is to seek Council approval to amend the lease agreement for Lot 2 Courtenay Airpark with D. Dubyk to permit a portable owned and operated by AP Aviation (Air Hanger Lot 1 tenant) to be located and operated on Lot 2 until August 31st, 2021.

CAO RECOMMENDATIONS:

THAT based on the March 15th, 2021 staff report "Amendment to Lease Agreement for Lot 2, 100-20th Street - Courtenay Airpark", Council adopt OPTION 1 and authorize staff to work with external legal counsel to amend to the current lease agreement with Duane John Dubyk for the property having a legal description of PID: 000-892-149, Lot 1, Section 66, Comox Land District Plan 14942 except any portion of the bed of the Courtenay River and further identified as Lot 2 on Plan VIP64872 to temporarily permit a portable administrative office belonging to AP Aviation to be located and operating on Lot 2 under the following conditions:

- a) That AP Aviation make best efforts to secure all relevant permits for the portable administration office located and operated on Lot 2 as soon as possible; and,
- b) That AP Aviation maintain a \$5,000,000 commercial liability insurance policy (including personal injury, property, products and completed operations, cross liability, name the City of Courtenay and Duane Dubyk as additional insured, maximum deductible \$5,000) on the portable administration office; and,
- c) That the portable administration office be removed from Lot 2 no later than August 31st, 2021

THAT the Mayor and Corporate Officer be authorized to execute all documentation relating to the lease.

Respectfully submitted,

Trevor Kushner, BA, DLGM, CLGA, PCAMP
Interim Chief Administrative Officer

BACKGROUND:

Duane John Dubyk is the current owner of the hangar located on Lot 2, Courtenay Airpark. Mr. Dubyk stores an aircraft and periodically performs mechanical repairs on it. It was not disclosed to the City at the time of the most recent agreement negotiation that the property was being used for anything other than the storage of personal aircraft. However, shortly after Council approval of the current Agreement, it was brought to the

City's attention through business licence processes that AP Aviation was storing and operating a portable administrative office on lot 2 (for approximately two years) in contravention of the Agreement sections: 6 (Purpose and Use of Premise), 9 (Compliance with Regulations), and 10 (Assignment and Subleases).

In discussion with Mr. Dubyk, it was stated that the intention of permitting AP Aviation to locate a portable administrative office on Lot 2 site was to assist the business which did not have suitable space on their leased lot (Lot 1). Mr. Dubyk has not received compensation for the arrangement and stated he did not intend to violate the lease agreement when he permitted AP Aviation to store the portable on his lot. AP Aviation is in the process of applying for building permits and consent from the City to expand the hanger on Lot 1 which upon completion will eliminate the need for the portable administrative office. With this understanding, Mr. Dubyk formally requested the City consider an amendment to his current Agreement to temporarily permit the portable administrative office belonging to AP Aviation to remain on lot 2 property until August 31st, 2021 by which time construction on lot 1 is expected to be completed.

DISCUSSION:

With approval from Council, staff will work with external legal counsel to draft an amendment to the current Lot 2 Agreement to permit the temporary location and use of a portable administrative office with the following conditions:

- Permit the portable administration office to be located and operated on Lot 2 temporarily
- Maintain a \$5,000,000 commercial liability insurance policy (including personal injury, property, products and completed operations, cross liability, City of Courtenay and Duane Dubyk as additional insured, maximum deductible \$5,000) on the portable administration office
- Best efforts to obtain all necessary permits as soon as possible
- The portable administrative office is to be removed from lot 2 no later than August 31st, 2021.

Consideration of an amendment that permits the temporary use of lot 2 for the purpose of providing aviation commercial services is not intended to change the long-term purpose and use of lot 2 and the amendment will ensure the preservation of the City's desired mix of commercial, education and personal use of lots located within the air park.

FINANCIAL IMPLICATIONS:

Drafting the lease amendment is estimated to cost approximately \$500.

ADMINISTRATIVE IMPLICATIONS:

Approximately 100 hours of staff time has been dedicated to reviewing the lease terms, identifying compliance issues and options, tenant discussions, permit and contract discussions, and drafting the original lease and amendment reports.

ASSET MANAGEMENT IMPLICATIONS:

There are no asset management implications as the amendment will not change any service levels within the Courtenay Airpark. Permitting temporary use of lot 2 for commercial purposes is not intended to change the overall use and purpose of lot 2 nor create a precedent for other air park lots.

STRATEGIC PRIORITIES REFERENCE:

We focus on organizational and governance excellence

- Responsibly provide services at levels which the people we serve are willing to pay

We actively pursue vibrant economic development

- ▲ Work with the business and development sectors to mutually improve efficiencies
- ▲ Continue to explore innovative and effective economic development opportunities

We continually invest in our key relationships

- Consider effective ways to engage with and partner for the health and safety of the community

- **AREA OF CONTROL:** The policy, works and programming matters that fall within Council's jurisdictional authority to act
- ▲ **AREA OF INFLUENCE:** Matters that fall within shared or agreed jurisdiction between Council and another government or party
- **AREA OF CONCERN:** Matters of interest that are outside Council's jurisdictional authority to act

OFFICIAL COMMUNITY PLAN REFERENCE:

The Official Community Plan states: “Council acknowledges the Courtenay Airpark serves an important role to the City and Council will support limited expansion of airport oriented commercial uses including aircraft flight training services”.

REGIONAL GROWTH STRATEGY REFERENCE:

No specific reference.

CITIZEN/PUBLIC ENGAGEMENT:

Public notice was provided for the Lot 2 lease agreement upon its renewal in January of 2021. Further notification is not required.

OPTIONS:

- OPTION 1: THAT based on the March 15th, 2021 staff report “Amendment to Lease Agreement for Lot 2, 100-20th Street - Courtenay Airpark”, Council adopt OPTION 1 and authorize staff to work with external legal counsel to amend to the current lease agreement with Duane John Dubyk for the property having a legal description of PID: 000-892-149, Lot 1, Section 66, Comox Land District Plan 14942 except any portion of the bed of the Courtenay River and further identified as Lot 2 on Plan VIP64872 to temporarily permit a portable administrative office belonging to AP Aviation to be located and operating on Lot 2 under the following conditions:
- a) That AP Aviation make best efforts to secure all relevant permits for the portable administration office located and operated on Lot 2 as soon as possible; and,
 - b) That AP Aviation maintain a \$5,000,000 commercial liability insurance policy (including personal injury, property, products and completed operations, cross liability, name the City of Courtenay and Duane Dubyk as additional

- insured, maximum deductible \$5,000) on the portable administration office;
and,
c) That the portable administration office be removed from Lot 2 no later than August 31st, 2021. **(Recommended)**

OPTION 2: THAT Council deny the lease amendment request and issue notice to the tenant to bring the property into compliance with the January 1, 2021 Agreement.

OPTION 3: THAT Council refer this item back to staff for further consideration.

Prepared by:



Kate O'Connell, BA, MPP, CLGA, PCAMP
Director of Corporate Support Service

Concurrence by:



Trevor Kushner, BA, DLGM, CLGA, PCAMP
Interim Chief Administrative Officer



THE CORPORATION OF THE CITY OF COURTENAY

STAFF REPORT

To: Council **File No:** 3360-20-2003/6480-20-2001
From: Chief Administrative Officer **Date:** March 15, 2021
Subject: Official Community Plan (OCP) Amendment Bylaw No. 2996 and Zoning Amendment Bylaw No. 2997 - 2700 Mission Road

PURPOSE:

The purpose of this report is to bring forward a revised development concept for the development of 2700 Mission Road following the direction of Council at consideration of Third Reading of the related bylaws on February 16, 2021.

CAO RECOMMENDATIONS:

THAT based on the March 15th, 2021 staff report "Official Community Plan (OCP) Amendment Bylaw No. 2996 and Zoning Amendment Bylaw No. 2997 - 2700 Mission Road" Council approve OPTION 1 and direct staff to schedule and advertise a new statutory Public Hearing for Bylaws 2996 and 2997 related to a revised design proposal for the development.

Respectfully submitted,

Trevor Kushner, BA, DLGM, CLGA, PCAMP
Interim Chief Administrative Officer

BACKGROUND:

The proposed bylaws were given First and Second Readings on September 21, 2020 and a Public Hearing was held December 16th, 2020.

On February 16, 2021 Council considered Third Reading of the proposed bylaws and resolved to postpone consideration with a request that staff engage with the developer to consider revising their development plans with the general goal of reducing the scale and density of the development to less than what was proposed, particularly in relation to the 72 unit apartment building. There was suggestion that the overall number of units should be reduced by increasing the number of larger 2 and 3 bedroom units and it was requested that the 72 unit apartment building mass should be reduced by breaking it into separate components or smaller buildings. Additionally, there was some discussion about the importance of greenspace for the residents and community and some desire to increase it.

A revised plan has been submitted taking these concerns into consideration. This report outlines the history of changes that have been made to the project over time, outlines the current proposal and supplements the previous staff report.

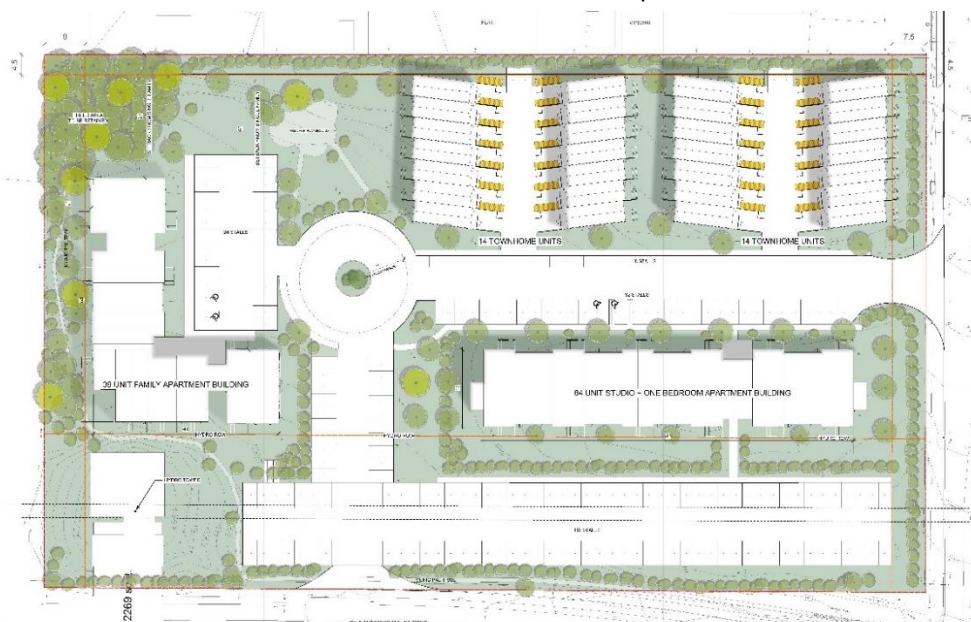
History of the proposal

In October 2019 the applicant held a pre-application open house with the public to consider feedback on their proposal. This resulted in the applicant adjusting the location of one of the proposed apartment buildings, increasing the setback from the adjacent single family homes to the apartment building and proposing the townhouse units at a similar height as the adjacent residential homes. This original concept is seen below.



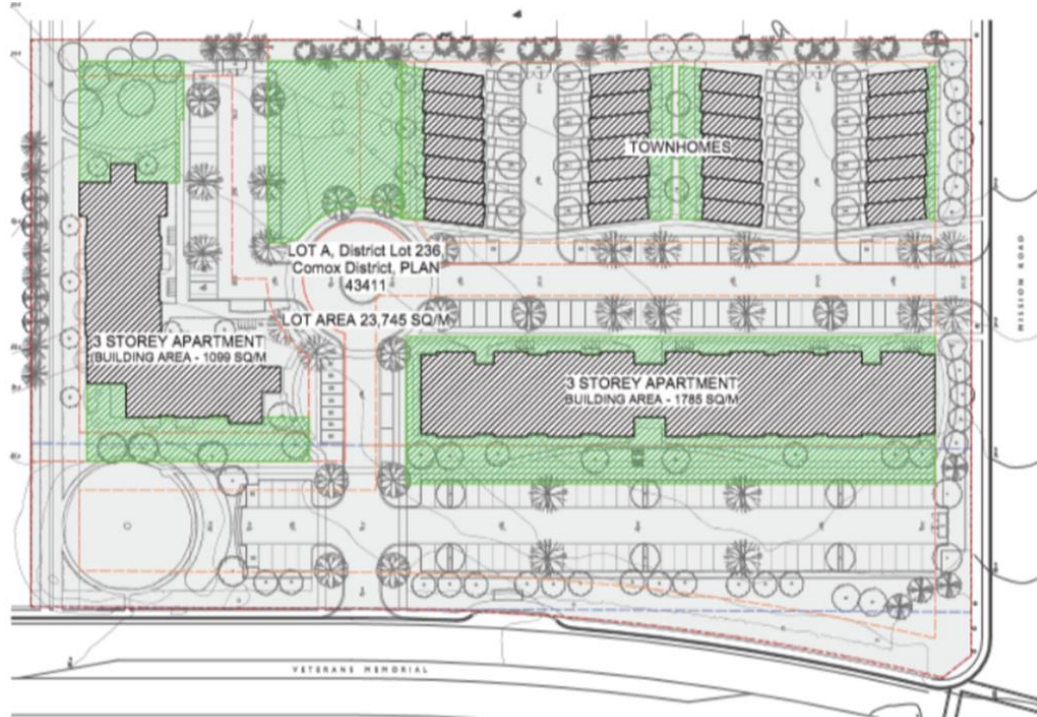
Seen below is the development as submitted to the City with the initial application and included in the April 2020 neighbourhood mail out. It included 151 units as follows:

1. A 39 unit affordable family oriented apartment which is understood to be a partnership with BC Housing to construct second stage housing for women and children;
2. A three-storey building with 84 market rental units proposed to be studios and 1 bedroom apartments; and
3. 28 two level townhouses for market ownership or market rental.



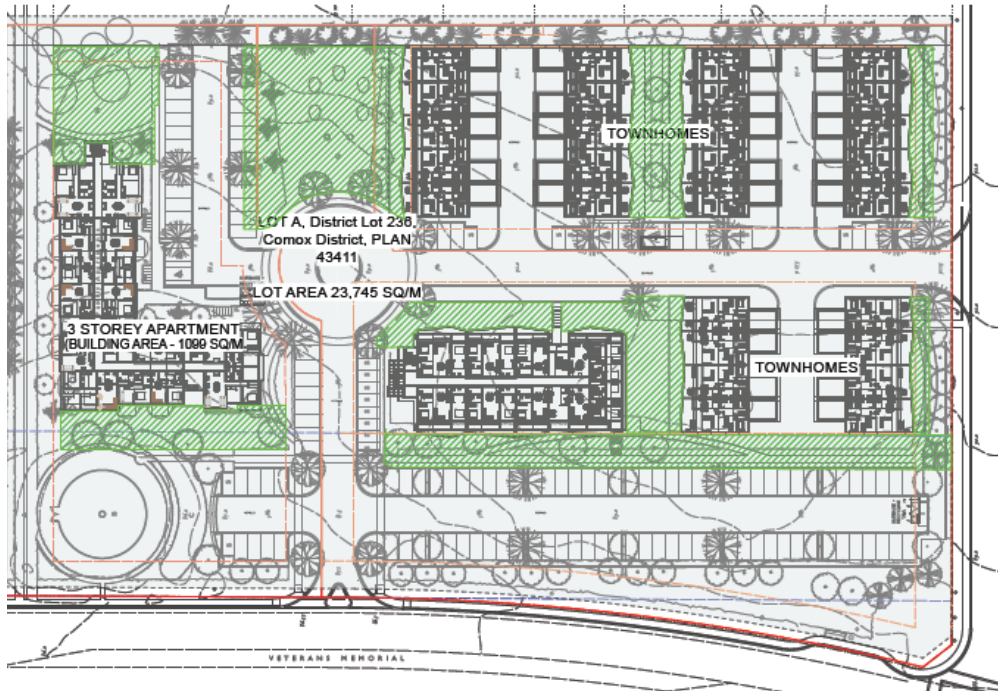
Following feedback received during the neighbourhood consultation process after formal application a revised proposal was presented to the City. This plan was what Council considered at First and Second Reading on September 21, 2020. The plan is seen below and was revised as follows:

1. The overall unit count was reduced from 151 to 137
2. The 84 unit market rental apartment was reduced to 72 units;
3. The unit mix in the market rental apartment was modified to include 2 and 3 bedroom units in addition to the studio and 1 bedroom units originally proposed;
4. The 39 unit affordable family housing building was reduced to 37 units.



Following 3rd Reading of the bylaws on February 16, 2021, the applicant further modified the proposal (seen below) to address Council comments as follows:

1. The overall unit count was reduced from 137 unit to 104 units;
2. To break up the building mass and reduce the number of units, the 72 unit 3 storey apartment has been replaced by a smaller 36 unit 4 storey apartment and 8 new 3 bedroom townhouse units in two buildings;
3. There is a redesign of the layout of townhouse units and the number has been reduced in the area immediately adjacent to the existing homes on Cascara Crescent.
4. The site grade is proposed to be reduced by another 5 feet in the area of the 4 storey apartment to limit the height increase of the additional floor to approximately 5 feet (each floor in an apartment building is approximately 10 feet); and
5. The affordable housing (transition society) building is increased from 37 units to 40.



DISCUSSION:

One of the concerns raised at the public hearing and discussed during the February 16th 2021 Council meeting relates to density of the project. The following is a simplified discussion of the two common ways residential density is measured in many planning regulations - Floor Area Ratio and Unit Density.

Floor Area Ratio

As discussed at Third Reading, the proposed R-4 zone contemplated for this development measures density by Floor Area Ratio (FAR). FAR is the ratio of permissible floor area as a fraction of the lot area. For example with an FAR of 1.0 the total floor area of all buildings on a lot is equal to the lot area. So in simple terms a 1 storey building would cover the entire lot, a 2 storey building would cover half the lot, and so on.

This type of density calculation does not consider the total number of units on a lot, rather in combination with other requirements such as building height and setbacks, it aims to regulate the intensity of buildings on a site. In general, using FAR as a measure of density, the smaller the floor area of individual residential units, the higher the overall unit yield.

Unit Density

As the name implies unit density is the number of units that are permitted on a parcel of land. This is more typically used for residential zones and is an expression of the number units permitted per unit of land area. For example a permitted density of 50 units per hectare would yield 150 units on a 3 hectare site. Generally, unit density is less concerned with the floor area (size) of individual units and is combined with other requirements such as building height, setbacks and lot coverage to regulate the intensity of development on a site.

In some bylaws both FAR and unit density are used to regulate residential buildings.

Density Context

Whether using FAR or unit density, the classifications of what constitutes low, medium and high density development are not universal and typically relate to the size of the community. In a local context, the Regional Growth Strategy identifies the following for residential densities in municipal areas:

- Low Density: 4-24 units per hectare
- Medium Density: 24-74 units per hectare
- High Density: minimum 74 units per hectare

The history of the Unit Density of the proposal at 2700 Mission Road, a 2.36 hectare site, is:

- Proposal at original application – 151 units/2.36ha = 64 units/ha
- Proposal presented at 1st and 2nd reading – 137 units/2.36ha = 58 units/ha
- Revised proposal following 3rd reading - 104 units/2.36ha = 44 units/ha

The history of the Floor Area Ratio of the proposal at 2700 Mission Road is:

- Proposal at original application – 0.38
- Proposal presented at 1st and 2nd reading – 0.47
- Revised proposal following 3rd reading - 0.43

Using unit density as a metric the proposal falls in the low to mid range of medium density residential development outlined in the RGS. Similar to unit density FAR varies by municipality but an FAR of 0.43 would be considered low density in most communities.

Unit Mix

The applicant has also adjusted the unit mix over the various iterations to increase the number of two and three bedroom units as presented below.

	UNIT TYPE	UNITS IN ORIGINAL APPLICATION	UNITS at 1 ST AND 2 ND READING	UNITS IN CURRENT PROPOSAL
FAMILY HOUSING	STUDIO			5
	ONE BEDROOM	9	10	5
	TWO BEDROOM	18	15	16
	THREE BEDROOM	12	12	12
	FOUR BEDROOM			2
	TOTAL	39	37	40
APARTMENT	THREE BEDROOM		12	6
	TWO BEDROOM		24	16
	ONE BEDROOM	36	18	10
	STUDIO	48	18	4
	TOTAL	84	72	36
TOWN HOMES	THREE BEDROOM			28
	TWO BEDROOM	28	28	
TOTAL UNITS		151	137	104

Analysis of changes and Recommendation

The subject property is in an area that has evolved over the last few decades into a regionally important node. This area includes: major arterial roads; a transit exchange on the frequent transit corridor; cycling infrastructure; a number of major regional employers; and shopping, service, education and recreational opportunities in walking distance. Although a higher residential density may be desirable at the subject location, the development is well conceived in regard to the variety of housing forms provided and sensitivity to the adjacent low density single family neighbourhood.

The modification of the 72 unit apartment to a 36 unit apartment and 8 townhouse units in two buildings responds to the concern identified with the mass of a single apartment building and creates more useable open space on the site. The revised proposal has modified the overall layout of the townhouse units in the development. While the number of units remains at 28 these units play an important role in family housing options – providing family oriented housing units that are typically more attainable compared to standalone single family homes. This is a housing form that is under represented in Courtenay’s current housing supply and they will help meet the growing desire for alternatives to single family homes.

In addition to the 28 townhouse units the development has an important mix of unit sizes and tenures including affordable family housing through a BC Housing partnership. This diversity helps to create a socially inclusive neighbourhood.

The revised proposal includes a further reduction in building grade in the area of the 4 storey apartment, keeping it below the building height otherwise permitted under the current I-2 zone. Additionally, the proposed buildings have similar roof lines with the adjacent single family homes, when viewed from Cascara Crescent. This will lessen the overall visual impact for existing home owners. Added to this, the taller 3 storey apartment and the 4 storey apartment are approximately 30m and 64m respectively from the rear property line of the homes on Cascara Crescent.

The development includes a public walkway connection on the north side of the property and an approximately 800 square metre playground that will be accessible to the public. The revision to the 72 unit apartment has created additional open space for residents between the new apartment and townhouse units.

As outlined in the previous staff report and discussions at 1st and 2nd reading and at consideration of 3rd reading the drawings included are not development permit ready. Final design details (form and character) of the buildings, landscaping and internal streetscape will be reviewed in detail at the time of development permit - should the OCP and Zoning amendment bylaws be approved.

Staff support the proposed changes and recommend that a new public hearing be scheduled to obtain input from the community. Should Council wish further design changes staff recommend they be identified at this time in order to incorporate them in the materials available for the public hearing.

FINANCIAL IMPLICATIONS:

Advertising for a new public hearing will cost approximately \$1000 and will be paid through development services accounts.

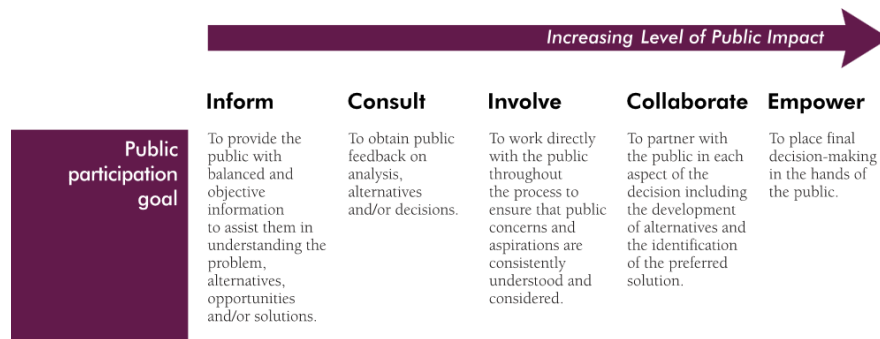
ADMINISTRATIVE IMPLICATIONS:

Approximately 30 hours of combined staff time has been spent discussing design changes with the applicant and preparing this report.

Should Council move the application forward to another public hearing an estimated 19 hours of staff time will be required to prepare for and conduct the hearing.

CITIZEN/PUBLIC ENGAGEMENT:

The level of consultation for this application is “**Consult**” based on the IAP2 Spectrum of Public Participation:



As previously outlined the applicant held a pre-application meeting with the surrounding neighbourhood, in addition to an alternative (COVID protocol) neighbourhood information meeting following their formal application. The City conducted a statutory public hearing on December 16, 2020.

Although section 470 of the *Local Government Act* permits Council to move forward without another public hearing or notice where the density of a proposed development has been decreased with the owner’s consent, staff recommend another public hearing is warranted given the proposed changes to the 72 unit apartment.

OPTIONS:

OPTION 1: (Recommended)

THAT Council direct staff to schedule and advertise for a new statutory Public Hearing for Bylaws 2996 and 2997 related to a revised design proposal for the development.

OPTION 2: THAT Council request further specific design changes prior to consideration of a Public Hearing.

OPTION 3: THAT Council not proceed with Bylaws No. 2996 and 2997.

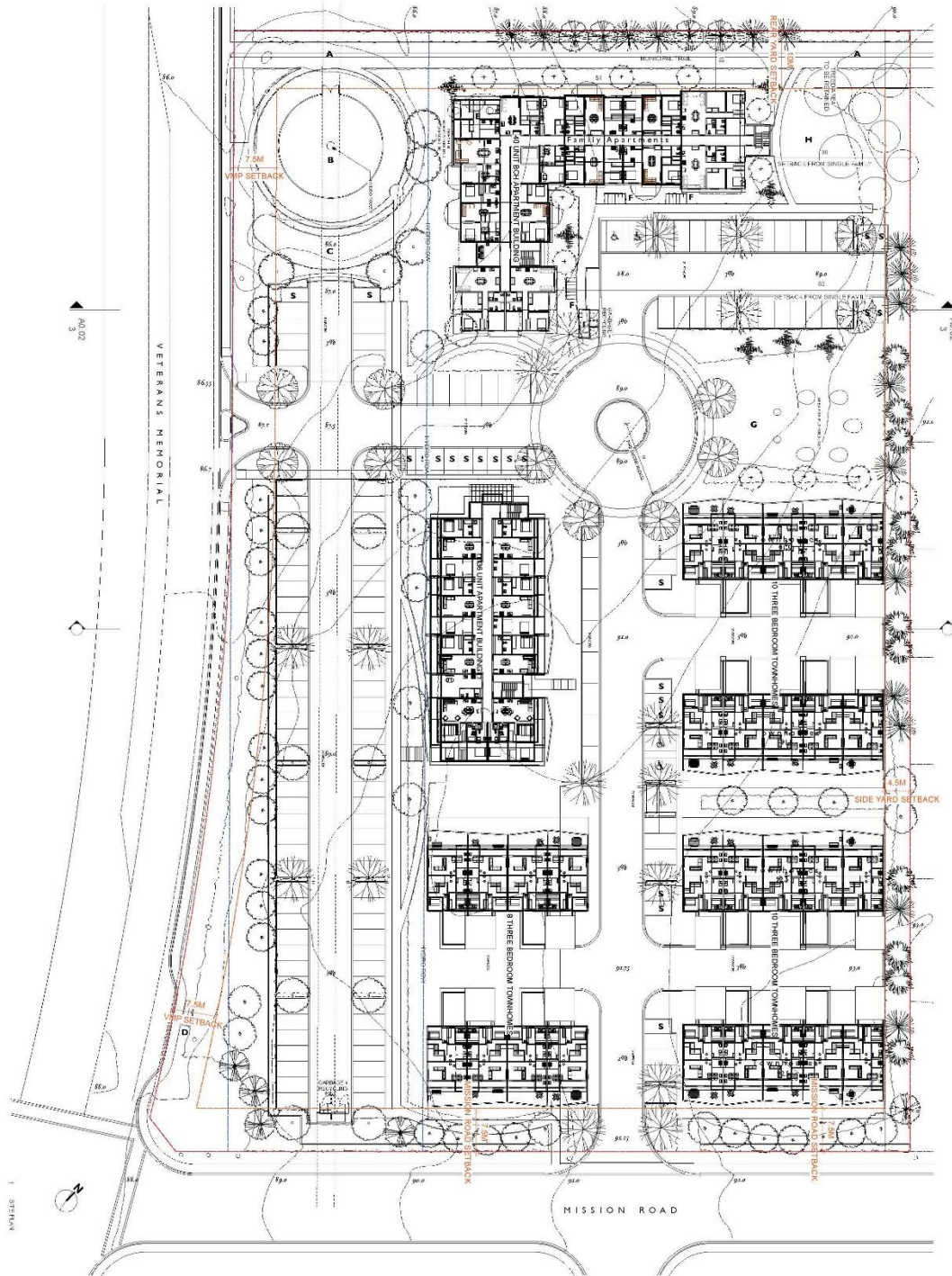
Concurrence by:

Ian Buck, RPP, MCIP
Director of Development Services

Concurrence by:

Trevor Kushner, BA, DLGM, CLGA, PCAMP
Interim Chief Administrative Officer

Attachment: Schedule No. 1 - Revised Design Concepts



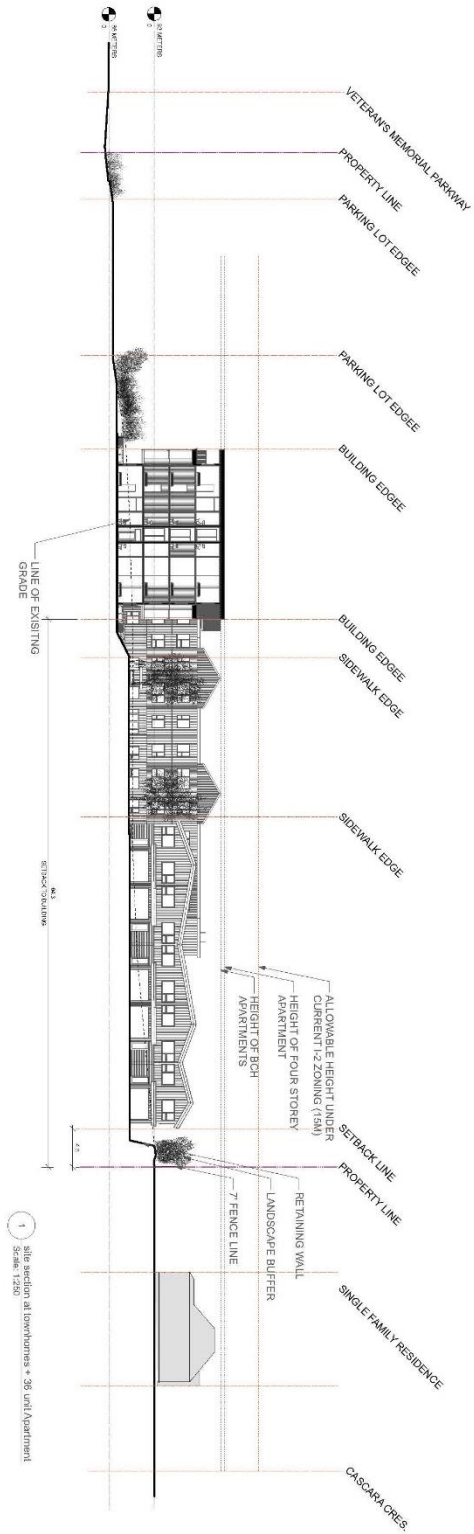
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SITE PLAN

2700 Mission Road
 2700 MISSION ROAD

1. 2020-09-21: Initial site plan, including setbacks
 2. 2020-09-21: Revised site plan, including setbacks
 3. 2020-09-21: Revised site plan, including setbacks
 4. 2020-09-21: Revised site plan, including setbacks





1 site section at townhouse + 36 unit apartment
 Scale: 1/250

A0.02

Site Sections

2700 Mission Road
 2700 MISSION ROAD

10/15/2019	Revised for rezoning application
10/15/2019	Revised for rezoning application
10/15/2019	Revised for rezoning application
10/15/2019	Revised for rezoning application
10/15/2019	Revised for rezoning application





A0.03

PERSPECTIVE RENDER

2700 Mission Road
 2700 MISSION ROAD

5 - 2020-09-21
 6 - 2020-09-21
 7 - 2020-09-21
 8 - 2020-09-21
 9 - 2020-09-21





Rental building
 2700 Mission Road

Revised Rezoning Application
 Issued for Client Review

SHEET LIST
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 A.2
 A.3
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 Vancouver, BC V6H 1G5
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THE CORPORATION OF THE CITY OF COURTENAY

STAFF REPORT

To: Council

File No.: 3360-20-1914

From: Chief Administrative Officer

Date: March 15, 2021

Subject: Zoning Amendment Bylaw No. 2986 to Allow for a Secondary Suite at 2129 Blue Jay Place

PURPOSE:

The purpose of this report is for Council to consider an application to rezone the property located at 2129 Blue Jay Place from Residential One to Residential One S Zone (R-1S) to permit the addition of a secondary suite to an existing house.

CAO RECOMMENDATIONS:

THAT based on the March 15th, 2021 staff report "Zoning Amendment Bylaw No. 2986 to Allow for a Secondary Suite at 2129 Blue Jay Place" Council approve OPTION 1 and proceed to First and Second Readings of Zoning Amendment Bylaw No. 2986, 2021; and,

That Council direct staff to schedule and advertise a statutory public hearing with respect to Zoning Amendment Bylaw No. 2986.

Respectfully submitted,

Trevor Kushner, BA, DLGM, CLGA, PCAMP
Interim Chief Administrative Officer

BACKGROUND:

The subject property is an approximately 658m² residential lot located at 2129 Blue Jay Place in East Courtenay, legally described as Lot J, District Lot 158, Comox District Plan VIP79430 (**Figure 1**). The property is currently zoned Residential One (R-1) and there is an existing 275.3m² (2,963ft²) two-storey single family dwelling on the parcel. The home contains a single car garage. There is also space for two vehicles in the front driveway (for a total of 3 parking spaces). Plans and elevations are shown in **Attachment No. 1**.

The secondary suite is proposed within the basement of the existing home. The proposed suite is 89m² (958ft²) in size and includes one bedroom, one bathroom, laundry, a living room, dining room, and a kitchen (**Attachment No. 1**). The applicant's rationale for the rezoning can be found in **Attachment No. 4**.



Figure 1. Context map with the Subject Property outlined in yellow.

DISCUSSION:

The subject property is located within less than two kilometres of the Crown Isle Shopping Complex, Valley View Elementary, and Mark R. Isfeld Secondary School and the Aspen Grove and Highland Village Shopping Centres in Comox. These destinations are accessible by cycling, walking, or transit (with two bus routes that travel along Lerwick Road). It is also adjacent to Lerwick Nature Park.

OCP Review

The proposed application represents infill development within an established neighbourhood designated Urban Residential in the Official Community Plan (OCP).

The OCP and the Affordable Housing Policy support infill development within existing Urban Residential areas provided it is in keeping with the character and scale of the surrounding neighbourhood. Infill housing provides more rental housing stock and diversity of housing types, and promotes more efficient use of land that is already serviced.

Zoning Review

This application meets zoning requirements, including building height, lot coverage, building setbacks and parking for both R-1 and R-1S zones. It also specifically meets all R-1S zoning requirements for secondary suites, summarized in the table below.

Requirements	Proposal
Total not more than 90.0 m ²	Approximately 89m ² (includes 1 bedroom,1 bathroom, living room, kitchen)
Floor Area Less than 40% of the total habitable floor space of the building	~32%
Located within a building of residential occupancy containing only one other dwelling unit	Yes
Located within a building which is a single real estate entity	Yes
Three Parking Spaces (2 spaces for the principal dwelling unit and 1 additional space for the secondary suite)	3 parking spaces: 2 full-sized driveway spaces, and 1 parking space in the garage (Attachment No. 1)

FINANCIAL IMPLICATIONS:

Application fees in the amount of \$500 have been collected in order to process the rezoning amendment application. Should the proposed Zoning Amendment Bylaw be adopted, Building Permit application fees will apply.

Properties with a secondary residence are charged a second utility fee (sewer, water, garbage) for the additional dwelling unit. Should the rezoning application be approved, the additional utility fees will be charged to the property at the time of occupancy permit. Secondary residences are exempt from paying Development Cost Charges to the City and Regional District.



ADMINISTRATIVE IMPLICATIONS:

Processing Zoning Bylaw amendments is a statutory component of the corporate work plan. Staff has spent approximately 30 hours processing this application to date. Should the proposed zoning amendment proceed to public hearing, an additional two hours of staff time will be required to prepare notification for public hearing and to process the bylaw. Additional staff time will be required to process the subsequent building permit application including plan checking and building inspections.

ASSET MANAGEMENT IMPLICATIONS:

The proposed development utilizes existing infrastructure and is connected to City water, sewer and storm mains. There are no direct asset management implications associated with this application.

2019 - 2022 STRATEGIC PRIORITIES REFERENCE:

-  Communicate appropriately with our community in all decisions we make
-  Encourage and support housing diversity

OFFICIAL COMMUNITY PLAN REFERENCE:

The proposed zoning amendment is consistent with the Urban Residential land use designation of the Official Community Plan. It represents infill residential development near existing amenities and services, providing a range of housing choice, while fulfilling OCP Section 4.4.3 4 a) – limited infill will be considered only in keeping with the character and scale of an existing neighbourhood and 4.4.3.4 d) – secondary suites will be considered as part of a principle single family residential building subject to zoning approval.

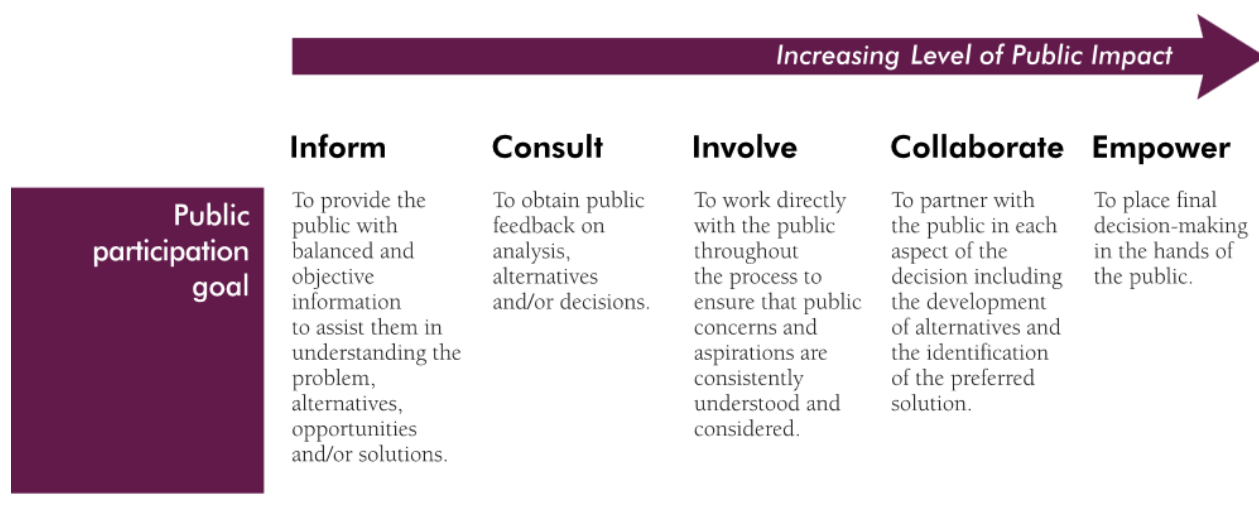
REGIONAL GROWTH STRATEGY REFERENCE:

The development proposal is consistent with the RGS Housing Goal to “ensure a diversity of affordable housing options to meet evolving regional demographics and needs” including:

- Objective 1-A: Locate housing close to existing services; and
- Objective 1-C: Develop and maintain a diverse, flexible housing stock.

CITIZEN/PUBLIC ENGAGEMENT:

Staff will “Consult” the public based on the IAP2 Spectrum of Public Participation:



Prior to this application proceeding to Council, the applicant distributed an alternative public information package to property owners and occupiers within 100m of the property, over a two week period and collected and summarized feedback as per the new Alternative Public Information Meeting process. The information provided to neighbours and the summary of the process can be found in **Attachment No. 2**. The City received 13 comments from the public. The applicant received 4 comments. Of the comments received, 12 households were represented.

Of the responses received, six households were opposed and six had no objections.

All feedback can be found in **Attachment No. 3**. Of those that stated opposition to the proposal, they had the following concerns:

- Potential traffic increase
- Parking concerns and snow ploughing in the winter
- Desire to maintain the neighbourhood as single family only
- The potential for property value impacts

It is important to note that the Zoning Bylaw requires one additional off-street parking space be provided for a suite, and these requirements for parking will be met on the subject property.

OPTIONS:

OPTION 1: (Recommended)

THAT based on the March 15th, 2021 staff report “Zoning Amendment Bylaw No. 2986 to Allow for a Secondary Residence at 2129 Blue Jay Place” Council approve OPTION 1 and proceed to First and Second Readings of Zoning Amendment Bylaw No. 2986, 2021; and,

That Council direct staff to schedule and advertise a statutory public hearing with respect to Zoning Amendment Bylaw No. 2986.

OPTION 2: Defer consideration of Bylaw No. 2986 with a request for more information.

OPTION 3: Defeat Bylaw No. 2986.

Prepared by:



Cassandra Marsh,
Planner I

Reviewed by:



Matthew Fitzgerald, RPP, MCIP
Manager of Development Planning

Concurrence by:



Ian Buck, RPP, MCIP
Director of Development Services

Concurrence by:

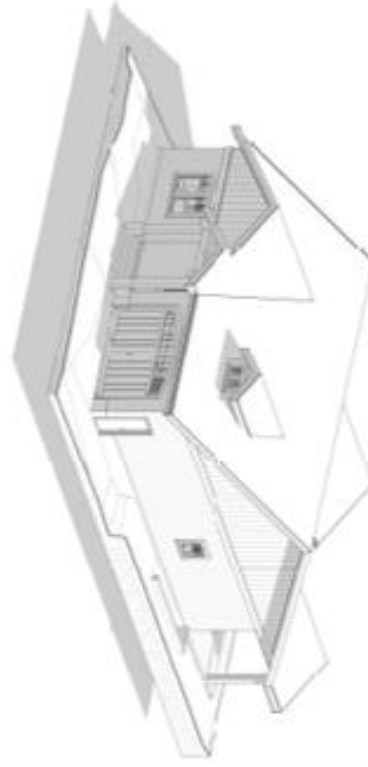
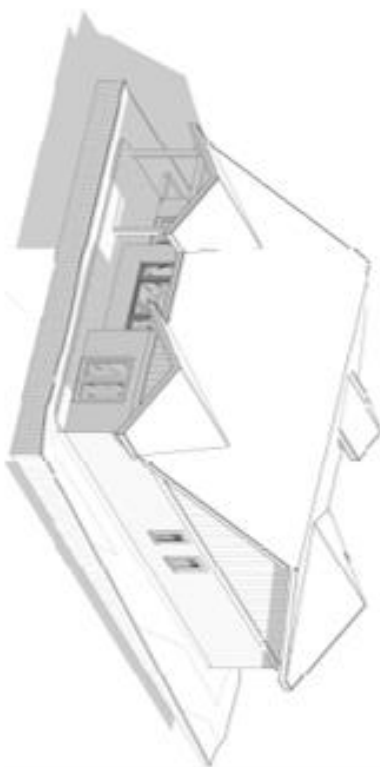


Trevor Kushner, BA, DLGM, CLGA, PCAMP
Interim Chief Administrative Officer

Attachments:

1. *Attachment No. 1: Plans and Elevations*
2. *Attachment No. 2: Alternative Public Information Meeting Mail Out and Summary*
3. *Attachment No. 3: Public Comments*
4. *Attachment No. 4: Applicant’s Rationale*
5. *Attachment No. 5: Sustainability Evaluation Checklist*

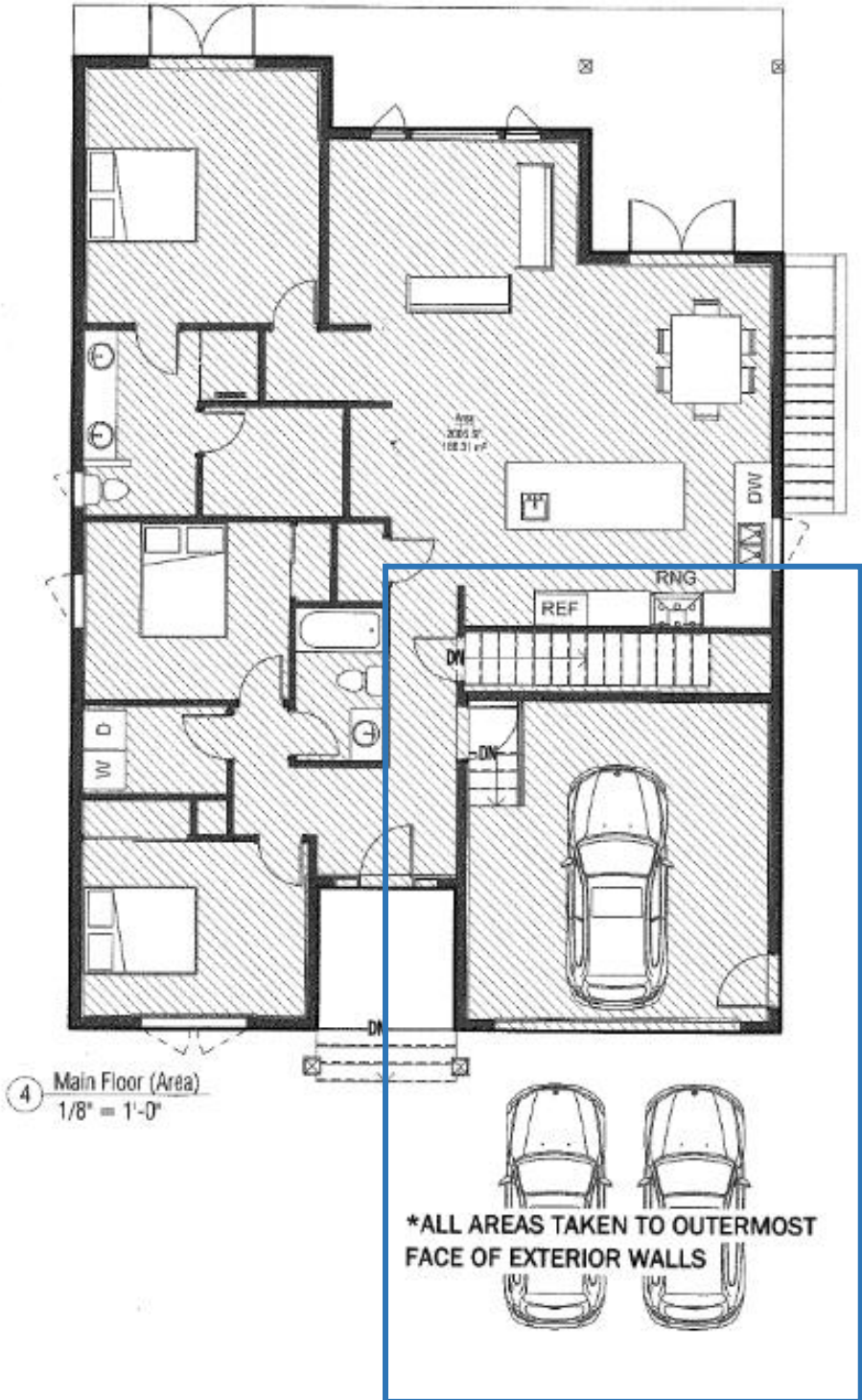
Attachment No. 1: Plans and Parking



GFA

 2005 SF (MAIN FLOOR)

Parking shown with 3 spots.



Attachment No. 2: Public Information Meeting Summary

Hello fellow neighbours, my name is Clayton Gilroy and I live at 2129 Blue Jay Place. I have submitted a proposal with the city of Courtenay to allow my unfinished basement to be developed into a suit.

This notice is to allow for the locals to comment and or request further information before the application is approved. Please view relevant documents on the city of Courtenay’s website www.courtenay.ca/devapptacker. You can search by the file number or the house address.

file number RZ000037 or house address 2129 Blue Jay Place Courtenay.

If you have any further questions you can phone me at 250-898-9580 or email claytongilroy3@gmail.com







Please return your comments to the city by: October 28th

Comments can be submitted by one of the following methods:

- Drop your comment sheet off in the drop box located at the front entrance of the City of Courtenay or mail: city of Courtenay, Planning Services Department, 830 Cliffe Ave Courtenay BC V9N 2J7
- Email your comments to planning@courenay.ca
- Fax your comments to 250-334-4241

Thank you for the time you have taken to look over this proposal

Clayton

 Message file # RZ000037 (1).eml 2129 Blue Jay Place (1).eml file # RZ000037 (1).eml File number 000037 (1).eml application for rezoning.docx

Hey Marsha, here is the Post-Meeting Summary info

A) My sign was posted Jan 10th, 2019. My mail out was sent to the neighbour's on October 10th, 2020 from the list given.

B) I 4 people responded to the mail out, all were for the rezoning or at least not opposed to the suit being approved. see the attachments for their comments.

C) The page I mailed out to neighbor's is also also attached to file.

D) There were no questions asked, or concerns raised.

All 4 responses were by email and did not require a response or info sent to them over concerns.

If there is anything else required to move this application forward please let me know.

Clayton

Attachment No. 3: Public Comments



 Wed 10/21/2020 5:57 PM
[Redacted Name]
Suite


To PlanningAlias

I live at 2041 Blue Jay Place. I am definitely opposed to having a suite at the new residence at 2129 Blue Jay Place.
We are having a major problem, on Blue Jay Place, with cars parked on the street. Having a suite would just further this problem and is not in keeping with the original plan for the area.
This is regarding file #RZ000037.
Do you need me to write a letter or is this email sufficient.

Thank you
[Redacted Signature]


Sent from my iPad

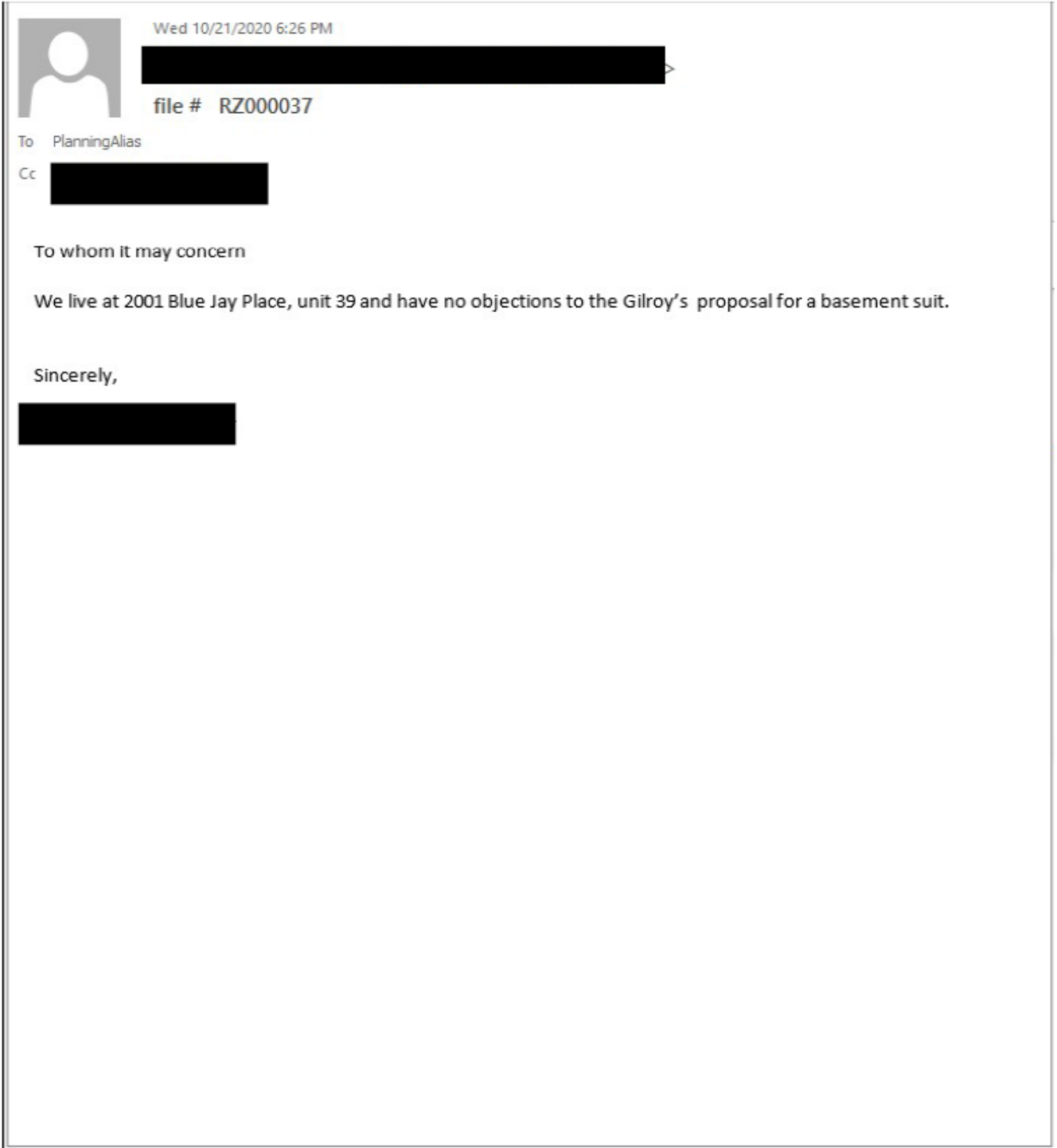
 Wed 10/21/2020 6:26 PM
 >
file # RZ000037

To PlanningAlias
Cc 

To whom it may concern

We live at 2001 Blue Jay Place, unit 39 and have no objections to the Gilroy’s proposal for a basement suit.

Sincerely,






Fri 10/23/2020 4:17 PM

[Redacted Name]

Response to application for rezoning RZ000037

To: PlanningAlias

To the Planning Department Courtenay,

My wife and I recently received a letter from the home owner at 2129 Blue Jay Place. The resident states in his letter that he has applied to the City for permission to develop a suite in his basement, and invites his neighbours to comment directly to City Planning on his application. We oppose this application on several grounds. First, we are concerned with the number of cars being parked on the cul-de-sac. The owner of 2129 has a single-car garage and a parking area for a second car on his property, but he has a trailer permanently parked there, so there is limited room for off-road parking for the suite’s occupant. The problems with street parking in the cul-de-sac are well-established. First, children on skateboards and bicycles ride out from between parked cars onto the road. There have been several near misses on the cul-de-sac. In fact, it has come up in discussion at The Woodlands (2001 Blue Jay Place) strata meetings. Secondly, the cul-de-sac is the primary access to The Woodlands and to the trails around the strata. As a consequence, there are a great number of strollers, dogwalkers, and car drivers coming in and leaving the cul-de-sac daily. Thirdly, delivery vans use the entrance to The Woodlands to deliver packages to the strata owners and at times (when the back gate is left open) to the neighbouring streets west of the strata. Fourthly, the City of Courtenay does not appear to be able to clear the cul-de-sac of snow in timely manner when necessary. Adding more traffic (and parked cars) to the cul-de-sac just compounds these problem. For your information today there are three cars parked on the street in front of 2129 Blue Jay Place. It should be kept in mind that for the people living on the cul-de-sac there is only one entry and exit point.

Yours truly,

[Redacted Signature]
#45 2001 Blue Jay Place

From: [Redacted]
Sent: Tuesday, November 17, 2020 4:03 PM
To: PlanningAlias <planning@courtenay.ca>
Subject:

Dear Planning Department,
Further to my communication with you earlier on the rezoning application by the owner(s) of 2129 Blue Jay Place. As you can see in the photograph the zoning application signage does not appear to be properly placed. Also, the city’s No Parking sign (which can be seen in the attached photo) is being frequently ignored.

[Redacted Signature]
2001 Blue Jay Place



Sat 10/24/2020 11:37 AM

[REDACTED]
Re RZ000037 - 2129 Blue Jay Place, Courtenay

To PlanningAlias

You forwarded this message on 10/26/2020 8:39 AM.

The Owners of of 2129 Blue Jay Place have requested feed back on the proposed basement suite development.

Our primary concern with respect to a new suite development, is added vehicle traffic on Blue Jay Place, and the resultant, on street parking. As it stands presently, it appears there is insufficient on street parking for Blue Jay Place residents. There is congestion at the entrance to Blue Jay Place (off Lerwick), when concurrent entering and leaving vehicles meet at the intersection. This situation is created by residents parking in no parking zones, sometimes on both sides of Blue Jay, near the intersection - and blocking traffic flow. If and when this area is properly policed, the residents in the No Parking areas will have to park further back onto Blue Jay, limiting the space for other permanent residents, as well as visitors. In addition, one residence has their vehicle parked on the boulevard, to avoid parking on the street in a No Parking area.

We would request the City of Courtenay review the following:

- Residential design standards for on street parking, covering the dwellings on Blue Jay Place, and determine if there is sufficient parking (left) to allow incremental traffic from an additional basement development; and
- Pass on our concerns re street parking enforcement on Blue Jay Place to the proper bylaw enforcement authorities, to address the current lack of residential parking enforcement that is occurring in "No Parking" demarked areas near the intersection.

[REDACTED]
61 2001 Blue Jay Place
Courtenay, BC V9N 4A8

[REDACTED]



Mon 10/26/2020 12:50 PM

[Redacted]

re: basement suite at 2129 Blue Jay Place

To PlanningAlias

I have no objections to this suite. [Redacted] 2288 Swallow Cres. My house goes street to street.



Tue 10/20/2020 7:29 PM

[Redacted Name]

RZ000037 (2129 Blue Jay Place, Courtenay)

To PlanningAlias

Dear Sirs:

We have no problem with the above basement being developed into a suite.
It will not affect increased traffic in our complex.

[Redacted Address]

Unit #27, 2001 Blue Jay Place



Mon 10/19/2020 8:51 PM

[REDACTED]
RZ000037 Zoning Amendment Application 2129 Blue Jay Pl

To PlanningAlias

 Follow up. Start by Tuesday, October 20, 2020. Due by Tuesday, October 20, 2020.

To Whom It May Concern:

As a neighbour of Mr. C. Gilroy, I am writing in support of the subject application. I live in The Woodlands strata, which is situated at the end of Blue Jay Place cul-de-sac. I believe the application supports the City's objective of increasing affordable housing while not detracting from the present nature of our community. Also, there is ample parking availability on the cul-de-sac, due in part, to the two turn around areas within the cul-de-sac.

Thank you for your consideration of the application and this note of support.

Sincerely : [REDACTED] # 75 2001 Blue Jay Place

city




Tue 10/20/2020 10:18 AM

[Redacted]

2129 Blue Jay Place

To PlanningAlias

Cc [Redacted]

 Follow up. Start by Tuesday, October 20, 2020. Due by Tuesday, October 20, 2020.

Dear Sirs

For the record we are in favor of the application to build a basement suite by Mr Gilroy. We own the house at 2258 Swallow Crescent.

Your truly

[Redacted signature]

From [Redacted]



Tue 10/20/2020 12:07 PM

[Redacted]

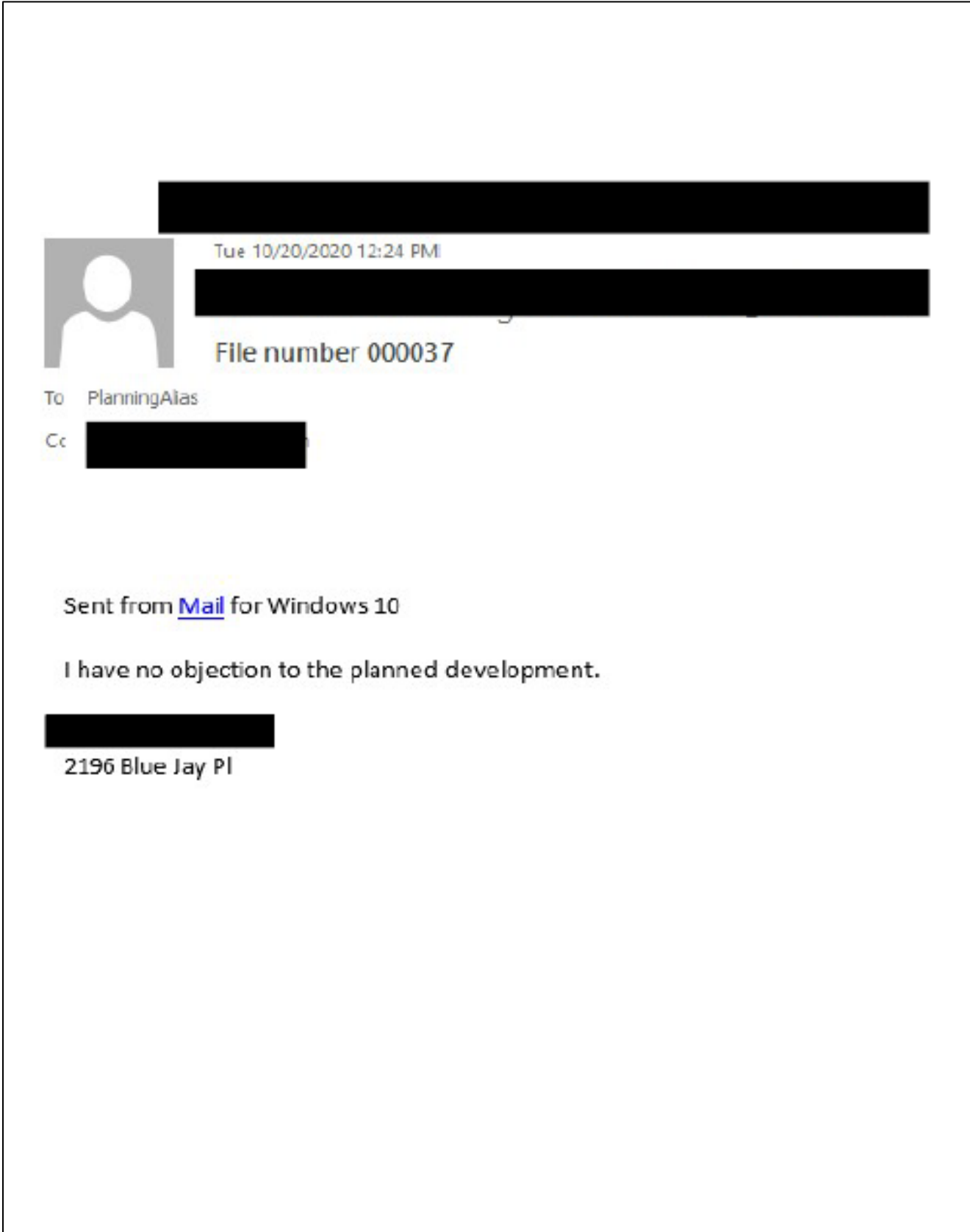
file rz000037

To PlanningAlias

We received the request for comments from neighbours of Clayton Gilroy of 2129 Blue Jay Place re his application for a basement suite at his residence. Our only concern would be the addition of more cars parked on the side of Blue Jay as most houses along there have already got extra cars parked on the street. The driveway at 2129 would not allow extra cars to park on it as it would block the garage. We are not directly impacted but we do drive out on Blue Jay as we exit from the Woodlands Patio homes where we live. The situation would become more critical in winter when snow is on the road as Blue Jay is often the last to have a snow plow to clear the street.

Sincerely

[Redacted signature]



[Redacted]



Tue 10/20/2020 12:24 PM

[Redacted]

File number 000037

To: PlanningAlias


Cc: [Redacted]

Sent from [Mail](#) for Windows 10

I have no objection to the planned development.

[Redacted]

2196 Blue Jay Pl

 Sun 10/25/2020 9:39 AM
[Redacted Name]
Re: File # RZ000037

To: PlanningAlias

To whom it may concern:

We live at 2076 Blue Jay Place. We oppose the application for approval to build a basement suite at 2019 Blue Jay Place.

We were among the early owners of homes on Blue Jay Place. Both our builder and the developer advertised lots that would have single family dwellings only. If this suite is allowed, it will be the second home to have a rental unit in a house on a single frontage lot.

Over the past few years, there has been a steady increase in the number of vehicles on Blue Jay Place. On our side of the street, next to us at 2106, the house has two vehicles parked, plus a large boat that sits on the driveway in summer months, and on the grass beside the house in winter. On the other side of that house two vehicles and a huge motor home are parked on the driveway.

The other side of the street has a house (2085 Blue Jay Place) with a rental suite. With both the main house and suite occupied, there have been as many as five vehicles on the driveway and more on the street.

On the other side of 2129 Blue Jay Place (the house in this zoning application) there are too many vehicles to park on the driveway. Usually one extra car parks on the street, and often, another is parked on the lawn.

From the illustrations of house and driveway at 2129, we feel there is barely room for two vehicles. It is likely that if a second family is allowed there, more than two vehicles will add to the parking congestion on the street.

We can understand reasons for owners of single-family homes to want to add a suite, but don't feel that Blue Jay Place is a suitable street to accommodate more vehicles and vehicle traffic. We hope sincerely that this will not be allowed.

Yours truly

[Redacted Signature]

2076 Blue Jay Place
Courtenay, B.C.

Attachment No. 4: Applicant’s Rationale**Written Statement on conformance to the Affordable Housing Policy**

1. This rezoning application is to change my current zoning R-1 to R-1S to allow a Secondary suite in the basement of the new house going to be constructed.
2. The lot at 2129 Blue Jay Place, is an infill lot, and the only vacant lot on the street for the last 10 years. I believe the location of the land is ideal for a suite, with it being a 5 minutes walk to our schools, grocery stores, and local transit.
3. The house has been designed to comply with all Building Code and City Bylaw requirements for a legal suite.
4. There is at least three off street parking spots, one in the garage and at least two on the driveway allowing two for the residents and one for the suite.
5. Community benefits: This secondary suite will help with the tight Comox Valley rental market, and will help with the stated City of Courtenay in-fill density policies.
6. The house has been designed to blend in with the well-established feel of the neighbourhood. The suite will be unnoticeable to the surrounding community, and still help with the AHP’s goal for higher density in the Comox Valley.
7. I believe this application is the perfect example of what the Affordable Housing Policy is looking to create, as stated: “Expanding the application of secondary suites and secondary residents by encouraging the provision of secondary suites in areas seeking single residential lot zoning.”
8. I am applying for the suite to make my new home affordable for my family. as well as help others find a suite they can afford to rent at a reasonable price.
9. The exterior of the house is going to be finished with a dark green Hardi Board, and Stained Fir wood trim and beams. This I believe will give the house an appealing classic look, and help it blend into the park setting the lot is on.

Attachment No. 5: Sustainability Evaluation Checklist



CITY OF COURTENAY
Development Services
 830 Cliffe Avenue
 Courtenay, BC, V9N 2J7
 Tel: 250-703-4839 Fax: 250-334-4241
 Email: planning@courtenay.ca

**SUSTAINABILITY
 EVALUATION**

COMPLIANCE CHECKLIST

The following checklist provides a quick reference list of required sustainability criteria that, where applicable, shall be satisfied for all development applications including Official Community Plan (OCP) and Zoning Bylaw amendments, Development Permits, Development Variance Permits, Tree Cutting and Soil Removal Permits, Agricultural Land Reserve and Subdivision applications. These criteria are established to ensure that the goals and objectives of the OCP are satisfied. **Please briefly state in the "Description" column how the application achieves the stated criterion.** Where an element of the development proposal does not comply with a sustainability criterion, a justification stating the divergence and the reason shall be made. A separate sheet may be used to provide comment. **Incomplete forms will result in application delays.**

- The Sustainability Evaluation Checklist Policy states: *Proposed developments will be considered where a development:*
- a. provides substantial benefits to the City;
 - b. will not negatively impact on the City's infrastructure, neighborhood or environment;
 - c. new development that supports destination uses such as the downtown, Riverway Corridor or a Comprehensive Planned Community;
 - d. Meets applicable criteria set out in the OCP.

The complete Sustainability Evaluation Checklist policy is contained within the City of Courtenay Official Community Plan No. 2387, 2005.

Project Address: 2129 Blue Jay Place	Date: Oct 19, 2019
Applicant: Clayton Gilroy	Signature: Clayton Gilroy

APPLICATION REQUIREMENTS To be filled out by applicant

Land Use. The application:	Description of how the criteria are met
a) Provides a mix of housing types and sizes;	The house design was picked to blend well with the neighborhood in a size and appearance.
b) Balances the scale and massing of buildings in relation to adjoining properties;	The majority of houses on the street are single story 1600-3,000 square ft houses, this appears from the road to be a single story 1,600 sq ft ranch.
c) Complements neighboring uses and site topography;	The house is going to have the same setback + elevation as the houses on either side of it.
d) Provides or supports mixed used developments or neighborhoods;	I am requesting for a suit to help with the affordability housing issue in Courtenay.
e) Promotes walking to daily activities and recreational opportunities;	We will be able to walk to the school, Q&S + Co-op in 5 minutes.
f) Supports a range of incomes;	lower income families will be able to afford to live in the suit.
g) Is a positive impact on views and scenery;	I am using stained wood trim + dark green hand to blend into the park + blend with the existing houses on the street.
h) Preserves and provides greenspace, trails and landscaping;	there is already a trail behind the lot into the park.

Building Design. <i>The application:</i>	Description of how the criteria are met
a) Exhibits high standard of design, landscaping and environmental sensitivity;	10x10 wood posts in the entrance, a fake dormer above garage for character. hardi board & solid trim around window + Doors
b) Maintains a high standard of quality and appearance;	Wood entrance + hardi finish.
c) Includes articulation of building faces and roof lines with features such as balconies, entrances, bay windows, dormers and vertical and horizontal setbacks with enhanced colors;	2 Dormers on the front + 2 on the back
d) Avoids creating a strip development appearance;	The dormer above the garage gives it extra character
e) Satisfies Leadership in Energy and Environmental Design (LEED) certification (or accepted green building best practices);	Complies with today's efficiency requirements
f) Uses environmentally sensitive materials which are energy sensitive or have accepted low pollution standards;	House will be built using standard building materials. No spray foam etc, will be used.
g) Builds and improves pedestrian amenities;	This was the only empty lot on the street for years. All amenities have been in place for 15 years.
h) Provides underground parking;	No, only garage parking
i) Applies CPTED (Crime Prevention Through Environmental Design) principles;	Not sure what this is?
Transportation. <i>The application:</i>	Description of how the criteria are met
a) Integrates into public transit and closeness to major destinations;	Bus route is 2 minutes away.
b) Provides multi-functional street(s);	Street in the front, park in the back.
c) Prioritizes pedestrian and cycling opportunities on the public street system and through the site location that can provide an alternative to public road;	we can walk to QF through the park
d) Provides or contributes towards trail system, sidewalks, transit facilities, recreation area or environmentally sensitive area;	My kids might add trails in the park?
Infrastructure. <i>The application:</i>	Description of how the criteria are met
a) Includes stormwater techniques that are designed to reduce run-off, improve groundwater exchange and increase on-site retention;	Yard will have top soil, flower beds will have bark mulch
b) Utilizes renewable energy sources (i.e. solar, geothermal) within servable area to City standards;	Natural gas fireplace

Character & Identity. <i>The application:</i>	Description of how the criteria are met
a) Provides a positive image along waterfront areas and fronting road;	Post + beam + hardi board
b) Is designed with quality and variety of features within the project (i.e. street furniture, street lights, signs, curb treatments);	Yard will be well landscaped
c) Provides public and private amenity space;	The backyard will have a waterfall
d) Preserves heritage fixtures;	Will blend well with the houses on the street
e) Orients to views, open space and street;	Living room + Kitchen in back to enjoy park views
Environmental Protection & Enhancement. <i>The application:</i>	Description of how the criteria are met
a) Protects riparian areas and other designated environmentally sensitive areas;	yes,
b) Provides for native species, habitat restoration/improvement;	Lot is empty + treeless now, but will be well landscaped
c) Includes tree lined streetscapes.	Will have flower beds + a Japanese maple in the front yard.



THE CORPORATION OF THE CITY OF COURTENAY

STAFF REPORT

To: Council
From: Chief Administrative Officer
Subject: Greenwood Trunk Sewer Funding Reallocation

File No.: 5335-20 / 5400-02
Date: March 15, 2021

PURPOSE:

The purpose of this report is to secure the additional funds required to complete the Greenwood Trunk Sewer project by reallocating \$1,492,500 from the New Works Reserve - Community Gas Tax Funds and prior year Sewer Operating Surplus, into the Greenwood Trunk Sewer Capital project budget in 2021.

EXECUTIVE SUMMARY

The Greenwood Trunk Sewer project began construction in June, 2020, and has since been completed to approximately 75% final build-out.

During deep excavation works in September, 2020, a hydraulic breach in the floor of the excavation caused inflow from an underground aquifer. Further investigation determined that the aquifer, which lies approximately 5.5m below base of proposed excavation, is under artesian pressure causing fissures in the soils below the excavation floor.

Review of the resulting situation by multiple consulting engineers has determined that the soils below the excavation must be remediated prior to installation of the proposed lift station, to ensure safety and mitigate environmental impacts. The costs of the efforts to do these works could not be covered under the project's original budget, and so additional funds are being requested in 2021

CAO RECOMMENDATIONS:

THAT based on the March 15th, 2021 staff report "Greenwood Trunk Sewer Funding Reallocation" Council approve OPTION 1 and direct Staff to:

1. Reallocate \$1,000,000 from the New Works Reserve - Community Gas Tax Funds into the Greenwood Trunk Sewer Capital project fund in 2021; and,
2. Reallocate \$492,500 from the prior year Sewer Operating surplus into the Greenwood Trunk Sewer Capital project fund in 2021;

Respectfully submitted,

Trevor Kushner, BA, DLGM, CLGA, PCAMP
Interim Chief Administrative Officer

BACKGROUND:

The installation of the Greenwood Trunk sewer project, consisting of approximately 600m of gravel roadway, 1.6km of gravity main, 1.7km of pressure main, a lift station, and other supporting works, began in early June, 2020. By utilizing multiple crews, all of the access road had been roughed in, and 1.3km of gravity & 800m of pressure main had been installed in the first 3 months of construction. At this time (early September), the project was projected to finish on-time and approximately \$473,000 below its \$4,100,000 budget.

DISCUSSION:

Installation of the lift station component began on September 9th, 2020. On September 10th, 2020, a fissure within the excavation floor was noted to be springing groundwater at approximately 6.5m below original grade. Excavation was immediately halted, and a meeting was held on-site with representatives from the City, the Project Consultant, the Project Contractor, and a geotechnical sub-consultant. A pumping sump was installed to manage the inflow, and a clay layer approximately 1.5m thick was installed over the excavation floor to mitigate flow while the geotechnical consultant investigated. Upon initial review from the geotechnical sub-consultant, the pumps were later shut down and the water level allowed to equalize within the excavation pit, resulting in a level approximately 1.0m below existing ground.

Additional expertise in artesian-flowing aquifer management was sought and Waterline Resources Inc. (Waterline hereinafter)-hydrogeologists with past experience on directly adjacent sites-were engaged on September 15th, 2020. Waterline's initial recommendations included a requirement to advance wells into the Quadra Sand stratum hosting the aquifer, beginning with a standard 6" well. Due to pressures within this stratum, standard drilling equipment (i.e. auger-boring) could not be utilized due to risk of a non-competent seal. A sonic-boring contractor with experience in artesian aquifers was engaged and began drilling operations on October 10th, 2020. On October 14th - 15th, upon request from the drilling contractor to mitigate risk of slope failures upsetting the rig, the excavation was backfilled with drain rock.

Results from the initial well showed a soil cross-sections approximated as:

- 0-3m Fill, weathered sediments;
- 3-6m Blue Clay (interpreted as marine clay);
- 6-14m Dense Grey Diamict (silt, sand, clay, and gravel/cobbles); and
- 14-24+m Quadra Sand & Gravel Aquifer

Pressures experienced in the well once the aquifer was pierced were found to be much higher than expected when considering the static level in the adjacent excavation, with design artesian pressures set to 10m above ground level. Based on this and the above noted strata, it was determined that the blue clay layer is the de facto aquitard while the diamict layer is hydraulically connected to the aquifer sands, though dampening the pressure with approximately 11m of head losses across its depth. Further, the action of excavating the clay and dense diamict likely lowered the overburden pressure to a point which may have caused fissures in the diamict, allowing the deeper groundwater to flow upwards into the excavation.

It was recommended that to progress with the aquifer remediation and wet well installation, regardless of methodology, the underburden pressures below the excavation site must be reduced. To accomplish this, a second de-watering well, 200mm diameter and concrete encased to manage the hydraulic pressures, was advanced. Results from a 24 hour pump drawdown test performed on October 29th – 30th on the 200mm well indicated the need for a third de-watering well (also 200mm), and also provided a model for the eventual excavation dewatering process. Subsequently, a third 200mm de-watering well was installed.

Current Environmental, environmental consultants on the project, oversaw the construction of dispersion infrastructure for the pump down test, capable of managing its 450 gal/min flow, including multiple perforated lines into adjacent farming fields. Waterline installed additional monitoring equipment on groundwater springs a short distance from site that feed a fish spawning hatchery. Currently, the site is generally prepared to begin dewatering operations.

In parallel to the advancement of wells, the geotechnical sub-consultant, Thurber Engineering Ltd. (Thurber hereinafter) progressed design options for the aquifer remediation and wet well installation. Further, an additional geotechnical consultant with experience in artesian aquifer remediation, EXP Engineering, was consulted for a professional third party review. With this team, options put forward for consultant review include, but are not limited to:

- Grout improvement with jet grouting or cutting & soil mixing
- Installation of bentonite clay till impermeable layer
- Installation of bentonite clay till impermeable layer within sheet piled work area
- Permanent dewatering (pumping)
- Below and/or above ground French drain system
- Reduce station depth and/or raise area around the lift station
- Relocate lift station
- Deep anchor tie-down system c/w pressure grouting
- Deep anchor tie-down system c/w secant pile wall cut-off

A conceptual geotechnical review of the above options was completed in mid-December. At this time, most of the above options were able to be eliminated due to inadequate factor of safety against soil heave beneath the lift station, or inadequate remediation of the aquitard. The remaining options were advanced through preliminary design and a further professional third party review was performed. These preliminary designs were provided to multiple ground improvement contractors throughout BC whom have the ability to perform projects of this scope to attain budget level cost estimates.

PROPOSED SOLUTION:

Due to its superior performative qualities combined with its relatively low-cost, grout improvement using jet grouting is the recommended solution. This option reinstates the aquitard by forming a grout block below the proposed lift station, both sealing the existing aquifer and providing greater protection from soil heave. The proposed block has approximately a 6.5m diameter and a height of 5.0m, constructed to the top of the existing aquifer sands, with additional walls extending up above the base of the lift station installation.

The first steps to implementation include site preparations and dewatering operations of the aquifer to bring the hydrostatic pressure to approximately 2.0m below existing ground elevation, where it will be held until the jet grout block has reasonably cured. Once the block is in place, construction on the lift station may continue as originally planned, generally in conformance to the Issued for Construction design drawings.

IMPLICATIONS IF NOT ADDRESSED:

Engineers and Geoscientists BC’s (EGBC hereinafter) Practice Advisory “Flowing Artesian Wells and Excavations” notes that it is important to control artesian aquifer flow as it can cause subsurface erosion and water quality issues. The practice advisory effectively states that the aquitard must be remediated. Without efforts to do so, a qualified engineer registered with EGBC could not certify the works and the project could not be completed.

Leaving this project incomplete would entail long-term maintenance responsibilities in handling the artesian flows arising from the base of the excavation, including infrastructure to direct flows and mitigate downstream environmental concerns to fish habitats. Approval from the Ministry of Forests, Lands, and Natural Resource Operations would be required for permanent flows, and this is not guaranteed. Additional maintenance would be required on the approximately 3.2km of pipe installed as part of this project, which would have no outlet.

Further, without completion of this project, existing overburdened sanitary sewer infrastructure would not be relieved, including the planned ability to decommission three existing lift stations, and additional capacity for future development in the area would not be realized.

SCHEDULE & FINANCIAL IMPLICATIONS:

Prior to September 10th, 2020, when the aquifer was encountered, the project was on track to achieve substantial completion, under budget, in December of 2020. While all other site works not reliant on the lift station installation have been completed to mitigate schedule impacts, project delivery delays will still be experienced due to the required aquifer remediation. See Table 1 below for modified project schedule through completion.

Table 1: Modified Project Schedule

SCHEDULE	2020				2021							
	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug
Aquifer Disturbed												
Temporary Engineering												
Well Advancement												
Data Collection												
Design Engineering												
Staff Report to Council												
Site Preparation & Dewatering												
Aquifer Remediation												
Lift Station Installation												
Substantial Completion												

Table 2 below provides a summary of the project costs anticipated due to the aquifer breach. It is estimated the project shall require \$1,492,500 in additional funds to complete.

Table 2: Additional Costs

Cost Item	Firm(s)	Services Provided	Cost
Sub-Consulting	Urban Systems Waterline Resources Miskimin Engineering Thurber Engineering EXP Engineering	-well and dewatering design and oversight -temporary aquifer remediation engineering -permanent aquifer remediation engineering -third party design review	\$328,638.76
Prime Contractor	Leighton Contracting Current Environmental	-supporting site and dewatering works -site management and safety oversight -environmental monitoring and management	\$693,706.25
Drilling Contractor	Fyfe Well Services	-installation of 2-pumping and 1-monitoring wells -dewatering oversight	\$424,030.87
Reclamation Contractor	Jet Grouting Contractor	-jet grouting works	\$290,000.00
Miscellaneous Delay Costs	Multiple	-interim equipment rentals -interim environmental monitoring	\$130,000.00
Sub-Total			\$1,866,375.88
Contingency		10% contingency (on uncompleted works).	\$99,083.89
Grand Total			\$ 1,965,459.77
Available Budget		Funds projected to be available under original budget.	- \$473,005.29
TOTAL		Additional funds requested (rounded).	\$1,492,500.00

Staff will be pursuing insurance options to mitigate the above additional costs for this unforeseen geo-technical site condition.

FINANCIAL IMPLICATIONS:

The 2021-2025 Sewer Fund Financial plan was prepared and approved by Council in November, 2020 prior to finalizing the 2020 year end and this capital budget amendment request.

The City received an additional \$1 Million dollars in Community Gas Tax Funds in 2019 that are still available in the New Works Reserve. The Greenwood Truck Sewer project would qualify to utilize these funds.

In addition, staff are currently working on finalizing the 2020 year end and the sewer fund is estimated to end up with an additional \$500,000 of operating surplus that was not taken into consideration in the approved 2021-2025 Sewer Fund financial plan. Utilizing these funds would not impact any further projects or operations currently in the approved sewer fund financial plan.

It is proposed that \$1,000,000 be reallocated from the New Works Reserve – Community Gas Tax Funds, and the remaining \$492,500 be reallocated from prior year Sewer Operating surplus to fund this budget amendment.

Since the 2021-2025 Consolidated Financial Plan Bylaw is currently being prepared, this amendment will be incorporated into the bylaw and adopted by Council through the regular statutory process before May 15, 2021.

ADMINISTRATIVE IMPLICATIONS:

The Greenwood Trunk Sewer Project is led by Engineering Services, with support from other City Departments. Consultants with technical knowledge specific to this work have been and will be utilized to develop and implement detailed designs and processes. Estimated costs associated with external consultants are included in the project capital budget.

ASSET MANAGEMENT IMPLICATIONS:

The Greenwood Trunk Sewer project is an important project required to support growth in East Courtenay, to enhance capacity and support continued development. This project has been vetted through the Asset Management Working Group, approved by the CAO, and identified as a high priority project.

The City's Sewer Master Plan identifies the Greenwood Trunk as the number 1 priority project. The construction of this trunk main has a number of significant positive impacts to the City's wastewater collection system, but also to the Sewage Commission infrastructure and the environment.

1. When constructed, the Greenwood trunk will allow the City to decommission three (3) smaller lift stations and redirect those flows by gravity into the CVRD trunk main on Anderton Road. The CVRD (approved Sewage Commission project in 2019) completed their section in anticipation of the City's project. The new lift station along the Greenwood trunk has been designed with improved technology and monitoring (SCADA) and will be much more efficient than the older three lift stations.
2. When constructed, the Greenwood trunk will allow the City to re-direct substantial flows away from the Regional Courtenay lift station, alleviating capacity concerns and deferring future Sewage Commission capital upgrades that are contemplated for the Courtenay Lift Station.

STRATEGIC PRIORITIES REFERENCE:

As part of the 2019 Strategic Priorities Chart a list of Council's NOW/NEXT priorities were adopted. Strategic Priorities 2019 - 2022

As part of the Strategic Priorities for 2019 - 2022 the following are relevant to the Greenwood Trunk Sewer Project:

We proactively plan and invest in our natural and built environment

- Focus on asset management for sustainable service delivery
- ▲ Look for regional infrastructure solutions for shared services

- ▲ Support social, economic and environmental sustainability solutions

We continually invest in our key relationships

- ▲■ Advocate and cooperate with local and senior governments on regional issues affecting our community
- ▲ Support improving accessibility to all City Services

OFFICIAL COMMUNITY PLAN REFERENCE:

Section 6.3 Sanitary Sewer Treatment states to follow policies to reduce infiltration, consider downstream capacity of existing sewer mains, and to provide an effluent network that is limited to areas within the City's municipal boundaries.

REGIONAL GROWTH STRATEGY REFERENCE:

These sewer projects provide the public with infrastructure that addresses public health needs and concerns and provides equal service to all residents within the municipality and region (per Comox Valley Regional Growth Strategy Bylaw No. 120, 2010, part 3.2.5, Objective 5-D on Page 56).

OPTIONS:

- Option 1: THAT based on the March 15th, 2021 staff report "Greenwood Trunk Sewer Funding Reallocation" Council approve OPTION 1 and direct Staff to:
1. Reallocate \$1,000,000 from the New Works Reserve - Community Gas Tax Funds into the Greenwood Trunk Sewer Capital project fund in 2021;
 2. Reallocate \$492,500 from the prior year Sewer Operating surplus into the Greenwood Trunk Sewer Capital project fund in 2021.
- Option 2: Refer back to Staff for further review.

Prepared by:



Sean Hayes, ASCT, CAPM
Engineering Technologist

Reviewed by:



Chris Davidson, P.Eng., PMP
Director of Engineering Services

Concurrence by:



Trevor Kushner, BA, DLGM, CLGA, PCAMP
Interim Chief Administrative Officer

ATTACHMENTS:

- Attachment #1: Urban Systems - Lift Station Artesian Pressures Mitigation Letter
- Attachment #2: Thurber Engineering - Options to Mitigate Artesian Pressure Effects Technical Memorandum
- Attachment #3: EXP Services - Lift Station 1 Geotechnical Engineering Review

March 8, 2021

File: 3222.0048.02

City of Courtenay
830 Cliffe Avenue
Courtenay, BC V9N 2J7

Attention: Sean Hayes, Engineering Services**RE: Greenwood Trunk Sewers – Lift Station Artesian Pressures Mitigation**

1.0 Introduction

As the City is aware, in the fall during initial excavation for the lift station installation, Leighton Contracting encountered groundwater inflow near the base of the excavation, at a depth of approximately 6.1 m. At the time further excavation was stopped and the excavation and water flows were reviewed by the Geotechnical Engineers (Thurber Engineering). The initial concern was that an unmapped and previously unidentified aquifer layer may have been present beneath the lift station and was breached by the excavation.

Waterline Resources (Waterline), a hydrogeological consultant, was engaged to provide a review of the excavation and the potential groundwater influences in the area. Their initial review concluded that there was the potential for an unmapped aquifer layer beneath the excavation and they recommended a drilling investigation be undertaken to better understand the potential. In November and December of 2020, an investigation and drilling program was conducted to determine the depth of the potential aquifer, the aquifer pressures and to help aid in the development of a dewatering plan to complete the installation of the lift station. As part of the drilling program, it was discovered that there was in fact an artesian aquifer at approximately 14 m below ground surface and well below the base of the excavation. However, the presence of groundwater inflow within the excavation along with relatively high artesian pressures (up to 10 m above ground surface) within the aquifer raised concerns that the confining layer (the aquitard) could have been fractured, and that further excavation could raise the risk of failure of the aquitard.

2.0 Potential Remediation Options

Based on a review of the concerns due to the aquifer presence and the geotechnical considerations, the following options were reviewed from a feasibility perspective.

2.1 Geotechnical Ground Improvement

Thurber has investigated several ground improvements options that have the potential to stop the aquifer water pressures and flows from impacting the lift station and will allow the lift station to be installed as intended. Along with Thurber providing design recommendations, the City has also engaged a second geotechnical engineering firm, EXP, to provide a third-party review of the potential geotechnical solutions and design parameters.

2.2 Relocation of the Lift Station

Relocation of the lift station to a new location was reviewed. To provide the sewer collection necessary, the relocation would require the station to be at a similar elevation, or lower, to the existing sanitary sewer. The underlying aquifer is unmapped, and the pressures were determined only once a well installation was conducted. If a location could be found where the aquifer depth is significantly greater than has been found in the current

location the lift station may be able to be installed without major ground improvements. In review of this option with Waterline it would be difficult to determine the depth of the aquifer in any location without a detailed drilling program. Wells would need to be drilled at various locations to determine aquifer depth and pressure. Due to the high aquifer pressures the investigation wells would need to be completed as drilled steel cased wells which comes at a significant cost.

Locating the lift station further up the hill was proposed from a groundwater perspective as the pressure will be reduced further up the hill. This however reduces the collection area of the station and minimizes its impact.

Lastly, relocation of the station will still require a soil repair program at the current site to remediate the aquifer breach that has been formed.

Based on the expected high costs and low probability of finding an alternate suitable location, relocation of the lift station was not advanced any further.

2.3 Redesign of the Existing Lift Station.

Reduction of the depth of the lift station was reviewed to understand if a shallower station would reduce the concern to the aquifer.

The gravity piping to the station is already very shallow and at minimum depth required to service the upstream area. The base on the lift station could be reconfigured to be reduced by 1.0 to 1.5 m without affecting the piping however this would result in sewage flows backing up the gravity piping prior to pumping. This will increase the operations and maintenance requirements for the station by requiring regular flushing and cleaning of the gravity system and could lead to increased odors as well.

Thurber has noted that the natural factor of safety to prevent aquifer heave is already quite low; in the 1.2 range. To install the station with a similar factor of safety ground improvements are recommended even if the station were to be installed at a shallower depth.

Like the other options the aquifer repair will also need to be completed.

3.0 Proposed Solution

Based on a review of all the options it was determined that a geotechnical ground improvement solution is the only option that could result in the installation of the lift station and repair of the aquifer.

Thurber has completed a thorough review of all possible options and 2 potential geotechnical options were identified as practical in providing a solution. These options are:

- Option 1: Soils mixing or jet grouting. A mechanism where high pressure grout is pumped into the ground beneath the lift station which both seals the ground below and acts as a weighted anchor for the station.
- Option 2: Installation of soil anchors and pressure grout. The anchors penetrate deep into the soils to hold down the lift station while the grout repairs any fractures in the soils below.

These two preferred solutions were refined and advanced by Thurber, with a third-party review provided by EXP. Thurber evaluated conceptual costs and schedule with several specialized contractors, as presented in the attached letter, "City of Courtenay Greenwood Sewer Trunk – Lift Station 1 Options to Mitigate Artesian Pressure Effects." Dated February 26, 2021. EXP has also reviewed this approach and has provided a letter which is also attached.

Option 1: Soil mixing, or jet grouting has ultimately been recommended by Thurber from a geotechnical perspective. Option 2 soil anchors and pressure grout was presented as higher risk from a geotechnical perspective due to increased risk of leakage through the pressure grout. It should be noted that both options will require a level of dewatering to be undertaken during installation to lower the aquifer pressures and manage water during the installation. Currently dewatering wells have been drilled at the site and will be able to be utilized for the installation procedure. The dewatering and water management will be a significant level of effort for either option.

Based on the recommendation from Thurber, the City and Leighton Contracting have begun conversations with Southwest Contracting who had provided the most advantageous preliminary pricing and availability to Thurber. Southwest Contracting has also visited the site and provided supporting recommendations to the design of the solution.

4.0 Remediation Costs

The additional costs for the ground remediation efforts have been tracked since the unexpected water conditions have occurred, costs have also been forecasted based on all the expected needs of the project. Along with the specialized contractor costs for soil remediation, there have been and will be additional project costs related to the reinstatement of the aquitard and installation of the lift station. These costs include well drilling and dewatering, environmental support, water management, geotechnical and hydrogeological consulting, and construction support from the general contractor (Leighton). Based on the efforts expected the project costs have been estimated as follows:

Table 1 – Overall Project Costs

Cost Items	Responsibility	Services	Costs
Sub-Consulting	Urban Systems Waterline Resources Miskimin Engineering Thurber Engineering EXP Engineering	<ul style="list-style-type: none"> Project / Contract management Temporary aquifer remediation engineering Permanent aquifer remediation engineering Third party design review Well and dewatering design and oversight 	\$ 328,638.75
Prime Contractor	Leighton Contracting Current Environmental	<ul style="list-style-type: none"> Supporting site and dewatering efforts Site management and safety oversight Environmental monitoring and management 	\$ 693,706.25

Drilling Contractor	Fyfe Well Services	<ul style="list-style-type: none"> Installation of 2 pumping and 1 monitoring well(s) Dewatering oversight 	\$ 424,030.87
Reclamation Contractor	Jet Grouting Contractor	<ul style="list-style-type: none"> Jet grouting works 	\$290,000.00
Misc. Delay Costs	Multiple	<ul style="list-style-type: none"> Interim Equipment Rentals Interim Environmental Monitoring 	\$ 130,000.00
Sub Total			\$ 1,866,375.88
Contingency (10% on uncompleted works)			\$ 99,083.89
Total			\$ 1,965,459.77

The expected costs have been presented based on the current understanding of the needs. There are still design elements of the proposed solution that need to be confirmed and detailed and as such a contingency allowance of 10% on the remaining construction efforts as been included. The sufficiency of this contingency is dependent on how the actual construction progresses and how ground conditions are found to respond to the remediation.

5.0 Project Timing

Based on initial conversations with Leighton and Southwest, the expected overall timing of the works is estimated in Table 2 below. The availability of equipment for the ground improvement work is expected in late March 2021. To prepare the site for this timing the site preparation will need to be started in the next couple of weeks to make sure the site is ready for them.

	Expected Timing
Site Preparation and Dewatering	3 Weeks
Ground Improvements	3 Weeks
Installation of Lift Station and Remaining Project Elements	4 Weeks
Commissioning	2 Weeks
Total	12 Weeks

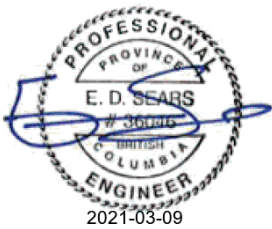
6.0 Next Steps

As noted above, Thurber has recommended that the option of jet grouting presents the most cost-effective solution with the least risk. EXP has supported Thurber in stating that they feel the jet grouting option is appropriate under these conditions. It should be noted that while Thurber has recommended that this option is the least risky from a ground improvements perspective there are still risks and several considerations that are being confirmed and planned for, including water management of the site during dewatering and environmental considerations for the site.

Thurber is currently working with Southwest and the rest of the project team to finalize all the design details and we are working actively with the Leighton and the project team to ensure that all the considerations have been addressed and the risk identified and considered.

Sincerely,

URBAN SYSTEMS LTD.



Eric Sears, P.Eng.
Principal

A handwritten signature in blue ink, appearing to read "Steve Brubacher".

Steve Brubacher, P.Eng.
Principal

/eds
Enclosure

Attachment:

Thurber Engineering - City of Courtenay Greenwood Sewer Trunk – Lift Station 1 Options to Mitigate Artesian Pressure Effects.
Dated February 26, 2021
EXP – Geotechnical Engineering Review – Greenwood Sewer Trunk – Lift Station 1, Dated March 1, 2021

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THURBER ENGINEERING LTD.

February 26, 2021

File: 23229

Urban Systems Ltd
Unit #106, 501 4th St
Courtenay, BC V9N 1H3

Attention: Eric Sears, P.Eng.

**CITY OF COURTENAY
GREENWOOD SEWER TRUNK – LIFT STATION 1
OPTIONS TO MITIGATE ARTESIAN PRESSURE EFFECTS**

Dear Eric:

This report provides additional geotechnical details for options to mitigate the effects of artesian pressures at the Greenwood Sewer Lift Station #1. Previous reports dated November 27, 2020 and December 18, 2020 provided background information and conceptual design discussion. This report is an update which supersedes our January 29, 2021 report.

It is a condition of this report that Thurber's performance of its professional services is subject to the attached Statement of Limitations and Conditions.

1. BACKGROUND

During excavation for Lift Station #1 significant groundwater inflow was encountered at a depth of about 6.1 m. A subsequent groundwater drilling investigation by Waterline encountered the Quadra Sand aquifer at a depth of about 14 m, which is estimated to have a design artesian pressure of about 100 kPa (i.e. in addition to hydrostatic pressures). Based on these existing conditions (before excavation) we estimate that the existing factor of safety (FS) against heave was about 1.2, which could be considered to be a minimum acceptable FS. To maintain this FS against heave, the stress relief caused by excavation and construction of the lift station will need to be compensated for. Additionally, the till aquitard that extends to a depth of 14 m may have been breached during excavation and will need to be reinstated.

2. DESIGN ASSUMPTIONS

The following design assumptions have been made in developing the mitigative options:

- Lift station is 3.05 m in diameter and 8.03 m deep.
- Soil unit weight is 20 kN/m³.
- Net excavated soil weight is 1,172 kN.
- Depth to aquifer is 14 m below the ground surface.
- Design artesian water pressure is 10 m above the ground surface.
- Jet grout unit weight is 20 kN/m³.
- Soil anchor bond strength is 200 kPa.



3. REMEDIATION OPTIONS

The options presented below assume that the aquitard has been breached. While we cannot be certain of this, it is likely that it has been. Remediation options will require depressurization of the Quadra Sand aquifer before starting further construction. The aquifer will probably need to be depressurised to a hydrostatic pressure equal to the ground surface.

Engineers and Geoscientists BC's Practice Advisory "Flowing Artesian Wells and Excavations", dated June 22, 2020, provides guidance for managing artesian conditions encountered during construction. It is important to control artesian flow as it can cause subsurface erosion and water quality problems. The practice advisory effectively states that the aquitard must be retained.

Option 1 – Jet Grout – Reinstatement Aquitard

This option would reinstate the aquitard by forming a block of jet grout (or soil mix) below the pump station. The block would seal the aquitard and provide control of groundwater during subsequent excavation for lift station construction. The weight of the block would compensate for the stress relief from the lift station construction.

Conceptually, reinstating the aquitard would comprise installation of overlapping jet grout columns to form a large block. This block of jet grout will be an impermeable block that will replace the soils around and below the lift station. We have assumed that a cylinder of jet grout columns with an overall diameter of 6 m and extending from a depth of about 6 m to a depth of 19 m would be installed. An untreated zone extending to a depth of 14 m inside the cylinder would be left for excavation of the lift station.

Our assessment of this conceptual design option indicates that it has a factor of safety of about 1.2 against heave under design artesian conditions, which is similar to the factor of safety that may have existed before excavation started. Per the EGBC's Practice Advisory "Flowing Artesian Wells and Excavations" this option would reinstate the aquitard.

Approximate costs for the jet grouting option have been obtained from the following contractors and are presented in Table 1 below. These costs do not include any subcontractor markup or contingency.



Table 1

Contractor	Estimated Cost	Availability
Southwest Contracting (jet grout)	\$290,000	April 2021 (one month)
Keller (jet grout)	\$700,000	One month
Keller (soil mix)	\$500,000	One month
Henry (soil mix)	\$500,000	-

Option 2a – Seepage Cut-off and Uplift Soil Anchors

This option would comprise a ring of secant concrete cast-in-place caissons installed around the pump station combined with uplift soil anchors. To seal the aquitard, the secant caisson ring would be connected to a concrete slab at the underside of the lift station. This concrete slab would be subject to uplift forces caused by the artesian pressures. The stress relief from lift station excavation would be compensated by the uplift soil anchors.

The secant caisson ring would extend through the aquitard to a depth of about 14 m below the ground surface. We have allowed for a 6 m diameter ring that would consist of about 40 – 0.6 m diameter concrete caissons with 0.1 m overlap.

Excavation for the lift station would start after secant cut-off ring was installed. Anchor blocks would be installed at the base of the excavation and about 8 soils anchors consisting of 32 mm diameter, 1035 MPa DCP threadbar would be installed to a depth of about 13 m. A 5 m bond length and an 8 m long unbonded free length has been assumed. The anchors would be stressed to about 150 kN and then locked off. The base slab would then be poured within the secant ring to provide a seal and would be structurally connected to the anchor blocks. The lift station would then be constructed and the area between the secant ring and the lift station would be filled with controlled strength concrete.

Table 2 below provides approximate construction costs for this option without subcontractor markup or contingency.

This option requires many more steps than the jet grouting options and therefore carries more potential for construction issues and potential delays. There is also an increased risk of leakage through the base slab.



Table 2

Contractor	Estimated Subcontractor Cost	Estimated Cost	Availability
Southwest Contracting (anchors) Henry (secant pile ring)	\$60,000 \$300,000	\$360,000	May 2021 (2 months)
Southwest Contracting (anchors) Construction Drilling (secant pile ring)	\$60,000 \$240,000	\$300,000	-

Option 2b – Aquitard Grouting and Uplift Soil Anchors

This option would be similar to Option 2a, except that the aquitard would be reinstated by pressure grouting the till layer below the pump station. The stress relief from lift station excavation would be compensated for by uplift soil anchors connected to a concrete slab at the underside of the lift station.

For costing purposes we have assumed that the pressure grouting would be completed on a grid pattern from the underside of the lift station to the bottom of the till layer. We have assumed a 1 m triangular pattern of 0.15 m diameter pressure grout holes would be able to reinstate the aquitard. We note that the success of pressure grouting depends on the ability of the grout to permeate the till and any seepage paths that may have formed due to heave. Because the till layer is relatively impermeable, the grout will likely not be able to completely permeate the till and the success of this method would depend on the grout holes intercepting any seepage paths that may have formed, which is uncertain.

This option also requires many more steps than the jet grouting options and therefore carries more potential for construction issues and potential delays. There is an increased risk that grouting will not reinstate the aquitard.

Approximate costs for the seepage cut-off and anchor option have been obtained from the following contractors indicated in Table 3 below. We have not yet received responses from all of the contractors.



Table 3

Contractor	Estimated Subcontractor Cost	Estimated Cost	Availability
Southwest Contracting (anchors)	\$60,000	\$170,000	May 2021 (2 months)
Western Grater (pressure grouting)	\$110,000		May 2021 (2 months)

4. REMEDIATION OPTION COMPARISON

Table 4 below provides a high-level comparison of the three options. From a geotechnical perspective the jet grouting option is recommended.

We foresee that each of these remediation measures will take about one month to complete, however there is a higher schedule risk with the anchor options (2a and 2b) as there are more design elements, which may complicate the schedule. The contractor availability date is based on current conditions and can be expected to change.

The costs do not include additional design that will be required from a structural engineer. We don't foresee that the jet grout option (Option 1) will require additional structural engineering. For the anchor options, a structural engineer would need to provide design for the base slab and anchor blocks. The conceptual designs for Options 1 and 2a would require some relatively minor further geotechnical engineering analysis and preparation of a design document for the structural engineer. The pressure grouting option (2b) will require significant further investigation and analysis to confirm its suitability.

The remediation option cost estimates provided herein do not include a contingency or contractual mark-up. We suggest allowing for a 25% contingency on top of the contractual mark-up. We anticipate that our level of effort for geotechnical input and field review during construction will be about the same for each option.

From an operations and maintenance perspective, the options are all similar (i.e. if successful, we don't anticipate that there will be a significant difference in the day-to-day operations). From a reliability and lifespan perspective, the jet grout option is preferred.

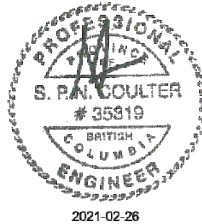


Table 4

	Jet Grout/Soil Mix	Seepage Cut-off and Anchors	Aquitard Grouting and Anchors
Estimated Installation Cost (no markup or contingency)	\$290,000	\$300,000 plus (i.e. will also need anchor blocks, slab and other details)	\$170,000 plus (i.e. will also need anchor blocks, slab and other details)
Schedule Risk	Lowest	Higher	Higher
Aquifer Leakage Risk	Lowest	Low/moderate	Highest
Design Life	Longest	Shorter	Shorter
Reliability	Highest	High	Lowest

If you have any questions, please do not hesitate to contact us.

Yours truly,
 Thurber Engineering Ltd.
 Stephen Bean, M.Eng., P.Eng.
 Review Principal



Steven Coulter, M.Sc., P.Eng.
 Geotechnical Engineer

Attachments: Statement of Limitations and Conditions



STATEMENT OF LIMITATIONS AND CONDITIONS

1. STANDARD OF CARE

This Report has been prepared in accordance with generally accepted engineering or environmental consulting practices in the applicable jurisdiction. No other warranty, expressed or implied, is intended or made.

2. COMPLETE REPORT

All documents, records, data and files, whether electronic or otherwise, generated as part of this assignment are a part of the Report, which is of a summary nature and is not intended to stand alone without reference to the instructions given to Thurber by the Client, communications between Thurber and the Client, and any other reports, proposals or documents prepared by Thurber for the Client relative to the specific site described herein, all of which together constitute the Report.

IN ORDER TO PROPERLY UNDERSTAND THE SUGGESTIONS, RECOMMENDATIONS AND OPINIONS EXPRESSED HEREIN, REFERENCE MUST BE MADE TO THE WHOLE OF THE REPORT. THURBER IS NOT RESPONSIBLE FOR USE BY ANY PARTY OF PORTIONS OF THE REPORT WITHOUT REFERENCE TO THE WHOLE REPORT.

3. BASIS OF REPORT

The Report has been prepared for the specific site, development, design objectives and purposes that were described to Thurber by the Client. The applicability and reliability of any of the findings, recommendations, suggestions, or opinions expressed in the Report, subject to the limitations provided herein, are only valid to the extent that the Report expressly addresses proposed development, design objectives and purposes, and then only to the extent that there has been no material alteration to or variation from any of the said descriptions provided to Thurber, unless Thurber is specifically requested by the Client to review and revise the Report in light of such alteration or variation.

4. USE OF THE REPORT

The information and opinions expressed in the Report, or any document forming part of the Report, are for the sole benefit of the Client. NO OTHER PARTY MAY USE OR RELY UPON THE REPORT OR ANY PORTION THEREOF WITHOUT THURBER'S WRITTEN CONSENT AND SUCH USE SHALL BE ON SUCH TERMS AND CONDITIONS AS THURBER MAY EXPRESSLY APPROVE. Ownership in and copyright for the contents of the Report belong to Thurber. Any use which a third party makes of the Report, is the sole responsibility of such third party. Thurber accepts no responsibility whatsoever for damages suffered by any third party resulting from use of the Report without Thurber's express written permission.

5. INTERPRETATION OF THE REPORT

- a) Nature and Exactness of Soil and Contaminant Description: Classification and identification of soils, rocks, geological units, contaminant materials and quantities have been based on investigations performed in accordance with the standards set out in Paragraph 1. Classification and identification of these factors are judgmental in nature. Comprehensive sampling and testing programs implemented with the appropriate equipment by experienced personnel may fail to locate some conditions. All investigations utilizing the standards of Paragraph 1 will involve an inherent risk that some conditions will not be detected and all documents or records summarizing such investigations will be based on assumptions of what exists between the actual points sampled. Actual conditions may vary significantly between the points investigated and the Client and all other persons making use of such documents or records with our express written consent should be aware of this risk and the Report is delivered subject to the express condition that such risk is accepted by the Client and such other persons. Some conditions are subject to change over time and those making use of the Report should be aware of this possibility and understand that the Report only presents the conditions at the sampled points at the time of sampling. If special concerns exist, or the Client has special considerations or requirements, the Client should disclose them so that additional or special investigations may be undertaken which would not otherwise be within the scope of investigations made for the purposes of the Report.
- b) Reliance on Provided Information: The evaluation and conclusions contained in the Report have been prepared on the basis of conditions in evidence at the time of site inspections and on the basis of information provided to Thurber. Thurber has relied in good faith upon representations, information and instructions provided by the Client and others concerning the site. Accordingly, Thurber does not accept responsibility for any deficiency, misstatement or inaccuracy contained in the Report as a result of misstatements, omissions, misrepresentations, or fraudulent acts of the Client or other persons providing information relied on by Thurber. Thurber is entitled to rely on such representations, information and instructions and is not required to carry out investigations to determine the truth or accuracy of such representations, information and instructions.
- c) Design Services: The Report may form part of design and construction documents for information purposes even though it may have been issued prior to final design being completed. Thurber should be retained to review final design, project plans and related documents prior to construction to confirm that they are consistent with the intent of the Report. Any differences that may exist between the Report's recommendations and the final design detailed in the contract documents should be reported to Thurber immediately so that Thurber can address potential conflicts.
- d) Construction Services: During construction Thurber should be retained to provide field reviews. Field reviews consist of performing sufficient and timely observations of encountered conditions in order to confirm and document that the site conditions do not materially differ from those interpreted conditions considered in the preparation of the report. Adequate field reviews are necessary for Thurber to provide letters of assurance, in accordance with the requirements of many regulatory authorities.

6. RELEASE OF POLLUTANTS OR HAZARDOUS SUBSTANCES

Geotechnical engineering and environmental consulting projects often have the potential to encounter pollutants or hazardous substances and the potential to cause the escape, release or dispersal of those substances. Thurber shall have no liability to the Client under any circumstances, for the escape, release or dispersal of pollutants or hazardous substances, unless such pollutants or hazardous substances have been specifically and accurately identified to Thurber by the Client prior to the commencement of Thurber's professional services.

7. INDEPENDENT JUDGEMENTS OF CLIENT

The information, interpretations and conclusions in the Report are based on Thurber's interpretation of conditions revealed through limited investigation conducted within a defined scope of services. Thurber does not accept responsibility for independent conclusions, interpretations, interpolations and/or decisions of the Client, or others who may come into possession of the Report, or any part thereof, which may be based on information contained in the Report. This restriction of liability includes but is not limited to decisions made to develop, purchase or sell land.



March 1, 2021

Urban Systems Ltd.
Unit #106, 501 4th Street
Courtenay, BC V9N 1H3

Email: esears@urbansystems.ca

Attention: Eric Sears, P.Eng.

Re: EXP Reference No. VAN-00263277-A0
Geotechnical Engineering Review
Greenwood Sewer Trunk - Lift Station 1
near Crown Isle Blvd., Courtenay, BC

Dear Sir:

As per your request, EXP Services Inc. ("EXP") has completed a peer review of the remedial options for repair of the potentially 'breached' aquitard and to allow for the construction of the proposed Lift Station 1 in Courtenay, BC. Our review comments are outlined in this letter.

Relevant information provided as part of the review included:

- Memorandum by Thurber Engineering Ltd. ("TEL") dated January 27, 2021;
- Memorandum (draft) by TEL on Assessment of Lift Station Excavation and Conceptual Options dated November 27, 2020;
- Geotechnical Investigation Report by TEL dated November 16, 2018; and,
- Preliminary Hydrogeological Assessment for Aquifer Depressurization by Waterline dated November 16, 2020;

The main focus of the review would be on the memorandum by TEL dated January 27, 2021. The following represent EXP's review comments:

- The design assumptions outlined in Section 2 of the memorandum appear reasonable;
- Three remedial options are presented in the memorandum:
 - Option 1: Jet Grout – Reinststate Aquitard;
 - Option 2a: Seepage Cut-Off an Uplift Soil Anchors; and,
 - Option 2b: Aquitard Grouting and Uplift Soil Anchors.

An excerpt from Table 4 contained in the TEL memorandum of January 27, 2021 is shown below.

Table 4

	Jet Grout/Soil Mix	Seepage Cut-off and Anchors	Aquitard Grouting and Anchors
Estimated Installation Cost (no markup or contingency)	\$200,000	\$360,000 plus (i.e. will also need anchor blocks, slab and other details)	\$170,000 plus (i.e. will also need anchor blocks, slab and other details)
Schedule Risk	Lowest	Higher	Higher
Aquifer Leakage Risk	Lowest	Low/moderate	Highest
Design Life	Longest	Shorter	Shorter
Reliability	Highest	High	Lowest

EXP review comments on the above remedial options are outlined below:

	Jet Grout/Soil Mix	Seepage Cut-Off and Anchors	Aquitard Grouting and Anchors
Costs	\$200k represent the lowest cost; there are many factors that can affect the actual cost as noted below.	Some of the risk items that could affect the actual cost would also apply to this option. The degree of impact differs due to construction method.	Some of the risk items that could affect the actual cost would also apply to this option. The degree of impact differs due to construction method.
Schedule Risk	May not be the lowest; likely comparable to the other two options	Comparable to the other two.	Comparable to the other two.
Aquifer Leakage Risk	Is considered to be low to moderate; not necessary the lowest.	Low to moderate.	Moderate. If experiences pressuring grouting contractor is retained: low to moderate.
Design Life	Comparable to the other two options.	Comparable to the other two options.	Comparable to the other two options.
Reliability	Comparable to other two options.	Comparable to the other two options.	Comparable to the other two options.

The selection of Jet Grout as a repair option is considered appropriate as it appears that the cost of the three options are comparable, provided that the following issues/risk items can be addressed properly:

- The actual diameters of the jet grout columns vary significantly depend on the ground conditions. What method will be used to confirm that the jet grout column diameters are uniform (i.e., even at depth) and confirm that the jet grout will overlap at the centroid? If the centroid is not grouted, then the treated volume would not be a cohesive mass; hence, the performance could be worse than the other two options. If the contractor has to close up the spacing of the jet grouting points due to ground condition, significant cost increase should be expected.
- The rate of drilling and rate of construction also depend on the ground condition. It is recommended that the uncertainties in ground conditions are taken into consideration with appropriate cost provisions.
- Jet grouting requires a relatively large space to operate. Make sure the contractor is aware of any space constraints before mobilizing.
- To avoid contamination of the aquifer, it is likely that groundwater level will need to be drawn down to below the bottom of the jet grout columns. This should be confirmed by Thurber.
- Jet grouting will require a fair bit of water for the operation and will generate a fair bit of refuse material containing cement or bentonite, which could have environmental implications.
- Although soil mixing is mentioned, this method does not work very well when there are large boulders in the ground (which is possible at this site) and also when the soils are very dense.

It is very important that a proper specifications and contract be prepared to address the potential risk items as noted above and potential cost escalation.

There is a more recent memo prepared by Thurber dated February 26, 2021 with a higher cost for the Jet Grouting option. We presume that the extra costs would be related to the risk items identified above. Due to time constraints, we have not reviewed this recent memo.

If you require additional information, or wish to discuss any aspect of this letter, please do not hesitate to call.

Sincerely,

EXP Services Inc.



Kai-Sing Hui, P.Eng.

Vice President, Geotechnical Engineering



THE CORPORATION OF THE CITY OF COURTENAY

STAFF REPORT

To: Council

File No.: 8620-20

From: Chief Administrative Officer

Date: March 15, 2021

Subject: Level 2 Electric Vehicle (EV) Charging Station(s) Location

PURPOSE:

The purpose of this report is to provide Council information, potential locations, and costs to provide two dual port station and one single port station level 2 Electric Vehicle charging stations designated for public use.

CAO RECOMMENDATIONS:

THAT based on the March 15th, 2021 staff report “Level 2 Electric Vehicle (EV) Charging Station(s) Location” Council adopt OPTION 1 and direct staff to proceed with engineering assessments of the Level 2 EV charging stations based on the locations recommended in the report identified as:

- 6th Street & England Avenue Downtown Courtenay Business Improvement Association (DCBIA) - dual port station;
- Lewis Centre, 489 Old Island Highway - dual port station; and,
- Courtenay City Hall, 830 Cliffe Avenue - single port station.

Respectfully submitted,

Trevor Kushner, BA, DLGM, CLGA, PCAMP
Interim Chief Administrative Officer

BACKGROUND:

The City's 2019 – 2022 Strategic Priorities includes the goal of exploring opportunities for Electric Vehicle (EV) charging stations, and to further this goal, on March 18, 2019, Council resolved:

That the City participate in the Mid-Island EV Network project and associated CleanBC Communities Fund application with Regional District of Nanaimo as the lead applicant and dedicate a total of up to \$25,000 to be funded from Host Local Government Gaming Tax Revenue for the City's portion of the cost of four public electric vehicle charging stations (2 X dual port) at a City-owned site within the community, and that the location of the charging station be referred to staff.

On September 1, 2020, the Province announced that grant funding was approved for EV charging stations in key locations on Vancouver Island based on public demand and current gaps in availability. The City of Courtenay was successful in obtaining funding for two dual port and one single port Level 2 EV charging stations.

DISCUSSION:

Ensuring that the EV charging network operates efficiently and meets driver expectations can be crucial in maintaining future investment and support. One critical step toward maximizing the return on investment is to place charging stations in optimal locations in order to maximize usage, and to avoid traffic and parking issues.

For an efficient vehicle charging network, EV charging stations need to be placed near tourist attractions, commercial areas, or areas with high residential density, and they need to be visible or on high traffic volume routes. EV charging stations must also be accessible, well lit, have access to power, and have sufficient space for the charging equipment. Consideration must also be given to adequate space to manoeuvre to the front and side of the vehicle to attach the charging coupler, as each vehicle's charging port may be located on a different part of the vehicle.

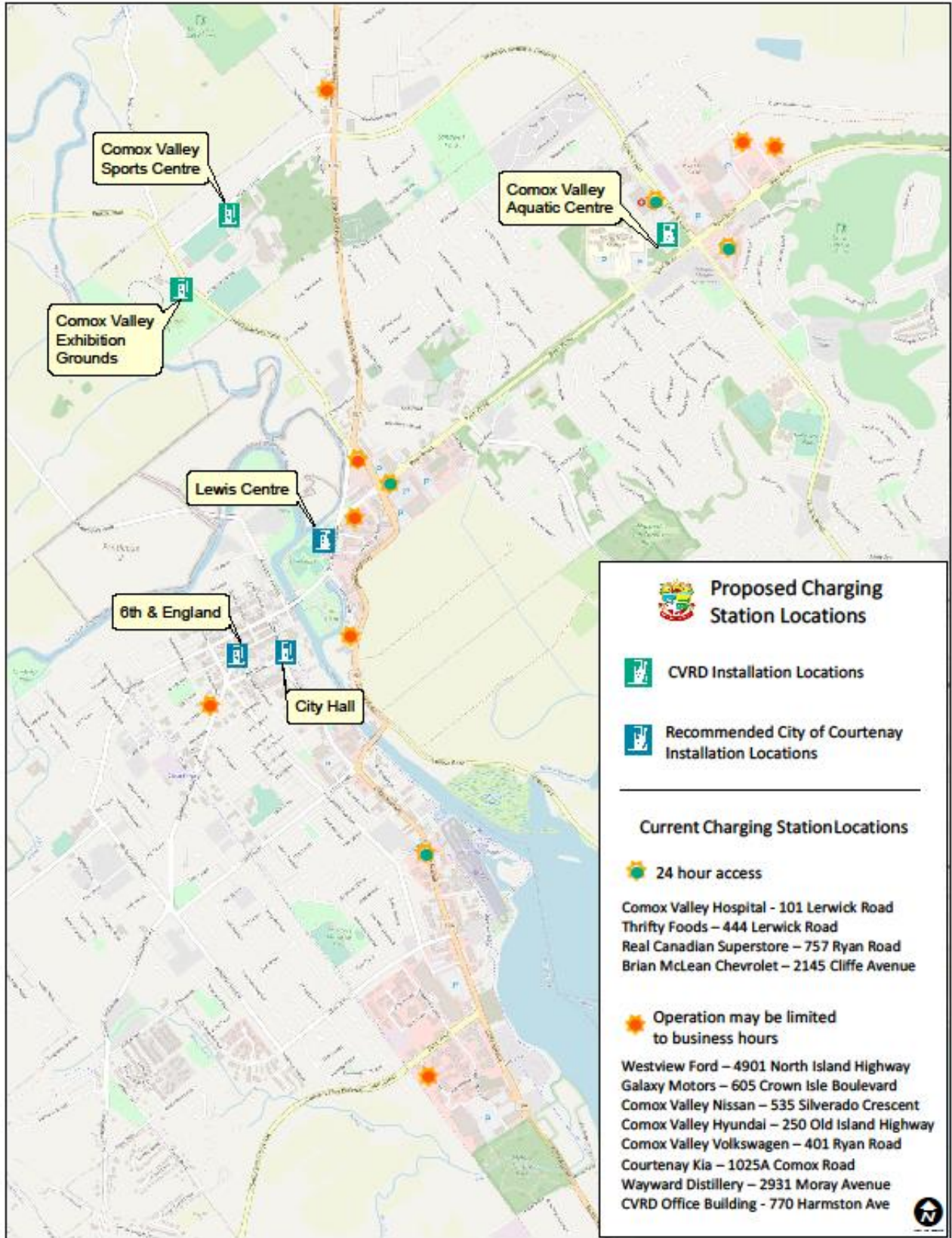
With this in mind, City staff met with key stakeholders, including the Downtown Courtenay Business Improvement Association (DCBIA) and the Comox Valley EV Association, to determine their preferred criteria for EV charging station locations. These criteria were reviewed by technical staff in order to ensure they met electrical standards. Grant requirements and stakeholder feedback include the following criteria:

- Charging station must be located on City owned property
- Minimize service gaps in regional delivery
- Provide adequate, designated parking for station patrons
- Be in proximity to shopping, tourism or recreational opportunities
- One station is desired to be located in the Downtown Core

Based on current and forecasted community service levels, as well as installation costs, the following sites are recommended for the installation of EV charge stations:

- 6th Street & England Avenue (DCBIA) - dual port station
- Lewis Centre, 489 Old Island Highway - dual port station
- Courtenay City Hall, 830 Cliffe Avenue - single port station

An engineered assessment of these proposed locations will be completed by the grant coordinator in order to ensure installation requirements are met. If the above locations are deemed unsuitable, staff and key stakeholders will assess new locations for Council's consideration.



FINANCIAL IMPLICATIONS:

The addition of EV charging stations is the result of an investment from all levels of government. The City of Courtenay will receive approximately \$93,000 from the Province's CleanBC Communities program. The program requires local government partners to contribute 27% of installation costs, a \$25,000 commitment for the City for installation in 2021. Based on the March 2019 report to Council referenced above, the funding for the EV charging stations will come from Gaming Tax Revenue.

On-going costs include maintenance to the charging station, which will be added to the out-years of Public Works Services operating budgets, and the cost of electricity.

An annual inspection by an electrician will take approximately 3 hours of time for a total annual cost of approximately \$300. Electricity costs will be approximately \$20,000 annually for all three sites, assuming a 20kW charger is in use for four hours per day with a total of five chargers in operation.

Grant criteria requires that the City of Courtenay pay all electricity costs for five years. The five year electricity cost is estimated to be approximately \$100,000.

ADMINISTRATIVE IMPLICATIONS:

Approximately 80 hours of staff time is expected to be required to confirm location suitability and upgrade electrical services as required.

Staff recommends that applicable bylaws be reviewed and amended to accommodate the new EV parking spaces, including parking restrictions, charge time limits, and hours of availability.




ASSET MANAGEMENT IMPLICATIONS:

The addition of EV charging stations where none currently exist is an increased level of service. The stations are new tangible capital assets that will incur annual costs.

Each site will require annual maintenance of approximately 3 hours, with no expected material costs. It is anticipated that there will be no additional costs for seasonal maintenance (ie: ice/snow removal), as all proposed sites are currently serviced by Public Works Services. The life cycle replacement/technological upgrade is expected to be 20 years.

STRATEGIC PRIORITIES REFERENCE:

We proactively plan & invest in our natural & built environment

-  Support actions to address Climate Change mitigation and adaptation
-  Make progress on the objectives of the BC Climate Action Charter
-  Advocate, collaborate and act to reduce air quality contaminants

We actively pursue vibrant economic development

- ▲ Engage with businesses and the public to continue revitalizing our downtown

We plan & invest in methods of multi-modal transportation

- ▲ Explore opportunities for Electric Vehicle Charging Stations

- **AREA OF CONTROL:** The policy, works and programming matters that fall within Council's jurisdictional authority to act
- ▲ **AREA OF INFLUENCE:** Matters that fall within shared or agreed jurisdiction between Council and another government or party
- **AREA OF CONCERN:** Matters of interest that are outside Council's jurisdictional authority to act

OFFICIAL COMMUNITY PLAN REFERENCE:

Section 10.1.4 Introduction

The City of Courtenay will engage the community by raising awareness respecting climate change and promote community wide emission reductions and carbon neutral initiatives.

Section 10.2 Goals

To reduce the City's annual community-wide greenhouse gas emissions 20% below 2007 levels by 2020, with an incremental reduction target of 2% per year between 2010 and 2020.

Section 10.3 Objectives and Policies

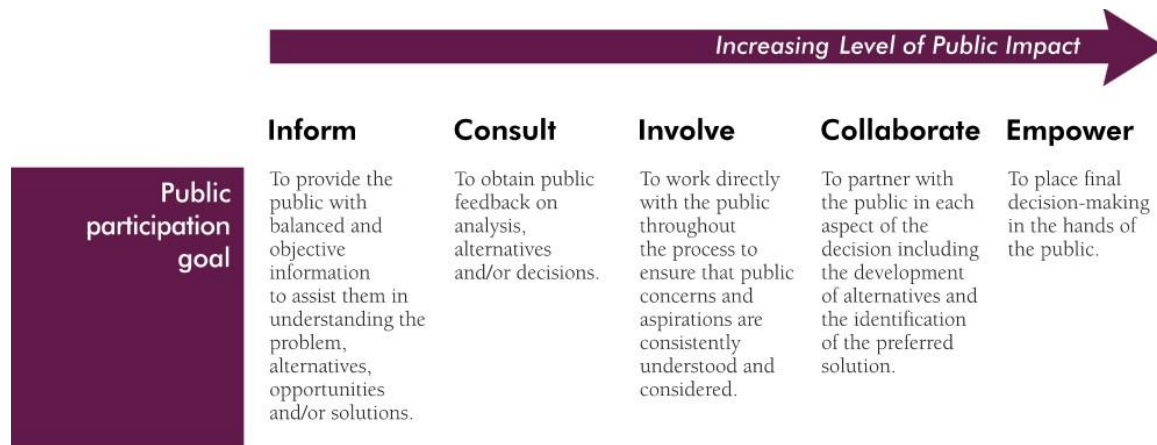
To focus GHG reduction efforts in the transportation sector as this is Courtenay's greatest source of community-wide emissions as determined by the provincial Community Energy and Emissions Inventory.

REGIONAL GROWTH STRATEGY REFERENCE:

N/A

CITIZEN/PUBLIC ENGAGEMENT:

Staff would inform the public based on the IAP2 Spectrum of Public Participation:



© International Association for Public Participation www.iap2.org

OPTIONS:

1. THAT based on the March 15th, 2021 staff report “Level 2 Electric Vehicle (EV) Charging Station(s) Location” that Council adopt OPTION 1 and direct staff to proceed with engineering assessments of the Level 2 EV charging stations based on the locations recommended in the report identified as:
 - 6th Street & England Avenue Downtown Courtenay Business Improvement Association (DCBIA) - dual port station;
 - Lewis Centre, 489 Old Island Highway - dual port station; and,
 - Courtenay City Hall, 830 Cliffe Avenue - single port station.
2. THAT Council requests additional information before proceeding.
3. THAT Council receives this report for information only.

Respectfully Submitted,



Kyle Shaw, ASCT, CPWI
Director of Public Works Services

Concurrence by:



Trevor Kushner, BA, DLGM, CLGA, PCAMP
Interim Chief Administrative Officer

Attachment(s):

1. *Letter of Support from Downtown Courtenay Business Improvement Association Re: EV Charging Station Location for Downtown Core*



**DOWNTOWN
COURTENAY**
EXPERIENCE MORE

February 5, 2021

Dear City of Courtenay Mayor, Council, and Public Works Services Staff,

On behalf of the Downtown Courtenay Business Improvement Association, we would like to express our support for the installation of an electric vehicle charging station at the intersection of 6th street & England Avenue.

We are seeing increased numbers of patrons utilizing EVs while supporting Downtown Core business, and this infrastructure will help to lessen the service gap that currently exists for this valued demographic. Additionally, with the station listed with online resources, the opportunity exists to generate increased visitor interest in the Downtown area.

As a Society it is important to support initiatives designed to mitigate the impacts of climate change, as well as encourage the research, development, and refinement of alternative technologies. We believe that an EV station in the Downtown Core speaks to the commitment that the DCBIA and City of Courtenay has towards advancing in these areas.

The DCIBA is excited to endorse this project and looks forward to its implementation.

Respectfully,

Tracey Clarke

Executive Director,
DCBIA

File: 5360-30/Organics

March 1, 2021

Sent via email only: wsorichta@courtenay.ca

Mayor and Council
City of Courtenay
830 Cliffe Avenue
Courtenay, BC V9N 2J7

Dear Mayor and Council:

Re: 50% Design Reached for Regional Organics Compost Project

On November 14, 2019, the Comox Strathcona Waste Management (CSWM) Board made the decision to advance the Regional Organics Compost Project and build a composting facility at the Campbell River Waste Management Centre – Block J (6300 Argonaut Road), with a transfer station to be located at the Comox Valley Waste Management Centre. Since then, CSWM has been working with municipal staff at the City of Campbell River, City of Courtenay, Town of Comox and Village of Cumberland to implement this project that will process the region's organic waste.

In early 2020, the CSWM offered a variety of opportunities for residents to learn more about the Regional Organics Compost Project and provide feedback to inform its design and operations. A feedback summary report was submitted to the CSWM Board in March 2020. In fall 2020, the detailed design of the composting facility and transfer station was awarded to solid waste engineering firm, Sperling Hansen Associates, who were tasked to incorporate the input collected from the community into the preliminary design.

We are pleased to share the design of the composting facility and transfer station, which is now available for the community to review on the CSWM website at www.cswm.ca/regionalorganics, and at upcoming webinars scheduled on March 16 and 18.

This design addresses the feedback from neighbours and the community regarding issues such as groundwater, odour, traffic, trees, wildlife and pests. All feedback from the community will be consolidated and reported back to the CSWM Board and to regulators.

Once the design is finalized, CSWM will proceed with regulatory, development and building permits approvals with construction commencement expected by fall 2021. Phased introduction of organics collection is expected over the summer and fall of 2022. The facility will be fully operational by fall 2022.

The CSWM looks forward to working with you and your staff to bring our communities this important service, a critical component in the management of solid waste in the Comox Strathcona service area and to advance the waste diversion goals of the CSWM Solid Waste Management Plan.

Food and yard waste currently makes up about 30 per cent of the total waste landfilled within the CSWM service area. Removing organic material from the waste stream will extend the life of our landfills, resulting in a smaller environmental footprint and a cost effective approach for handling solid waste for taxpayers. When buried in a landfill, organic material also produces methane gas, a key contributor to global climate change. Properly composting organic waste is an important step to sustainably manage waste in our region as it reduces the greenhouse gas emissions that would otherwise be associated with its decomposition

If you have any questions, please do not hesitate to Russell Dyson at 250-334-6055 or rdyson@comoxvalleyrd.ca.

Sincerely,

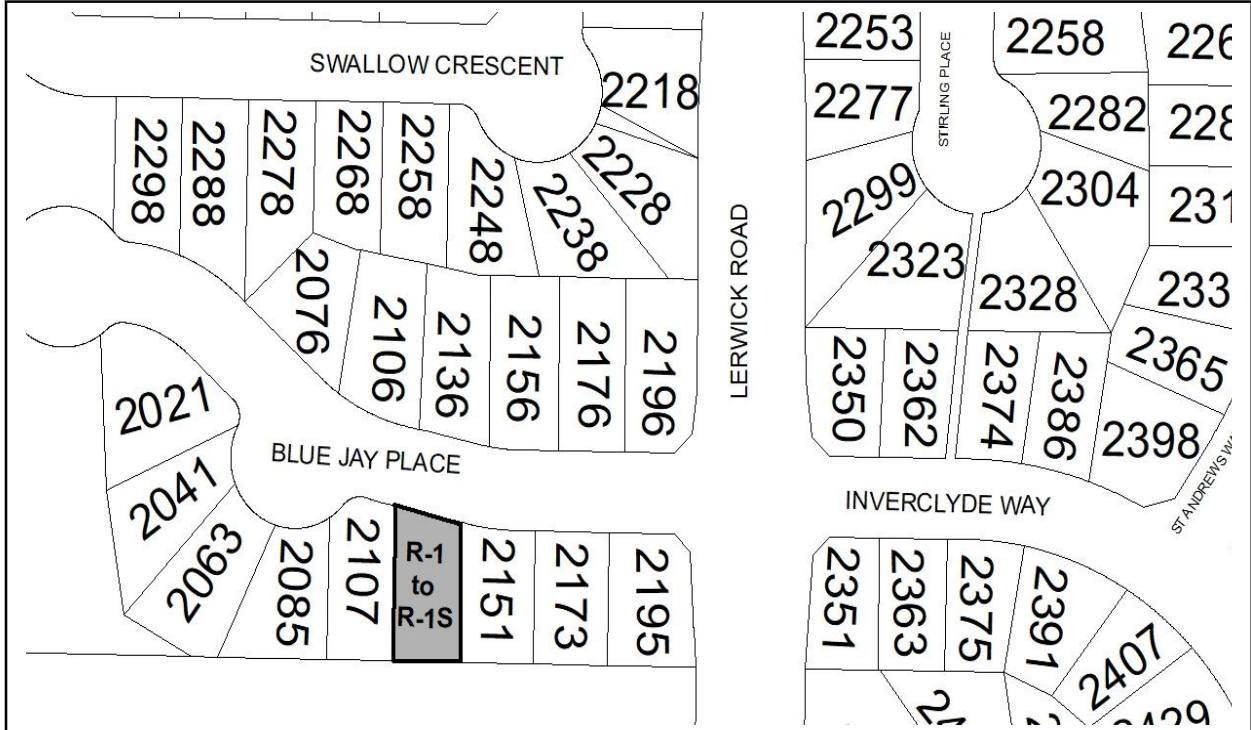
A. Hamir

Arzeena Hamir
Co-Chair

B. Unger

Brad Unger
Co-Chair

cc: Russell Dyson, Chief Administrative Officer, Comox Valley Regional District
Marc Rutten, General Manager of Engineering Services, Comox Valley Regional District
Trevor Kushner, Interim Chief Administrative Officer, City of Courtenay



THE CITY OF COURTENAY
ATTACHMENT "A"
 Part of Bylaw No. 2986, 2021
 Amendment to the
 Zoning Bylaw No. 2500, 2007